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**VASANTRAO KALE MAHAVIDYALAYA,**  
DHOKI, Tq. & Dist.- Osmanabad (MS).



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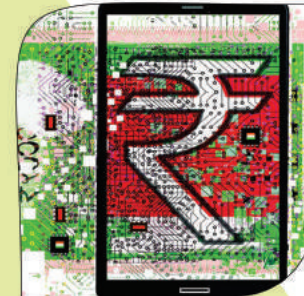
## **FINANCIAL LITERACY AND DIGITAL PAYMENT SYSTEM IN INDIA**

Kisan Shikshan Prasarak Mandal, Borgaon (Kale), Tq. & Dist. Latur  
Affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

**VASANTRAO KALE MAHAVIDYALAYA,**

DHOKI, TQ. & DIST. OSMANABAD. (MS)

Saturday, 28<sup>th</sup> December 2019



Organized By  
Department of Economics  
Vasant Rao Kale Mahavidyalaya, Dhoki  
Tq. & Dist. Osmanabad (MS).

**Pri. Dr. Haridas Fere**  
Chief Editor

**Dr. Balasaheb Maind**  
Editor

Vol.  
I



ICSSR, New Delhi Sponsored

## **NATIONAL SEMINAR**

on

# **FINANCIAL LITERACY AND DIGITAL PAYMENT SYSTEM IN INDIA**

28<sup>th</sup> December 2019.

**Organized by**

**K.S.P.M.'S**

**Vasanturao Kale Mahavidyalaya, Dhokri,**

**Tq. & Dist. Osmanabad (MS)**

**(Department of Economics)**

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(Principal)

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**आ. विक्रम वसंतराव काळे**

(औरंगाबाद विभाग शिक्षक मतदार संघ)  
सदस्य पंचायत राज समिती  
प्रांताध्यक्ष, महाराष्ट्र राज्य राष्टवादी शिक्षक संघ

## MESSAGE

I am extremely happy about Our Institutions Vasant Rao Kale Mahavidyalaya, Dhoki, Tq. & Dist. Osmanabad is organizing one day National Level Seminar in Interdisciplinary subject on "Financial Literacy and Digital Payment System in India" sponsored by ICSSR, New Delhi on 28th December 2019.

I welcome all delegates and participants and wish them pleasant and memorable stay in Dhoki Dist. Osmanabad. I would like to congratulate the Principal and organizing committee of the seminar.

On this occasion, I wish the best luck to the National Seminar organizers and college staff,

I wish that the Seminar will be grand success.

(Vikram Vasant Rao Kale)

Monday, 09<sup>th</sup> Dec. 2019

## PRINCIPAL ADDRESS

I have a great pleasure on organizing a One Day Inter Disciplinary National Seminar on 'Financial Literacy and Digital payment System in India' on 28<sup>th</sup> December 2019 at Vasantrao Kale Mahavidyalaya, Dhoki, Tq. & Dist. Osmanabad.

Financial Literacy and digital payment system are two different concepts which are closely concerned to each other. In the 21<sup>st</sup> century digitalization is taking place in every field of the world. Today, the world is becoming a digital world. The Indian Government is promoting financial literacy and digital India Mission to use Digital payment system and digitalization in Indian Banks. After demonetization, the Government of India has been promoting cashless transactions for cashless society. For this issue increase awareness regarding financial literacy and digital payment system among the people is an essential thing. All the delegates and resource persons have focused on the issues and challenges about it through their discussion and publication in this National Seminar.

I hope this seminar is going to be very useful for researcher and students as well as staff to improve the knowledge about financial literacy and digital payment system. Digital payment system enables to promote cashless transaction for cashless society. It is benefited personal as well as for the society.

This seminar will be a platform to exchange new ideas among each other with interaction with experts in this field. I assure that this seminar will prove fruitful for one and all.

**Dr. Haridas Fere**

Principal

Vasantrao Kale Mahavidyalaya,  
Dhoki, Tq. & Dist. Osmanabad.

## EDITORIAL

It is an immense pleasure to welcome you all for attending the National seminar on “Financial Literacy and Digital Payment System in India” organized by the Department of Economics, Vasant Rao Kale Mahavidyalaya, Dhoki Tq. & Dist. Osmanabad. The purpose of this seminar is to share and discuss new ideas about financial literacy and digital payment system in India. Its impact is on Indian economy. Various sectors such as administration, banking, business, agricultural, industrial, service and their various problems, challenges, remedies and advantages regarding financial literacy and digital payment system are discussed.

Today, the world is becoming a digital world in the 21<sup>st</sup> century. Digitalization is taking place in every field of the world. Whether it is manufacturing or selling the area or whether it is the human relation in the daily life or the Government’s social services given to its citizens. All these places are digitalized very rapidly.

We invited paper written in interdisciplinary subjects to attitude and increase to develop research knowledge.

I the convener truly delighted in collecting experiences, inspirations, encouragement, suggestion, co-operation from the delegates and honorable resources persons.

I must express our deep sense and gratitude to our patron Hon. Shri. Vikramji Kale (MLC, Teachers Constituency Aurangabad Division) Hon. Anilji Kale (Treasurer, KSPM), Hon. Madhukarrao Gaikwad (Ex. IC Vice Chancellor, SRTMU, Nanded) and Principal Hon. Dr. Haridas Fere.

It is our prime duty to express our sincere thanks to ICSSR, New Delhi for their kind co-operation extended to the department of economics.

I express our sincere thanks to the Principal, Teaching staff and Non-Teaching staff and who encouraged organizing this seminar.

I also express our sincere thanks to the Aayushi International Interdisciplinary Research Journal and its Chief Editor Hon. Pramod P. Tandale for publishing special Issue.

**Dr. Maind B.V.**

Convener

Dept. of Economics

Vasant Rao Kale Mahavidyalaya,

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## Financial Literacy And Digital Payment System In India

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### Abstract

Now a day's cashless transaction in India is an effort to move towards a cashless economy by minimizing the use of physical cash. The main objective of the study is to present the current status of India in usage of digital currency in comparison to other developed countries and find the challenges and opportunities which are associated with the cashless transaction in India. Data is gathered by using secondary data collection method and then graphical representation is being used. The findings of the study revealed that the introduction of cashless economy in India can be seen as a step in the right direction of economy growth and development. It has been conducted to unravel the challenges and opportunities of cashless economy by promoting electronic money instruments, developing electronic financial infrastructures and spreading digital transaction habits among people.

**Keywords:** Digital payment, Rural and Urban India, Digital Transaction.

### Introduction

Indian economy is one of the fast growing economies of the world. Despite of global turbulences of economic conditions, Indian economy has been focusing on development. In the recent past, there are significant developments that have taken place in the Indian financial system, which has led to huge transformations, trends and changes in the business dynamics. Though the government of India has been focusing on the digital transactions initiatives since last few years, the actual impact of digital payments has taken place in India in significant manner post the demonetization period. India has joined other countries in the digital payment revolution a lot faster than the past where we often lagged behind in adopting technology, especially in the financial sector. This is set to have a transformative impact on our country, especially as digital payments spread into rural areas. Worldwide there is a tremendous interest among policymakers to explore the possibility of moving towards a cashless economy. Digitalization of transactions is the best way to move towards cashless economy. It is estimated that rural users will constitute almost half of all Internet users in 2020. Government should assure basic necessities in rural areas and focus on developing infrastructure. Special drives through schools, colleges, Panchayats etc. can help create awareness about cashless/banking transactions. Financial Literacy is a must for bringing more and more people to digital platform. Digital payment or payment through banks, instead of paying cash should be encouraged.

### Objectives of the study

1. To know about Financial Digital Literacy and Awareness.
2. To know the digital payment system in India.

### Methodology of the study

This study has been undertaken on the basis of secondary data, the data are collected through journals, articles, books, internet and news paper etc.

### Financial Digital Literacy and Awareness:

#### What are Digital Payments?

Digital Payments is nothing but the transfer of money between the two Bank Accounts or Mobile Wallets in Digitalized form. There is no involvement of physical cash transactions. The Bank Accounts may be between any same Banks or other Banks or mobile wallets between the same service providers or the different providers. In Digital Payments, Payer and Payee both uses digital mode to send and receive money in real-time.

As per the RBI directives, the interoperability of mobile wallets can only be possible if they are both KYC verified. As of now, only a few mobile wallets are KYC verified, though RBI directs all the wallet service providers to complete customers KYC verifications within August 2019.

Further, Digital Payments can be online or offline depending on the mode of payment instruments, you can send money using your Smartphone or PC with internet or using simple mobile devices without using any mobile data.

From time to time, several financial and digital literacy camps have been conducted with an attempt to educate the rural sections of in Indian society about the Banking system with their importance and digital world with the aim is to identify various digital payment systems appropriate to different sectors of the

economy and coordinate efforts to make them accessible and user- friendly. We are also identifying and access infrastructural and bottlenecks affecting the access and utility of digital payment options. In the Indian rural markets, the financial awareness and literacy level is still very low which a critical issue effecting country development. Even the population with little awareness about bank does know only basic aspect of the bank but their trust in formal banking facilities is minimal. Since banking facility is a very vital facet of Financial Inclusion, so there should be adequate knowledge and awareness among the rural populace in India.

To develop financial Inclusion in unbanked areas and to overcome these critical issues, various awareness programs have been undertaken by SAHYOG & Sahyog Foundation in past reaching to the most interior villages was one of the major spotlights of its campaign, so as a sponsor companies, it has tried its level best to reach the last mile.

To reach the masses and provide awareness about Financial Inclusion SAHYOG has planned various financial literacy activities, which were implemented. These activities reached the most rural interiors, which shaped this assignment into one of the finest projects. The sponsor companies aim is also to make these activities very interactive, educative and entertaining so that the target audience gets involved all the time. Nukkad Natak, drum beating, banking benefits & saving games, group gathering & announcements are the main elements of the session.



### Digital Payment System in India:

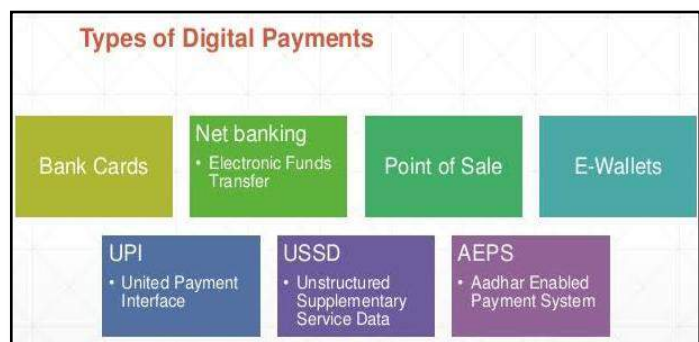
It is not a very old story when we used to do everything by cash, from purchasing our monthly grocery items to booking movie tickets at Inbox, standing in a long queue. A few Mobile Wallet service providers like Pay tm or free charge was started providing App-based Mobile Recharge services with some Cash Back features which can be utilized for the next mobile recharge. But after November 8, 2016, everything was drastically changed. It is very hard to change someone’s behavior pattern if he/she is not forced to do anything. Many people have reluctantly adopted the alternate payment system due to the cash crunch. And now more and more people are willingly adopting this alternative Payment solution leaving traditional cash-based payments system. Yes, we are talking about the Digital payment system in India and its burgeoning popularity amongst the all, no matter whether he/she is young or old. Because it is fast, secure, convenient & less time-consuming.

Different Methods of Digital Payments in India:

1. Banks’ Credit/Debit Card:
2. Bank’s Prepaid Card
3. Unified Payments Interface (UPI)
4. Offline Mode
5. Aadhaar Enabled Payment System (AEPS)
6. Mobile Wallet
7. Internet Banking
8. Mobile Banking
9. Micro ATM
10. PoS Machine.

### Different Methods of Digital Payments in India:

Digital Payments is the Govt. of India’s initiative to make India a “Digitally



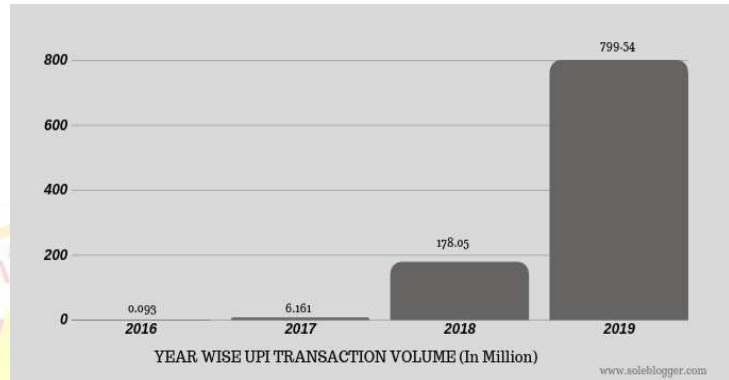


**Empowered”** Cash-less economy under the campaign of “Digital India”. It not only helps to reduce the work burden on Banking Industries in India but also provides a safe, reliable, fast & Digital alternative of Cash-centric Indian Economy.

**1. Banks’ Credit/Debit Card:** The most popular and common method of Digital Payments solutions in India. You can get a Debit card just after the opening of Account in Bank in India. The card may be Visa, Mastercard or RuPay card depending upon your choice or Bank. The other types of Debit or Credit card providers in India are Maestro, Diners Club, Visa Electron.

**2. Bank’s Prepaid Card:**

Bank’s prepaid card is also known as Gift Card or Preloadable debit card for a single-use or reloadable for multiple uses. Any KYC complied account holder can create Bank’s prepaid card from the Bank’s NetBanking websites or purchase from Bank’s official websites. The prepaid card can be Visa or RuPay powered depending upon the Bank. The prepaid cards mainly used for Corporate Gift, Reward Card or any single-use card for gifting purposes. The Prepaid card can be used to withdraw money at ATM or performing an online transaction at any Payment Gateway up to a certain limit.



**3. Unified Payments Interface (UPI):** UPI or Unified Payments Interface is one of the most innovative Digital Payments solutions launched by NPCI in India, maybe the best Payment solution in the World to date. UPI transaction has reached Rs.1,52,449.29 as of May 2019 by transaction value. (Source: NPCI). Here’s a year-wise growth of UPI transaction by volume. (As on March 2019).

**Some of the best UPI payment Apps in India you can download to your smart phone are:**

**1. Google Pay:** Currently Number One in terms of Transaction Value (Data up to March 2019). Google Pay’s Digital Payments transaction value is more than the total Digital Payment of Axis Bank.

**2. Paytm:** Most downloaded UPI App in India both Android and IOS Platform.

**3. PhonePe:** Very popular UPI App and currently ranked 2nd in the total volume of UPI transactions.

**4. BHIM:** Official UPI App launched by NPCI.

**5. Offline Mode:** USSD is one of the offline processes of the Digital payments system in India. You can perform Different banking tasks by dialing \*99# which works on the mode of Unstructured Supplementary Service Data (USSD). The services you can avail of by this mode are balance inquiry, mini statement, and Fund Transfer through MMID. Only you have to register your mobile number with the bank account number. Though the process seems innovative but failed to make any real impact in the process of Digital Payments in India.

**5. Aadhaar Enabled Payment System (AEPS):**

By this Digital payment mode, you can transfer money between two Aadhaar linked Bank Accounts or withdraw money if your Account linked with Aadhaar Card. All the transaction made by this process has to go through the biometric authentication. This mode of payment mainly uses by the Business Correspondence at CSP points for cash withdrawal and work as micro-ATM.



**6. Mobile Wallet:** The popularity of Mobile wallets has increased many folds during recent times and it is one of the most used Digital Payment modes in India. The reason is anyone can create a Mobile wallet just by downloading and installing the App. You can keep some money in a digitalized form in the Mobile Wallet. Many Mobile wallet providers in India also run different types of rewards or cash back programs if the transaction made from the Mobile Wallet.

**7. Internet Banking:** Internet banking one of the first technology started at the initial stages of the Digital payment system in India. All the commercial banks and recently launched Payment Banks in India have their own internet banking portal. Some Banks have integrated so many things in their internet banking

portal that you can complete your every banking tasks from the Net Banking portal. You can find an internet banking option at every Payment Gatewa in India. Here's the list of some Banks which has the best internet banking portal in India

- ICICI Bank
- State Bank of India
- HDFC Bank
- Kotak Mahindra Bank
- DBS Bank
- CITI Bank
- Axis Bank
- Yes Bank

**8. Mobile Banking:** Mobile Banking is the best and most Popular Digital Payment mode in India because it is most convenient, easy to use and integrated with all the features that we need our day to day banking. You can find all the Digital payment modes like IMPS, NEFT, RTGS, UPI, Bill Payments, etc at a single platform. Banks are also encouraging their customers to use mobile banking services because it not only helps to reduce the work pressure on Banks but also helps to create a Digital Payments ecosystem in India.

**9. Micro ATM:** This is mostly used by the Business Correspondence at Customer Service Points(CSP). You can withdraw money or deposit cash to your Aadhaar Linked Bank Account by just authenticating your fingerprint to the device. You can even transfer funds between any Bank's Account only you need the Aadhaar to linked both the Account.

**10. PoS Machine:** You might observe PoS Machine or Point sale Machine at various Shopping Malls, Petrol Pumps, Movie Ticket Booking or many Kirana shops. You can pay shopping bills by swiping your credit or debit card, only you need to put your Card PIN to authenticate the transaction. All the Banks now starts providing contactless debit or credit card to its customers. You can authenticate the transaction just by holding the Debit or Credit Card on the Contactless reader of PoS Machine. You don't need to provide the Card PIN up to Rs.2000.00, it will auto-authenticate. The contactless payment works using the NFC payment technology (Near Field Communication Technology).

There are two types of PoS Machines available in India, Wired (requires Telephone connection) and wireless (requires SIM card or Wifi connection). Most of the acquiring Banks now offer mPOS type of PoS Machine. SBI is now the largest acquiring Bank (Banks which provides the PoS terminal to the merchant) in the country.

#### Conclusion:

Digital Payments is the Future of India's economy, as per the Credit Suisse report, India's Digital Payments is expected to reach \$1 trillion by 2023. More than 100Milion people in India now use Digital Payments mode at least once in a month in India. Banks and Fintech startups are also introducing several innovative Digital payment modes every day. The days are not far away when India will also be regarded as a Digital Economy.

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## Challenges and Difficulties of Electronic Payment Systems

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### Abstract:

Electronic payments are financial transactions made without the use of paper documents such as cheques. Electronic payments include debit card, credit card, smart card, e-wallet, e-cash, electronic cheques etc. E-payment systems have received different acceptance level throughout the world; some methods of electronic payments are highly adopted while others are relatively low. This study aimed to identify the issues and challenges of electronic payment systems and offer some solutions to improve the e-payment system quality.

Electronic payment system is a mode of payments over an electronic network such as the internet. In other words we can say that e-payment is a method in which a person can make Online Payments for his purchase of goods and services without physical transfer of cash and cheques, irrespective of time and location. Electronic payment system is the basis of on-line payments and on-line payment system development is a higher form of electronic payments. It makes electronic payments at any time through the internet directly to manage the e-business environment

**Key Words:** Cyber Cash, Digital Signatures, e-Cash, Electronic Payments, Encryption, First Virtual Holdings, Net Bill, RAM (Random access memory), ROM (Read only memory), Secure Electronic Transaction Protocol etc.

### The Two Distinct Types of Payment Systems:

In real world we have two distinct types of payment systems:

**(1) Internet –Based payment system :** There are four models of Internet-Based payment system:

1. e-Cash
2. Credit Card
3. Debit Card
4. Smart Card

**(2) Electronic Transaction-Based payment system**

1. Secure Electronic Transaction
2. Cyber Cash
3. Net Bill
4. First Virtual Holdings.

### 2. Objectives

- (a) To create awareness about various methods of online payment systems.
- (b) To create awareness about various frauds of electronic payments
- (c) To motivate people to use online payments systems.
- (d) To make online payments safe and secure.

### 3.2 Credit Card

A credit card is a plastic card issued to the users to lent money for purchase of goods and services. The customer type the card number, expiry date and billing address on the order form and the vendor can verify the details and be confident of payment.

The credit card payment on the online network can be categorized into three types :

- (a) Payment using plain credit card details
- (b) Payment using encrypted credit card details
- (c) Payment using third party verification.

### 3.3 Debit Card

A Debit card is a banking card enhanced with Automated Teller Machine and point of sale features so that it can be used at merchant locations. A Debit card is linked to an individual's bank account, allowing funds to be withdrawn at ATM and point of sale without writing a cheque. A Debit card holder pay directly through bank for his purchases. It replaces physical cash and cheque. In debit card system customers deposit in advance into the bank and withdraw at the time of purchase. There are two types of debit card which are used in real world:

- (a) Online debit card
- (b) Offline debit card

### Smart Card:

A smart card was first produced in 1977 by Motorola. It is a thin, credit card sized piece of plastic which contains a half-inch-square area that serves as the card's input-output system. A smart card contains a programmable chip, a combination of RAM and ROM storage and can be refilled by connecting to the bank. It is known as smart card because the ability of chip to store the information in its memory makes the card smart.

### Secure Electronic Transaction (SET)

Secure electronic transaction is a system of online payments for ensuring the security of financial transactions on the internet. The SET specification is an open, technical standard for commerce, developed by



VISA and master card. It facilitates secure payment card transactions over the internet. Digital certificate create a trust change throughout the transactions, verifying cardholders and merchant validity.

### **Cyber Cash**

Cyber cash is a web based service that automatically processes and verifies customer's credit card information then debiting the customer's account and crediting the merchant's account electronically. Cyber cash servers act as a gateway between the merchant on the internet and bank's secure financial network. For the purpose of security in electronic payments system this system use the digital signatures

## **Issues and Challenges Regarding Electronic Payment System**

### ***Lack of Usability***

Electronic payment system requires large amount of information from end users or make transactions more difficult by using complex elaborated websites interfaces. For example credit card payments through a website are not easiest way to pay as this system requires large amount of personal data and contact details in web form.

### ***Lack of Security***

Online payment systems for the internet are an easy target for stealing money and personal information. Customers have to provide credit card and payment account details and other personal information online. This data is sometimes transmitted in an un-secured way, (Kolkata and Whinston, 1997). Providing these details by mail or over the telephone also entails security risks (Guttman, 2003, Laudon and Traver, 2002)

### ***Issues with e-Cash***

The main problem of e-cash is that it is not universally accepted because it is necessary that the commercial establishment accept it as payment method. Another problem is that when we makes payment by using e-cash, the client and the salesman have accounts in the same bank which issue e-cash. The payment is not valid in other banks.

### ***Lack of Trust***

Electronic payments have a long history of fraud, misuse and low reliability as well as it is new system without established positive reputation. Potential customers often mention this risk as the key reason why they do not trust a payment services and therefore do not make internet purchases (Lietaer, 2002)

## **Users Perception Regarding Acceptance of Electronic Payment Systems**

User's acceptance is a pivotal factor determining the success or failure of any information system project. (Davis, 1993), Many studies on information technology report that users attitudes and human factors are important aspects affecting the success of any information system (Davis, 1989, Burkhardt, 1994, Rice&Adyn , 1991). According to Dillion and Morris (1996) users acceptance is "the demonstrable willingness within a user group to employ information technology for the tasks it is designed to support". Electronic payment systems are not an exception of it. It means these are not successful without acceptance of users. Electronic payment system is an innovative way for online payments. Issues are not accepting easily because of lack of security in changing business-environment. Online payment system requires improvement of information technology. The failure of electronic payment system is depend on the factor that it neglects the needs of users and the market.

### ***Lack of Awareness***

Making online payment is not an easy task. Even educated people also face problems in making online payments. Therefore, they always prefer traditional way of shopping instead of online shopping. Sometimes there is a technical problem in server customers tried to do online payments but they fails to do. As a result they avoid it.

### ***Online Payments are not Feasible in Rural Areas***

The population of rural areas is not very literate and they are also not able to operate computers. As they are unaware about technological innovations, they are not interested in online payments. So the online payment systems are not feasible for villagers.

### ***Highly Expensive and Time Consuming***

Electronic payment system are highly expensive because it includes set up cost, machine cost, management cost etc and this mode of payment will take more time than the physical mode of payment.

### ***Overcomes of Problems in Electronic Payment Systems***

#### ***Encryption***

Online shopping are very sensitive to notion that e-commerce is insecure, particularly when it comes to online payments. Most online payment systems use an encryption system to add security to the transmission of personal and payment details. There are various encryption schemes in use to prevent from frauds of online payments.

#### ***Digital Signatures***

The parties involved in online payments, transactions should use digital signatures in order to ensure authentication of

transactions.

### ***Check Whether the Country is a “High Risk” Country***

Always require closer inspection for orders that being shipped to an international address. Pay more attention if the card or the shipping address is in an area prone to credit card fraud. According to a Clear Commerce® survey, the top 12 international sources for online fraud are Ukraine, Indonesia, Yugoslavia, Lithuania, Egypt, Romania, Bulgaria, Turkey, Russia, Pakistan, Malaysia, and Israel. The same survey also showed that the 12 countries with the lowest fraud rates are Austria, New Zealand, Taiwan, Norway, Spain, Japan, Switzerland, South Africa, Hong Kong, the UK, France, and Australia. IP Geolocation service can identify the country of origin for businesses who need more information. It is helpful in maintaining the authentication in online payments.

### ***Firewalls***

A firewall is an integrated collection of security measures designed to prevent unauthorized electronic access to a networked computer system to protect private network and individuals machines from the dangers of the greater internet, a firewall can be employ to filter incoming or outgoing traffic based on a predefined set of rules called firewalls policies. There are 3 policy actions of firewalls:

Accepted: Permitted through the firewall.

Dropped: Not allowed through with no indication of failure.

Rejected: Not allowed through accompanied by an attempt to inform the sources that the packet was reject.

There are two fundamental approaches to create firewall policies to effect minimize vulnerability to the outside world while maintaining the desire functionality for the machines in the trusted or individuals computer. These are:

- (a) Blacklist Approach      (b) White list Approach

### **Conclusion**

Electronic payment refers to the mode of payment which does not include physical cash or cheques. It includes debit card, credit card, smart card, e-wallet etc. E-commerce has its main link in its development on – line in the use of payment methods, some of which we have analysed in this work .The risk to the online payments are theft of payments data, personal data and fraudulent rejection on the part of customers. Therefore, and until the use of electronic signatures is wide spread, we must use the technology available for the moment to guarantee a reasonable minimum level of security on the network. With respect to the payments methods they have been analysed in this work, it is impossible to say that any one of them is perfect, although each one of them has advantages as opposed to others. If the client wants to maintain privacy, then they choose those payment methods which guarantee a higher level of privacy such as E-cash or Net Bill Checks. If the priority is security, they should use, Smart Cards. Both consumers and service providers can benefit from e-payment systems leading to increase national competitiveness in the long run. The successful implementations of electronic payment systems depends on how the security and privacy dimensions perceived by consumers as well as sellers are popularly managed, in turn would improve the market confidence in the system.

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## Financial Inclusion And Its Relationship With Financial Literacy

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### Abstract:

*Financial Literacy has become one of the top priorities for most of the countries today as it put direct impact on economic growth of a country. In Indian economy financial literacy has still not become a top priority like other developed countries. Because of this most of the people are investing money in short term plans and physical assets. According to the survey conducted by Standards & Poor's over 76% Indian adults does not understand even the basic financial concepts. This article provides a discussion on some issues associated with digital finance – an area which has not been critically addressed in the literature. Digital finance and financial inclusion has several benefits to financial services users, digital finance providers, governments and the economy*

**Key words:** Financial Literacy, Digital Literacy, Education, inclusion.

### Introduction

Financial Literacy is the first step towards achieving Financial Inclusion. It is essential for enabling people to make right financial choices. In view of the lack of proper awareness, people buy policies without adequate planning and give up midway because they don't have money to pay the premium. People who have a strong grasp of financial principles are able to better to understand and negotiate the financial landscape and avoid financial consequences. Conversely, people with a lower degree of financial literacy struggle to understand money matters and the potential impact on their financial well-being.

Financial literacy and financial inclusion are twin pillars where financial inclusion acts as supply side for providing financial services and financial literacy acts as demand side making people acquainted with what they should buy. As the main motto of financial inclusion is to provide access to financial services to the masses at an affordable cost, so it is imminent that the masses be financial literate to avail much benefits and augment the process of inclusive growth. Financial inclusion mainly aims at providing the basic financial services and other financial services like insurance, mutual funds etc, which can only be done by improving financial literacy.

The OECD, defines financial literacy as “A combination of awareness, acquaintance, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial well-being”

### Objectives of the Paper

1. To concentrate on financial journey in the world and India
2. To see the present level of financial education in India.
3. To focus of various initiatives taken by various institutions i to enhance the financial literacy in India
4. To suggest measures to boost the financial literacy in India

### Methodology

This paper is descriptive in nature and is based on several secondary data and sourced from the publications of various government and private organizations and websites like, websites of RBI, Finance Ministry, MOSPI-CSO, SEBI, NISM, NSE, NSDL, CRISIL, Govt. publications, Research Publications of individual and institutional, Foreign Regulatory Acts of various other countries, etc.

### Financial Literacy in the world:

The countries with the highest financial literacy rates are Australia, Canada, Denmark, Finland, Germany, Israel, the Netherlands, Norway, Sweden, and the United Kingdom, where about 65 percent or more of adults are financially literate. On the other end of the spectrum, South Asia is home to countries with some of the lowest financial literacy scores, where only a quarter of adults—or fewer— are financially literate. Not surprisingly, financial literacy rates differ enormously between the major advanced and emerging economies in the world. On average, 55 percent of adults in the major advanced economies—Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States—are financially literate But even across these countries, financial literacy rates range widely, from 37 percent in Italy to 68 percent in Canada. In contrast, in the major emerging economies—the so-called BRICS (Brazil, the Russian Federation, India, China, and South Africa)—on average, 28 percent of adults are financially literate. Disparities exist among these countries, too, with rates ranging from 24 percent in India to 42 percent in South Africa ( Final report S& P 2016)

### Financial inclusion journey in India

Financial inclusion as a policy initiative entered the banking only after the recommendations of the Rangarajan Committee in 2008. It began to attract the attention of stakeholders when banks realised the significance of connecting with more people for business growth. The span of financial services included

provision of basic savings accounts, and access to adequate credit at affordable costs to vulnerable groups such as the excluded sections of the society and low-income households. The experience of microfinance units in India and abroad shows that vulnerable groups who pay usurious interest rates to local moneylenders, can also be worthy borrowers of banks

### Initiatives for Financial Literacy:

Government of India through its various agencies like RBI, SEBI, NABARD, State Bank of India etc have been trying to give financial literacy and financial education to its citizens in the last few years

1. The booklet on [FAME \(Financial Awareness Messages\)](#) is a basic financial literacy messages for the information of general public. It contains eleven institution/product neutral financial awareness messages, such as, documents to be submitted while opening a bank account (KYC), importance of budgeting, saving and responsible borrowing, maintaining a good credit score by repaying loans on time, banking at doorstep or at vicinity, knowing how to lodge complaints at the bank and the Banking Ombudsman, usage of electronic remittances, investing money only in registered entities, etc

In a move to provide elementary financial literacy information to general public RBI has designed the booklet FAME (Financial Awareness Messages). FAME Contains financial awareness messages, such as, documents needed to be submitted while opening a bank account (KYC), importance of budgeting, saving and responsible borrowing, maintaining creditworthiness, a credit score and by repaying loans on time, doorstep banking and localized banking, process of lodging complaints at the bank and the Banking Ombudsman, usage of electronic transfers, capitalizing money in registered entities etc.

2. The Reserve Bank of India has undertaken a project titled "Project Financial Literacy", the objective of which is to disseminate information regarding the central bank and general banking concepts to various target groups, including school and college students, women, rural and urban poor, defense personnel and senior citizens Modules covering matters related to General Indian economics and banking in India has been created in English and other vernacular languages and is disseminated to the target audience. Moreover, it also arranges visits of school and college students to RBI. Since last year it has started an annual quiz programme for students of classes VII to XI to generate their interest in economy, banking and insurance and RBI.
3. The Securities Exchange Board of India has gone aboard for financial education programmes through a nationwide campaign. To impart financial education to school and college students, working executives, middle income group, home makers, retired personnel, self help groups, etc., SEBI has empanelled Resource Persons throughout India who are trained on various aspects of finance and equipped with the knowledge of financial markets

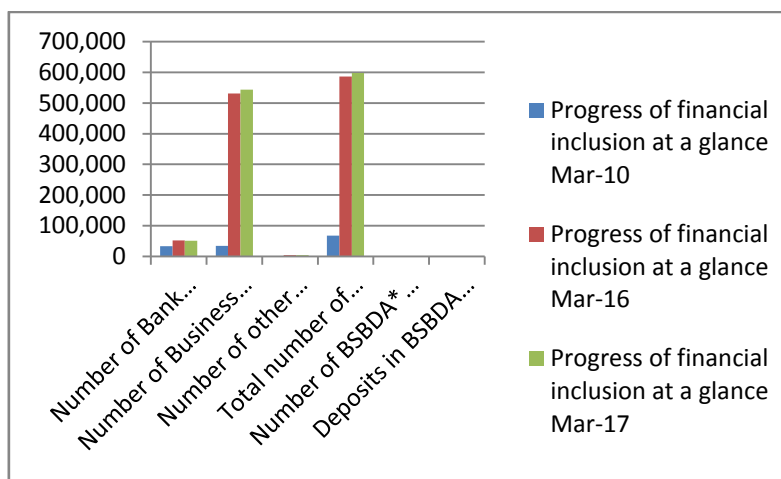
Investor education programs are conducted by SEBI through investor associations all over the country. Regional seminars are conducted by SEBI through various stakeholders viz. Stock Exchanges, Depositories, Mutual Funds Association, Association of Merchant Bankers etc. SEBI has a dedicated website for investor education wherein study materials are available for dissemination. SEBI also publishes study materials in English and vernacular languages. Under 'Visit SEBI' programme, School and college students are encouraged to visit SEBI and understand its functioning. SEBI has recently set up SEBI Helpline in 14 languages wherein through a toll free number, investors across the country can access and seek information for redressal of their grievances and guidance on various issues.

4. IRDA'S Initiatives on Financial Education Insurance Regulatory and Development Authority has taken various initiatives in the area of financial literacy. Awareness programmes have been conducted on television and radio and simple messages about the rights and duties of policyholders, channels available for dispute redressal etc have been disseminated through television and radio as well as the print media through sustained campaigns in English, Hindi and 11 other Indian languages. IRDA conducts an annual seminar on policy holder protection and welfare and also partially sponsors seminars on insurance by consumer bodies. IRDA has got a pan India survey on awareness levels about insurance carried out through the 13 NCAER in a bid to improve on its strategy of crating insurance awareness. IRDA has also brought out publications of 'Policyholder Handbooks' as well as a comic book series on insurance. A dedicated website for consumer education in insurance is on the verge of launch IRDA's Integrated Grievance Management System (IGMS) creates a central repository of grievances across the country and provides for various analyses of data indicative of areas of concern to the insurance policyholder.

### Progress of financial inclusion at a glance

Parameter of financial inclusion	March 2010	March 2016	March 2017
Number of Bank branches in villages	33,378	51,830	50,860
Number of Business Correspondents (BCs)	34,174	531,229	543,472
Number of other forms of banking touch points	142	3,248	3,761
Total number of banking touch points	67,694	586,307	598,093
Number of BSBDA* (in millions)	73	469	533
Deposits in BSBDA (Amount in Rs. billions)	55	636	977

Source: Annual Report of RBI, 2016-17.



In the last 7-8 years, banks have expanded their presence, and differentiated banks – payments banks and small finance banks – are set to take this further. When banks began pursuing three-year FI policies, innovations in providing better access to appropriate financial products and services came up. There was more focus on making banking accessible to vulnerable groups. Mainstream institutional players integrated fairness and transparency as part of their offerings, with basic products well-understood by the masses. As a result, FI became a critical factor for inclusive growth and development. Banks also realized that it can be an effective means for cross-selling and business growth.

### Suggestions

India has now 180 billion accounts. But 48 per cent of the bank accounts have seen no transactions in the last one year, according to the World Bank's Global Findex database. We must remember that the right measure of financial inclusion is not access, but regular usage. For making successful use of financial services, people need to be literate enough to understand the basics of managing money. This skill is known as financial literacy. People must be trained in smart spending – prioritising needs over wants, using credit card wisely, avoiding waste, funding expenses from savings and not loans, understanding terms of EMI (equated monthly instalments) before buying on EMI. Unfortunately it is a fact that even graduates in India are not really financially literate. So we should concentrate on financial education of graduates.

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## Impact Of Digital Payment System On Social Life

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### Abstract:

*It is transparency and security, Transparency and accountability, harder to achieve with cash payment. Because they are an the Digital payments are defined as non- cash transactions processed through digital channels, the digitalization of financial services is associated with disruptive change within the industry when it's come to the checkout process or payment. Digital payments have emerged as important tools for advancing financial inclusion because its lower the cost of providing financial services to poor people and increases the safety and convenience of using savings, payments and insurances products.*

*According to government of Indian the Digital payment will increase the employment controlling the imbalance of price marketing, transaction, and corruption .Reduce risk related to cash like, corruption, robbery, and carrying or storage of large amount of cash and made all transactions to be done cashless or digitalized which helps the people to transfer the money with security and safety.*

### Introduction:

#### E-money:

“Digital payments are technically defined as any payments made using digital instrument in digital payment, the payer and The payee both use electronics mode

1. Electronics payments allow your customers to make cashless payments for goods and services through cards, mobile phones or the internet.
2. The cost and time savings, increased sales and reduced transactions coasts.
3. Maximum payments or transaction women, more than 1.7 billion people in the world are still unable to participate in the formal financial system. The majority are women.
4. The majority are women. moment's economic participation by giving women more control over their financial levees and improves economy mobile payments is relatively a new payment methods .it is one of the outcomes of digital revolution.
5. Digital payments are technically defined as any payments made using digital instruments. In digital payments, the payer and the payee, both use electronic modes to send and received money. No hard cash is used.

#### Digital payments important

1. Cast saving through increased efficiency and speed.
2. Transparency and tracking, reducing corruption and theft as a result.
3. It is access to arrange of financial services, including savings accounts and insurances products.
4. The key benefit of digital or mobile payments is the case and the speed of completing the transaction and it is more flexibility in making payments.
5. Cashless money its helps authenticate and formalize the transaction that is done.
6. Its helps to curb corruptions and the flow of black money which results in an increase of economics growth the expenditure increased in printing and transportation of currency notes is reduced.
7. Lost saving through increased efficiency and speed transparency and security by increasing accountability and tracking. Reducing corruption and theft as a result inclusion saving accounts and insurances.

#### User's of Digital payment's in India

#### Digital payments :

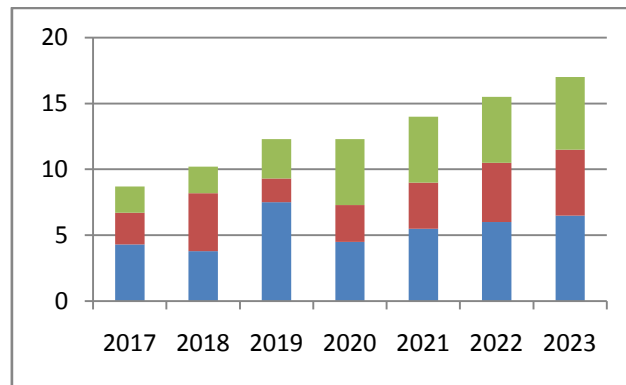
Transaction value (2019) - + 26.8% yoy US \$ 64.787m

Users (2019) +9.1% you

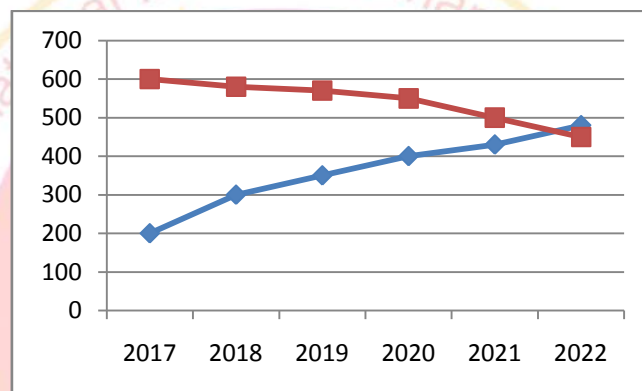
513.8 m +9.1% you

1. Total transaction value in the digital payments segment amount to us \$64.78m in 2019
2. Total transaction value is expected to show an annual growth rate (CAGR 2019-2023) OF 2019 resulting in the total amount of us \$13.588 m try

## Transaction Value



China is currently the biggest market in the world in the digital payments  
 Transaction value us \$ 1275 million 2018



The digital payments data is based on statistical primary reversely (SGA)

### Advantages:

The ease of conducting financial transaction is probably the biggest motivator to go digital. You will no longer need to carry wads of cash plastic cards, or queue up for ATMS with drawl

1. It is also a safer and easier spending option when you are travelling .the benefits are enormous if you leave out the low income group. Which will face a huge challenge says.
2. It will be especially use full in ease of emergencies say, in hospitals,” he says, adds Jayvant pai Head marketing PDFAS. Mutual fund
3. You have the freedom to transport or transact whenever and wherever you want you don't have to be physically presents to conducts a transaction or be forced to do so only during office hours.

### Discounts:

1. The recent waiver of service tax on card transactions upto RS 2000 is one of the incentives provided by the government to promote digital transaction.
2. For instances 0.75% discount on digital purchase of fuel means that the petrol price in Delhi at Rs 63.47 per litre can be brought down to Rs 62.99 with digital payments

### Go Digital Get Discounts:

**Service Tax:** service tax of 15% on digital transaction up to 2000 fuel 0.75% discount on digital purchase of fuel through credit /debet card, e-wallets or mobile wallets.

**Rail Tickets:** 0.5 discount on monthly and seasonal suburban railway tickets from 1 January 2017 on online rail tickets buyers get upto 10 lakh free accident insurances to

**Rail Catering:** 5% discount on digital payments for railway catering, accommodation retining rooms etc. Highway toll 10% on nh 100/ payment via RFID OR FAST TAGS in 2016-17.

**Insurance:** 10% DISCOUNT BY GOVERNMENT GENERAL insurances on premium paid online via their portals 8% discount on new lic polices bought online via its site pos rs 100 a months in the maximum rent that psu banks can charges for the posterminals

**Rupay:** kishan credit card holders to get rupay kishan cards

### **Drawback Of Digital Transactions:**

1. higher risk of identity theft
2. losing phone
3. Indian has a low internet penetration of 34.8% 26% mobile user 2015-16
4. How you can help low wage earners adapt to a cashless digital system.

### **Five Reasons Why Consumers Still Don't Use Digital Payments:**

“We are there yet” it is fair to say that the digital payment revolution has started. However, we are not there yet and there are five major reasons why consumers are yet to warm up to digital payments.

### **By Satyan Kathari:**

1. work is under way in the Indian ecosystem to expand infrastructure , increase technology adoption grow digital consumption and increase data traffic
- 1) Trust 2) Habit 3) Transparency 4) Pervasiveness 5) Friction

### **Impact Digital Payments System On Social Life**

#### **Important of digital payments system:**

“ According to the government of India the digital payments will increase the employment, reduces risk related to cash like corruption , robbery and carrying or storage of large amount of cash and made all transaction to be done cashless or digitalized which's helps the people to transfer the money with security and safety.

#### **Advantage and disadvantage of electronics payments system.**

1. Transparency and security.
2. Transparency and accountability.
3. Harder to achieve with cash payments because they are anonymous and difficult to trace digital payments increase accountability and tracking lessening the risk of corruption and theft.
4. The ease of conducting financial transactions is probably the biggest motivation to go digital ,you will no longer need to carry wads of cash plastic cards or every queue up for ATM with draw al it's also as a far and easier spending option when you are travelling the benefits are enormous if you leave and there low income group which will face a huge challenge says Karhik Jhaveri,
5. Arrektor, transcend consulting “ for the rest of the country it is constructive any simple”

#### **Conclusion:**

Digital Payments is the Future of India's economy, as per the Credit Suisse report, India's Digital Payments is expected to reach \$1 trillion by 2023. More than 100 million people in India now use Digital Payments mode at least once in a month in India. Banks and Fintech startups are also introducing several innovative Digital payment modes every day. The days are not far away when India will also be regarded as a Digital Economy.

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## Digital Payment System: Importance, Advantages and Difficulties

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### Abstract:

India is a developing country in the world. It is getting developed with the various dimensions like: education, health, socio-economic system, research and technology etc. Digital transaction is a technological reform in the economic system. Digital transactions bring in better transparency, scalability and accountability. The world is rapidly moving towards digitalization, by using digital payment system in shopping, education, banking, groceries, bill payments, tax filing and any other transaction. More people prefer to use digital cash payment methods rather than carrying hard cash. Government of India thought that, if it reduces the economy's dependence on the cash and making it more based on digital mediums would result into the betterment of the economy and the country. As part of government reforms Prime Minister Mr. Narendra Modi launched the "Digital India" initiative in 2015 and also demonetized the Rs. 500 and 1000 denomination notes in November 2016. These initiatives have provided extensive boost up to the digital payment system in the country. This paper strives to illustrate the importance, advantages and difficulties in digital payment system in India.

**Keywords:** Digital Payment System, Importance, Advantages, Difficulties.

### Introduction:

The "Digital India" is the Indian Government's flagship programme with a vision to convert India into a digitally empowered country. "Faceless, Paperless, Cashless" is one of supposed function of Digital India.<sup>6</sup> Digital payment system will help in curbing the generation of black money. The cashless or digital economy has regulated the parallel economy. People who hoard money under their bed, people who launder money bypassing banking channels, finance to terrorism will face difficulty in cashless or digital economy. It also will help in reducing issues of tax avoidance. Cashless economy will boost consumption of people as they would not be attracted towards keeping money in banks due to low interest rates. More consumption will lead to more investment and more production with more employment generation. Hence, the income of the people and ultimately the national income will be increased.

The volume of cashless transactions has been growing globally at a compound annual growth rate (CAGR) of 9.8 per cent during the period 2012-2016, which was driven by emerging Asia and CEMEA (Central Europe, Middle East and Africa) (World Payments Report, 2018).<sup>3</sup> Though there are some difficulties in digital payment system, the Government of India is encouraging it by taking into consideration the importance and advantages of digital economy.

### The Concept of Digital Payment:

Digital payment means; all transactions are carried out using different types of payment methods and this does not involve the physical use of money for the purchase of various goods and services.<sup>6</sup>

There are various types and modes of digital payments. Some of these include the use of debit/credit cards, internet banking, mobile banking, mobile wallets, Bharat Interface for Money (BHIM), Unified Payments Interface (UPI) service, Unstructured Supplementary Service Data (USSD), Bank prepaid cards, Aadhaar Enabled Payment System (AEPS), Point of Sale (PoS) etc.

### Objectives of the Study:

1. To study the concept of digital payment system.
2. To find the importance of digital payment system.
3. To review the advantages of digital payment system.
4. To understand the difficulties in digital payment system.



### Research Methodology:

This research is descriptive and exploratory in nature and based on secondary sources of data. Necessary information is collected from the research papers, Journals, websites etc.

### Importance of Digital Payment System:

We can discuss the importance of digital payment system on following grounds:

- 1. Taxation:** Digital payment system is important to improve tax compliances. With lesser availability of hard cash at homes and more in banks, there is lesser scope to hide income and evade taxation. It leads to increase in tax payers and ultimately tax income of the country will increase.
- 2. Transparency and Accountability:** Digital payment becomes a lot easier to track the flow of money with every transaction being recorded with the buyer, seller as well as regulatory bodies. Obviously the system will be much more transparent and compliant. It is good for the economy for better business and investment in long run. Cheap money policy can be employed for more circulation of money in the economy; because more currency will be in bank.
- 3. Reduced Redtapism and Bureaucracy:** With digital transactions through electronic means the wire transfers are easy to track. So the concerned people are accountable in terms of transactions. It helps to reduce corruption and improves service time and facility.
- 4. Control on Illegal Activities:** When people prefer go cashless, there is lesser cash available with the people and there won't be the more cash to invest in other activities. Thus channels like illegal remittance, finance to terrorism will ultimately under control by a cashless economy.
- 5. Pack of Plastic Cards:** While using digital payment system there is no need to carry notes in a case. Just carrying the required pack of plastic cards or mobile banking will also suffice. Cards are safety with PIN protection. Hence, much credentials for the users.
- 6. No Fear of Robbery:** Cashless digital payment leads to have minimum cash in hand; so there is no fear of robbery.
- 7. The Payment of Exact Amount:** With digital transactions, there is no need to pay fringe amount in case the exact amount is not available with person. In this way money can be saved by payment of exact amount.
- 8. Easier Transactions and Accounting:** We can easily do any transaction with security and direct payment to bank account makes accounting easy. We need not to go every day to deposit cash to our current account.
- 9. Tracing Illegal Political Funding:** Majority of the funding in the political party is unaccountable and remains unchecked because that is not revealed by the party as well as the donor. All that kind of illegal transaction would be traced and stopped if a government follows cashless or digital economy.
- 10. Cut in Cost of Currency Services:** Government bears a lot of cost on currency services. But by adopting digital economy the cost of printing and distribution of currency would be minimised substantially.

### Advantages of Digital Payment System:

The advantages of digital payment system are discussed below:

- 1. Convenience:** Digital financial transaction is easy to conduct which motivates more digitalization. It's also a safer and easier spending option when we are travelling. We will no longer need to carry cash money, credit/debit cards, or even queue up for ATM withdrawals. It will be especially useful in case of hospitals and other emergencies. Digital payment system gives us the freedom of transaction whenever and wherever we want. We need not to be physically present to conduct a transaction also there is no limitation of office hours to do so.
- 2. Discounts:** The government is offering various discounts to promote digital transactions in India. Service tax on card transactions up to Rs 2,000 is waived off, 0.75% discount available on digital purchase of fuel. Similarly, we can avail saving on rail tickets, highway toll or purchase of insurance. In addition to these the cash back offers and discounts offered by mobile wallets like Paytm, as well as the reward points and loyalty benefits on existing credit and store cards therefore; digital payments become more beneficial.

3. **Tracking Spending:** If the transactions are digitally made, they remain on record and it will be very easy for people to keep track of their previous spending. According to Manoj Nagpal (CEO, Outlook Asia Capital), “such records will also help while filing income tax returns and in case of a scrutiny, people will find it easy to explain their spends.”
4. **Budget Discipline:** Digital payment system maintains written record which help us keep tabs on our spending and this will result in better budgeting. According to Jhaveri, “Various apps and tools will help people analyse their spending patterns and throw up good insights over a couple of years.” Amount saved by controlled spending can be invested.
5. **Lower Risk:** The modes of digital payments are more safety which has lower risk as compare to handling cash. If a credit/debit card or mobile wallet stolen, it is easy to block remotely, so it lowers risk. Moreover; if the futuristic cards evolve to use biometric ID it can be extremely difficult to copy, making it a very safe option of economic transactions.
6. **Benefit to Government:** The government also will benefit from the digital economy in the area of adequate budgeting and taxation, improved regulatory services, improved administrative processes (automation), and reduced cost of currency administration and management (Ashike, 2011). The advantages of a cashless or digital society range from regulating and controlling to securing the financial system of our economy.

#### Difficulties in Digital Payment System:

The difficulties in digital payment system are as follows:

1. **Lack of Literacy:** The first and foremost issue of lack of literacy about digital modes and financial matter is a difficulty in the digital payment system. People are not literate properly to use digital payment system.
2. **Cybercrimes:** People are facing difficulty of cybercrimes while using digital modes of payments, which creates question mark on cyber security. Number of cases of cybercrimes has been registered in this year.
3. **Poor or No Internet Connectivity:** People are facing difficulty in digital or cashless payments because of poor connectivity of internet. In some rural areas there is no internet connectivity at all.
4. **Unbanked Population:** In India numerous accounts have been opened through Jan Dhan Yojana but most of them are remaining un-operational. Unless people start operating bank accounts cashless or digital economy will not develop.
5. **Agro-based Formal Economy:** Indian economy is basically agro-based formal economy where the transactions are dependent on cash. Still banking network is not sufficiently reached in rural India. Also the different digital instruments are not available to rural population. In these circumstances rural economy faces the difficulty in digital payments.
6. **Rigid Approach:** Even though all facilities are available some people are rigid in nature, there vested interest in not moving towards digital economy.
7. **Lack of Electronic Payment Infrastructure:** India is having dominant population of small shopkeepers or retailers. They don't have enough resources to invest in electronic payment infrastructure. Thus they have difficulty to go digital.

#### Conclusion:

India is the fast emerging and one of the largest and strong economies in the world. Digital payment system is found important on various grounds also there are lot of advantages of the digital economy. But It's a fact that there are some difficulties also people are facing while going digital. Though there are some problems but all developments could be feasible only when the population accepts the digital payment system. According to a recent report, the Indian digital payment industry is expected to reach \$1 trillion by 2023. Government is also encouraging digitalization of our economy. RBI's Vision 2021 is a step in the right direction as it looks to create a robust digital payment ecosystem by moving towards a cash-lite economy. Hence, if the difficulties those are discussed above are addressed by the government. And provided solutions like: digital transactions with more secured features, to ease of transactions, the reduced cost of the making digital payments could lead to more potential developments of digital payments processing system in India.

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## Digital Payment System Advantages And Difficulties

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### Abstract:

The RBI and the Government are making several efforts to reduce the use of cash in the economy by promoting the digital/payment devices including prepaid instruments and cards. RBI's effort to encourage these new varieties of payment and settlement facilities aims to achieve the goal of a 'less cash' society. With limited cash in hand and an indefinite crunch in sight, most people are rushing to cashless transactions. Digital transactions bring in better transparency, scalability and accountability. The new move will compel more merchants to accept digital money. Cash may no longer be king.

**Keywords:** varieties of payment, limited cash, transparency, digital money.

### Introduction:

The Government of India has been taking several measures to promote and encourage digital payments in the country. As part of the 'Digital India' campaign, the government aims to create a 'digitally empowered' economy that is 'Faceless, Paperless, and Cashless'. There are various types and modes of digital payments. Some of these include the use of debit/credit cards, internet banking, mobile wallets, digital payment apps, Unified Payments Interface service, Unstructured Supplementary Service Data (USSD), Bank prepaid cards, mobile banking, etc.

Digital payment methods are often easy to make, more convenient and provide customers the flexibility to make payments from anywhere and at anytime. These are a good alternative to traditional methods of payment and speeden up transaction cycles. Post demonetization, people slowly started embracing digital payments and even small time merchants and shop owners started accepting payments through the digital mode.

### What Is A Digital Payment?

To put it in simple words, a digital payment occurs when goods or services are purchased through the use of various electronic mediums. There is no use of cash or cheques in this type of payment method.

### Methodology:

The study depends upon secondary data's. the secondary data will be collected from various Books, articles, journals, pamphlets.

### Types Of Digital Payment Methods In India

1. Banking cards
2. USSD
3. Aadhaar Enabled Payment System (AEPS)
4. UPI
5. Mobile Wallets
6. Bank pre-paid cards
7. Point of Sale (PoS)
8. Internet Banking
9. Mobile Banking
10. Bharat Interface for Money (BHIM) app

### Advantages Of Digital Payment System

There are several reasons why the government and the RBI bring up measures to promote cashless transaction economy. Besides convenience, digital transaction gives more scope for recording of transactions and in this way it is a first step against the spread of unaccounted money or black money. Secondly, the problem of counterfeit notes can also be avoided when payment is settled digitally.

#### 1. Convenience:

The ease of conducting financial transactions is probably the biggest motivator to go digital. You will no longer need to carry wads of cash, plastic cards, or even queue up for ATM withdrawals. It's also a safer and easier spending option when you are travelling. The benefits are enormous if you leave out the low-income group, which will face a huge challenge. For the rest of the country, it is constructive and simple. It will be especially useful in case of emergencies. The freedom to transact whenever and wherever you want. You don't have to be physically present to conduct a transaction or be forced to do so only during office hours.

## 2. Discounts:

The recent waiver of service tax on card transactions up to Rs 2,000 is one of the incentives provided by the government to promote digital transactions. This has been followed by a series of cuts and freebies. It's a good time to increase your savings if you take advantage of these. For instance, 0.75% discount on digital purchase of fuel means that the petrol price in Delhi at Rs 63.47 per litre can be brought down to Rs 62.99/l with digital payment. Similarly, saving on rail tickets, highway toll, or purchase of insurance can help cut your costs. Add to these the cash back offers and discounts offered by mobile wallets like Pay tm, as well as the reward points and loyalty benefits on existing credit and store cards, and it could help improve your cash flow marginally.

## 3. Tracking Spends:

If all transactions are on record, it will be very easy for people to keep track of their spending. It will also help while filing income tax returns and, in case of a scrutiny, people will find it easy to explain their spending. Besides the tax, it will have a good impact on budgeting.

## 4. Budget Discipline:

The written record will help you keep tabs on your spending and this will result in better budgeting. Various apps and tools will help people analyze their spending patterns and throw up good insights over a couple of years. Controlled Spending could also result in higher investing. If the same amount of cash does not flow back into circulation and people continue to use mobile wallets and cards, it is also likely to bring down the latte factor. This means that the Rs 10 you spent on candy or chips, or that regular cup of coffee office is likely to take a hit since you will be short of loose and smaller currency notes. There's a lesser chance of budgetary leaks and unaccounted for spends sneaking into your budget at the end of the month.

## 4. Lower Risk:

If stolen, it is easy to block a credit card or mobile wallet remotely, but it's impossible to get your cash back. "In that sense, the digital option offers limited security," says Pay. This is especially true while travelling, especially abroad, where loss of cash can cause great inconvenience. Besides, if the futuristic cards evolve to use biometric ID (finger prints, eye scan, etc), it can be extremely difficult to copy, making it a very safe option.

## 5. One Stop Solution For Paying Bills:

Many digital wallets and payment apps have become a convenient platform for paying utility bills. Be it mobile phone bills, internet or electricity bills, all such utility bills can be paid through a single app without any hassle.

## 6. Helps Keep Black Money Under Control:

Digital transactions will help the government keep a track of things and it will help eliminate the circulation of black money and counterfeit notes in the long run. Apart from this, this may also give a boost to the economy as the cost of minting currency also goes down.

## 7. Small Gains:

It may not seem like much of an advantage, but being cashless makes it easy to ward off borrowers. Another plus is that you can pay the exact amount without worrying about Not having change or getting it back from shopkeepers. Go digital, get discounts

### a) Service Tax:

Waiver of service tax of 15% on digital transactions up to `2,000. Fuel: 0.75% discount on digital purchase of fuel through credit/debit cards, e-wallets or mobile wallets.

### b) Rail Tickets:

0.5% discount on monthly and seasonal suburban railway tickets from 1 January 2017. Online rail ticket buyers get up to `10 lakh free accident insurance too.

### c) Rail Catering:

5% discount on digital payments for railway catering, accommodation, retiring rooms.

### e) Insurance:

10% discount by government general insurers on premium paid online via their portals. 8% discount on new LIC policies bought online via its site. POS: Rs 100 a month is the maximum rent that PSU banks can charge for PoS terminals.

### d) Highway Toll:

10% discount on NH toll payment via RFID or fast-tags.

### F) Rupay:

Kisan credit card holders to get RuPay Kisan cards.

## Difficulties Of Digital Payment System

### 1. Higher Risk Of Identity Theft:

The biggest fear is the risk of identity theft. Since we are culturally not attuned to digital transactions, even well-educated people run the risk of falling into phishing traps. With the rising incidence of online fraud, the risk of hacking will only grow as more people hop on to the digital platform. Besides, the latest move by the government to remove the two-factor authentication process for online transactions up to ₹2,000 will not help. Irrespective of the size of transaction, the absence of this additional layer of security will expose thousands to the risk of identity theft. Another weak link is the inadequate redressed mechanism. With the poor redressed system in India, imagine what a poor rickshaw puller will do if he has his Aadhaar ID stolen? Given the tedious process and poor grievance redressed, people will have no easy recourse if they lose money online. There is no stringent legal process to deal with this kind or scale of fraud. Add to it the mass identity theft from banks' or companies' databases and it can turn into a financial nightmare akin to the data breach in the Indian banking system in October this year.

### 2. Losing Phone:

Since you will be dependent on your phone for all your transactions on the move, losing it can prove to be a double whammy. It can not only make you susceptible to identity theft, but you could also be rendered helpless in the absence of physical cash or any other payment option. This can be especially problematic if you are travelling abroad or in smaller towns or villages with lack of banking infrastructure or other payment options. Another drawback is that you need to keep your phone constantly charged. If the phone dies on you, you will be stranded, particularly if you are in the middle of an important purchase or dealing with an emergency.

### 3. Difficult For Tech-Unsavvy:

India has a low Internet penetration of 34.8% (2016), according to the Internet Live Stats, and only 26.3% of all mobile phone users have a Smartphone (2015), as per Statistic figures. Besides the practical difficulty of going digital, a bigger block is the psychological shift. You are suddenly jumping three generations to the digital medium. It's a problem for the older people, who may suddenly find themselves locked out of their accounts if they can't download an app or don't have cash. The digital medium may prove a challenge for the tech-unfriendly people, who will need more time to adapt or the availability of other options to conduct transactions.

### 4. Overspending:

While there is no denying the convenience of card or mobile wallet transactions, it could open a spending trap for an unsuspecting population. According to behavioral finance theorists, the pain of parting with money is felt more acutely if you use physical cash instead of a card. Hence, using cash instead of cards or mobile wallet acts as a natural bulwark for people who find it difficult to control their spending. This is the reason that people could end up overspending, throwing their budgets into disarray. Besides, a high penetration of the digital payment system is contingent on the fact that the same amount of cash does not come back into circulation. If it does, people are more likely to switch back to the former ease of using cash as it is a habit that they may find difficult to break.

### Conclusion:

With limited cash in hand and an indefinite crunch in sight, most people are rushing to cashless transactions. Digital transactions bring in better transparency, scalability and accountability. The new move will compel more merchants to accept digital money. Cash may no longer be king. While you wait for the serpentine queues at ATMs to peter out and currency notes of Rs 100 denomination to become easily accessible again, the adoption of digital payment solutions is picking up at a furious pace. Everyone from the neighborhood vegetable vendor to the chai and bhelpuri-wala is embracing digital payment solutions to tide over the cash crunch. ET Wealth conducted an online survey to find out the level of adoption of digital payment solutions and user habits. The findings reveal that while people are getting comfortable with cashless payments, some mindset issues are holding back many from embracing the newer platforms. The findings also suggest that the usage habits of those who have taken to cashless modes could be exposing them to security threats.

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## A Study On Impact Of Digital Payment System On Business In India

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### Abstract:

India is one of the fastest growing economic country in the world. It is also the seventh largest economic country in the world so it's GDP measure and the second largest in terms of Purchasing Power Parity. The digital Indian plan was a major step by the government in India to bring all segments into purview. It has a three pronged agenda of providing infrastructure, governance and digital empowerment to every citizen. This initiative will transform the economy of the nation and make it among the top seven countries globally to go completely digitalization in India. In the era, which has its most recent inclusion "the UPI- based transfer" to the already advanced digital payments system, we are stepping up towards an economy which facilitates a more convenient, effective and secure payments environment. Digital payments give the users a whole new set of opportunities. Our study is based on understanding the study on impact of digital payment system on business in India.

**Keywords:** Digital Payment, UPI, Digital India, Demonetization, E wallets

### 1.Introduction:

Now a day new era of mobile phone and smart phone technology is in every hand, when dally user counts is increasing at the rate of thousands per day newer technologies are coming to aid the digital payment. One of the most useful and innovation technologies of all was the introduction of E wallets or digital payment systems. In India the first e wallet was launched On 11th April 2016, the National Payments Corporation of India (NPCI) launched the Unified Payments Interface (UPI) which opened up scope for a better mode transact in the market, alongside mobile wallets such as Paytm and Amazon pay, credit/debit cards and other modes of internet banking instantly. Demonetization which took place on 8th November 2016 has impacted the Indian economy to a great extent, which was aimed at retrenching illicit economic activity prevalent in the Indian economy. This digital payment eased payments for online shopping and payment of utility bills. The real change happened after India went through demonetization when the user count rapidly increased and many E wallet companies grabbed this opportunity, when the monthly transaction jumped from 3000 crore to 6800 after demonetization. In 2013 the industry was having annual turnover of IND 24 billion and in 2017 it has grown to IND 955 billion. The industry is expected to grow up to \$4.4 billion by the year 2022. Though many look into Governments United Payment Interface (UPI) over other modes; digital payment Industry is having immense opportunity in our country. A stiff competition stays in the field and the markets are filled with more firms coming into race and are trying to grab in the opportunity. Digital payments were considered as an alternative and alongside it had several other benefits such as convenience, ease, ability to track expenses, etc., so people opted this as an alternative to cash. This study aims at understanding the consumer behaviour after the introduction of digital payments.

### Objective of the Study

- 1) To analyze the perspective of Digital Payment in India.
- 2) To study the history of Digital Payment across the world.
- 3) To study the impact of demonetization on cash less transactions.

### Research Methodology

This article is purely conceptual so no primary data is collected by means of questionnaire or interview schedule. The secondary data for this paper are collected from Research articles which have already published in government and non-government websites, books and so on.

### 2. Literature Review:

#### K.C.Balaji & L.Balaji (2017)

in this study the growth of the cashless transaction system is reaching new heights. People tend to move to cashless transactions. It is right to say that the cashless system is not only a requirement but also a need for the society. But on the other hand, the risk of cyber-crime is very much higher as almost all the cashless transactions are done over internet. In order to punish the cyber criminals, the properly structured cyber police force with high end forensic labs and technology must be created.



**Piyush Kumar and Dr.Dhani Shankar haubey (2017)**

The digital payment had given relief and force to learn digital transaction after demonetization. People adopted technology slowly, but don't wanted to pay extra for digital transaction. However, people of India faces money problems during demonetization they suffer with no cash. In addition, for this medium like paytm helps them.

**Ansh Tak (2019)**

The magnitude of Demonetisation on Indian economy is very large. There were few bottlenecks to implement it but Indian public has taken it as bitter pill and expected some changes in years to come. The above study reveals that there were considerable drop in GDP. Banking sector showed positivity in low cost CASA and expected that Bank will be mild towards lending and will be able to fight against NPA. Stock market showed some jitteriness towards few sectors in anticipation of Production Due to demonetization digital economy came in force but need some more reforms to get the real output.

**Burhan Ul Islam Khan, Rashidah F. Olanrewaju and Asifa Mehraj Baba (2017)**

An evolutionary succession has been witnessed by payment methods from cash to cheques, to credit cards and debit cards, and currently to electronic commerce and mobile banking. The issues associated with online payment as well as the adoption of electronic commerce for making payments by customers has been discussed in this paper. Furthermore, the advancements in technology supporting mobile transactions and making them more convenient and transparent is developing trust among customers who are becoming habitual of employing this mode of payment.

**R. Adharsh, J. Harikrishnan, Adarsh Prasad and J.S. Venugopal (2018)**

E wallets Payment systems have grown-up to a larger market during the years, being a part of techno economic development youth has accepted this concept. One third of the youth today use E wallets at least once in a month, perceiving E wallets mainly due to their easily accessible nature, Ease of transaction as well as the confidentiality and security during the Payments. The major factors influencing youth towards E wallets include availability of wide range of services, monitors benefits as well as it's acceptance from small vendors to large scale retailers.

**Arun P Nambiar, Saranya Devi K, and Anand Sriram S (2018)**

With the study that we have conducted we establish that for most of the respondents,cashless mode of expenditure is not forming a major part of their expenditure. The reason for not opting digital payments which is more convenient for expenditures, largely pertains to the perceived drawbacks that the respondents had to digital payments.

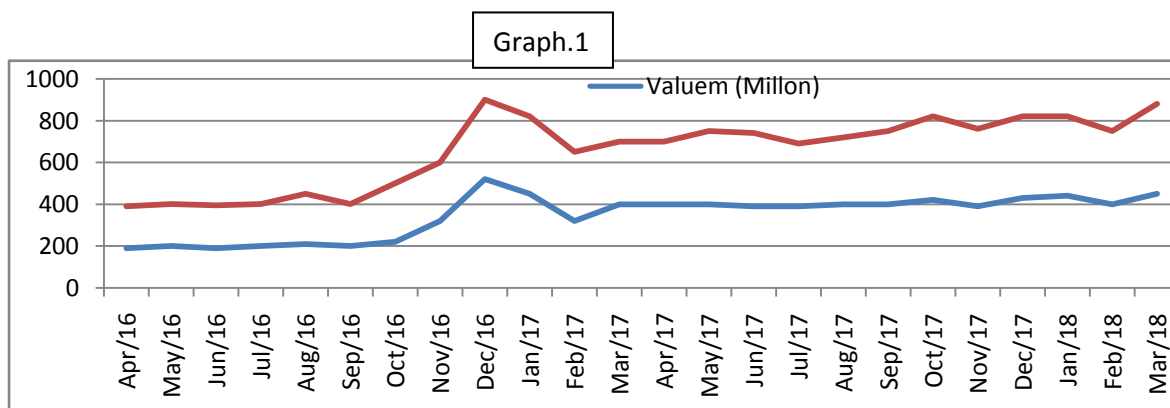
**Payel Chaudhuri (2016)**

Impact of digitization is increasingly helping Indian GDP to grow. Economic benefit of Internet is expected to contribute 4.6% of GDP of India by 2018. It is also predicted that there is enormous opportunity to grow the SME sector through the ecommerce. The increase of SME business would also generate employment in the country. Ecommerce is considered to be an important channel of job creation which is estimated to create 15-20 lakhs job by 2018 in India.

**3. Perspective Of Digital Payment In India:**

Up to November 2016, the term 'demonetization' was largely relegated to macroeconomic textbooks and viewed largely only as a theoretical policy idea; that changed when the Government of India implemented it. It can be debated whether the policy was a success or not but what cannot be debated is the fillip it gave to digital payments, and more importantly, fundamentally changed the nature of people largely accustomed to cash – by some estimates, cash accounted for over 97% of transactions.

**POS Transaction in India**

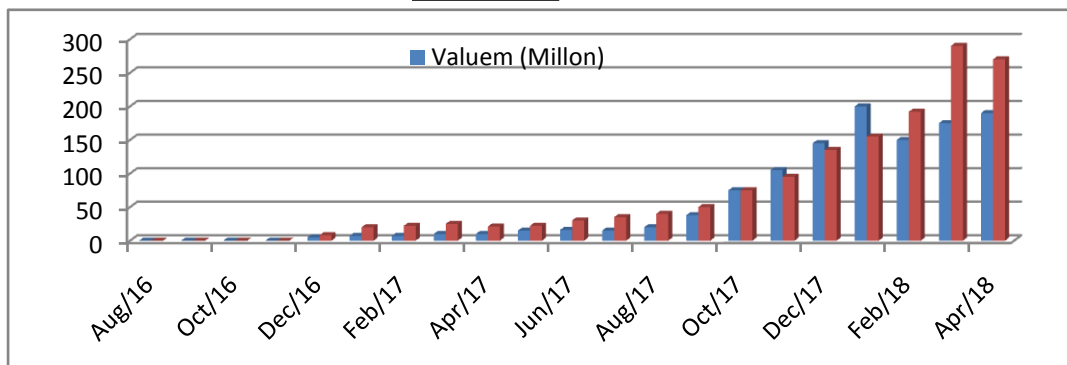


Source: Reserve Bank of India - May 2018

While cash has made a comeback into the economy and POS transactions have largely levelled off from their highs, the conversation around digital payments has changed from something that was largely perceived as relevant only to the urban population to something that has a more inclusive and sustainable feel to it.

A proxy for this inclusiveness and sustainability can perhaps be seen in the volume and value of UPI (Unified Payments Interface) transactions in recent months. UPI is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing and merchant payments into one hood (NPCI website). While the estimates for merchant payments through UPI range from 10-25%, albeit primarily through e-commerce platforms, it is a good indicator that people are taking fairly swiftly to the idea that there are digital alternatives to cash.

Graph.2



Source: National Payments Corporation of India - May 2018

### Digital India:

Digital India is a campaign launched by the Government of India in order to ensure the Government's services are made available to citizens electronically by improved online infrastructure and by increasing Internet connectivity or by making the country digitally empowered in the field of technology.<sup>[1][2]</sup> The initiative includes plans to connect rural areas with high-speed internet networks. Digital India consists of three core components: the development of secure and stable digital infrastructure, delivering government services digitally, and universal digital literacy.

Launched on 1 July 2015 by Indian Prime Minister Narendra Modi, it is both enabler and beneficiary of other key Government of India schemes, such as BharatNet, Make in India, Startup India and Standup India, industrial corridors, Bharatmala, Sagarmala.

As of 31 December 2018, India had a population of 130 crore people (1.3 billion), 123 crore (1.23 billion) Aadhaar digital biometric identity cards, 121 crore (1.21 billion) mobile phones, 44.6 crore (446



million) smartphones, 56 crore (560 million) internet users up from 481 million people (35% of the country's total population) in December 2017, and 51 per cent growth in e-commerce.

### 4. History Of Digital Payment Across The World:

Electronic payments have their roots in the 1870s, when Western Union debuted the electronic fund transfer (EFT) in 1871. Since then, people have been enamored with the idea of sending money to pay for goods and services without necessarily having to be physically present at the point-of-sale. Technology has

been a driving factor in the development of electronic payments. Today, making a purchase is as easy as tapping a button on your smartphone. Work with streamlining payment methods has been hard-won.

From the 1870s until the late 1960s, payments underwent a slow but gradual transformation. In the 1910s, the Federal Reserve of America began using the telegraph to transfer money. In the 1950s, Diner's Club International established itself as the first independent credit card company, soon followed by American Express. In 1959, American Express introduced the world to the first plastic card for electronic payments. Entering the 1970s, people became more reliant on computers as part of the buying process. In 1972, the Automated Clearing House (ACH) was developed to batch process large volumes of transactions.

#### *The World Wide Web*

Then along came the Internet. In the 1960s, ARPANET, a precursor to the modern Web, was built as a military network to improve communication. In the 1990s, online internet banking services were offered to bank customers. Those first online payment systems were anything but user-friendly users had to have specific encryption knowledge and use data transfer protocols. Soon, development across the Web, and the eventual invention of Web 2.0, set the stage for online sites to participate in what's now known as e-commerce. In 1994, Amazon, one of the pioneers of e-Commerce, was founded, along with a slew of other websites that we know and love to purchase on.

People have engaged in commerce to exchange goods and services for **payment** throughout the ages. This is the **History** of Money and **Payments**. Fast, reliable, digital transactions are demanded more and more. Yet today's payments world fails to live up to demands of cost, speed and efficiency. Technology now exists, and is maturing, to change systems for the better.



Payment acceptance and securing payments has been a specific challenge for e-merchants and payment processors. In the early days of electronic payment processing, you needed special equipment and software to send a payment for goods. Now, payment acceptance can be integrated into websites, mobile platforms, and at the point-of-sale for scalability amongst merchants big and small.

#### **5. Impact Of Demonetization On Cash Less Transactions In India:**

On 8 November 2016, the government of India demonetised Rs 500 and Rs 1,000 currency notes. While some welcomed the decision, most people faced challenges in the days that followed. The move forced consumers to go cashless.

For the first month after demonetisation, his business took a sudden plunge. So he started accepting cashless payments through traditional points of sale, mobile wallets, cheques, etc. to keep his business afloat. Dhulla says, "Things are better now, but many consumers still prefer to make cashless payments." Dhulla himself has also started using a mobile wallet, and a debit card for big-ticket expenses.

In the financial year of 2016-17, there were a total of 865.9 crore digital transactions across all banking platforms. Within a period of 3 years, the amount of digital transactions has more than tripled. Recently, Niti Aayog principal advisor Ratan Watal shared similar statistics, stating that digital payments grew 55 per cent in volume and 24.2 per cent in value in 2016-17 over 2015-16.

The above statistics shows how the people started adapting the technology and shifted towards the cash-less transaction, in the Metropolitan cities about 60-70% of the shop owners, grocery stores, local vendors and even the small tea stall owners use Paytm for the payment. This has also minimized the problem of spare change of which the sellers took the advantage by either giving a chocolate or by asking to buy something to make a round figure or procrastinating the amount for next purchase (which hardly happens), but this issue is resolved here as the exact amount of payment (including decimal figure) can be done using the virtual money transactions.



The adult population with a bank account has increased to 65 percent with the financial inclusion reforms in India over the last 5 years.

The cash-less economy transaction has helped out to give the tremendous increase in GDP (gross domestic product) rate of our country.

If we talk about the rural areas the effect of demonetization results out to be harsh as the sudden news of banning of Rs.500 and Rs.1000 banknotes made the situation chaotic. More than 90% of the rural people do the transaction in cash and there is limited access to the banks, in this moment they had faced so much problems, even some of them faced the day for survivals.

Therefore, it is not at all easy for them to get involved in the cash-less payment mode but this brought the change as by the stats of telecom companies states that till 2012 only 13% of the rural people subscribed for the internet but in 2016 this figure has reached to about 58% which is sought to be a big change.

#### **Political Impact-**

The political impact of demonetization was felt by the whole country with majority of the educated people offering support to the demonetization. The speeches against black money made by Prime Minister Mr. Narendra Modi are attracting huge crowds turning into vote banks for BJP. There is a growing support for BJP from the educated people and especially the youth for the bold step taken to curb black money. The opposition parties however oppose the demonetization drive. The continuous adjournment of both the houses indicates this scenario. Dr. Manmohan Singh, ex- prime minister of India has said this move as unlawful against democracy. His statement came out in the Rajya Sabha in the presence of Mr. Narendra Modi. Opposition parties strongly oppose the demonetization implementation process.

#### **Social Impact –**

The Banning Of Rs.500 And Rs. 1000 Notes Was Released Suddenly And The Worst Affected Was The Common Man. The Social Impact Was Drastic With Marriages Facing Severe Issues With Cash Transactions. People Conducting Marriages Must Produce The Marriage Invitation To Withdraw 2, 50,000 And Above. This Has Caused Great Difficulty Among the public. The impact on the health care sector was huge with hospitals refusing to accept the old currency. The common man faced severe issues transacting in the hospitals with old currencies and several cases of death had been registered for not attending the patients due to demonetization Salaried employees faced the issue on the opening day of the month with their salaries credited in the bank account but they were able to withdraw only 2,000 rupees from the ATM machines. Many salaried people have gone to the bank branch to withdraw their full salary amount with loss of pay. Social problems in the form of road blockades and quarrels arouse with people waiting in long queues before the banks and ATM machines. People become restless spending an entire day to withdraw money. Several deaths have been registered as a result of waiting in long queue. Pensioners are worst affected with no special provisions made for senior citizens in banks.

#### **Economic Impact-**

Demonetization is viewed as a measure of sterilizing the money. RBI plays the pivotal role in this demonetization drive. All the banking experts welcome this demonetization measure. Considering the banking sector, both public and private sector banks are facing the severe issue of Non-Performing Assets (NPA) or Bad loans to the tune of 10 lakhs crore including the stressed assets according to RBI sources. This demonetization measure will help banks to recover some bad loans and improve their financial position. Considering the entire economy of India as a whole, demonetization will make most of the transactions to be done through the formal banking sector. This will increase the transparency with people and corporate paying tax properly. Income Tax department has reported that only 4 percent of the individuals pay income tax while this figure has to be increased to 28 percent. The demonetization will help achieve this target of the Income tax department. When black money within India gets curbed, it will result in the overall economic development of the nation.

#### **6. Conclusion:**

“When you expect an honest Government with no corruption and malpractices, you also have to be honest. Honesty is not one-way road” – Prime Minister Shri Narendra Modi. From the above analysis it also appears that many people actually agree with the government on the usefulness of cashless economy as it helps to fight against terrorism, corruption, money laundering but one biggest problem in the working of cashless economy in India is cybercrime and illegal access to primary data. Therefore it's important to strengthen Internet Security from protection against online fraud. Large number of population is still below literacy rate living in rural areas .For smooth implementation of cash less system in India, the following measures are recommended Government have to bring transparency and efficiency in e-payment system, strategies used by government and RBI to encourage cashless transactions by licensing payment banks, promoting mobile wallets and withdrawing service charge on cards and digital payments. A financial literacy campaign should be conducted by government time to time to make population aware of benefits of electronic payments.



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## Impact Of Cashless Transactions On Indian Economy

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### Abstract

*This article examines the cashless transactions and its impact on Indian economy. The Indian payment system is speedily transiting to more and more IT-based systems. In the retail area, we have very high volumes of money circulation. Other than cash, one of the growing payment methods accepted by merchants in the sector is payment cards. However, the whole isometrics of moving from cash-determined economy to a cashless economy has somehow been mixed with demonetization that was aimed to extract liquidity from the system to extract black money. With the increasing acceptance of electronic payments, particularly those driving e-commerce and mcommerce, there is a growing demand for quicker payment services which, in turn, enable ease in doing financial connections. Keywords: Cashless Economy, Black money, Digital India, Digital Payments, Cyber Crimes,*

### Introduction

“A Cashless economy is secure, it is clean. You have a leadership role to play in taking India towards an increasingly digital economy”-Sri. Narendra Modi November 8, 2016, is a historical date in the contemporary Indian economic scenario as it was on this day our hon. Prime Minister Mr. Narendramodi had launched the programme Digital India with a vision to transform India into a digitally empowered nation, creating a cashless, paperless economy followed by the implementation of demonetization. He addressed the public during an election campaign at Utter Pradesh for asking them to familiarize themselves with the idea of cashless transactions. The current status indicates that in India, the e payments in the country are only limited to 7 percent to 8 percent. Moreover his radio Programme “Man Ki Baat” He said: “Learn how this digital economy works. Learn the different way you can use your bank accounts and internet banking. Learn how to effectively use the apps of various banks on your phones. Learn how to run your business without cash. Learn about card payments and other electronic modes of payment. Look at the malls and see how they function. A cashless economy is secure, it is clean. You have a leadership role to play in taking India towards an increasingly digital economy.

### Objective

- To study the concept of Less-cash society; cashless economy and digital economy.
- To evaluate the change in economy in pre-demonetization and current scenario.

### Methodology

This study is entirely descriptive in nature and is based on the secondary data. The data is taken from authentic and reliable source i.e. RESERVE BANK OF INDIA, well renounced journals and international articles.

### Limitation of Study

The study is done on data on Reserve Bank of India only.

### Meaning Of Cashless Economy: Current Trend And Pattern

A cashless economy includes e-banking (mobile Banking/ Internet Banking), debit and credit cards, card swipe or point of sale(POS) machine and digital wallets where all types of transactions are carried out through digital means. The present status of India reveals that our country stands far behind other economies with respect to the cashless transactions. The ratio of cash to GDP in India was one of the highest in the world, ie 12.42 percent as per the report of 2011 when compared it with that of China (9.47%). Another statistics of 2012-13 revealed that India has 76.47 billion currency notes in circulation during that time as compared to that in the US (34.5 Billion) However, by 2016, India, the demonetization of 8th November has resulted in the depletion in cash as the currencies of Rs.500/- and Rs.1000/- were banned, pushing the digital and electronic transaction to the forefront. But e-banking, e-wallets, and other transaction applications are becoming more prevalent nowadays. On the other hand, various other studies have shown that people prefer cash to credit cards while making their personal purchases, especially at malls.

### Benefits Of Cashless Economy

The cashless economy has helped in creating a positive impact on society in terms of its mode of operation, time and cost. The various benefits of going for a cashless economy are given below:

1. Root out the creation of black money
2. Individuals will find it hard to excuse themselves from income taxes.
3. A check on black money leads to the reduction of real estate prices

4. Money spend on currency insurance and insurance and management can be avoided

5. It can increase consumption and thereby boost production, employment opportunities, and income

The cashless economy has helped in uprooting the growth of a parallel economy rooted in black money. As all the transactions can be tracked and monitored, there will be difficulty in evaluating the income taxes. Thus it can enhance the revenue income of the government by carrying out more productive activities in the economy. Inflation takes place in the prices of real estate markets and the reduction of real estate prices take place due to the improved check on black money. It is reported that RBI had spent Rs.27 Billion in the financial year 2015 and such expenses shall be rubbed off. People won't be that much interested in keeping their cash in banks. So that it will boost consumption and thus the income.

### Disadvantages of Going Cashless

Cashless techniques are based on IT. Hackers can easily access to IT based transactions. Table 1 below shows the increasing trend in fraudulent cases.

Table 1

Year	IT Act		IPC	
	Cases Registered	Persons Arrested	Cases Registered	Persons Arrested
2011	1791	1184	422	446
2012	2876	1522	601	549
2013	4356	2098	1337	1203
2014	7201	4246		1224
2015	8045	5102	3422	2867
<b>Total</b>	<b>24269</b>	<b>14152</b>	<b>8054</b>	<b>6289</b>

Source: www.factly.in

### Analysis

Table 2 data is sourced from RBI shows that government is adopted cashless economy very loudly without increasing banking infrastructure, digital infrastructure in the economy. Mobile wallets, Mobile banking, Point of sale machines shows an increasing trend .

Table 2

Components	Oct 2016 Volume (Million)	Oct 2018 Volume (Million)	Growth rate since Demonetisation
RTGS	9.01	10.97	21%
CCIL-Operated System	0.27	0.31	14%
Paper clearing	88.03	95.03	7%
Retail-electronic clearing	346.46	565.02	63%
Cards	1,032.14	1,293.28	25%
M-wallets	99.57	325.18	226%
PPI cards	27.29	26.62	-2%
Paper voucher	0.04	0.00	-100%
Mobile banking	78.12	307.74	293%
No. of ATMS	2,19,578	2,27,758	3%
NO. of POS	15,12,068	33,40,029	120%

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## A study of National Initiative on Financial Literacy

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### Abstract

*Financial Literacy is the ability of a person to understand how money works: or how it can make or invest it and expands it, manages it. Financial Literacy is important because it helps to equip people with the knowledge and skills that they need to manage money effectively. Without which the financial decisions and actions can not lead to success. Financial literacy involves many aspects such as; the proficiency of financial principles and various concepts related to it such as managing debt, financial planning, compound interest, techniques for profitable savings, the time value of money etc. There can be negative consequences on the financial well-being of an individual if a person has a lack of financial literacy which may lead in making poor financial choices. To prevent from this, the federal government created the Financial Literacy and Education Commission, which provides resources for people who want to become competent enough and to learn more about financial literacy.*

**Key Words:** Financial Literacy, Money, Education.

### Introduction

Financial Literacy is the ability of a person to understand how money works: or how it can make or invest it and expands it, manages it. Financial Literacy is important because it helps to equip people with the knowledge and skills that they need to manage money effectively. Without which the financial decisions and actions can not lead to success. Financial literacy involves many aspects such as; the proficiency of financial principles and various concepts related to it such as managing debt, financial planning, compound interest, techniques for profitable savings, the time value of money etc. There can be negative consequences on the financial well-being of an individual if a person has a lack of financial literacy which may lead in making poor financial choices. To prevent from this, the federal government created the Financial Literacy and Education Commission, which provides resources for people who want to become competent enough and to learn more about financial literacy

### Objectives of the Paper:

- 1) To understand the concept of Financial Literacy
- 2) to know the Importance of Financial Literacy
- 3) To study National Initiatives on Financial Literacy

### Meaning of the Financial Literacy

Financial Literacy is the possession of the set of skills and Knowledge and information which allows an individual to make informed and effective decisions with all of their financial resources. In other words, financial literacy is the not only education but also understanding of various financial areas which includes managing personal finance, understanding how to generate, invest, spend, and save money. It focuses on the ability to manage matters related to personal finance in an efficient manner, and it also includes the knowledge of making appropriate decisions about personal finance such as Investing in Mutual Funds, Shares, Debentures, Government Bonds etc., insurance, investment in real estate, forecasting and making budgets and tax planning.

Financial literacy involves many aspects such as; the proficiency of financial principles and various concepts related to it such as managing debt, financial planning, compound interest, techniques for profitable savings, the time value of money etc. There can be negative consequences on the financial well-being of an individual if a person has a lack of financial literacy which may lead in making poor financial choices. To prevent from this, the federal government created the Financial Literacy and Education Commission, which provides resources for people who want to become competent enough and to learn more about financial literacy.

The main steps to achieving financial literacy includes following:

- 1) Learning the skills to create a budget,
- 2) The ability to track spending,
- 3) Learning the techniques to pay off debt and
- 4) Effectively planning for retirement.

These steps can also include counselling from a financial expert. Financial Literacy involves understanding how money works, creating and achieving financial goals and managing internal and external financial challenges.



### **The Importance of Financial Literacy**

The knowledge of financial literacy helps individuals become self-sufficient so that they can achieve financial stability in their life. Those who understand this subject should be able to answer several questions about purchases, such as whether an item is required, whether it is affordable, and whether it an asset or a liability etc.

This field helps to demonstrate the behaviours and attitudes a person who possesses money that is applied to his daily life need. Financial literacy shows how an individual makes appropriate financial decisions. This skill may help an individual to develop a financial road map to identify a) what he earns b) what he spends c) and what he owes.

Financial illiteracy affects all ages and all socio-economic levels of the society. Financial illiteracy causes many people to become victims of predatory lending, subprime mortgages, fraud and high interest rates, potentially resulting in bad credit, bankruptcy or foreclosure etc. The lack of financial literacy can lead to owing large amounts of debt and thus making poor financial decisions.

### **National Initiatives on Financial Literacy**

The Reserve Bank of India (RBI), India's oldest and most experienced financial apex and supervisory body is working aggressively in the field of financial literacy. Commercial banks (Private as well as Public), various Non Government Organizations (NGOs) and Self - Help Groups (SHGs) have joined their hands with the Reserve Bank and the Government with the aim of spreading financial literacy among the people. With this context, the Reserve bank of India (RBI) has implemented a project named 'Project Financial Literacy' with the main objective of disseminating information regarding the financial and banking concepts in easy and simple language which can be understood by general public. A Financial Education Site was launched in November 2007 with the objective of creating the interest among students in finance and the related concepts have been explained through some short films, games, cartoons etc. Moreover, the staff of the Reserve bank of India has been visiting the number of villages of India for imparting and spreading financial education to the rural India.

In order to make and improve financial capability of the people in India and to make them more capable and confident regarding their financial transactions, in total 718 Financial Literacy Centres have been set up as at the end of March 2013 and these centres have successfully educated 2.2 million people from April 2012 to March 2013.

In order to make spread of knowledge and information of financial literacy (i.e. its concept, scope, implementation and measurement) there is a need to develop financial literacy framework from top to bottom. Various banks are taking active steps in this. HDFC Bank is conducting rural financial literacy initiatives across the country. State Bank of India has launched financial literacy programme for creating awareness among the rural masses about savings, financial services of banks, educational loans, kisan credit card, insurance, old age pension etc. With the objective of promoting financial literacy in unbanked areas in Madurai and Theni districts, the National Bank for Agriculture and Rural Development (NABARD) has initiated a unique project of spreading financial education through street plays and identified ninety unbanked villages for the purpose. SEBI has also taken number of Initiatives on Financial Education such as Certified Resource Persons organise financial literacy workshops for different groups in the society like students, retired personnel, homemakers etc. In a drive of creating a financially literate India, the NGO's and SHG'S are focusing particularly on improving the financial education of women, school children, underprivileged people, educated youth, farmers and poor by developing and improving their knowledge and skill and enabling them to avail financial services and manage their financial budget according to their need efficiently.

For spreading financial Literacy and Credit Counselling the Indian Government has also launched Financial Literacy and Credit Counselling Centers during the year 2009, the main aim of which is to inculcate not only saving habits among the people, to make them aware of the financial products but also the credit schemes and counselling people to prevent unmanageable debt level. Credit counselling is nothing but a process of offering education to consumers about how to avoid incurring debts that cannot be repaid. As a result of transformation of the financial system and shifting of traditional need-based lending to retail lending, a large variety of products/loans are available for a common through various banking channels.

### **Counselling Centers**

People are ready to take debt even to finance their daily consumption needs. This make necessity to open a credit counselling centers this helps to avoid over- indebtedness and NPAs. These centers mainly focus on credit related problems and provide awareness on various products. Now a day, a few banks have opened credit counselling centers in the country.

1. 'ABHAY' counselling centre is an initiative of Bank of India;
2. Disha Trust is established by ICICI Bank Ltd and

3. Bank of Baroda has opened Grameen Paramarsh Kendra in the state of Maharashtra.

### Conclusion

In India, RBI is doing commendable job through the various banking linkages for achieving the objectives of both i. e. financial inclusion and financial literacy. Various NGOs and SHGs are also contributing towards improving the financial education of the people. The need of the hour is to strengthen financial education initiatives in India. Through this paper the researcher has tried to explain the importance and need of the financial literature.

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## Digital Payment System In India

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### Abstract:

*This paper is trying to understand the current trend of adopting digital payments in India. Digital payment means paying the other person via Internet or electronically instead of paper money. Digital Payments Initiative was taken up by the Government of India on 8th November on the declaration of notation. Digital payments were introduced to bring transparency in transactions and eliminate black money. This was actually a move towards a cashless economy. Further, digital payments were encouraged to provide sufficient cash for banks to lend to people. So far, many sections of society have begun digital mode payments, but people are still scared to use internet banking, debit cards, e-cash etc. The government used to incentivize the government for digital payments but now it has declined. This paper seeks to understand the reasons behind the adoption of digital payments by people in India and also explores the problems that people face when making digital payments.*

**Keywords:** Digital payments system, cash back system, promotion, etc.

### Introduction:

This research paper is an attempt to adopt digital payment methods by people and to create transparency in their work. Digital payments encouraged by the Government of India after the announcement of the notation on November 8, on. The basic goal behind the implementation of digital payments is to achieve a long term cashless economy. Increasing corruption and black money in India makes it difficult for people to obtain statements from other parties about transactions and transfers. The government had launched a digital campaign to increase transparency in operations and gain governance.

### Objectives:

1. To find out people's perspective on digital payments
2. To know the problems people face in digital transfer
3. Learn the most popular digital payment method.
4. To have an idea about the expected future of digital payments in India.

### Literature Review:

#### Code Roy, Dr. Review of Indrajit Sinha :

India's e-payment system has grown tremendously, but still more has been done to increase its use. Yet 90% of transactions are cash based. The adoption model of the technology is used for the purpose of study. They found that innovation, incentives, customer convenience and legal frameworks are the four factors contributing to the strengthening of the e-payment system.

#### Rakesh HM and Ramaya TJ :

in their dissertation study of "Factors affecting consumer adoption of the Internet Store on Internet Banking" tried to examine the factors affecting Internet banking adoption. Rirex Methodology For the purpose of our study, primary and secondary data were used. Primary data were collected from 110 people in a questionnaire manner It collects secondary information from various online sources such as websites, articles, journals, news, etc.

### Paper Based payment Mode:

Paper based system costs a lot to the community. These include cash printing, transportation of notes, weeding of earthen notes, check-printing, postage, clearing and handling costs etc. It also includes indirect costs of tax revenue loss, black money creation, security risk, etc. Cash - Cash flow in the country remains constant. Currency and currency notes are very high in the country as a percentage of GDP. India's cash-to-GDP ratio was 9.5%, the highest in the BRICS countries. PM Narendra Modi has emphasized on cashless transactions as part of government reforms after the demonetization of rupee correctional value. Demonetization has introduced a unique platform for Indian consumers to adopt digital payments as an alternative to cash payments. Check-in has long been an option for cash payments. Non-cash payment modes have been widely acknowledged by government and BI due diligence initiatives. The check clearing system has been migrated to the Ifefe-based check system. CTS have provided banks with liquidity management and operational benefits.

### Electronic payment mode:

Cards payments include payments made using debit cards, credit cards or prepaid / store value cards. Card payments can be made face-to-face or implemented remotely.



**Pay money:**

**Paytm:**

Transferring Money from Paytm Account to Bank Quickly the CVV number of the customer is safe. Paytm has introduced the App Password feature for Paytm Wallet to make sure that money is safe even if customers lose their phone or misdirect. Customers can use Paytm even without a Smartphone.

**Mobi-Week:**

Introduction to m-wallet for easy storage and money management. Instant recharge without sign-up. Encrypted and highly secure transactions. User friendly mobile applications.

**Rupay:**

It is the hero of the two terms, rupee and payment. Rupay Card 2 Pay was launched by National Payments Corporation of India (NPCL) on March 7. These are linked to a personal bank account. Can be used for shopping in shops, ATMs, online wallets, micro-ATMs and e-commerce. In April 5, the Rupay card is issued to more than 3 savings accounts of the length and breadth of the country and to current account holders.

**AEPS:**

Aadhaar enabled payment system uses a 12-digit unique Aadhaar Identification Number to allow bank-to-bank transactions at POS. AEPS services include support for balance inquiries, cash withdrawals, cash deposits and Aadhaar fund transfers. Instead of paying cash, check, orchid card, the customer can use mobile to pay for various services and digital or hard goods. As of May 31, 2017, there were 1, 180,82 million wireless subscribers. The high level of access of mobile users provides immense opportunities for mobile banking. I

**IMPS:**

Interbank Mobile Payment Service was launched as a remittance product through mobile phones. This is an Interbank Electronic Funds Transfer service through mobile phones. IMPS makes it easy for customers to use mobile devices as a channel to access their bank account and send money. USSD: Mobile banking based on unstructured supplementary service data. The business is connected to a bank account of Rs. Used for payments of up to.

**UPI:**

The United Payments interface considers a system that empowers multiple bank accounts on a mobile application platform of a participating bank. Ensures merger of multiple banking features, intact funding paths and merchant payments. This facilitates P2P funds transfer. On December 30, the government launched mobile applications for Digital Banking (BHIM) for Bharat Bank. The app enables users to transfer money to another person's bank account using a virtual payment address (VPA).

**Electronic / mobile wallets:**

They are used by the Internet and smart phones. Money can be stored on the app through debit or credit card or recharge through Net-banking. Consumer wallet limit is Rs. 20,000 per month and the merchant wallet is limited to Rs. Self1,3 per month after self-declaration and Rs. After KYC Verification 10000 VI Top Five Mobile Payment Wallet of India

**The various forms of digital payments in India are as follows:**

**NFC**

MST Transmission Wave platform conferences are transacting through NFC (Near Field Communication) and MST. (Magnetic Secure Transmission) Technology. Send your card through POS (Point of Sale) machine. You can easily pay merchants through their wireless transmitted magnetic waves without having to swipe in. You can take advantage of this convenience by downloading the MST enabled app and your phone will support NFC facility. You can do contactless communication through your phone at the terminal.

**Digital wallet payment system:**

Digital wallet payment system is loaded into the pocket on this platform. Likewise with the introduction of e-wallets you can add money using digital wallet apps. However, the problem is that you can only transfer funds to that wallet. This means that if you have a Paytm or SBI Buddy app on your phone, you can transfer the installed money to another person's Paytm Wallet or SBI Buddy App, respectively. There is no other way you can transfer money from Paytm Wallet to the SBI Buddy Wallet app. There are some e-wallets available in the digital marketplace like Mobi-wick, Free-Charge, Oxygen, JioMoney, PayPal, Buddy, Pocket-Set.

**USSD Code Payment System:**

You can easily complete your payment using the USSD (Unstructured Supplementary Service Data) code and a few instructions, even from your basic phone. It is a GSM-based technology where transactions occur through messages. It is a platform that fully constitutes a medium between telecommunications and banking financial services. For each banking app, you have a separate dialing code that you must check with your service provider when transferring payment.



### Mobile Identifier MMID:

Mobile Identifier MMID is a unique seven-digit number that is issued by the bank once you have registered your mobile number. The person who wants to send the money and the person who wants to receive the money must have the MMID for the specific interbank fund transfer. However, with MMID you can transfer only a small amount (about 10,000) a day. Almost all of these banks offer small payment facilities.

### UPI based payments platform

UPI has introduced a Virtual Address Creating feature whereby you can transfer money by revealing your account number and IFS code to the recipient. UPI works on a real time basis, meaning that money is transferred immediately. UPI also helps in transferring funds to other media. UPI facility is available with all banking apps such as HDFC UPI, SBI UPI, ICICI UPI, IS XIS UPI and almost all other private and public banks. Now, most banks are embedding their UPI feature in their mobile banking app.

### QR Code based payment system:

QR code is a separate payment transfer system where you only need to reduce the QR code of the merchant and do that, Payments Transfer is the easiest way to transfer payments through most digital payment apps such as BHIM, other banking apps The black square contains information about the item through which the code information is automatically transmitted via smart phone and upon payment, when payment is complete. You do not need to enter anything manually when using the QR Code feature. The government has introduced the India QR code to prevent digital payment activities everywhere

### Major Challenges / Difficulties of Digital Payments

1. **Lack of trust in people with digital payments.**
2. Lack of knowledge among illiterate or less advanced people.
3. Low credibility due to scams and hacking cases.
4. Sometimes loss of internet connection.
5. Delay in cashback processing by e-commerce companies and e-wallet companies.
6. Payments are blocked from time to time and no confirmation is sent to the customer regarding the payment status.

### Future of digital payments in India:

The future of digital payments in India means that it will take enough time. To be a fully cashless economy. This will require full support from the public and greater awareness and knowledge among the people. Lack of education and the problem of digital literacy need to be addressed first in order to become more digital. In addition, cashback offers are currently working well but India needs a committed, secure and highly reliable payment network to drive digital transactions, secure black-money, eradicate black money and build long-term economic development through a cashless economy. By doing so we can certainly have a grand future for digital payments in India.

### Suggestions for digital payment system :

1. The following measures are recommended for easy implementation of cash less system in India.
2. Government installment of transparency and efficiency in e-payment system, promotion of cashless transactions by licensing payment banks and strategies used by the RBI and mobile wallets.
3. As part of 'Make in India' initiative of the government, Rs. Cards, Aadhaar based payment system should be given priority. Government should withdraw service charges on cards and digital payments. Cash. Measures to discourage cash use by charging fees for withdrawals over the limit Population. Financial literacy campaign should be implemented by the government from time to time to make the public aware.
4. In order to improve financial inclusion, in addition to business talks, e-service centers etc. Subtle receipts and payment transactions can be allowed using Aadhaar authentication. digital. Educate women through campaigns to accelerate the adoption of digital payments.
5. Financial literacy will empower women. This will lead to a digital and social revolution. Schools. Basic banking skills can also be offered in schools. Cash. Activate all departments to adopt non-cash electronic methods of cash payments.
6. Lucky receiver plans and guidance business plans need to be continued to encourage electronic payments.

### Conclusion

Moving to a cashless economy is definitely good but I have a long way to go to fully cashless economy. Government and Paytm, PhonePay etc. These efforts are well underway by private sector companies with similar e-wallet apps. The biggest challenge facing the government is the lack of knowledge of the people and

the fear of harm caused by the use. The risk of hacking digital payment methods. The government needs to address these challenges to create a cashless economy and provide sustainable economic development to the country in the long run to promote digital payments.

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## Digital Payment System Methods And Probabilistic Challenges

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### Introduction :

Digital payment system helps everyone to save time and energy and is more convenient for instant money transfers all across the world. Further, there are many types of digital payment systems available at present which includes unified payment interface, Aadhaar enabled payment service, unstructured supplementary service data, card payments and electronic wallets. These different methods of digital payment systems are being used all across the world based on the users' requirements and suitability of transactions. Digital payments are used for purchase and sale transactions, ticket bookings and utility payments, banking and other investments and taxation payments. It also helps the business organizations to increase their profits and reduce transaction costs. It helps the government in prompt collection of taxes and e-government .

Technological innovations have also changed the prospect of payment systems. Modern technologies have turned traditional cash-based payments systems into a cashless payments system which is more efficient and effective. The features of digital payments like the ease of use, convenience, safety, and speed made digital transactions lucrative in the field of payments than a traditional system. Digital payments emerge as a favorite mode of payments all over the world including India.

Digital payments have been picking up rapidly in India since 2014 due to "digital India" initiatives of the government, internet penetration, smart-phone penetration and adoption of the technologies by the people.

India has achieved a cumulative average growth rate (CAGR) of 58.9% in terms of volume and CAGR of 28.4% in terms of value in digital payments in the year 2019. This growth rate of India is remarkable in the global payments market (NITI AAYOG , 2018).

**Objective :** This paper has the following main objectives

- 1) To study the methods of digital payment system.
- 2) To study the probabilistic challenges of digital payment system .

### Research methodology:

The present research paper study has collected secondary data through the journals, articles, bank reports and published books and internet websites etc.

### Digital payment system– meaning

Digital payment is a method in which a person can make online payments for his purchase of goods and services without physical transfer of cash and cheque, irrespective of time and location. Digital payment system is the basis of on-line payments and on-line payment system development is a higher form of electronic payments. It makes electronic payments at any time through the internet directly to manage the e-business environment. We have two distinct types of payment systems in the real world. 1. Internet based payment system; there are four models

Of internet based payment system, e-cash, credit card, debit card, smart card. 2. Electronic transaction based payment system; there are four models of internet based payment system, secure electronic transaction, cyber cash, net bill, first virtual holdings.

### Definition

5.1 "The payment and settlement act, 2007 has defined digital payments. As per this any "electronic funds transfer" means any transfer of funds which is initiated by a person by way of instruction, authorization or order to a bank to debit or credit an account maintained with that bank through electronic means and includes point of sale transfers; automated teller machine transactions, direct deposits or withdrawal of funds, transfers initiated by telephone, internet and, card payment"

5.2 "Digital transaction means a payment transaction in a seamless system effected without the need for cash at least in one of the tow legs, if not in both this includes transaction made through digital / electronic medium to send or receive money".

### Digital payment system methods



### **Banking cards**

Banking cards offer consumers more security, convenience, and control than any other payment method. The wide variety of cards available – including credit, debit and prepaid. These cards provide 2 factor authentications for secure payments e.g. Secure pin and OTP. Ropay, visa, MasterCard are some of the example of card payment systems.

### **Internet banking**

Internet banking or e-banking is the latest series of technological wonders in the recent past which involves use of internet for delivery of banking products and services. It is the service being utilized intensively by most of the consumers of the digital world. It enables customers of a bank or other financial institution to conduct different financial transactions through the financial institution's website.

### **National electronic fund transfer (NEFT)**

National electronic funds transfer (NEFT) is a nation-wide payment system facilitating one-to-one funds transfer. Under this system, individuals, firms and corporate can electronically transfer funds from any bank branch to any individual, firm or corporate having an account with any other bank branch in the country participating in the system. However, cash remittances will be restricted to a maximum of Rs. 50,000/- per transaction.

### **Real time gross settlement (RTGS)**

RTGS is the continuous settlement of funds transfers individually on an order by order basis. 'real time' means the processing of instructions at the time they are received rather than processing some time later; 'gross settlement' means the settlement of funds transfer instructions occurs individually. This system is primarily meant for large value transactions. The minimum amount to be remitted through RTGS is 2 lakhs and there is no upper ceiling for these transaction.

### **Electronic clearing system (ECS)**

ECS is an alternative method for effecting payment transactions in respect of the utility-bill payments such as telephone bills, electricity bills, insurance premium, card payments and loan repayments, etc., which would eliminate the need for issuing and handling paper instruments and thereby facilitate improved customer service by banks / companies / corporations / government departments, etc., in collecting / receiving the payments. This works as per the standing instructions of the customer given to his/her bank.

### **Immediate payment service (imps)**

Imps offer an instant, 24x7, interbank electronic fund transfer service through mobile phones. Imps is an emphatic tool to transfer money instantly within banks across India through mobile, internet and ATM which is not only safe but also economical both in financial and non-financial perspectives. It sub-serves the goal of reserve bank of India (RBI) in electronification of retail payments and builds the foundation for a full range of mobile based banking services.

### **Mobile banking**

Mobile banking is a service provided by a bank or other financial institution which allows its customers to conduct different types of financial transactions using a mobile device through software called an app. It fulfills the ability and the increasing demand of consumers, to perform more and more sophisticated financial transactions on a Smartphone or tablet with one or two taps of a finger .examples: axis mobile, ICICI mobile, state bank anywhere, state bank buddy, Kotak bank and many more.

### **USSD-unstructured supplementary service data (USSD)**

It is a service which allows mobile banking transactions using basic feature mobile phone, without having mobile internet data facility .this innovative payment service \*99# works on national unified USSD platform (NUSP) channel. The key services offered under this service include, interbank account to account fund transfer, balance enquiry, mini statement besides other services. Account in a bank and any mobile phone on GSM network are required for activation. There is a transaction limit of Rs 5000 per day per customer. Registered mobile number with any phone, mobile money identifier (mmid) and mobile pin (mpin) will pave way for transactions.

### **AEPS- Aadhaar enabled payment system**

AEPS is a bank led model which allows online interoperable financial transaction at point of sale / micro ATM through the business correspondent /bank Mitra of any bank using the aadhaar authentication without any pin or password. There is no limit on transactions. Only linkage of aadhaar with bank account is needed for transactions. It enables Services like balance enquiry, cash withdrawal, cash Deposit , Aadhaar to AAdhaar funds transfer.



### UPI-unified payments interface

UPI is a system that combines multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood. A Smartphone with internet facility and bank account details, are required for registration. Virtual payment address and UPI pin enables transactions. Example: phone pay, Google Tez, and BHIM etc.

#### Mobile wallets

Mobile wallet is a path to carry digital cash. This can be done by linking credit card or debit card information in mobile device to mobile wallet application or you can transfer money online to mobile Wallet .the basic requirements to start using a wallet are bank account, Smartphone, internet connection and a free wallet app. For consumer the wallet limits are: rs.20,000/month for all. Rs.1 lakh/month with KYC (know your customer) and for merchants the wallet limits are rs.50,000/month with self declaration and rs.1 lakh /month with KYC. E.g. Paytm, free charge, Mobikwik, oxigen, Mruppee, Airtel money, jio money.

#### Point of sale

It is the place where sales are made. It maybe markets, malls, retailer or checkout counter etc. Physical pos -physical card swiping through a handheld configured device. Mobile pos- it enables transactions through smart phone connected with external pos device through jack / Bluetooth. Virtual pos – it is a virtual e-payment gateway. Payments to bank account of merchant are enabled through QR code. It provides complete privacy of merchant bank account.

#### Micro ATM's

A device used by a million business correspondents(who could be a local kirana shop owner and will act as \_micro ATM's) to deliver basic banking services. It is based on a mobile phone connection and is available at every bc. Customers would just have to get their identity authenticated and withdraw or put money into their bank accounts. This platform will enable function through low cost devices (micro ATM's) that will be connected to banks across the country

### Digital payment system challenges

7.1 Maximum number of people in rural area prefer cash transactions. They do not wish to accept digital payments system either through using debit card or credit card or RTGS or any other. As for decades India has been a cash based economy.

7.2 The other important issue of digital payments is the lack of technology used in the rural areas and also reach of technology to various locations. Though, it is being sounded that every corner of India shall have ICT services in place, many of the locations where the installations are completed, services are not available for the customers.

7.3 Creating awareness in rural area about using the digital payments like Smartphone based transactions, feature phone based transactions, usage of credit or debit cards at pos solutions etc are some of the important challenges.

7.4 Limited availability of point of sale terminals as most of the pos terminals are located in urban and semi urban areas.

7.5 Mobile internet penetration remains weak in rural India. There are connectivity issues in rural areas. Lower literacy level in poor and rural parts of the country makes it problematic to push the use of plastic money on a wider scale.

7.6 High level of cash circulation prevails in India. Cash in circulation amounts to around 13% of India's GDP.

7.7 ATM use is mainly for cash withdrawals and not for settling online transactions. Nearly 90% of ATM cards are used for cash withdrawals. Multiple holding of cards in urban and semi urban areas show low rural penetration.

7.8 The challenge of gaining the trust of customers is one of the key challenges faced by the mobile wallets, digital transaction service providers like banks, fin-tech companies etc.

7.9 In the view point of the customer, the cost of transactions that are levied over the customer is also a major concern. For example, over every debit card transaction, some retailers are charging the transaction cost from customers and it is an additional burden.

### Conclusion

Digital payment system in India, has shown tremendous growth, but still has lot to be done to increase its usage. 24\*7 service, time saving, convenience and security factors contribute to strengthen the digital payment system. Digital transactions and mobile wallets, with more secured features, reduced cost of managing and ease of transaction in digital payments are the probable developments in digital payments all over the

world. There are a fewer problems for the public to use cashless digital methods at present. But the government's efforts in creating awareness, building trust, providing cyber security framework and necessary infrastructure will make it possible for faster acceptance among the public to adapt towards digital payment systems.

The biggest challenge in front of government is the lack of knowledge and awareness among people and fear of loss of money by use of digital payment methods risk of hacking. The government needs to tackle these challenges to have cashless economy and to give a boost to digital payments to provide sustainable economic development to the country in the long run.

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## Methods of Cash less Transactions

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### Introduction:

A digital transaction means a transaction which is took place without any paper. Purchasing goods from e-commerce websites, signing of business contracts online, or even buying movie tickets through your smartphone app fall under the umbrella of digital transactions. Such operations are accurate, quicker, convenient, and certainly easier. A cashless transaction is an automated or online operation that may take place between two people, business, or organisations. Many are unwilling to accept that there are benefits to a cashless transaction simply because they cannot navigate their way around digital devices, or are just happier to transact using cash. Read on about an array of cashless transactions that simplify day-to-day trading.

### Objective of Study:

Present study is undertaken for finding out the challenges and remedies of cash less transactions.

### Research Methodology:

Secondary data is used in present study, which is collected from different secondary sources. E.g. Books, Journals, New papers, Magazines and websites.

### Findings:

It's safe to say that cashless transactions have revolutionized the financial outlook of India. Utilizing mobile phones to make payments instead of opting for the traditional modes of payment has increased tremendously since demonetisation. When the business operations of most SMEs came to a standstill during demonetisation, the businesses that had shifted to cashless transactions managed to curb losses.

### Types/ Methods of Cash less Transactions-

#### Cheques and Demand Drafts

A cheque is one of the safest and oldest methods of cashless payment. A cheque is issued to a person or business for a specific amount. This cheque is deposited in the receiver's bank, and the money is received through a payment processed by a clearinghouse. A demand draft is safer than a cheque because it cannot be defaulted or dishonoured, unlike a cheque. The DD is signed by a banker to ensure that sufficient funds are available for a successful transaction. The disadvantage of cheques and DDs are that they are time-consuming because a person has to visit the bank and then wait for the cheque or DD to clear.

#### Debit and Credit Cards

Debit and credit cards have caught on as a method of cashless trading. A debit card is considered by many to be safer because you are transacting with money in your account. The risk with a credit card is overspending. Debit and credit cards can be used to make purchases online as well as over-the-counter at a store.

#### UPI Applications

UPI stands for Unified Payment Interface. UPI has changed the way we transact. At the core of a UPI's functionality is the fact that our mobile numbers are registered with our respective banks and linked to our accounts. A virtual payment address helps to send or receive money without entering any bank related information. Merchants would need to have a current account to receive UPI payments. UPI applications that are currently popular are BHIM, PhonePe, Google Pay/ Tez, ICICI Pocket, and SBI Pay.

#### Mobile Wallets

Mobile wallets have become a convenient way of making payments without cash. Once you load money into your mobile wallet, you can use it wherever it is accepted. The most popular mobile wallet that is trending is Paytm. The disadvantage with mobile wallets is that it isn't linked to your account. Once you load the money into your mobile wallet, you can only spend it with a merchant who accepts payment through the said app.

#### Neft & Rtg

National Electronic Fund Transfer and Real Time Gross Settlement are electronic payment systems that allow convenient fund transfer between bank accounts. Both facilities are maintained by the RBI (Reserve Bank of India). The facilities can be used to transfer money only within India. The RTGS transfer window is from 8 am to 4.30pm on weekdays and bank working days. NEFT settlements happen in deferred batches between 8 am to 7 pm on bank working days. There is no facility for 'stop payment' instructions in case of either systems and the payments made are irrevocable.

### **Net Banking**

Net banking is an alternative to using your debit or credit card. The user needs to login to their net banking account to approve a payment. Net banking gives you the flexibility of transacting even if you have misplaced your debit card or lost it. You can use internet banking to make utility payments, purchase goods and services online, or send and receive money.

### **Gift Cards or Vouchers**

Gift vouchers are a handy way of going cashless and are a great gift idea because the receiver can decide what they would like to purchase with the voucher. Stores also give out discounts on gift vouchers which work well for the purchaser as well.

### **Electronic Clearance Service**

ECS stands for Electronic Clearance Service. It is a convenient method to make bulk payments, especially to pay off your utility services, equated monthly installments, and for financial institutions to disburse payments like pensions, salaries, or dividend interest. ECS can be used for both debit as well as credit services. Authorisation has to be provided to your bank for periodic debits or credits to be made. It is a safe method because instructions can be given regarding maximum sum to debit, validity period for the said mandate, or purpose of the transaction.

### **Challenges before Cashless transactions-**

Steps towards cashless societies around the world seem to have taken significant steps forward in the last couple of years, with acceptance of non-cash payments becoming more widespread and technologies such as contactless aiming to make transactions more streamlined.

### **Security and privacy concerns**

An increasing worry for many is the security of cashless solutions. In today's environment, with both organized criminal gangs and nation-states always coming up with new ways of attacking digital systems, non-cash solutions may well be more exposed. At the same time, there are also privacy concerns that come with every transaction having a digital footprint, whereas cash is more anonymous.

### **Resilience**

Another issue if a country does not offer a cash payment option is what to do should the supporting systems be unavailable. While the latest infrastructure solutions will offer very high levels of availability, 100 percent uptime is never a guarantee. If this connectivity should fail, having cash as a reliable backup option will be essential, especially if natural disasters such as flooding, earthquakes or hurricanes knock out critical infrastructure

### **Tracking spending**

Cash also has a key advantage over alternatives when it comes to issues such as budgeting and monitoring spending. When notes physically leave your hand as part of a transaction, this tends to register much more than when paying by card or other means. In fact, when using digital payments, it can be very easy to lose track of how much you are spending and could leave people approaching the end of the month with a much lower balance than they think, simply because they cannot see in front of them how much money they have available.

### **Unwilling consumers**

Regardless of how effective public education campaigns may be, there will always be a certain number of consumers who are resistant to the change, often with very good reasons. These are often thought of as more elderly citizens who are not as tech-savvy as their younger peers. But while there may be some truth in this, people of all ages still prefer to deal in cash for a variety of reasons, and their wishes must be respected.

### **Loss of control**

Many of the concerns about moving away from cash essentially come down to consumers feeling as though they are in less control of their finances. Whether it's being able to physically feel notes and coins in their wallet or purse, or worries about putting their faith in the systems of private companies or governments, cash gives people a sense of comfort and security that can't be matched by other alternatives. This means that, while non-cash payments may become the norm for many transactions in the coming years, there must always be a place for notes and coins.

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## Digital India: Challenges And Opportunities

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### Abstract:

*Digital India is the beginning of digital revolution. It is a vision which is created by the Government of India to ensure that government services are made available to all citizens electronically, even in remote areas by improving online infrastructure and by increasing good Internet connectivity. It has an intention to take India forward digitally and economically towards developed economy. The proposal of digital India will enable people to engage in the innovation process, which is required by the economy to move forward. But, its implementation is the great challenge. There are many roadblocks in the way of its successful implementation of digital literacy like, poor infrastructure, low internet speed and facility, lack of harmonization among various departments, issue pertaining to taxation etc. These challenges need to be addressed for the purpose of realizing the full potential of this program. It requires a lot of pains and dedication from all departments of government as well as private sector. If implemented properly, it will open various new opportunities for the India's citizens.*

**Key Words:** Digital, Infrastructure, Opportunities, Revolution, Roadblocks.

### Introduction:

Throughout the world, Information and Communication technologies continue to proliferate at incredible speed. Digital India was a flagship program launched by the Prime Minister of India, Shri. Narendra Modi on 1<sup>st</sup> July 2015 with an objective of connecting rural areas with high speed Internet network and digital literacy awareness. The vision to motivate the citizens and connect Indian economy to knowledge savvy world is the biggest step taken by government.

### Literature Review:

Number of research papers and articles provide a detailed insight about the role of digital India and the implications of this project in India.

In 2016, Rani concluded that the digital India project provides a huge opportunity to use the latest technology to define the paradigms of service industry and also pointed that many project require some transformational process, reengineering, refinements, etc. to achieve the desired service level objectives.

Midha, in 2016 expressed that digital India is a great plan to develop India for knowledge in future but its improper implementation due to inaccessibility and inflexibility to requisite can lead to its failure. Though the digital India program is facing number of challenges, but if properly implemented it can make the best future of every citizen. The Indian should work for shaping knowledge economy.

In 2015, Gupta and Arora has studied and narrated that the impact of digital India project on rural area. The study found that many schemes have been launched in digital India to boost agriculture sector and entrepreneurship development in rural area. Digital India program has also set the stages for empowerment of women in rural India.

### Research Methodology:

The paper is based on the secondary data and the information received from internet, newspapers, websites, books, journal, research papers etc. and expert opinion on the same subject matter.

### Objective Of The Study

- a. To study the concept of digital India.
- b. To understand the importance of the Digital India program.
- c. To know challenges faced in implementation of this program.
- d. To find solutions and innovative ideas to accomplish the vision of digital India.
- e.

### Digital India:

Digital India is a campaign launched by the Government of India in order to ensure the government's services are made available to citizens electronically by improving online infrastructure and by increasing internet connectivity. Its motto is power to empower. It is the Central government program to make the country ready for knowledge-based future. There are three Vision area of digital India program as under:

#### Digital Infrastructure as utility to citizen of India:

The digital infrastructure includes providing high speed internet connectivity and digital identity as core utility for service delivery to the citizen, providing digital identity. i.e. unique, lifelong, online and authenticable and financially viable to every citizens. To provide mobile phone and bank account that

enables people for participation in digital and financial space area, easy accessing to a common service center.

#### **Governance and service demand:**

Single window access to all persons by seamlessly integrating department or jurisdictions; availability of government services online and on mobile platforms; All citizens entitlements to be available on the cloud to ensure easy access; government services to be digitally transformed for improving ease of doing business; Making financial transactions above a threshold, electronic and cashless; and leveraging GIS for decision support system and development.

#### **Digital Empowerment of Citizen:**

Citizens of India are empowered through providing universal accessible digital resources, by making digital resources available in Indian languages and by providing collaborative digital platforms for participative governance.

#### **Pillars Of Digital India:**

**Broadband Highways :** In order to cover 2,50,000 Panchayats under National Optical Fiber Network by December, 2016; it need to integrate the network and cloud of infrastructure in the country for providing high speed connectivity and cloud platform to various government department and Gram Panchayat level.

**Universal access to mobile connectivity:** The aim is to increase network penetration and provide mobile connectivity to 44,000 villages by 2018.

**Public Internet Access Program:** One common service Centre would be provided to each Gram Panchayat and 1,50,000 post offices are proposed to be converted into multi service centers.

**E-Governance:** IT would be used for making successful delivery of government services. Services and UIDAI and Mobile Seva platform, Public redressal should be incorporated throughout IT for having all information electronically.

**E-Kranti:** It is the electronic delivery plan of services to the people in education, health, finance and justice.

**Information for all:** The focus will be on online internet website hosting service of data and realistic participation through social media and web based systems like MyGov.20

**Electronics Manufacturing:** It concentrate on set to containers, VSAT, Mobile, consumer electronics, technology, medical electronics devices, intelligent energy meters, smart cards and micro ATMs. Therefore, the government is offering cost benefit on local producers, rewards, concession in tax and financial system of range.

**IT for Jobs:** The Government is planning to teach one crore learners from small towns and villages for IT industry. Plans are also to exercise 3,00,000 assistance distribution providers in 2 years to un practical companies offering IT services telecommunication companies to train 5,00,000 rural workers in five years..

#### **Benefits Of Digital India:**

Digital India program is the beginning of digital revolution and big initiative to empower the people. Following are the main benefits of the said program:

- f. The digital India mission would make all services available to people through common service outlets and will lead to inclusive growth by enabling access to education, healthcare, and government services to all citizens of the county. People can get guidelines of all services. The people who cannot go for college or school can have opportunities of education through this program.
- g. There would be more transparency as all data would be available online and accessible to citizens.
- h. E-governance will reduce corruption and can get the things done quickly.
- i. Digital locker system from banks will help citizen to store digitally their documents like Pan Card, Aadhar card, Passport, Mark sheets, etc.
- j. It will help people for opening bank account, giving details of official documents, verifying documents, etc. It can save time and trouble of standing in long queues for getting the work done.
- k. It helps to reduce documentation and paper work.
- l. It leads to cashless transactions.
- m. It can help small businessmen for expanding their business through online tools/services.
- n. It can play role in GDP growth. As per the report of World Bank 10 % increase in mobile and broadband penetration increase per capita GDP by 0.81 % and 1.31% respectively in the process of developing the country.

The Digital India Program will help in generating large number of jobs in the field of IT, Electronics, Telecommunications, etc. directly or indirectly.

The Digital India Program will help people of India to improve their standard of living and lifestyle by getting jobs of good earning.

#### **Iv. Challenges:**

More than two more years has been over since digital India program has been announced but the people of India facing multiple problems in successful implementation. The challenges faced by the India are:

1. High level of digital illiteracy is main challenge in the successfulness of the digital India program and hindrance in adoption of technologies. As per the survey report of ASSOCHM (November, 2016) more than 950 million Indians are still out of internet connectivity.
2. Making Digital India mission known and creating awareness among common public about its benefits and its uses is the great challenge before us.
3. It is big task of connectivity with each and every villages, town and city. Connecting 2, 50,000 Village Panchayats through National Optical Fiber is difficult task. It is the big challenge to ensure that each panchayat point of broadband fitted up and remain functional. Then it is found that 67 % of the NOFN points are not functioning even at pilot stage.
4. It is very difficult to facilitate online delivery of various services due low speed of internet in India. According to Akamai report on Internet Speed, India is on 105<sup>th</sup> position in the world which is the lowest rank in AisaPasific region.
5. The public private participation in government project is very poor because of long and complex regulatory process.
6. India has 1,600 languages and dialects and no digital services in Indian languages are the main hurdles in digital literacy.
7. There is digital division between rural and urban and still government has not deployed funds effectively to meet the cost of infrastructure creation in rural areas.
8. There is fear of cybercrime and breach of privacy has been deterrent in adoption digital technologies. Most of the cyber security tools are imported and there is no requisite skill to check for these hidden malwares. We have no such level of experts in this line. As per NASSCOM, India need 1 million trained cyber security professionals by 2025 to protect our digital technologies and services and presently we have estimated 62,000.
9. The biggest challenge faced by digital India program is slow and delayed infrastructure and India has comprehensively inadequate infrastructure to handle growing in digital transactions. As per ASSOCHOM-Deloitte it is very difficult to reach at digitally global level.

#### **Suggestions:**

Digital India mission cannot be successful on its own without considering the following suggestions:

1. Make the India digitally literate, is the first step in empowering citizens.
2. Massive awareness program has to be conducted to make the digital India campaign successful. There is need to educate and inform people from rural and remote area about the benefits of increasing internet usage.
3. Digital India mission needs service partnership with telecom companies and other firms.
4. PPP model must be explored for sustainable development of digital infrastructure.
5. Private sector should be encouraged, for development of digital infrastructure in rural and remote areas by framing favorable taxation policies, quick clearance of projects, etc.
6. We need anti cyber-crime team to maintain database and protecting from cyber-crime because successful digital India project depends upon maximum connectivity with minimum cyber security risk.
7. We need to introduce cyber-crime security courses at graduate level and encourage the international certification body to introduce the various skill based cyber security courses for the purpose of developing cyber security skills.
8. For the purpose of successful implementation of digital India, there must be amendments in various legislations for growth of technology.

#### **Conclusions:**

The digital India mission and its implementation is a huge step towards truly empowered nation. It will transform people's access to multimedia information and services. Focused attention must be given to each and every pillar of digital India so that this program will not fail. Factually, we all should be mentally prepare to change and ready to face the challenges for implementing policy to make the digital India mission a reality.



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## Digital Payment System: Advantages And Difficulties

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### Abstract:

*In modern times, commercial banking occupies an important place in the financial frame-work of every economy. Banking system is a dynamic sector of economy. The wind of change in payment system in India is gaining strength by government accelerating financial inclusion, opening new business models and providing impetus to digital payments system. The stated role of Digital India is "faceless, paperless, and cashless" To support cashless as a part of Digital India campaign government has initiated with different modes of Digital payment system. Which are the needs of today for developing country. But various difficulties in Digital payment system. The focus of this paper is to identify and explain the digital payment system; we analyze the advantages of digital payments system.*

**Keywords:** Advantages, Difficulties, Different Methods, digital payments system.

### Introduction

The payment landscape in India has witnessed some structural dramatic changes during the last couple of years which is considered a watershed period in the payment industry. In the early 1990s, the Reserve Bank of India spearheaded the development of technological infrastructure that facilitated the creation of a Department of Payment and Settlement System (DPSS). In 2007, the Indian Parliament passed the Payment and Settlement Systems Act. Since the inception, the department continued its focus on migrating to a cashless economy through a process of stakeholder consultation for developing a regulatory framework that is responsive to emerging developments and innovations. Digital payments can enable greater economic growth, growth in international e-commerce, and aid in social and financial inclusion. Presently, India represents one of the largest market opportunities for payments. The population is eager to participate in the rapid evolving advancement in technology. Cash may not be a king anymore, the adoption of digital payments is picking up at an extreme pace, and everyone from vegetable vendor to chai-wala is adopting the digital payment system to move away from the cash crunch. New technologies, players and consumer expectations are changing the payments marketplace more than ever. The opportunity of the new digital payment ecosystem comes with risks. From cyber security and privacy to the impact of legacy technology and new competitors, it is far from clear sailing for organizations wanting to be a player in the future payments marketplace. In wake of the government initiatives towards transformation towards digital economy, and many private companies, payment bank licenses issued by RBI, witness the transformation. —Faceless, Paperless, Cashless|| is one of professed role of Digital India.

### Objective Of The Study

The overall objective of the study is to examine the role of digitization in transforming India into a cashless economy. Following are the objectives of the paper;

1. To analyze the different digital modes of payment system available in India
2. To investigate advantages and difficulties of making India a cashless Economy

### Research Methodology

In pursuance of above objectives the following research methodology was used for this study. The objectives of the study were achieved through collection and analysis of secondary Data. The secondary data has been mainly drawn from various records and publications of Reserve Bank of India (RBI), Digital India, National Payments Corporation of India (NCPI), Journals and websites of government and non government organization.

### Methods of digital payment

What is a Digital Payment

To put it in simple words, a digital payment occurs when goods or services are purchased through the use of various electronic mediums. There is no use of cash or cheques in this type of payment method.

1. Banking cards
2. USSD
3. Aadhaar Enabled Payment System (AEPS)
4. UPI

5. Mobile Wallets
6. Bank pre-paid cards
7. Point of Sale (PoS)
8. Internet Banking
9. Mobile Banking
10. Bharat Interface for Money (BHIM) app

#### **Banking cards:**

Cards are among the most widely used payment methods and come with various features and benefits such as security of payments, convenience, etc. The main advantage of debit/credit or prepaid banking cards is that they can be used to make other types of digital payments. For example, customers can store card information in digital payment apps or mobile wallets to make a cashless payment. Some of the most reputed and well-known card payment systems are Visa, Rupay and MasterCard, among others. Banking cards can be used for online purchases in digital payment apps, PoS machines, online transactions, etc.

#### **USSD:**

Another type of digital payment method, \*99#, can be used to carry out mobile transactions without downloading any app. These types of payments can also be made with no mobile data facility. This facility is backed by the USSD along with the National Payments Corporation of India (NPCI). The main aim of this type of digital payment service is to create an environment of inclusion among the underserved sections of society and integrate them into mainstream banking. This service can be used to initiate fund transfers, get a look at bank statements and make balance queries

#### **AEPS:**

Expanded as Aadhaar Enabled Payment System, AEPS, can be used for all banking transactions such as balance enquiry, cash withdrawal, cash deposit, payment transactions, Aadhaar to Aadhaar fund transfers, etc. All transactions are carried out through a banking correspondent based on Aadhaar verification. There is no need to physically visit a branch, provide debit or credit cards, or even make a signature on a document. This service can only be availed if your Aadhaar number is registered with the bank where you hold an account. This is another initiative taken by the NPCI to promote digital payments in the country.

#### **UPI:**

UPI is a type of interoperable payment system through which any customer holding any bank account can send and receive money through a UPI-based app. The service allows a user to link more than one bank account on a UPI app on their Smartphone to seamlessly initiate fund transfers and make collect requests on a 24/7 basis and on all 365 days a year. The main advantage of UPI is that it enables users to transfer money without a bank account or [IFSC code](#). All you need is a Virtual Payment Address (VPA). There are many UPI apps in the market and it is available on both Android and iOS platforms. To use the service one should have a valid bank account and a registered mobile number, which is linked to the same bank account. There are no transaction charges for using UPI. Through this, a customer can send and receive money and make balance enquiries.

#### **Mobile Wallets:**

A mobile wallet is a type of virtual wallet service that can be used by downloading an app. The digital or wallet stores bank account or debit/credit card information or bank account information in an encoded format to allow secure payments. One can also add money to a mobile wallet and use the same to make payments and purchase goods and services. This eliminated the need to use credit/debit cards or remember the CVV or 4-digit pin. Many banks in the country have launched e-wallet services and apart from banks, there are also many private players. Some of the mobile wallet apps in the market are Paytm, Mobikwik, Free charge, etc. The various services offered by mobile wallets include sending and receiving money, making payments to merchants, online purchases, etc.

#### **Bank pre-paid cards:**

A prepaid card is a type of payment instrument on to which you load money to make purchases. The type of card may not be linked to the bank account of the customer. However, a debit card issued by the bank is linked with the bank account of the customer.

#### **PoS terminals:**

Traditionally, PoS terminals referred to those that were installed at all stores where purchases were made by customers using credit/debit cards. It is usually a hand held device that reads banking cards. However, with digitization the scope of PoS is expanding and this service is also available on mobile platforms and through internet browsers. There are different types of PoS terminals such as Physical PoS, Mobile PoS and Virtual PoS. Physical PoS terminals are the ones that are kept at shops and stores. On the other hand, mobile PoS terminals work through a tablet or Smartphone. This is advantageous for small time business owners as they do not have to invest in expensive electronic registers. Virtual PoS systems use web-based applications to process payments.

### Internet Banking:

Internet banking refers to the process of carrying out banking transactions online. These may include many services such as transferring funds, opening a new fixed or recurring deposit, closing an account, etc. Internet banking is also referred to as e-banking or virtual banking. Internet banking is usually used to make online fund transfers via NEFT, RTGS or IMPS. Banks offer customers all types of banking services through their website and a customer can log into his/her account by using a username and password. Unlike visiting a physical bank, there are no time restrictions for internet banking services and they can be availed at any time and on all 365 days in a year. There is a wide scope for internet banking services.

### Mobile Banking:

Mobile banking is referred to the process of carrying out financial transactions/banking transactions through a Smartphone. The scope of mobile banking is only expanding with the introduction of many mobile wallets, digital payment apps and other services like the UPI. Many banks have their own apps and customers can download the same to carry out banking transactions at the click of a button. Mobile banking is a wide term used for the extensive range or umbrella of services that can be availed under this.

### Bharat Interface for Money (BHIM) app:

The BHIM app allows users to make payments using the UPI application. This also works in collaboration with UPI and transactions can be carried out using a VPA. One can link his/her bank account with the BHIM interface easily. It is also possible to link multiple bank accounts. The BHIM app can be used by anyone who has a mobile number, debit card and a valid bank account. Money can be sent to different bank accounts, virtual addresses or to an Aadhaar number. There are also many banks that have collaborated with the NPCI and BHIM to allow customers to use this interface.

### Advantages of Digital Payments

1. **Faster, easier, more convenient:** Perhaps, one of the biggest advantages of cashless payments is that it speeds up the payment process and there is no need to fill in lengthy information. There is no need to stand in a line to withdraw money from an ATM or carry cards in the wallet. Also, with the move to digital, banking services will be available to customers on a 24/7 basis and on all days of a year, including bank holidays. Many services like digital wallets, UPI, etc, work on this basis.
2. **Economical and less transaction fee:** There are many payment apps and mobile wallets that do not charge any kind of service fee or processing fee for the service provided. The UPI interface is one such example, where services can be utilized by the customer free of cost. Various digital payments systems are bringing down costs.
3. **Waivers, discounts and cashbacks:** There are many rewards and discounts offered to customers using digital payment apps and mobile wallets. There are attractive cash back offers given by many digital payment banks. This comes as boon to customers and also acts a motivational factor to go cashless.
4. **Digital record of transactions:** One of the other benefits of going digital is that all transaction records can be maintained. Customers can track each and every transaction that is made, no matter how small the transaction amount this.
5. **One stop solution for paying bills:** Many digital wallets and payment apps have become a convenient platform for paying utility bills. Be it mobile phone bills, internet or electricity bills, all such utility bills can be paid through a single app without any hassle.
6. **Helps keep black money under control:** Digital transactions will help the government keep a track of things and it will help eliminate the circulation of black money and counterfeit notes in the long run. Apart from this, this may also give a boost to the economy as the cost of minting currency also goes down.
7. **Go Digital, Get Discounts**
8. **Service tax:** Waiver of service tax of 15% on digital transactions up to ₹2,000.  
**Fuel:** 0.75% discount on digital purchase of fuel through credit/debit cards, e-wallets or mobile wallets.  
**Rail tickets:** 0.5% discount on monthly and seasonal suburban railway tickets from 1 January 2017. Online rail ticket buyers get up to ₹10 lakh free accident insurance too.  
**Rail catering:** 5% discount on digital payments for railway catering, accommodation, retiring rooms, etc.
9. **Highway toll:** 10% discount on NH toll payment via RFID or fast-tags in 2016-17.  
**Insurance:** 10% discount by government general insurers on premium paid online via their portals. 8% discount on new LIC policies bought online via its site. POS: Rs 100 a month is the maximum rent that PSU banks can charge for PoS terminals.  
**Rupay:** Kisan credit card holders to get RuPay Kisan cards



## Difficulties of Digital payments

### 1. Higher risk of identity theft

- 1) The biggest fear is the risk of identity theft. Since we are culturally not attuned to digital transactions, even well-educated people run the risk of falling into phishing traps,” says Nagpal. With the rising incidence of online fraud, the risk of hacking will only grow as more people hop on to the digital platform.
- 2) Besides, the latest move by the government to remove the two-factor authentication process for online transactions up to ₹2,000 will not help. Irrespective of the size of transaction, the absence of this additional layer of security will expose thousands to the risk of identity theft. Another weak link is the inadequate redressal mechanism.
- 3) Given the tedious process and poor grievance redressal, people will have no easy recourse if they lose money online,” adds Nagpal. There is no stringent legal process to deal with this kind or scale of fraud. Add to it the mass identity theft from banks’ or companies’ databases and it can turn into a financial nightmare akin to the data breach in the Indian banking system in October this year.

### 2. Losing phone

since you will be dependent on your phone for all your transactions on the move, losing it can prove to be a double whammy. It can not only make you susceptible to identity theft, but you could also be rendered helpless in the absence of physical cash or any other payment option. This can be especially problematic if you are travelling abroad or in smaller towns or villages with lack of banking infrastructure or other payment options. Another drawback is that you need to keep your phone constantly charged. If the phone dies on you, you will be stranded, particularly if you are in the middle of an important purchase or dealing with an emergency.

### 3. Difficult for tech-unsavvy

India has a low Internet penetration of 34.8% (2016), according to the Internet Live Stats, and only 26.3% of all mobile phone users have a Smartphone (2015), as per Statist figures. Besides the practical difficulty of going digital, “a bigger block is the psychological shift. You are suddenly jumping three generations to the digital medium Adds It’s a problem for the older people, who may suddenly find themselves locked out of their accounts if they can’t download an app or don’t have cash.” The digital medium may prove a challenge for the tech-unfriendly people, who will need more time to adapt or the availability of other options to conduct transactions.

### 4. Overspending

while there is no denying the convenience of card or mobile wallet transactions, it could open a spending trap for an unsuspecting population. According to behavioural finance theorists, the pain of parting with money is felt more acutely if you use physical cash instead of a card. Hence, using cash instead of cards or mobile wallet acts as a natural bulwark for people who find it difficult to control their spending. Besides, a high penetration of the digital payment system is contingent on the fact that the same amount of cash does not come back into circulation. If it does, people are more likely to switch back to the former ease of using cash as it is a habit that they may find difficult to break.

Poor and uneducated people have to suffer a lot by this system. As most of the people in India don’t have mobile phones to make the cashless transactions and it’s also next to impossible for uneducated people as well

## Conclusion

India is at the cusp of transformation as we embark upon the new phase of banking and financial inclusion. New technology in particular has both enabled and in turn been fuelled by a huge influx of new providers and products, all vying to enter the payments space. However, government impetus to digital transaction by demonetization of high value currency notes and providing various initiatives, still majority of transactions are cash based and cash is still king for Indian consumers, hence achieving a cashless society will not be possible in near future, but one can always start from a less cash society and then move towards becoming mostly cashless. Thus, cash continue to play an important role for discrete transactions especially in the most remote areas and informal sector.

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## Impact Of Digital Payment System On Indian Economy

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### Introduction:--

The term digitalization means to deal money digitally with less use of hard form of money. Digital payment system refers to the electronic consumer transactions that include payments of goods and services through online means. Digital payment system promotes the cashless transaction and leads to create cashless society. Demonetization measures have had significant and immediate impact on the Indian economy. This move is expected to cleanse the formal economic system and discard black money. This was reflected most of the people are rushing to cashless transactions. Cashless transactions impacted by a decrease in liquidity, alternative payment methods, such as e- wallets, and apps online transactions using e-banking, usage of plastic money i.e. Debit and credit cards have increased. This will increase usage of such payment system, and enable a shift towards an efficient cashless infrastructure.

Digital payments system has been introduced to promote cash less transactions to create a cashless society. Digital transactions bring in better transparency, scalability and accountability. The RBI classifies every mode of cashless fund transfer using cards or mobile phones as prepaid payment instruments. These can be issued as Smart Cards, Magnetic strips cards, Net accounts, Net Wallets, Mobile accounts, Mobile wallets etc.

There are different methods to pay electronically like prepaid cards, NEFT, RTGS, mobile banking etc. Prepaid cards are the plastic cards with a unique identity number. The customer must have access to bank account if he wants to prevail the service of prepaid cards. Mobile banking is a service provided by a bank or financial institution that allows its customers to perform banking transactions using an electronic device connected with internet such as mobile phones or tablets. Electronic payment system has benefits for both buyers and sellers. Bank provides large number of services which may help to accept digital payment system. These services includes ATM, Debit cards, Credit cards, Online banking, Phone banking, Immediate payment service (IMPS), National Electronic fund Transfer ( NEFT), Real Time Gross Settlement (RTGS) etc. Financial service providers such as Paytm, Google pay, Mobikwik, Phonepay, Amezon pay, Free charge, Oxigen, PayU money, Bhimupi, E-wallets, IndiaBankBazar, etc..

### Objectives:-

- 1) To study the use of digital payment system
- 2) To study the impact of digital payment system

### Research Methodology :-

The paper is mainly based on secondary data which was collected from News papers, Books & banking reports.

### Digital Payment System:-

Cashless transactions means alternative payment methods, such as e- wallets, and apps online transactions using e-banking, usage of plastic money i.e. Debit and credit cards have increased. This will increase usage of such payment system, and enable a shift towards an efficient cashless infrastructure. Digital transactions bring in better transparency, scalability and accountability. The RBI classifies every mode of cashless fund transfer using cards or mobile phones as prepaid payment instruments. These can be issued as Smart Cards, Magnetic strips cards, Net accounts, Net Wallets, Mobile accounts, Mobile wallets etc.

For digital payment system the following conditions must be fulfilled.

Financial Stability, Education level, Smart phones / Laptops & internet connections, Physical infrastructure etc.

### Instruments of Digital Payment System: -

Three types of instruments are used for cashless transaction

- 1) **Closed:** - Issued by an entity for purchasing goods and services only from it, these don't allow cash withdrawal.
- 2) **Semi closed:** - These are used to buy goods and services, including financial services, from merchants that have a specific contract with the issuer. These too don't allow cash withdrawal. It includes wallets offered by service providers like Pay tm and State Bank Buddy.

**3) Open:** - These can be used to buy goods and services, including fund transfer at merchant's location, and also permit cash withdrawal at ATMs. All Visa and Master cards are included in this category.

As we shift from cash dependent to a cashless economy, we look forward to better social equity, availability of more resources for development work. For this purpose we have implemented Vittiya Shaksharta Abhiyan. The purpose of Vittiya Shaksharta Abhiyan is to actively engage the youth/students of higher education institutions to encourage and motivate all payers and payee to apply cashless modes.

**Plastic Money:** - Plastic money is the alternative cash or the standard money. Plastic money is much more convenient to carry around as you don't have to carry a huge sum of money with you. Plastic money includes Cash Cards, Credit Cards, Debit Cards, Credit Cards, Net Banking, Mobile Wallets etc.

#### **Advantages of Digital payment System:-**

Digital payments have emerged as an important tool for advancing financial inclusion because it lowers the cost of providing financial services to poor people and increases the safety and convenience of using savings, payments and insurance products.

1. Saves time, labour and energy.
2. Transactions can be done from anywhere (home/office/travelling).
3. Online money transfer through internet banking.
4. Online bill payment of phone, electricity, LIC premiums, income tax or Govt. payments.
5. Share market is totally online
6. Online travel, tour and hotel booking and payment.
7. It will reduce pick pocketing and highway robbery which is very rampant in some countries.
8. It will drive the development and modernization of the payment system, promotes transparency and accountability, reduce transaction cost, etc.
9. Electronic payments will help business people grow their customer base and resource pool, far beyond the limitations of their immediate geographic area.
10. If stolen it is easy to block a credit card or a mobile wallet.

#### **Impact of Digital Payment system on Economy:-**

The impact of the digital economy will affect a lot to the rural economy. Following are the impacts of digital payment system on Indian economy.

- 1) Job opportunities increased
- 2) Better tax compliance
- 3) E-Commerce business widely increased
- 4) Online payments of Govt. taxes increased
- 5) Online payments of various bills like Electricity bill, mobile recharge, Municipal taxes, etc increased
- 6) Reducing Black money at some level
- 7) Reduction in expenditure of printing cost
- 8) Money transfers
- 9) Reducing rush in Banks
- 10) Adopting more people digital payments.

#### **Conclusion:-**

Cashless economy is that form of economy wherein market all types of transactions happens with the help of debit or credit cards and electronic payment gateways without any involvement of physical form of money. No Country can be cashless country. It should be less cash country. The Indian Government is supporting digital payment system a lot. It has reduced some taxes and announced incentives for digital payment system. Now a day's more people are showing interest in digital payments. Still India not becomes cash less but we should give more emphasis on making India a less cash society. Now a days we are using various apps for making payments such as electricity bill, Mobile recharge, purchases on e commerce, telephone bills, recharge of dtch, money transfers, etc. There is remarkable growth found in digital payments in last three years. People are proactively adopting new methods of digital payments and also hoist the usage of new digital payment modes over old digital payment modes. In future it will increase the such transactions in India and it will certainly facilitate development of economy at higher growth rate in future.

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## A Comparative Analysis Of Use Of Digital Payments System In Urban Semi Urban And Rural Areas In India

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### Abstract

Digital payment system, also known as electronic payment system or e-payment, is a modern and advanced way of making payment for goods and services through electronic medium instead of using cash or cheque.

Government of India, now a days, has been promoting, encouraging and pushing digital payments system because it is faster, easier, convenient, economical and less risky (if used wisely) way of making payments.

Some of the Digital Payment Methods used in India are, Banking Cards, Mobile Wallets, Mobile Banking, Internet Banking, Bharat Interface for Money (BHIM) app, Bank pre-paid Cards, USSD, UPI, etc.

In short, as there are many options available in the form of above mentioned instruments for making payments, the system has been becoming popular throughout India. But the researcher doubts the equal penetration of the system through the urban, semi urban and rural India. Hence there is need to check its penetration and the availability of required infrastructural facilities.

The present study, based on Primary and secondary data, shows considerable differences in the use and penetration of digital payments systems through the urban, semi urban and rural areas. The infrastructural facilities are available from lesser to the greater extent as we move from rural to the urban area. There are more difficulties faced by users in using the system in rural areas as compared to semi urban and urban.

**Keywords:** E-payments, USSD, BHIM, Mobile Wallet, UPI, etc.

### Introduction:

Digital payment system, also known as electronic payment system or e-payment, is a modern and advanced way of making payment for goods and services through electronic medium instead of using cash or cheque.

Digital payments system's origin can be traced to the beginning of Internet, which changed the entire world. Stanford Federal Credit Union, established in 1994, is a pioneer institution offering online banking services to its customers.

Global non-cash transaction volume grew at 12% during 2016-17, to reach \$ 539 billion and they are expected to grow at a CAGR of 14% from 2017-2022F. (WPR 2019).

The transaction value of digital payments in India is estimated to grow annually at the rate of 20.2 per cent from about \$ 64.8 billion in 2019 to \$ 135.2 billion in 2023. At the same time the cybersecurity market is also expected to rise from \$ 1.97 billion in 2019 to \$ 3.05 billion by 2022. ( PwC India and Data Security Council of India report, 4<sup>th</sup> Dec.,2019, ET)

Government of India, now a days, has been promoting, encouraging and pushing digital payments system because it is faster, easier, convenient, economical and less risky (if used wisely) way of making payments.

As of now, there are around 10 types of Digital Payment Methods available in India. They are- Banking Cards, Mobile Wallets, Mobile Banking, Internet Banking, Bharat Interface for Money (BHIM) app, Bank pre-paid Cards, USSD, UPI, Adhar Enabled payment System (AEPS) and Point of Sale (PoS).

In short, as there are many options available in the form of above mentioned instruments for making payments, the system has been becoming popular throughout India. But the researcher doubts the equal penetration of the system through the urban semi urban and rural areas in India. Hence there is need to check its penetration and the availability of required infrastructural facilities.

The present research paper is an attempt to know the extent to which the instruments of Digital payments system are used through the urban semi urban and rural India. It also analyses the availability of infrastructural facilities for e-payment system and difficulties encountered by users in the respective areas under study.

The present research study is based on secondary and primary data. The secondary data is collected from the research papers and information available online. Whereas, the primary data is collected in the form of interviews of 30 respondents, selected randomly, each from Fort area in Mumbai (urban area), Ahmedpur (semi urban area, Tahsil head City in Latur district) and Devkara (rural area, village from Ahmedpur Tahsil, Latur District).

The study shows considerable differences in the use and penetration of digital payments systems through the urban semi urban and rural areas. The infrastructural facilities are available from lesser to the



greater extent as we move from rural to the urban area. There are more difficulties faced by users in using the system in rural areas as compared to semi urban and urban.

### Objectives Of The Study:

- 1) To know various instruments of digital payments system available.
- 2) To study the extent to which they are used in urban, semi urban and rural areas.
- 3) To discover the availability of infrastructural facilities in the respective areas.
- 4) To find out the difficulties faced by users in using e-payment system in the respective areas.

### Methodology:

The present research study is analytical in nature. It is based on secondary and primary data. The secondary data is collected from the research papers and information available online. Whereas, the primary data is collected in the form of interviews of 30 respondents, selected randomly, each from Fort area in Mumbai (urban area), Ahmedpur (semi urban area, Tahsil head City in Latur district) and Devkara (rural area, village from Ahmedpur Tahsil, Latur District). The respondents were posed with questions like, do they know the digital payments system, how many instruments of digital payments do they know, how many instruments of digital payments do they use, how frequently they use, do they prefer digital payments over cash payments, what are the problems they face while using the system.

### Analysis:

A system in which payments sent by payer and received by payee using digital modes or instruments of payments is called a Digital Payments System or E-payment system or Cashless Payments System. This system, today, is preferred over the cash payments system by more and more number of people all over the world including India.

As of now, there are around 10 types of Digital Payment Methods available in India. They are- Banking Cards, Mobile Wallets, Mobile Banking, Internet Banking, Bharat Interface for Money (BHIM) app, Bank pre-paid Cards, USSD, UPI, Adhar Enabled payment System (AEPS) and Point of Sale (PoS). But the question is, are they used, if yes, then how far?

India, one of the developing countries, is not evenly developed. Not all the facilities are available in all the corners of the country. Few of the states are reasonably developed whereas others are underdeveloped. Even the developed states in India do not have all its regions equally developed. There is a great divide between urban and rural areas too. On one hand, urban dwellers have almost everything that they require and on the other people living through rural areas have little or no options. Both the areas differ in the availability of facilities like, electricity, health, education, transport, banking, internet, mobile and its network coverage, etc. Availability and non-availability of such facilities makes the life either easier or difficult.

Digital Payments System is one of such facilities which is considered to be faster, easier, convenient, economical, less time consuming and less risky. But the use of this modern day facility depends on the availability of required infrastructure like bank branches, bank accounts, internet, smart phones, etc., this is the area where India, specially rural India lags behind.

In the present research study the researcher interviewed 30 random respondents each from urban, semi urban and rural areas to know their knowledge of the system and instruments used there in, the extent to which they use the system, and difficulties they face while using the system.

The observations made by the researcher are-

#### Fort, Mumbai (Urban India):

Fort area in Mumbai, on one hand, has the RBI's main office, Bombay Stock Exchange, High Court, University, head offices of most of the banks, TCS, Reliance and head offices of most of the leading firms, etc. whereas on the other hand, it also has hawkers cart pullers, roadside tea sellers who are mostly illiterate or moderately literate, yet with only one exception almost all the respondents said to have the knowledge of Digital Payments System.

Total of 25 had the knowledge of 08 or more than 08 modes of digital payments, 09 of them had the knowledge of all the 10 methods of payment.

Out of total of 30 respondents, 29 have claimed that they have been using the system on daily basis. In fact, 25 of them use the digital mode on an average 2-3 times a day.

All of them claimed for having used banking cards, either both or at least debit card. Mobile Wallets, UPI Apps are the most popular and frequently used methods of payments among them. Total of 29 respondents use Banking cards, Mobile Wallets, UPI, mobile and internet banking and BHIM.

Except the online frauds the people from urban areas do not face any problems in using the system. Being the financial capital of India and high level of financial literacy among most of the people in Mumbai, the Digital payments system is welcomed here because it is more easy, convenient, less time consuming, less risky and economical.



### **Ahmedpur, Dist. Latur (Semi urban India):**

Ahmedpur with a population of around 65000 (44000 as per 2011 census) is a head city of one of the Tahsils in Latur District in Maharashtra. It has one of the best literacy rate, 82.67% as per 2011 census. It is comparatively bigger city having enough bank branches of major banks like SBI, SBH, BOI, BOM, Maharashtra Grameen Bank, etc. City has large number of users using Internet and Smart Phones. Yet the use of Digital Payments System is very minimal.

Only 12 out of 30 interviewed said to have the knowledge of Digital Payments System but out of those 12 only 07 are found to be using Paytm to make payments mainly to pay for mobile recharges. One very interesting fact about those interviewed here is that they all use smart phones, internet and also the debit/ATM cards but they do not prefer to use them for making payments. All the 30 interviewed are found in possession of Debit/ATM cards but they use cards only for withdrawing cash from the ATM centres. The only use of Debit Cards as a instrument of making payment here is in case of filling some online form for giving some kind of examinations, like banking, railway, postal, MPSC, etc. None of the interviewed are found using Credit Cards.

All the interviewed were literate but were found to be either ignorant or hesitant for using the digital payments system. The extent of financial literacy is found to me satisfactory but they are very poor in the use of financial services. The extent of awareness about banking, banking facility, and payments system is found to be very low.

### **Devkara, Tal. Ahmedpur, Dist. Latur ( Rural India):**

Devkara with the population of 1753 (2011 census) has the literacy rate of 64.3% (female literacy of just 27.5%). No bank branch is found there in the village. Mobile network is available and quite a large number of people residing in Devkara villege are found using smart phones. There are few number of citizens of Devkara who use smart phones and also the digital payments system but they do not reside in the village, instead they reside in cities (smaller to bigger), accordingly they are not considered in the study.

The researcher interviewed 30 respondents from the village who actually reside there. All the 30 respondents had 1 or 2 bank accounts in the bank branches which are situated in a small town called Kingaon, around 04 kilometres away. All of them had the Debit/ATM cards. No one had a Credit card.

None of the respondents are found to have the knowledge of digital payments system. All use Debit Cards but just to withdraw cash from the ATMs.

### **Findings:**

- 1) Infrastructure required for Digital Payments System is available both in urban and semi urban areas, whereas it is partially available in rural areas.
- 2) Minimal required Instruments for making Digital payments, like, internet, smart phones are available in all the three areas.
- 3) Literacy rate is very high in urban, high in semi urban and low in rural areas.
- 4) Fairly high level of Financial literacy is found to be there in urban and semi urban areas whereas respondents from rural areas are found to be financially illiterate.
- 5) Knowledge of digital payments system and its instruments is very high in urban areas, good in semi urban areas and very poor (or no knowledge) in rural areas.
- 6) Online frauds is the only problem that the urban residents face with.
- 7) Though the required infrastructure and knowledge is available the respondents from semi urban areas are hesitant about using the digital payments system instead they prefer cash payments.
- 8) In rural areas, minimal required infrastructure and instruments are available but they do not have the knowledge.

### **Suggestion:**

The government and especially the banking system in the country should take appropriate steps to educate the people from semi urban and rural areas about the benefits of using digital payments system and the different ways in which the system or the instruments can be used. The government should also undertake appropriate measures to avoid online frauds.

### **Conclusion:**

Digital Payments System is easy to use, convenient, less time consuming, less risky and economical. Yet people from semi urban areas are hesitant about using it, while those from rural areas do not have knowledge of the system itself. Therefore, the government and especially the banking system in the country should take appropriate steps to educate the people from semi urban and rural areas about the benefits of using digital payments system and the different ways in which the system or the instruments can be used. The government should also undertake appropriate measures to avoid online frauds.

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## Digital Banking in india Nature & Importance

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### Introduction:

First of all what is digital banking? Digital banking is also called internet banking or online banking. When a bank provides its services online and customers can make transactions, submit requests, and handle other banking activities online, it is called digital banking. The first bank in India to offer internet banking was the ICICI bank in 1996. Since then a number of other banks have followed suit and today most of the banks provide online banking facilities.

### Objectives :

1. To take review of Digital Banking system.
2. To arise awareness among the readers.

### Role of Digitization in Indian Banking :

Banks in India as a whole were very reluctant to adopt the changes brought about by technological advancement. A number of factors brought about the mechanization and digitization in banking industry in India. The putting in place standard cheque encoders was the first step forward in digital transformation in banking. Magnetic Ink Character Recognition (MICR) helps in the sorting and processing of cheques with each bank branch having an MICR code. The next step was more of a necessity than an innovation. Banking is a repetitive job, and therefore a labor intensive one where the worker is prone to making mistakes. In order to minimize errors and speed up the process, banks began using computer technology with standalone personal computers and then set up their own local area networks (LAN).

### Digital banking

As the networks grew and banks began to connect together, Core Banking came into being. Centralized Online Real-time Exchange (CORE) banking thus allowed customers to perform financial transactions and access their account from any of the participating bank's branches. These services made it easier for customers to operate their accounts and slowly led to the coining of the phrase: 'Anytime, Anywhere Banking.' Then Automated Teller Machines (ATMs) arrived on the scene, and electronic fund transfers were made possible.

Online banking and Telebanking made their appearance in the 2000's and different modes of online fund transfers were instituted such as Real Time Gross Settlement (RTGS), Immediate Payment System (IMPS), National Electronics Fund Transfer (NEFT), and National Electronic Clearing Service (NECS). Recent years have seen the growth in mobile banking services and other innovative services online.

The role of digitization of banking in India that began in the 1980's has certainly come a long way. However there is still a long way to go in the digitization in banking industry and a number of hurdles to cross before we are able to ensure end to end digital banking in India as we will discuss in this article.

### Importance of Digital Banking

#### Customer Service:

customer service - Banking digital With internet freely available everywhere, all a customer needs to access his account is a device and internet connectivity. It saves him time and expense as he no longer has to travel to a bank to carry out transactions. He does not have to wait in unending queues only to find that he will have to go to a different counter to get his job done. Online services make it possible for him to sit in the comfort of his home or office, or in fact even in a vehicle while travelling, and carry out transactions without having to wait for anything.

#### 24x7 Availability:

The customer is able to check his bank records anytime he wishes and a number of banking services are available to him round the clock. Transferring money is easier, quicker, and safer.

#### Time Constraint:

A number of services required waiting for considerable periods. Banks had boards put up at their branches specifying the time required for different services. Even simply cashing a cheque took time. But with digital banking it is instant, with no time constraints.

**Online Bill Payments:**

online bill payments This is a feature that saves customers a lot of time and expense. Customers do not have to carry cash and queue up to pay their utility bills or other bills.

**Lower Overheads:**

Digital banking has drastically reduced the operating costs of banks. This has made it possible for banks to charge lower fees for services and also offer higher interest rates for deposits. Lower operating costs have meant more profits for the banks.

**Banking Benefits:**

With the increased convenience of anytime, anywhere banking, the number of customers has increased for banks. Human error in calculations and recordkeeping is reduced, if not eliminated. With records of every transaction being maintained electronically, it is possible to generate reports and analyze data at any point, and for different purposes.

**Importance of Digital Banking in India:**

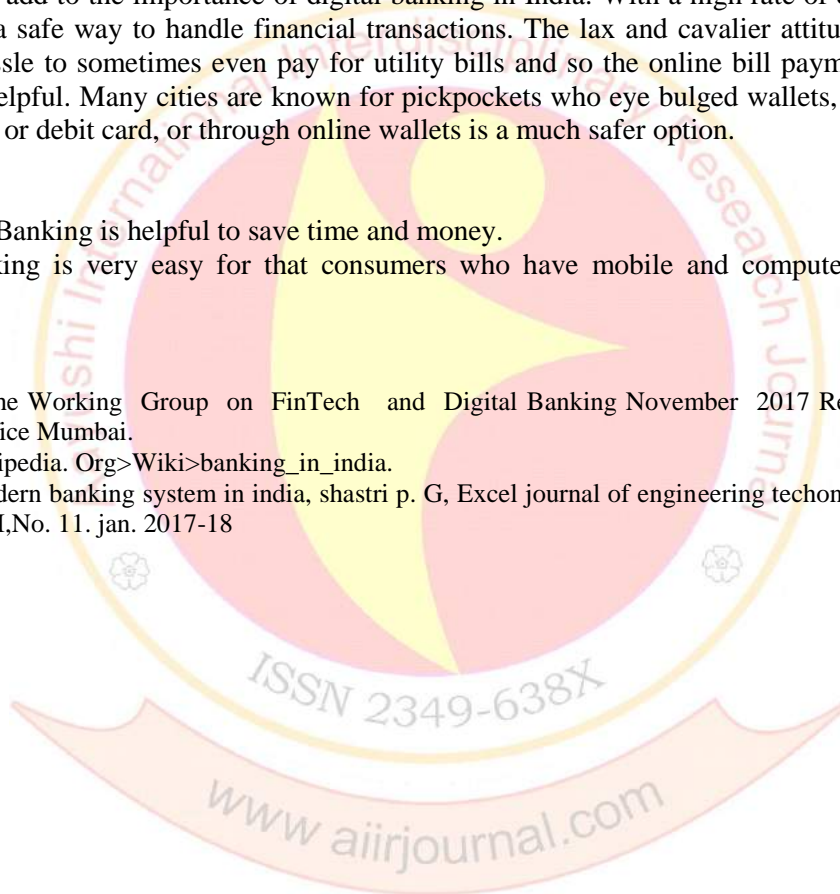
The benefits of digital banking stress its importance by themselves. However the socio-economic conditions we face add to the importance of digital banking in India. With a high rate of crime and corruption, digital banking is a safe way to handle financial transactions. The lax and cavalier attitude of public servants makes it a real hassle to sometimes even pay for utility bills and so the online bill payment feature of digital banking is really helpful. Many cities are known for pickpockets who eye bulged wallets, and hence the option of paying by credit or debit card, or through online wallets is a much safer option.

**Conclusions:**

1. The Digital Banking is helpful to save time and money.
2. digital banking is very easy for that consumers who have mobile and computer with the access of internet.

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## To study on Impact of Digital Payment System on Social life in India

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### Abstract:

*This research paper focuses on the impact of digital payment System on Social life in India. According to the Government of India the digital payment will increase the employment, reduces risk related to cash like corruption, robbery, and carrying or storage of large amount of cash and made all transactions to be done cashless or digitalized which helps the people to transfer the money with security and safety at high speed. This step of the Indian government even attracted various investors in the country. The impact of this policy is a step towards the modernization and globalization by making the economy cashless. In digital payment, banking sector plays a major role by providing digital instruments like debit cards, mobile banking, mobile wallets etc. A major obstacle for the adoption of this digital payment system in India is slow internet connectivity and the additional charges over the digital transactions and that purpose social life is disturbs in India. No matter India started following digital payment policy over a year ago but still some of the sectors in India are still at the predominance of cash transactions which is acting as a big hurdle for the economy to grow itself.*

**Keywords:** *Digital payment System, impact of Social life, India.*

### Introduction:

The Government of India has been taking several measures to promote and encourage digital payments in the country. As part of the 'Digital India' campaign, the government aims to create a 'digitally empowered' economy that is 'Faceless, Paperless, and Cashless'. There are various types and modes of digital payments. Some of these include the use of debit/credit cards, internet banking, mobile wallets, digital payment apps, Unified Payments Interface (UPI) service, Unstructured Supplementary Service Data (USSD), Bank prepaid cards, mobile banking, etc.

Digital payment methods are often easy to make, more convenient and provide customers the flexibility to make payments from anywhere and at anytime. These are a good alternative to traditional methods of payment and speeded up transaction cycles. Post demonetization, people slowly started embracing digital payments and even small time merchants and shop owners started accepting payments through the digital mode.

To put it in simple words, a digital payment occurs when goods or services are purchased through the use of various electronic mediums. There is no use of cash or cheques in this type of payment method. In a cashless economy, all transactions are carried out using different types of payment methods and this does not involve the physical use of money for the purchase of various goods and services.

### Types of Digital Payment Methods in India

1. Banking cards
2. USSD
3. Aadhaar Enabled Payment System (AEPS)
4. UPI
5. Mobile Wallets
6. Bank pre-paid cards
7. Point of Sale (PoS)
8. Internet Banking
9. Mobile Banking
10. Bharat Interface for Money (BHIM) app

### Objective

The objectives of this study are:-

1. To analyze the impact of digital payment system in Social life of India.
2. To understand the consequences of digital system.
3. To check the adoption of technology by the people

### Research Methodology

In order to study the impact of digitalization secondary data from different research papers, reports & government data has been studied and analyze.

### Impact of Digital payment system on social life.

When digital payment whether on mobile phones, cards, or online become available to everyone, everyone in the economy can benefit from the outcomes! These include:

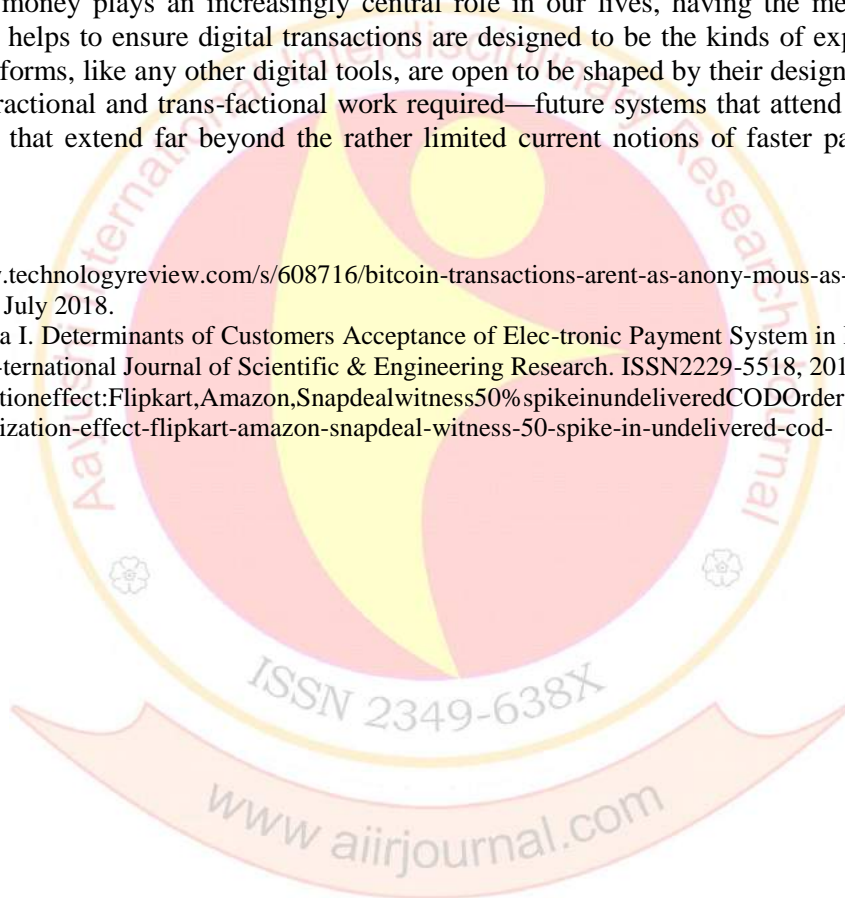
1. **Cost savings** through increased efficiency and speed
2. **Transparency and security** by increasing accountability and tracking, reducing corruption and theft as a result
3. **Financial inclusion** by advancing access to a range of financial services, including savings accounts and insurance products
4. **Women's economic participation** by giving women more control over their financial lives and improving economic opportunities
5. **Inclusive growth** through building the institutions that form the bedrock of an economy and the cumulative effect of cost savings, increased transparency, financial inclusion, and greater women's economic participation

### Conclusion:

As digital money plays an increasingly central role in our lives, having the means to articulate our interactions with it helps to ensure digital transactions are designed to be the kinds of experiences we wish to have. Payment platforms, like any other digital tools, are open to be shaped by their designers, and can do more to support the interactional and trans-factional work required—future systems that attend to their users' needs offer opportunities that extend far beyond the rather limited current notions of faster payments and cheaper services.

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## Importance Of Digital Payments In India

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### Abstract:

*This research paper focuses on the impact and importance of digital payments in India. According to the Government of India, digital payments will increase employment, reduce cash-related risks such as corruption, robbery, and large cash deposits or storage, and all transactions can be cashless or digitalized which facilitates the transfer of people. Money at high speed with security and security. The Indian government's decision attracted various investors in the country. The result of this policy is a step towards modernization and globalization by cashing out the economy. The banking sector is playing a big role in providing digital payments like debit cards, mobile banking, mobile wallets etc. One of the major obstacles to adopting this digital payment system in India is the slow internet connectivity and the extra charge on digital transactions. India started following the digital payment policy a year ago, but there are still cash flows in some regions of India which is a major hurdle for the economy to grow.*

**Key words:** Digital payment system, Cash less economy.

### Introduction:

The term digitalization means that digitization is the use of the less difficult form of money, or in the language of the common man, by means of a computer or a digital mode of transaction. India is a developing economy where 67% of the population is still in rural areas (World Bank, 1) No doubt we have achieved literacy rate of 74% but still lack the technology in large numbers of the population and hence the problem of digitization compared to other countries in the world. Is big in India. Automated Teller Machines (ATMs) are the first type of digitization that was introduced in India in 1987. It took more than twelve years for people to accept it as a method of dealing. But as time went on, people began to understand how to use it, and gradually its importance began to grow. While the demand for ATMs is increasing in different parts of the country, RBI has emphasized on e-banking in the country to reduce the crowd of ATMs. The main focus of the Reserve Bank of India is to ensure that people have a secure and authoritative payment system. For this purpose, the Electronic Clearing Service (ECS) was introduced in the 1990s. National Electronic Clearing Cell was launched in 2008 to handle many transactions of individuals and corporate. This has been a boon for the economy as it is easy, fast and fast for many people to transfer their funds to any part of the world. During this transformation, a national level e-governance scheme was introduced at level 3. Therefore, a "Digital India" campaign was launched on July 7, with a focus on e-banking and expanding good internet facilities in the rural areas. The mission of the campaign is to develop secure and digital infrastructure, to provide digital services and universal digital literacy services. According to the Internet and Mobile Association of India (IAMAI) and Kantar IMRB, out of the 918 million rural areas in India, only 186 million are using the Internet and leaving 732 million potential users. Although this digital transformation occurred ten years ago, it has been unable to reduce people's dependence on paper money in the economy. To reduce the burden of printing more notes and relying on people's paper currency, the people were relied on November 7th. In addition, the government unveiled two plans for Lucky to make use of digital currency. Consumer Plans for customers and Digi Money Trading Schemes for businesses. The Government of India and the Reserve Bank are working hard to promote mobile banks and e-payments. In addition to these efforts, various small finance banks and payment banks have recently introduced financial inclusion and innovative banking solutions. Digital India is striving in rural India but digital literacy is one of the biggest hurdles in making a big success.

### Objectives

The objectives of this study are to:

1. Analyzing the Impact of Digital Payment Systems in India
2. Understand the side effects of the digital system. T. Examining technology adoption by people.

### Research Methodology

To study the impact of digitalization of secondary data in various research papers, reports and government data were studied and analyzed.

### Findings:

The Indian economy is growing very fast and the literacy rate of the people is increasing but this is calculated on the basis of the number of people attending schools and colleges. But how many people actually know how to operate a desktop; Laptops, mobiles or operating systems of any kind cannot be evaluated by literacy rate. Nowadays we will find that even the working class has quality Android mobile phones but they do not have full knowledge of how to operate them properly. Although some people know how to use it, they are



afraid of using online banking because of online fraud, cyber crime, limited literacy, lack of information about online rules, etc. Residents of rural areas still believe in visiting banks. Instead of doing it online, do any kind of transaction because they believe that an employee's worth is more important to them. Coincidentally they know who to catch if they face any kind of problem, but there is no restriction on any particular person when dealing online. The government has taken initiative to add customer base numbers to catch criminals. But many people reduced their bank accounts to protect the government from paying any kind of tax. With each new implementation of the rules, people find new ways or ways to protect themselves. At first glance, it is important to change people's perception that what is being implemented is in the best interests of themselves. It may seem difficult and illogical to do today, but it will be more productive in the long run. It is a combination of a lack of personal understanding and financial literacy among the people. The role of banks in disseminating this information is crucial and requires employees to keep themselves up to date. Another issue that is seen as a major obstacle to the transformation of the paper economy into a digital economy is neither weak nor internet connectivity. When we talk about internet connectivity, there are still a number of government banks where there is no internet connectivity. These problems are more prevalent in areas with higher levels. Therefore, without the internet facilities it is completely impossible to achieve the goal of making the economy digital. Often ATMs have money but are unable to distribute funds due to unable to read cards without proper internet connectivity. Due to these prevalent problems, it is safe for customers to do their business by visiting the banks directly. In addition to these problems, it is also found that people use Net Banking, ATMs or any other e-banking facilities to face the unnecessary hassle of paying various fees. Therefore, they sought to avoid the use of these facilities.

#### Conclusion:

The government must address the first and foremost issue of literacy and for that we need to strengthen our education system from the very beginning. For the elderly, bank individuals have a very important role to play. Need to start any kind of information centers, programs, policies, new applications, or any technical information. In addition, educated youths should play a role in helping others by giving them knowledge that they cannot do their work on their own. Another issue that should be addressed is the implementation of cyber crime and cyber security issues, and more stringent rules regarding cyber security should be addressed. The state-of-the-art technology and economy that is now in progress in urban as well as rural areas can help digitalize the economy with daily use. The banking sector can also help by providing knowledge in this training strategy and for those with low awareness or with no knowledge of their use. Adopting a digital payment system can be a drastic change for people with full knowledge of daily life, such as withdrawal. Digital Payments, a digital empowerment system promoting digital India, launched by our Prime Minister Narendra Modi, is a digital payment system that brings cash transparency to the country and directly controls black money in India through tax payment and transparent cash flow of every person.

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## Cashless Economy – Challenges and Opportunities in India

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### Introduction :-

Transformation into a cashless economy is an international issue and many of the countries already almost become cashless economy. A cashless economy is where financial transactions are not being done in the terms of currency notes, coins or physical cash money. It was in trend by barter age of cashless transaction and other methods of exchange like food crops or other goods. However, the new concepts of cashless transactions in cashless economy are made with the help of digital currencies where legal tender (money) is exchanged and recorded only in the electronic digital form.

Cash may not be a king anymore, the adoption of digital payments is picking up at an extreme pace, and everyone from vegetable vendor to chai-wala is adopting the digital payment system to move away from the cash crunch. New technologies, players and consumer expectations are changing the payments marketplace more than ever. The opportunity of the new digital payment ecosystem comes with risks.

India is moving to cashless economy after demonization of Rs 500 and Rs 1000 currency notes. Indian Government and RBI are trying continuously cashless transaction by using digital or electronic mediums like net banking, credit cards, debit cards, etc. It doesn't mean that government is trying to remove the cash from the circulation but it enhances the habit of people settling transactions digitally. A **cashless** transaction describes an **economic** state whereby financial transactions are not conducted with money in the form of physical banknotes or coins, but rather through the transfer of digital information between the transacting parties. On November 8th, government withdrew Rs 500 and Rs 1000 notes- two highest currency from the circulation. Main objectives were to fight against corruptions, convenience, counterfeit money and black money. The whole country is witnessing the effects of demonetization and with our Prime Minister hinting at a cashless economy, many people are left in confusion. How would a cashless economy be beneficial is the question of many. The cashless transfer is soon becoming the most preferred option and there are a number of benefits of going cashless. The digital or electronic transaction of the capital by using net banking, credit cards etc. is called cashless transfer. People can easily pay their bills online, shop and schedule transactions and manage all the finances using their laptops or Smartphone.

### Literature Review:-

**Raja, Velmurgan And Seetharaman(2008)** have explained in their research paper titled "E-payments: Problems and Prospects". This paper discussed the evolution and the growth of electronic technologies, which can provide more advanced technical supports for electronic payment systems. The focus of this paper is to identify and explain the different methods of e-payment. The authors analysed the challenges of electronic payments from different perspective and provided preliminary security countermeasures for each of the issues

**Sachin Kumar (2011)**, In the article "India riding the ATM wave" presented the reader with rising number of ATMs in the country by nearly one third while cash withdrawn through ATM rose three times between Jan 2010 and Jan 2011. The author pointed out correctly to the fact that the important reason for the increasing popularity of ATMs in India is the bouquet of services they offer. Present day ATMs have turned into mini financial stores offering services like money transfer, mobile and electricity bill payment, income tax payment, cash deposit and even air ticket booking.

**Chandra Gnanasambandamet al (2012)** in his technical report "Online and upcoming: The Internet's impact on India" which was published for the McKinsey and company, has explored and interpreted the role of internet in China, Brazil, Russia, and India facilitating the cashless transactions in last five years. The study assesses the impact of the Internet on various groups of users which has classified them into four broad types: individuals, entrepreneurs, enterprises, and the government.

**Dhanajay. B. And Suresh Chandra B. (2015)** They have explained in their article entitled on "The Electronic Banking Revolution in India". This article reviews that electronic payment system has progressed in the recent year in so many countries and India also. The RBI was its vision statement has set the objective to promote electronic payment and less cash economy.

**Karamjeet Kaur And Dr Ashutosh Pathak (2016)** have explained in their research paper titled "E-Payment System on E-Commerce in India" the different types of cashless transactions methods including their functionality and processing. They have revealed that it is quite difficult, but not impossible, to suggest that which payment system is best. Some systems are quite similar, and differ only in some minor details. Thus there are number of factors that affect the usage of ecommerce payment systems.

### Objective of the Research:

1. To identify the different modes of cashless transaction.
2. To examine the various challenges in cashless transaction

### Methods of Cashless Transaction

Clumsy and expensive to handle coins and notes are replaced by efficient electronic Payments initiated by various types of plastic cards that have a tantalizing prospect for the twenty-first century. There are various cashless transaction methods such as Credit cards, Debit cards, Bank prepaid cards, Mobile/E Wallets, ATM money transfers, Internet banking transfers, AADHAR Enabled Payment System (AEPS), Unified Payment Interface (UPI), Cheques, Demand drafts, NEFT & RTGS transfers and, E-cash coupons.

### Methods of Cashless Transactions in India

#### Paper Based Methods:-

**Cheque:-** Cheque is one of the popular modes of cashless payment. In this method one issue a cheque for the specific amount to anyone else. The person deposits the cheque into the concern bank. Within two day bank get cleared the amount. The maximum validity of a cheque is three month from the date of issue. The entire transaction done through cheque gets recorded and there is a proof of payment. Although there is a chance to get dishonor of cheque because of not sufficient balance, mismatch of signature, in order to avoid all these issue in cheque book people can goes through cashless transaction.

**Demand Draft:-** A demand draft is a negotiable instrument issued by a certain bank. A demand draft is a negotiable instrument similar to a bill of exchange. A bank issues a demand draft to a client (drawer), directing another bank (drawee) or one of its own branches to pay a certain sum to the specified party (payee). It is used for transferring money from one place to another with great convenience and safety.

#### Electronic Based Method:-

**Banking cards (debit / credit / cash / travel / others):** One of the basic and method for online payment is through cards issued by the bank which are used to withdraw money from ATM machine and to make online payments. Each card secured by a four digit pin and every time when we make online transaction we are required to enter the pin and OTP i.e one time password that is send to the registered mobile number. Banking cards offer consumers more security, convenience, and control than any other payment method.

**Internet Banking Transfer:** - Internet banking or e-banking is the latest series of technological wonders in the recent past which involves use of internet for delivery of banking products and services. It is the service being utilized intensively by most of the consumers of the digital world. It enables customers of a bank or other financial institution to conduct different financial transactions through the financial institution's website. Different financial transactions are.

**Mobile Banking:-** Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct financial transactions remotely using a mobile device such as a Smartphone or tablet. Mobile banking is usually available on a 24-hour basis. Transactions through mobile banking may include obtaining account balances and lists of latest transactions, electronic bill payments, and funds transfers between a customer's or another's accounts. It allows you to use your banking services from any place across the country.

**Unified Payment Interface (UPI):-** UPI is a system that combines multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood. A Smartphone with internet facility and Bank Account details, are required for registration. Virtual payment address and UPI pin enables transactions. Example: Phone pay, Google Tez, and BHIM etc.

**National Electronic Funds Transfer (NEFT):-** National Electronic Funds Transfer (NEFT) is a nation-wide payment system facilitating one-to-one funds transfer. Under this System, individuals, firms and corporates can electronically transfer funds from any bank branch to any individual, firm or corporate having an account with any other bank branch in the country participating in the System. However, cash remittances will be restricted to a maximum of Rs. 50,000/- per transaction.

**Real Time Gross Settlement (RTGS)** RTGS is the continuous settlement of funds transfers individually on an order by order basis. 'Real Time' means the processing of instructions at the time they are received rather than processing some time later; 'Gross Settlement' means the settlement of funds transfer



instructions occurs individually. This system is primarily meant for large value transactions. The minimum amount to be remitted through RTGS is 2 lakhs and there is no upper ceiling for these transactions.

**Aadhaar Enabled Payment System (AEPS):-** AEPS is a bank led model which allows online interoperable financial transaction at PoS (Point of Sale / Micro ATM) through the Business Correspondent (BC)/Bank Mitra of any bank using the Aadhaar authentication.

### Challenges of Cashless Transaction in India

However, in a country of 1.3 billion people, all are not perfect. Going cashless must be an exponential curve, slow initial buildup then fast paced in later stages, not a digital step signal. That could be counterintuitive to the whole process. India is a large country that needs a change that is systemic and systematic. Here is a list of challenges-

1. **Unbanked population :-** The government along with Reserve Bank of India (RBI) implemented and initiated numerous schemes like PradhanMantri Jan DhanYojana, digital India payments limited etc., to promote financial inclusion, especially in rural India. Despite all the efforts, about 19 percent of the Indian population still doesn't have access to banks, according to a study jointly conducted by ASSOCHAM and the consultancy firm, Ernest & Young. Recent data from the government and other sources refute a claim that declared 99% of households to be in possession of bank accounts but the facts are stated above. All the popular methods of payment like E-wallets United Payment Interface and BHIM etc., are dependent on bank accounts, if not also smartphones and internet access.
2. **Cyber Security:** In October 2016 the details of over 30 lakh debit cards was feared to have been exposed at ATMs. It was believed that the card and PIN details might have been leaked due to which customers were advised to challenge the PIN of their ATM-cum-debit cards. Stringent steps issuing new cards were also taken so these are cyber-crimes is very dangerous to use the cashless transaction.
3. **Network Connectivity:** Since the day demonetization was announced, people are trying to use more of card transactions to save that dreaded trip to the bank and to save the last penny of the hard cash in hand. So many people have faced trouble standing in line to pay for a transaction at a shop when the card machines have stopped working due to an overload on the network. Connectivity issues must be resolved before dreaming about a cashless society.
4. **Internet Facility:** Lack of internet facilities and without it a country cannot think of becoming digital. There are still many rural and urban areas where you might difficulty in having access to 2G network, let alone 3G, 4G. Another issue is that sometimes it becomes difficult to note whether your transaction was successful or not. It may be due to the loss of net connectivity in between, or due to a slow connection, or the bank's server is down.
5. **Charges on Cards Online Transactions:** Heard of convenience charges of course we would have it we do online transactions. These are additional charges that are levied by the vendors when they offer an online payment facility but when the government is forcing us to go cashless should not this compulsory seen on online transaction be taken off. So charges of cards are main problem of cashless transaction.
6. **High Cash Dependency:** India has a high cash penetration in almost all of its transactions that happen as B2C transactions. Total cash flow in the market accounts for 12.04% of the GDP, which is among the highest in developing countries. This goes to show our dependence on cash is acute and it requires time to tackle it.
7. **Lacking infrastructure:** Lacking infrastructure is one of the main problems of cashless transaction retailers and consumers chose to deal in cash because swipe machines are not available on large scale ATMs are available but those are not sufficient. Most of the nationalised banks lacking behind in providing survive customers has to wait in queue for long time for depositing cash in banks. In rural area there are no banks branches. No Atm machines or e lobby facility. Many of the villages where is no electricity and telecom facility so far. The first and foremost requirement of a digital economy is the penetration of internet and smartphone. Not all Indians have mobiles, leave alone net connections. The latest figures from the Indian telecom regulator TRAI, India had a teledensity of 83%, with Bihar, Assam, Madhya Pradesh and Uttar Pradesh with teledensity of less than 70%. Although a billion mobile subscriptions (not users), only 30% of subscribers use smart phones. With 370 million mobile internet users, over 70% of them are in cities while 70% of Indian population lives in villages.
8. **Lack of Digital Literacy :** There are large number of people is still illiterate in India and can be victim of fraud or other malpractices while using digital payment options. This is due to lack of training to handle software; people do not know the way to make digital payments and use of debit and credit card. Many Street vendors, shopkeepers don't know how to use Swipe machines. Also these are not available

to them. People in rural still don't know what actually Smartphone mean. For them mobile is still a mode of communication only.

### Conclusion:-

This paper was aimed to find the challenges that are faced by Indian citizens in a move towards cashless economy. To conclude an important growth of cash less transactions has been the inducement to digital economy. It has boost to financial Inclusion efforts. There has been a distinct increase in proper saving flows. There has been a sharp increase in the number of accounts. As an overall review, most of the major developed countries in the world are moving in a very excellent way of cashless economy. A history of delayed in development in India is too long. Now the time, India should progress in full steam ahead and create a new legacy. This is time to embrace the cashless economy like other developed countries and we must make the most of it.

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## Digital Payment System New Approach Of India

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### Abstract:

*The paper has a quick overview of cash flows and transactions to understand the cashless method of dealing with historical background. Money is the most important tool to meet your needs and needs. The tools to meet your needs are the different types of currencies issued by the governments of the country and then exchanged for products and services. This money is an evolving form for everyday transactions and has emerged from various systems of exchange in human civilization. In the past, there were no currencies but all other important goods and services were exchanged for other goods and services; this exchange system was known as the barter system. When foreign exchange or coins came into being, the need for monetary value arose as a psychological assurance to engage external entities to promise to pay someone as a pledge or coin. Ancient China, India and Africa started using cows and shekels. With the rise of new technologies and the need for global business, cashless transactions have become more popular.*

**Key words:** Cash less, Digital payment, Advantages.

### Introduction:

Many methods of cashless transactions were frequently used, but due to the economic progress required other fast and reliable methods, entrepreneurs and economists were motivated to use reliable and simple methods of cashless transactions. Cashless Transaction System Cashless transactions where there is no physical currency involved the process of buying goods and services against money. Physical currency changes through many methods supported by digital currency technology and are able to transfer money from one person's bank account to another.

Methods have their own characteristics, qualities, and other mechanisms or mechanisms that work together with equipment; That is why they are called "systems". 1 As with any trading activity, the issue of safe and reliable money transfers between the parties involved is also required. In a cashless environment, payments take the form of money exchanges electronically, making it safe and reliable. The merchant sells goods to consumers and pays the customer with the help of cashless methods with security and reliability where in the offline world payments are made by cash or by check through counterfeit checks. There are many reasons behind people's choice to make cashless transactions such as convenience, sophisticated and reliable digital technology, the fastest and cheapest things to achieve, including maintaining a track record for taxation purposes. As in other countries, credit and debit cards were the most common for cashless transactions in India, but demand changed and after the historic decision on the notarization, the Hon'ble Prime Minister took the "Mr. Narendra Modi promoted other methods of cashless transactions. The changing paradigm gave a new height to cashless transactions in the country, and it also influenced consumers and their perceptions of these practices. The method of cashless transactions is weird and expensive to handle coins and notes, replaced by efficient electronic payments initiated by various forms of plastic cards with the possibility of tantalizing in the twenty-first century. There are various cashless transaction methods like credit card, debit card, bank prepaid cards, mobile / e wallets, ATM money transfer, internet banking transfer, Aadhaar enabled payment system (AEPS), unified payment interface (UPI), check, demand. Drafts, NEFT and RTGS transfers and e-cash coupons.

### Electronic based methods:

**Credit card:** Credit card is a piece of plastic issued by Visa Messer Card or any other network that allows a credit card company to borrow and pay for the purchase. A credit card reader is required for settlement to purchase goods from a credit card acceptor. **E Debit Card:** A debit card is a prepaid card and is also known as an ATM card. Should a person open an account at the issuing bank which gives a debit card with a personal ID number, when making a purchase, he has entered his PIN number on the shop pin pad. When the card slips through the electronic terminal, the acquisition banking system dials either the master card or the visa card which verifies the PIN and the customer can never overspend or accept or reject the transaction because the issuing bank knows that the system refuses any transaction which Exceeds account balance.

### Cashless transaction:

The cashless transaction of paradigm shift in term paradigm shift is said to change the fundamental assumptions of the dominant theory of science. The use of the term paradigm shift has been found in a contextual context that reflects the notion of major changes in a particular way of thinking. The paradigm shift is to make radical changes in individual thinking, complex systems or organizations rather than prior thinking



and fundamentally integrate with different thinking. This is a paradigm shift due to the influence of the technology that most people prefer online shopping over traditional physical store shopping. In the corporate and retail sectors of India, the behavior of consumers in every product or service from grocery to consumer goods is changing. According to the FICCI Technopak report, there is a wealth of young consumers, ranging from 3 working years to years, with a wealth of young consumers who make up 64 per cent of India's total population, who have different needs and are more suited to branded products. They want to buy these products and services in fashion, convenience and fast. ATMs have been used for many years Cashless transactions increased significantly when debit cards were used to withdraw money or cash. Many studies have shown that customer satisfaction factors provide a competitive advantage to companies involved in cashless transactions, or to settle for cashless transactions. The use of ATMs and other online transactions is evidence of consumer trends. Moving toward the positive side that has led to many conclusions. This change in the pattern is a result of customers' behavior and their choice to use cashless transaction methods.

#### **Global Connection of Cashless Transactions:**

Cashless practices of transactions are more prominent in developed countries such as Belgium, France, Canada and the United Kingdom. Cashless systems have recently been deployed for cashless categories in many developing countries such as Nigeria and Brazil. To strengthen transactions and cashless societies in the country. Along with this deployment, the governments of these countries are trying to eliminate problems like terrorism and tax evasion. So far this strategy has been very successful in Nigeria and Brazil. Although advances in technology have enabled the improvement and innovation of electronic payment systems, basic ATM card transactions are an indicator of acceptance of cashless payments in Western countries such as online credit transfer, direct debit, card payments and checks. And underdeveloped countries like Bangladesh and India. In the modern world, India is well-known for its development in the areas of information technology and software development but it is far behind in using cashless transactions as compared to other countries. In view of the adoption of these cashless transactions, special considerations need to be taken to bring India in line with other countries.

#### **Conclusion:**

India has undergone various transformations in recent years, responsible for industrialization, international trade and economic growth. Compared with other BRICS nations with economic growth rates, such as Brazil, Russia, India, China and South Africa, the percentage of total cashless transactions in India is very small, despite various growth indicators. Compared with a group of BRICS nations, India has about 5% of total transactions without direct currency. In addition to this backwardness in cashless transactions in India, this research will be studied. The study focuses on the major causes of cashless transactions and their role in various portals and schemes launched recently in India, for example: Digital India, Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Smart City Mission and other schemes under the NITI Aayog. And national development is where this is going Ones of success in cashless transactions, and play an important role. The study will benefit in many areas like income tax and trade as their development will be very beneficial in developing countries like India.

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## Digital Payment System: - Facts & Figures

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### Introduction:-

It is not a very old story when we used to do everything by cash. From purchasing our monthly grocery items to booking movie tickets at inbox standing in a long queue A few mobile wallet service providers like Payten or free charge was started providing Appeased mobile recharge services with some cash back features which can be utilized for the next mobile recharge But after November 8 / 2016 everything was drastically changed. It is very hard to change someone's.

Behavior pattern if it is not forced to be anything. Many people have. Reluctantly adopted the alter crunch payments system due to the cash crunch and now move and move people are willingly.

Adopting this alternative payment solution leaving traditional cash based payment system. Yes, are talking about the digital payment in India and its burgeoning, popularity amongst the all, no matter whether he she is young or old. Because it is fast secure convenient and less time consuming.

Today, in this article, we will try to cover all the facts, features and futures of the digital payment system in India along with its implications uses in the India payment landscape.

### Digital Payment system?

Digital payment are technically defined as any payments made using digital instruments. In digital payment the payer and the payee both use electronic modes to send and receive money, No hard cash is used.

Digital payment is nothing but the transfer of money between the two bank account and mobile wallets in digitalized form, there is no involvement cash transactions. The bank account may be between any same banks or other banks or mobile wallets between the same services providers of the different providers. In digital payments payer and payee both uses digital mode to send and receive money in real time.

Objectives:-

1. To study digital payment system
2. To know facts and figures of above OPS.
3. To study how to reduce cost of handing cash at individual level.

### Research Methodology:-

The government of India has been taking several measures to promotes and encourage digital payment in the country. As part of the digital India campaign, the government aims to create a digitally empowered economy that is faceless, paperless, and cashless. There are various types and modes of digital payments some of their include the use of debit / credit cards, internet banking, mobile wallets digital payment App unified payments interface (UPI) service Unstructured supplementary service data (USSD) bank prepaid cards mobile banking etc.

Digital payment methods are often easy to make more convenient and provide customers the flexibility to make payment from anywhere and at any time these are a good alternative to alternative to traditional methods of payment and even small time merchants and shop owners started accepting payments through to digital mode.

### Facts of digital payment system.

1. The total transaction value at point of digital payment system was around USD 65000/- M as of march 2019 and expect to increase by 20% for the next few years.
2. Swiping of debit card at point of scale sale (pops) has increased by 27% and swiping of credit card grew by 22% as on march 2019 as compared to the cores ponding period last year. Whereas ATM withdrawal increased by merely 15% according to RBI data.
3. More than 566 million people use the internet today and are exacted to reach 62% million at the end of 2019 digital adoption mostly registered a growth of 35%.
4. The number of people who use digital payment system at least once in a month grows to million.

**Importance's:-**

1. Cost saving- Through increased efficiency and speed.
2. Transparency and security by increasing accountability and packing reducing corruption and left as a result.
3. Financial inclusion by advancing access to a range of financial service including savings account and insurance products.
4. Women's economic participation by giving women more control over their financial lives and improving economic opportunities.
5. Inclusive growth through building the institutions that form the bedrock of an economy and the cumulative effect of cost saving increased transparency financial inclusion, and greater women's economics participation.

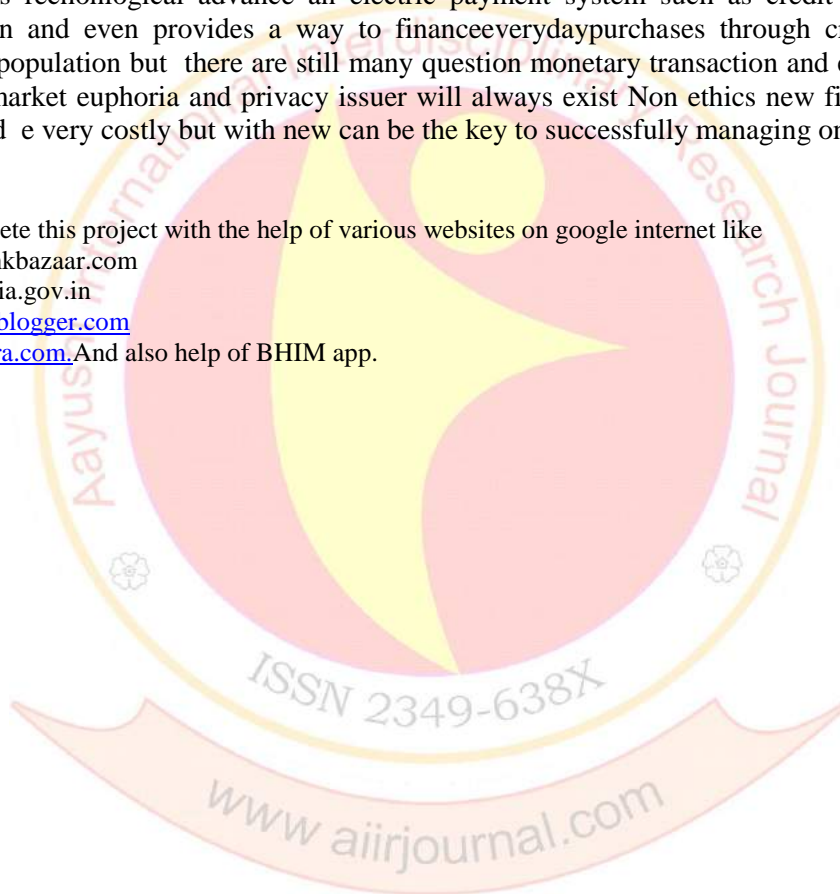
**Conclusion:-**

IN conclusion electric transfer funds have been around for many year and the economy has greatly benefited from this rechonlogical advance an electric payment system such as credit cards has facilitated moment transaction and even provides a way to financeeverydaypurchases through credit because of this bitcoins are going population but there are still many question monetary transaction and even consideration of an identity thefts market euphoria and privacy issuer will always exist Non ethics new financial technology it not yetperfecta and e very costly but with new can be the key to successfully managing one money

**Reference:-**

Complete this project with the help of various websites on google internet like

- 1) WWW. Bankbazaar.com
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- 4) [WWW.quora.com](http://WWW.quora.com).And also help of BHIM app.





## Study On The Future Of Digital Payments In Marathwada.

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### Abstract:

*This paper looks to distinguish the present pattern towards the reception of digital payments in India. The term Digital Payment implies making payment to other individual with the assistance of web or through electronic mode rather than paper cash. The activity of Digital Payments was taken by Government of India after the declaration of demonetization on eighth November 2016. Digital Payments was started to acquire straightforwardness exchanges and dispensing with dark cash. It was really a move towards cashless economy. A further, digital payment was energized to give adequate money accessibility to the banks for giving credit to individuals. Till date, a significant piece of society has begun utilizing Digital method of Payments, yet at the same time individuals feel frightened of utilizing Internet Banking, platinum cards, e-money and so on. At first the Government was giving significant motivators to digital payments however now a decrease has been seen in this push. This paper attempts to recognize the purposes behind selection of digital payments by individuals in India and it additionally attempts to discover the issues looked by individuals in making Digital Payments.*

**Keywords:** Digital Payments, Cash back, Incentives etc.

### Introduction:

This paper is about the mentality of individuals towards reception of Digital Payments strategies so as to have straightforwardness in their activities. Digital Payments were supported by Government of India after the declaration of demonetization on eighth November 2016. The essential target behind the activity of Digital Payments was to accomplish cashless economy over the long haul. Because of the expanding defilement and dark cash in India, it was getting hard to profit the announcement of exchanges and moves made by individuals to different gatherings. Digital India was a crusade propelled by Government to expand straightforwardness in activities and achieve governance.

### Objectives Of The Study:

1. To find out the attitude of people towards adoption of digital payments in India.
2. To find out the problems faced by people in making digital transfers.
3. To find out the most popular method of digital payments.
4. To have an idea regarding the expected future of digital payments in India.

### Review Of Literature

1. Sujith T S, Julie C D (2017) the article entitled "Openings and Difficulties of E-Payment Framework in India". This study planned to recognize the issues and difficulties of electronic payment frameworks and offer a few answers for improve the e-payment framework. E-payment framework gives more open doors as well as. The study found that, Computerized upset has given a simple approach for advanced payments. The study likewise found that, the span of portable system, Web and power is additionally growing computerized payments to remote zones. This will most likely expand the quantity of advanced payments.
2. Mamta, Prof. HariomTyagi and Dr. AbhishekShukla (2016) the article entitled "The Study of Electronic Payment Frameworks". This study intended to recognize the issues and difficulties of electronic payment frameworks and offer a few answers for improve the e-payment framework quality. The effective usage of electronic payment frameworks relies upon how the security and protection measurements saw by buyers just as dealers are prevalently overseen, thusly would improve the market trust in the framework.

### Research Methodology:

The study depends on Secondary Data. The necessary information has been removed from different sources like research diaries, periodicals, government distributions, magazines, papers articles and the authenticated sites.

### Various methods of Digital Payments available in Marathwada are as follows:

#### Debit Card:

A Debit card allows the card holder to withdraw money directly from his bank account using an ATM. It

also facilitates the user to swipe the card at Point of Sale (POS) devices at merchant locations, for good services purchased. The same card can also be used for online shopping and e-commerce transaction. These e-commerce transactions are known as "Card Not Present" where only the card number and other details, viz. date of validity, Cards Verification Value (CVV) are used for initiating payment to the merchant.

#### **Credit Card:**

A credit Card allows the card holder to use the card against a line of credit approved by the card issuing bank\ organisation. The card issuer normally allows the card holder to repay the used amount, either in full or in part (Monthly minimum repayment).

#### **IMT:**

IMT is an innovation domestic money remittance service that allows sending money to a receive, only by using the receiver's mobile number. IMT rides on bank's ATM network connectivity, where the ATM is used as a customer interface.

#### **Cash Deposit Machine (CDM)**

is a Self-service terminal that enables the user to deposit cash without any manual intervention of the branch staff. To use the CDM, one needs to have a bank Debit Card or needs to know his/her Bank's account number in which the money is to be deposited.

#### **Mobile Banking:**

The advancements in mobile technology and also increase in mobile phone density in our country, with close to 100 crore subscribers, present an unprecedented opportunity to leverage mobile as a platform for inclusive banking. Not only has mobile banking given immense convenience to the end customer to avail banking services at his fingertips, but at the same time it is facilitating to empower the un-banked and under-banked population of our country through the use of electronic banking services.

#### **Mobile Wallets:**

In recent years, the payments industry has witnessed many innovations in the payments systems and, especially in the area of Mobile Payments. With the increase in mobile subscribed base and the mobile internet usage in India, opportunities have arisen for creation of a new business line. One of these has been the Mobile wallet.

#### **IMPS:**

Immediate payment service (IMPS) is a real time payment service that is available 24x7 and 365 days a year, including public holidays. It facilitates inter-bank, account to account fund transfers. IMPS is available on multiple platforms such as Mobile (App, SMS, WAP, USSD), Internet Banking, ATM and branch as well.

#### **A POS**

(Point-of-Sale) Terminal is an automated version of cash register operating through various hardware and software services. Today's POS terminals can not only record and track customer orders/transactions but can also process credit/debit cards, connect to other systems in network and manage inventory. A full blown POS will for retail merchants, be keeping inventory, keeping price charts, loyalty details, promotional special conditions, doing billing etc. The model is much older. Generally they are provided with barcode reader and printer. This model may or may not be enhanced with network connections beyond a shop LAN, a card reader to handle credit/debit card payments

#### **RuPay and RuPay Secure :**

RuPay card Scheme was developed in India with RBI's vision (2009-2012) to come up with a domestic card scheme, act as a domestic price setter, thereby obviating the need of routing domestic transactions (over 90%) via international card-network owned switches.

#### **National Automated Clearing House (NACH):**

NACH is a web based solution to facilitate interbank, high volume, small and repetitive electronic Payments, i.e. it is another ECS, but, an improved one. National Automated Clearing House handles the clearing and settlement including returns among members on the same day. Changes to members are low. Bank customers need to register mandates like standing instructions through their banks for payment to or collection from other people for whom the account numbers , branch code, MICR, etc. are submitted.

#### **E-Kyc:**

In the year 2013, RBI permitted e-KYC as a valid process for KYC verification under Prevention of Money Laundering (Maintenance of Records) Rules, 2005. In order to reduce the risk of identity Fraud, documentary forgery and have paperless KYC verification, UIDAI has launched its e-KYC services.

#### **Cheque Truncation System (CTS):**

Truncation is the process of stopping the flow of the physical cheque issued by a drawer at some point with the presenting bank en-route to the drawee bank branch. In its place an electronic images of the cheque is transmitted to the drawee branch by the clearing house, along with relevant information like data of presentation, presenting bank, etc.

### **National Financial Switch (NFS):**

The Institution of Development and research in banking Technology (IDRBT), Hyderabad had been providing ATM switches services to banks in India through National Financial Switch. IDRBT decided to hive off its operational role on ATM switching in order to have focus on research and development activities and was looking for a suitable arrangements For shifting this business to some national level payments system organization. National payments Corporation of India (NPCI) considered this as an opportunities and started discussion with IDRBT on the feasibility of taking over

### **Real Time Gross Settlement System (RTGS):**

The Ad Hoc Study Group on RTGS was established by the Committee on payments and settlements Systems (CPSS), Bank for international settlements (BIS) as its meeting in December 1994 and was asked to study various important issues relating to RTGS with a view to achieving a clearer understanding of the design and operation of RTGS systems. The Group of Ten (G-10) countries constituted for this submitted their observations to CPSS. The study Group examined a range of issue including (a) liquidity issues, (b) queuing arrangements, (c) message flow and information structure, (d) issuing arising from the interrelationship between RTGS system and other settlements systems, (e) monetary policy implications, and (f) the distinctions between gross settlements systems and net settlement systems.

### **NEFT (National Electronic Funds Transfer):**

Established in November 2005, Reserve Bank of India stated that the objective of NEET system is to establish an Electronic Funds Transfer system to facilitate an efficient, secure, economical, reliable and expeditious system of funds transfer between banks in the banking sector using structured financial messaging Solution (SFMS) backbone. It has relived the stress on the existing paper based funds transfer and clearing system. NEFT, launched in 2005 with 8 participation banks has currently more than 160 banks live on the system. As per the system. As per the RBI, close to 130,000 bank branches are enabled for NEFT transaction.

### **Forex Settlements:**

All Foreign Exchange transactions are cleared and settled by the Clearing Corporation of India Ltd. (CCIL). CCIL commenced settlement of forex transaction from November 2002 covering inter-bank USD/INR spot and forward rates. From February 2004, cash (same day) and Tom (next day) trades were also include for granted settlement.

### **Major Challenges/ Problems Of Digital Payments In Marathwada Region**

1. Lack of trust among people in digital payments.
2. Lack of knowledge and awareness among uneducated or less advanced people.
3. Less reliability due to scams and hacking cases.
4. Loss of internet connection sometimes.
5. Delay in cash back processing by E-commerce Companies and e- wallet Companies.
6. Sometimes the payments get blocked and no confirmation is sent to customer regarding status of payment.

### **Conclusion:**

Innovation digital payments solutions are the latest offering in the Indian banking and payments landscape. In March 2015, value of mobile banking transaction touched a high of INR 170 Bn across 66 banks. Thus, Mobile banking applications have become a hygiene distortion channel for banks due to penetration of smartphone and high usage of apps. Large private and public sector banks of India, despite having a wide network of branches and ATMs, are foraying into digitals solutions for banking and creating a multi-channel customers interaction format which is evolving as per latest social communication trends. Banks are designing product offering over social media platforms such as Twitter and Facebook. Indian banks are also launching innovative payment and banking solutions across a wide range of platform ranging from mobile apps to internet banking to ATMs etc. They are packed with multiple banking services, customer's services, payment options. Payment services are also being designed around social networking sites which facilitate splitting the bill over the networking site. Aligning product is one of the key trends emerging in digital payments. Opening an account with self-invites, via Facebook or Email, and Banking over Twitter, has been introduced in India. Bank accounts offered over Twitter provide banking services such as cheque book requisition, checking last few transaction, net banking, etc. along with loyalty based reward points. Banking offered by banks in India indicates a shift from digital banking on social media platform to a core capability.



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## Role of Digital Payments and Its impact on Indian Economy

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### Abstract

*In the modern era is the digital era. Digital payment this term is more important for countries growth and development. It is most important tools for economic and social transformation in the 21<sup>st</sup> century. A digital payments occurs when transaction of goods or services are done through the use of electronic tools. Digital payments are more convenient and provide the flexibility to make payments from anytime and anywhere. There is no use of cash or cheques in this type of payments method. This is much easier mode of payments. Its digital because do not have to carry cash payments. To strengthen the financial system the government of India has developed the various mode for electronic payments and give the various benefits to the directly by people. This research paper is going to try to give a better view of various modes of digital payments and also tries to analysis the impact of digital payments on Indian economy.*

**Keywords:** Digital, Payments, Economy, Electronic and Financial System.

### Introduction

Digital payment is the part of Digital India. It is most important tools for economic and social transformation in the 21<sup>st</sup> century. A digital payments occurs when transaction of goods or services are done through the use of electronic tools. Digital payments are more convenient and provide the flexibility to make payments from anytime and anywhere. There is no use of cash or cheques in this type of payments method. As a part of government reforms the prime minister of India, on 8<sup>th</sup> November, 2016 demonetized the currency of Rs 1000 and Rs. 500. These initiatives have provided boost up to the digital payment systems in the economy. Therefore government of India has introduces app like BHIM and UPI are supporting in transition and faster adoption of digital payments. The aim of this step was to abolished black money and corruption. The digital payments has four phases such that registration, invoicing, payment selection and payment conformation. There are various types of digital payments include the use of debit and credit card. Internet banking, mobile banking, mobile wallets, digital payments app, unified payments interface, prepaid cards, etc. digital payment is an important tool for advancing financial presence because it less cost of providing services to people and increase the safety of payments. Today countries like Denmark, Norway, UK and US are top the adoption of cashless payments. Its helps authenticate and formalize the transaction that is done. This help to control corruption. To strengthen the financial system the government of India has developed the various mode for electronic payments and give the various benefits to the directly by people. This research paper is going to try to give a better view of various modes of digital payments and also tries to analysis the impact of digital payments on Indian economy.

### Objectives:

The objectives of this study are:-

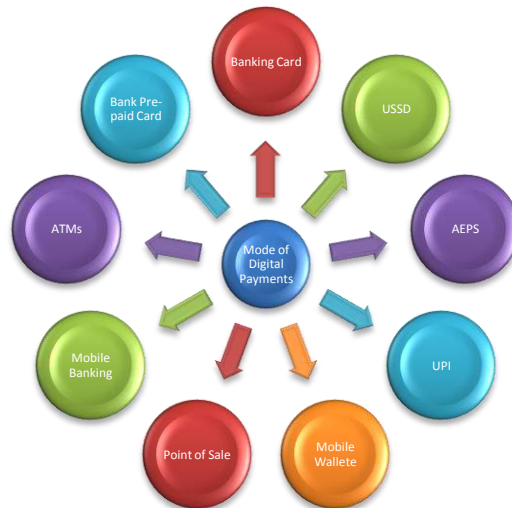
1. To understand the various modes of digital payments in India.
2. To analysis the impact of digital payments on Indian Economy.

### Methodology:

The present study is based on secondary source of data. Secondary data that would be collected with the help of appropriate and relevant information. Handbook of Indian Government for the period 1991 to 2019, Reports and Budget documents, different website, local print and media sources some of the many for the data and reference work. Articles and Research Papers published in National and International Journals like Journal of Public Choice, Journal of Development, Journal of Political Economy, Journal of Economic Studies, Economic and Political Weekly are to be referred authenticate the propositions.

### Digital Payments in India

In recent days digital payments played an important role in transaction of goods & services. In digital payments banking sector plays a major role by providing digital instruments such that debit card, credit card, internet banking, mobile banking, mobile wallets, payments app, UPI services, USSD, bank prepaid cards and BHIM app. India comprises of 15 per cent of the world population, and with a growth rate of 7 to 8 per cent, India can very well become the second largest economy by 2030. The following chart shows various types and modes of digital payments.

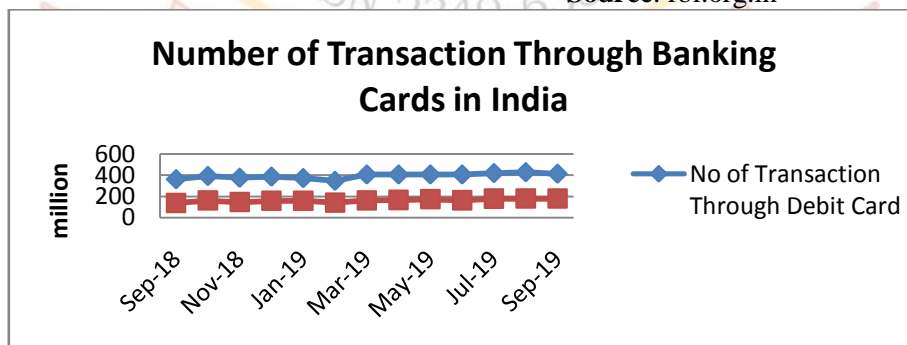


### Banking Card

In digital payments banking sector plays a major role by providing digital instruments like Debit card, Rupay card, Master card and Credit card. Debit and Credit cards are most widely used payment methods in purchased of goods and services. The following table shows the number of transaction through banking cards in India.

Month	Debit Card	Credit Card
Sep-18	362.7	138.2
Oct-18	393.4	161.1
Nov-18	376.6	145.8
Dec-18	387.5	158.3
Jan-19	373.6	159.6
Feb-19	347.2	141.3
Mar-19	407.6	162.4
Apr-19	407.6	166.9
May-19	407.6	173.2
Jun-19	407.4	163.2
Jul-19	420.8	178.4
Aug-19	429.3	179.6
Sep-19	414.9	179.5

Source: rbi.org.in



The above table shows that the number of transactions using credit cards at grew by 29.8% while it increased by 14.4 % for debit cards for September 2018 to September 2019. The total number of transactions through credit cards was 179.5 million, while debit cards were 414.9 million.

### Ussd

USSD is another type of digital mode of payment. It stands for Unstructured Supplementary Survive data. It is a Global System for mobile communication technology that is used to send the text between a mobile phone and application program. It is a Global System for Mobile (GSM) communication technology that is used to send text between a mobile phone and an application program.

### Aeps



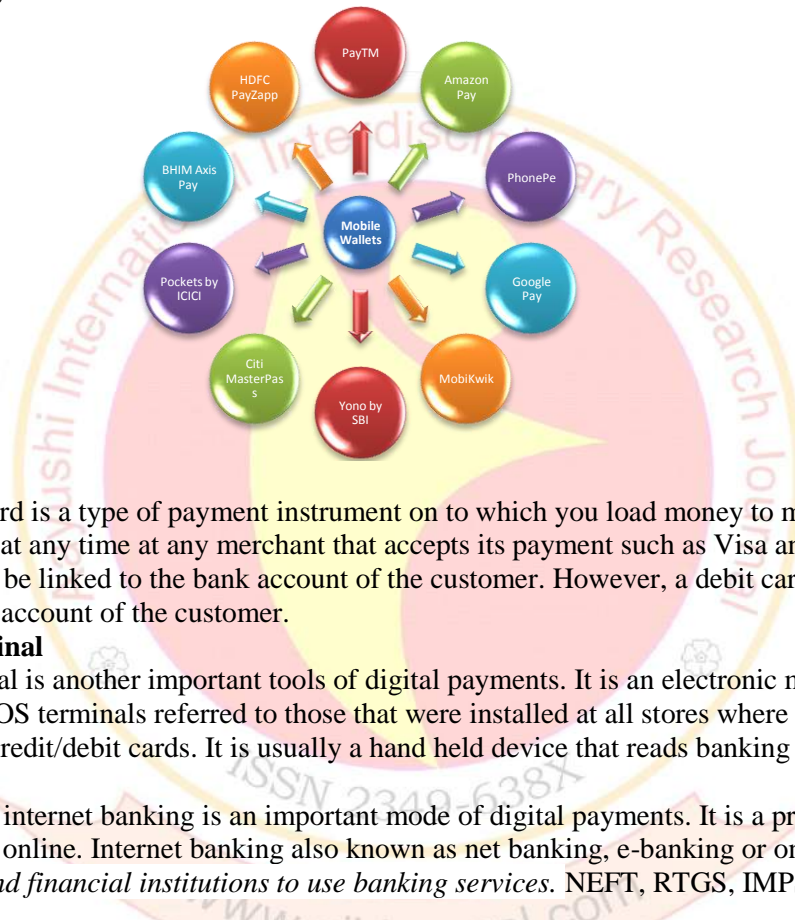
AEPS is another important mode of digital payments. AEPS stands for Aadhaar Enabled Payment System. It is used for all banking transactions such as balance enquiry, cash withdrawal, cash deposit, payment transactions and fund transfers. All transaction is made through a banking correspondent based on Aadhaar.

**UPI**

UPI is a smartphone application which stands for Unified Payment Interface. It is regulated by RBI. The main advantage of UPI is that it enables users to transfer money without a bank account. This app used 24/7 basis and on all 365 days a year. Through this app a people can send and receive money without charges.

**Mobile Wallets**

A mobile wallet is a simple mode of digital payments which is used online or offline payments. There are various types of mobile wallets in India. It is a simple way to use it. We can add some money to a mobile wallet and use the same to make payments and purchase of goods and services. There are some top 10 mobile wallets in India. They are



**Prepaid Card**

A prepaid card is a type of payment instrument on to which you load money to make purchases. Like a debit card. Its works at any time at any merchant that accepts its payment such as Visa and MasterCard. The type of card may not be linked to the bank account of the customer. However, a debit card issued by the bank is linked with the bank account of the customer.

**Point of Sale Terminal**

POS Terminal is another important tools of digital payments. It is an electronic mode used to card payments at retail. POS terminals referred to those that were installed at all stores where purchases were made by customers using credit/debit cards. It is usually a hand held device that reads banking cards.

**Internet Banking**

In recent era internet banking is an important mode of digital payments. It is a process of carrying out banking transactions online. Internet banking also known as net banking, e-banking or online banking. It's provided by banks and financial institutions to use banking services. NEFT, RTGS, IMPS used to make online fund transfers.

Country	Total transaction value in the Digital Payments (US\$)
China	1,570,194m
United States	961,465m
Japan	163,819m
UK	162,006m
Germany	118,398m
India	64,787m

Source: rbidocs.rbi.org.

**Mobile Banking**

Mobile banking is the act of making financial transactions on a mobile devices such that smart phone, tablet etc. the scope of mobile banking is increasing by day to day life. Many banks have their own apps and customers can download the same to carry out banking transactions at the click of a button.

**Bharat Interface for Money** BHIMApp developed by the national payments Corporation of India. Bharat Interface for Money is fast, secure, reliable app for digital payments. It is a digital payment app that make

simple, easy and quick transactions using UPI. The BHIM app can use by anyone who has a mobile number, and a valid account.

### Impact of Digital Payments on Indian Economy

1. **Transparency and accountability:** This a key feature of digital payments. Transparency is harder to achieve with cash payments. Digital payments increase accountability and tracking, lessening the risk of corruption and theft. It's helpful to economy growth.
2. **More Convenient:** The biggest benefits of digital payments is that it fastest and the payment process. There is no need to stand in a que to withdraw money. Through the digital banking services will be available to customers on a 24/7 basis and on all days of a year including holidays.
3. **Economical:** Digital payment is economical. Many payments app charges free or less fee. There are many payment apps and mobile wallets that do not charge any kind of service fee or processing fee for the service provided.
4. **Discounts and cashbacks:** There are many rewards and discounts offered to customers using digital payment apps and mobile wallets. There are attractive cash back offers given by many digital payment banks. This comes as boon to customers and also acts a motivational factor to go cashless.
5. **Inclusive growth:** through building the institutions that form the bedrock of an economy and the cumulative effect of cost savings, increased transparency, financial inclusion, and greater women's economic participation. Integrating digital payments into the economies of emerging and developing nations addresses the critical issue of domestic resource mobilization.
6. **Financial Inclusion:** Digital payments have emerged as an important tool for advancing financial inclusion because it lowers the cost of providing financial services to poor people and increases the safety and convenience of using savings, payments, and insurance products.
7. **Women Empowerment:** Improving access to digital payments can empower women by giving them more control over family finances, increasing personal security, and improving their economic opportunities.

### Conclusion

India is a second fastest growing economy where 67% of our population is still live in rural areas. A huge mass of population lacks technological knowledge. No doubt digital payments are much easier and faster mode of transaction payments. They are much more convenient than cash payments. We can't compare us with other develop countries where literacy rate is around 100%. India still have literacy rate 74.04%. There is a long way for Indian economy to become a digital and cashless economy. There is a lot of development in the field of basic infrastructure is required to make India Digital. There are some challenges of digital India but in the long run digital and cashless economy will help in growth and will bring a lot of benefits with it.

### Suggestions

1. Indian government should try to aware and educate people about the digital payments.
2. Government should try to educate people about benefits of digital payments.
3. Government of India should provide basic infrastructure in rural areas.
4. Government must appoint proper regulator for the smooth functioning of digital payment system in India.

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## Digital Payment System and Infrastructure

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### Introduction:-

Faceless, paperless and cashless is one of supposed function of digital India. As part of government reforms Prime Minister Mr. Narendra Modi demonetized the high value of currency and launched the digital India initiative. These initiatives have provided extensive boost up to the digital payment system in the country. Governments other initiatives like BHIM, UPI, Internet Banking, Mobile Banking and smart phone are supporting in transaction.

The challenge lies in achieving cashless transactions for the rest of the decade. Number of connected rural consumers is expected to increase from 120 million in 2015 to almost 315 in 2020. Over 93% of people in rural economy have not done any digital transactions. So the real problem lies there. The government has taken steps including announcing zero balance accounts for people, but growth of Bank branches has been very low.

### Digital Payments meaning:-

The Payment and Settlement Act, 2007 has defined Digital Payments. As per this any “electronic funds transfer” means any transfer of funds which is initiated by a person by way of instruction, authorization or order to a bank to debit or credit an account maintained with that bank through electronic means and includes point of sale transfers; automated teller machine transactions, direct deposits or withdrawal of funds, transfers initiated by telephone, internet and, card payment.

### Part of digital Payment system:-

The digital payment system divided into two parts. One is consists of instruments which are covered under Systemically Important Financial Market Infrastructure and the second is consist of Retail Payments. The list of instruments covered under the same are mentioned below.

### Rtgs:-

Real Time Gross Settlement is defined as the continuous (real-time) settlement of funds transfers individually on an order by order basis (without netting). 'Real Time' means the processing of instructions at the time they are received rather than at some later time; 'Gross Settlement' means the settlement of funds transfer instructions occurs individually (on an instruction by instruction basis). This system is primarily meant for large value transactions. The minimum amount to be remitted through RTGS is 2 lakh. For inter-bank fund transfer there is no floor.

### Cblo:-

CBLO refers to a money market instrument called Collateralized Borrowing and Lending Obligation (CBLO). Clearing Corporation of India Ltd. (CCIL) has developed and introduced this instrument with effect from January 20, 2003 This represents an obligation between a borrower and a lender as to the terms and conditions of a loan. CBLO facilitates unwinding of both borrowing and/or lending positions before maturity and substitution of security given as collateral for borrowing. It also does not entail physical transfer of respective securities from borrower to lender or vice versa being a blend of hold-in-custody and tri-partite repo.

### Government Securities:-

A Government Security is a tradeable instrument issued by the Central Government or the State Governments. It acknowledges the Government's debt obligation. Such securities are short term (usually called treasury bills, with original maturities of less than one year) or long term (usually called Government bonds or dated securities with original maturity of one year or more). In India, the Central Government issues both, treasury bills and bonds or dated securities while the State Governments issue only bonds or dated securities, which are called the State Development Loans A Government Security carry practically no risk of default and, hence, are called risk-free gilt-edged instruments.

### Foreign Clearing:-

In simple terms it is the trading in currencies from different countries against each other. In India the settlement of Foreign transactions is done by CCIL which was started in November 8, 2002. This segment accepts the inter-bank Cash, Tom, Spot and Forward USD-INR transactions for settlement by providing netting benefits of well over 95%. CCIL has since moved to a settlement on a Payment V/S Payment basis from April 2015.

### Retail Payments:-

Under the Retail Payments segment which has a large user base, there are three broad categories of instruments. They are Paper Clearing, Retail Electronic Clearing and Card Payments. The instruments under these three categories are discussed below.



### 1. Cheque Truncation System:-

CTS or online image-based cheque clearing system is a cheque clearing system undertaken by the Reserve Bank of India (RBI) for faster clearing of cheques. As the name suggests, truncation is the process of stopping the flow of the physical cheque in its way of clearing. In its place an electronic image of the cheque is transmitted with key important data. Cheque truncation thus obviates the need to move physical instruments across branches and effectively eliminates the associated cost of movement of physical cheques, reduces the time required for their collection and brings elegance to the entire activity of cheque processing.

### 2. Non-MICR:-

The Non-MICR clearing refers to the process of manual clearing of cheques where the cheque is physically moved between the bank branches/banks for clearing. Unlike MICR clearing where the MICR code on the cheques is scanned and the transaction is made, in MICR clearing the cheque is physically circulated for clearing.

### 3. ECS DR/CR:-

ECS is an electronic mode of payment / receipt for transactions that are repetitive and periodic in nature. ECS is used by institutions for making bulk payment or for bulk collection of amounts. Essentially, ECS facilitates bulk transfer of monies from one bank account to many bank accounts or vice versa. ECS includes transactions processed under National Automated Clearing House operated by National Payments Corporation of India.

### NEFT:

National Electronic Funds Transfer (NEFT) is a nation-wide payment system facilitating one-to one funds transfer. Under this scheme, individuals, firms and corporates can electronically transfer funds from any bank branch to any individual, firm or corporate having an account with any other bank branch in the country participating in the scheme. It is offered by the Reserve Bank of India.

### IMPS:-

Immediate Payment Service (IMPS) offers an instant 24X7 interbank electronic fund transfer service through mobile phones. IMPS is an emphatic tool to transfer money instantly within banks across India through mobile, internet and ATM. It is offered by National Payments Corporation of India, India's sole retail payment organization.

### UPI:-

Unified Payments Interface (UPI) is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood. It also caters to the "Peer to Peer" collect request which can be scheduled and paid as per requirement and convenience.

### USSD:-

USSD based mobile banking service of NPCI was initially launched in November 2012. The service had limited reach and only two TSPs were offering this service i.e. MTNL & BSNL. Understanding the importance of mobile banking in financial inclusion in general and of USSD in particular, various regulatory/trade bodies came together to ensure on boarding of all TSPs on USSD (USSD 1.0). With the wider ecosystem (11 TSPs), USSD was dedicated to the nation by Hon'ble Prime minister on 28th August 2014, as part of Pradhan Manti Jan Dhan Yojna.

### NACH:-

"National Automated Clearing House (NACH)" is a service offered by NPCI to banks which aims at facilitating interbank high volume, low value debit/credit transactions, which are repetitive and electronic in nature. The system leverages the Core-Banking Solution (CBS) of participating banks for centralized posting of inward debit / credit transactions and is run by NPCI.

### Credit Card:-

A credit card is a card issued by a financial company which enables the cardholder to borrow funds. The funds may be used as payment for goods and services, with a condition that the cardholder will pay back the original, borrowed amount plus any additional agreed-upon charges. The issuer pre-sets borrowing limits which have a basis on the individual's credit rating. These cards can be used domestically and internationally and can also be used to withdraw cash from an ATM and for transferring funds to bank accounts, debit cards and prepaid cards within the country.

### Debit Cards:-

A debit card is a payment card that deducts money directly from a consumer's bank account to pay for a purchase and eliminate the need to carry cash or physical checks to make purchases. In addition, they offer the convenience of credit cards and many of the same consumer protections when issued by major payment processors like Rupay, Visa or MasterCard, but unlike credit cards, they do not allow the user to go into debt,

except perhaps for small negative balances that might be incurred if the account holder has signed up for overdraft coverage. However, debit cards usually have daily purchase limits, meaning it may not be possible to make an especially large purchase with a debit card.

### Problems of Digital Payments:-

These are the problems that may occur in digital payments system is applied in India.

1. Electricity is not provided to all the villages.
2. Quality electricity to be provided to villages
3. Digital cable is not covered to the whole of India.
4. Villagers may not be able to purchase smart phones or laptops
5. Operations of accounts, conducting transactions through mobiles and to make online payments need training.
6. ATM centres to be provided at least at a distance of 3 kms for easy access.
7. At present there are 480 accounts for every 1000 adults. This need rectification and covers the entire adult population.
8. There are only 40000 banks for six lakh villages. At least one bank for every 5000 adults are to be provided.
9. There are 712 million debit cards in circulation. At present these cards are used on an average only 12 times a year in ATM counters and two times a year at the point of sale. It is very low and need improvement.
10. The above mentioned factors of provision of quality electricity, providing digital connection, banking facility, education to operate smart phones etc., need address before implementation of cashless transactions or digital payments system.

### Suggestions

1. The self help groups (SHGs) can be of great help to the people in the promotion of digital banking systems in the rural areas. More and more SHGs must be given the charge of Bank Mitras (friend) who can extend their help to the bank, post offices and Bank corresponding for proliferation of digital economy.
2. Rural social infrastructure such as Youth Clubs and Mahila Mandals and Panchayati Raj Institutions should be energized for the propagation of digital rural economy.
3. The Gram Sabhas in Panchayati Raj Institutions and Ward Sabhas in ULBs must take up the issue of digital economy at the village level.
4. All the line department functionaries such as school teachers, health workers, village Development officers, anganwadi workers, etc. must educate the people about the financial inclusion and digital economy
5. Like Pulse Polio Campaign, the Digital India Campaign twice or thrice in a year in a mass scale can be conducted in the country. It is an appropriate way to propagate the digital India campaign both in rural as well as urban areas.

### Conclusion

Technology systems, architecture and infrastructure are mature enough to enable the billion urban people in India to transact digitally. It is now a matter of increasing awareness transact to rural India. The Niti Aayog panel on e-payments which is working to promote the use of digital payments systems in rural India, where card based payments are more common in rural area. The Indian economy will digitalise in rural area through mobile based payments that are faster and cheaper to roll out. It is a matter of increasing awareness in rural area. Improved solutions in terms of UPIs, mobile wallets, and digital transactions with more secured features, ease of transactions and reduced cost of managing the digital payments could lead to more potential developments and supporting in improved conditions of digital payments processing in rural sectors. However, National Payments Corporation of India (NPCI) new payment application are designed to work on all phones with or without internet and even without phones is helping rural

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## Cashless Transaction : Challenges and Remedies

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### Introduction:-

The RBI and the Government are making several efforts to reduce the use of cash in the Economy by promoting the digital/payment devices including prepaid instruments and cards. RBI's effort to encourage these new varieties of payment and settlement facilities aims to achieve the goal of a 'less cash' society. Here, the term less cash society and cashless transaction economy indicate the same thing of reducing cash transactions and settlement rather doing transactions digitally.

A cashless transaction is an automated or online operation that may take place between two people, business, or organizations. A digital transaction is a cashless transaction which specifically involves no paper for completion of the transaction. Purchasing goods from e-commerce websites, signing of business contracts online, or even buying movie tickets through your Smartphone app fall under the umbrella of digital transactions. Such operations are accurate, quicker, convenient, and certainly easier. Many are unwilling to accept that there are benefits to a cashless transaction simply because they cannot navigate their way around digital devices, or are just happier to transact using cash. Read on about an array of cashless transactions those simplify day-to-day trading.

**Keywords:** Cashless, digital payment, challenges, remedies.

### Research Methodology:

The secondary data are collected through government records, Articles, Journals, Survey reports, Research Data and Websites information.

### Objectives of the Study:

The main objective of the study is to examine that the importance of cashless policies in the economy of a country and how it affects to their economic growth.

- 1) To know the meaning of Cashless Transaction.
- 2) To study the various challenges in cashless transaction.
- 3) To suggest various remedial measure to overcome challenges in cashless transaction.

### Challenges for Cashless Transaction:

**1. Lack of Digital Literacy:** There are large number of people is still illiterate in India and can be victim of fraud or other malpractices while using digital payment options. This is due to lack of training to handle software; people do not know the way to make digital payments and use of debit and credit card. Many Street vendors, shopkeepers don't know how to use Swipe machines. Also these are not available to them. People in rural still don't know what actually Smartphone mean. For them mobile is still a mode of communication only.

**2. Internet Facility:** Lack of internet facilities and without it a country cannot think of becoming digital. There are still many rural and urban areas where you might difficulty in having access to 2G network, let alone 3G, 4G. Another issue is that sometimes it becomes difficult to note whether your transaction was successful or not. It may be due to the loss of net connectivity in between, or due to a slow connection, or the bank's server is down.

**3. Internet Cost:** The Internet cost in India is still substantially high. There is no Wi-Fi at public places and if people do not get their monthly data packs recharged, there is no way they can be connected to make online payments. In order to convince people to do cashless transactions, the cost of the internet should be lowered and free Wi-Fi should also be provided at public places.

**4. Charges on Cards Online Transactions:** These are additional charges that are levied by the vendors when they offer an online payment facility but when the government is forcing us to go cashless should not this compulsory seen on online transaction be taken off. So charges of cards are main problem of cashless transaction.

**5. Smart phone Affordability:** Several companies have come up with new and inexpensive phones but them still not affordable for most of the population in India. More affordable options should be launched by the government for people to buy smart phones for cashless transaction. So smart phone affordability is most important problem of cashless transaction.

**6. Not Enough Bank Accounts:** So money people still do not have bank accounts. Most often there is just one account per family which also limits the number of cards people can have individually a family of even four people cannot be dependent on just one card for all household expenditure so lack of banking knowledge is one of the main problems of cashless transaction.



India is dominated by small retailers. They don't have enough resources to invest in electronic payment infrastructure.

### Remedial for Cashless Transaction:

- 1) The latest solution for enabling new business models in the acquiring chain. Mobile POS exploits synergies between an ordinary Smartphone or tablet and a PIN pad that reads payment cards and processes transactions in line with the card networks' standards.
- 2) Efforts should be made both by the government, bank and the public to encourage online transaction, thereby promoting digital cashless society
- 3) Financial security over the digital payment channels is imperative for pushing the cashless economy idea.
- 4) India can take into considerations the model of those economies which have already moved towards being cashless economies.
- 5) Enforce a transaction tax on every person-to-person payment.

### Conclusions:

The objective of this study is to find the challenges and Remedies of cashless economy. Cashless economy can be achieved by adoption of proper methods of digital payments. It only requires full proved new financial policies, centralised administrative control, bankers, government agencies and other private service. Safe and secured services like immediate certification of payments , clear statement of their accounts, no hidden charges, full control on money, shorten process of transaction by fulfill of mandatory information . As an overall review, most of the major developed countries in the world are moving in a very excellent way of cashless economy.

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## Cashless Transaction : Challenges & Remedies

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### Introduction:-

India Is moving to cashless economy after demonization of Rs.500&1000 Currency notes.Indian Government&RBI are trying countinuously cashless transaction by using digital or electronic mediums like net banking,credit cards,debit cards etc.It doesn't means that government is trying to remove the cash frome the circulation but it enhances the habit of people settling transactions digitally.A chasless transaction describes an economic state where by finacial transaction are not conducted with money in the from of physical banknotes or coins, but rather through the transfer of digital information between the transacting parties.The term cashless transaction means to reduce cash transactions and settlement of Payment through transections digitally or electronically.On November 8<sup>th</sup>government withdrew Rs.500&1000 notes-two highest currency.

Main objectives were to fight against corruption,counter money & black money.

### Objective of the Research:-

- 1.To identify the different modes of cashless transaction.
- 2.To examine the various challenges in cashless transaction.
- 3.To suggest various remedial measure to overcome challenges in cashless transaction.

### Research Methodology:-

**Reserch design:-**Descriptive research designs because my research work aims to describe the impact of cashless transaction in Indian economy.

#### Data collection method:-

**A)Primary Data:-**This has been collected through interview of the selected respondent using a sutailable questionnaire.

**B)Secondary Data:-**This has been collected through the study of available research Jouranal&data related to cashless transaction.

### Mode of cashless Transaction:-

#### Mobile Banking:-

Mobile banking is a Service provided by a bank or other financial institution that allows its customer to conduct financial transaction remotely using a mobile device such as a smartphone or tablet. Mobile banking is usually availbe.

#### Online Banking:-

Online Banking,also known as internet banking,it is an electronic payment system that enables customers of a bank or other financial transaction through the financial institutions website.

#### Credit Card&Debite Card:-

Credit card or debit card is another mode of cashless payment. The uses of credit card and debit card is increasing countinuously because of multiple Uses.Advantages of debit card is being safer than carrying cash,worldwide functionality due to Vise and Mastercard merchant acceptance.

#### Rtgs/Neft:-

National Electonic Fund Transfer (NEFT) and Real Time Gross settlement(RTGS)allow individuals,companies and firms to transfer funds from one bank to another. We can check the RBI webite for alist of NEFT and RTGS enabled branches of bank.

#### Cheques:-

Cheque is one of the populer modes of cashless payment. In this mehode one issue a cheque for the specific amount to anyone else. The person deposits the cheque into the concern bank. Within two day bank get cleard the amount.

#### Demand Draft:-

A demad draft is a negotiable instument similar to a bill of exchange. A bank issues a demand draft to a client, directing another bank or one of its own branches to pay a cerain sum to the specified party. A demand draft can also be compared to a cheque.

#### Mobile Wallet:-

Mobile wallet is a virtual wallet that stores payment card information on a mobile device. Mobile wallets are a convenient way for a user to make in store payment and can be used at merchants listed with the mobile wallet service provider.

#### **Unified payment Interface:-**

UPI is a single window mobile payment launched by the national payment corporation of India. The system is designed to provide a simple, secure and convenient single interface.

#### **E-Coupons:-**

These electronic coupons are offered by various online mega stores. They are very helpful in taking discount on purchase done through online shopping.

#### **Gift Card:-**

The next cashless payment method is a gift card. Gift card is a ready-made card and can be purchased from a merchant or from the bank.

#### **Adhar Enabled Payment System:-**

Adhar Enabled Payment System is one of the best cashless payment methods. AEPS is like micro ATM it uses smartphone and a finger-print scanner for the transaction.

#### **Challenges For Cashless Transaction:-**

However, in a country of 1.3 billion people, all are not perfect. Going cashless must be an exponential curve, slow initial buildup then fast paced in later stages. Here is a list of challenges-

#### **Lack of Digital Literacy-**

There are large number of people who are still illiterate in India and can be victims of fraud or other malpractices while using digital payment options. This is due to lack of training to handle software; people do not know the way to make digital payment and use of debit and credit card.

1. **Internet Facility:-** Lack of internet facilities and without it a country cannot think of becoming digital. There are still many rural and urban areas where you might face difficulty in having access to 2G network, let alone 3G, 4G. Another issue is that sometimes it becomes difficult to note whether your transaction was successful or not.
2. **Higher risk of identity theft:-** The biggest fear is the risk of identity theft. Since we are culturally not attuned to digital transaction, even well-educated people run the risk of falling into phishing traps. With the rising incidence of online fraud.
3. **High Cash Dependency:-** India has a high cash penetration in almost all of its transactions that happen as B2C transactions. Total cash flow in the market accounts for 12.04% of the GDP, which is among the highest in developing countries.
4. **Lack of Digital Infrastructure In Rural Area:-** In rural areas there are no bank branches. No ATM machine or e-lobby facility. Many of the villages where there is no electricity and telecom facility so far. The first and foremost requirement of a digital economy is the penetration of internet and smartphone. Not all Indians have mobiles, let alone internet connections.
5. **Skepticism in Merchants:-** Small time merchants as well as users have high amount of suspicion over plastic money and they need to be educated over the potential benefits of using it. One cannot expect an overnight change in the perception of a majority of Indians over the use of plastic money.
6. **High Merchant Discount Rate:-** These are the percentages deducted from each purchase a merchant makes by the card issuing authority or bank. These are volume dependent and are more economical if the merchant is able to sell a large amount of product, thereby beneficial for big merchant.

#### **6. Remedial Measure to Improve Cashless Transaction:-**

1. **Enhancing Online Transaction:-** Efforts should be made both by the government, bank and the public to encourage online transactions, thereby promoting digital cashless society. Earlier, the income tax regulation had imposed a rule of scrutiny for transactions above Rs. 2 lakh through credit cards in a year and the customers were reluctant to show electronic payments. Payment Council of India released a statement in which it said that overall growth rate of digital payment has already been around 40-70% between different payment products. Debit cards are growing at the rate of 40%, credit cards at 15-20%.
2. **Financial Security:-** Financial security over the digital payment channels is imperative for pushing the cashless economy idea. When recently, the data of lakhs of debit cards was rather easily stolen by attackers, the ability of Indian financial institutions to safeguard electronic currency and exchanges came into question.
3. **Learning from other cashless Economies:-** India can take into consideration the model of those economies which have already moved towards being cashless economies. Uruguay has put in place incentives for merchants to prefer digital payments. India may need to think about doing so too. Sweden is another example.



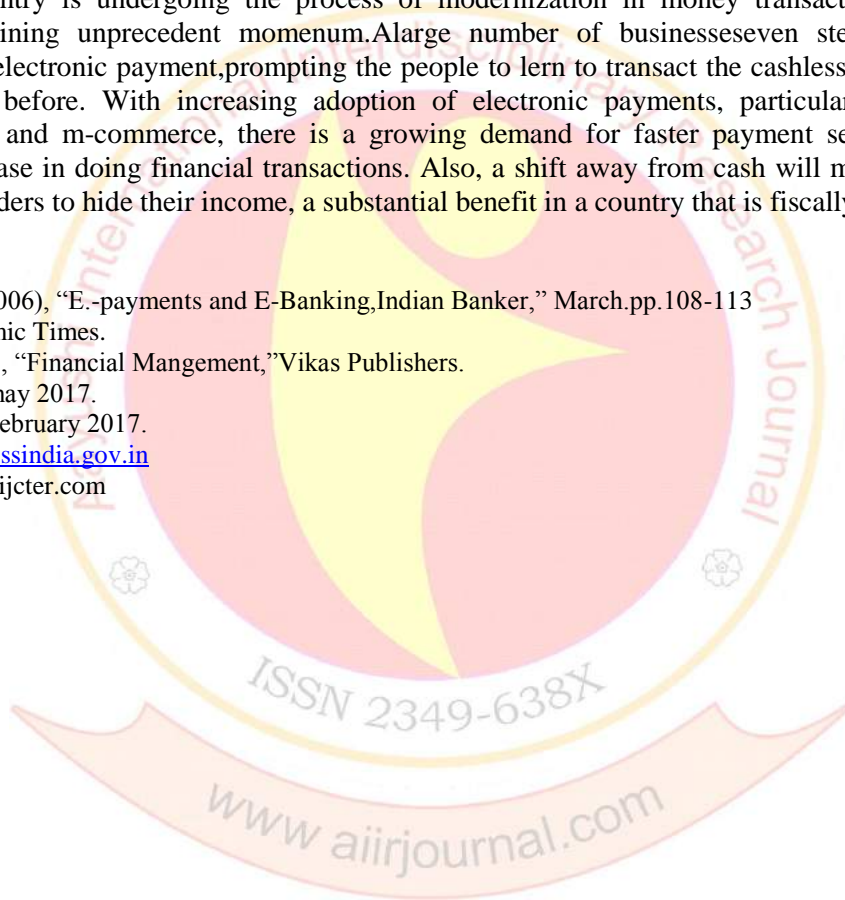
4. **Mobile Wallet:-**Credits system supports various payment methods, from cards-credit cards,prepaid cards and international debit cards from any issuer-to alternatives like bank transfer,direct debit, phone credit,payment account or electronic money.The platforms mobile wallet feature bring together a range of payment methods for consumers to choose the most suitable one for the product or service that they are using.
5. **Mobile POS:-**The latest solution for enabling new business models in the acquiring chain.mobile POS exploits synergies between an ordinary smartphone or tablet and a PIN pad that reads payment cards and processes transactions in line with the card networks standards.

#### Conclusion:-

The benefits of cashless transactions through digital payment system have now started blooming in steady pace with more and more people switching to digital modes of receiving and making payment.India is gradually transitioning from a cash-centric to cashless economy. Digital transactions are traceable,therefore easily taxable,leaving no room for the circulation of black money.The whole country is undergoing the process of modernization in money transactions,with e-payment service gaining unprecedented momentum.A large number of businesses even street vendors,are now accepting electronic payment,prompting the people to learn to transact the cashless way at a faster pace than ever before. With increasing adoption of electronic payments, particularly those driving e-commerce and m-commerce, there is a growing demand for faster payment service which,in turn, facilitates ease in doing financial transactions. Also, a shift away from cash will make it more difficult for tax evaders to hide their income, a substantial benefit in a country that is fiscally constrained.

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## A Study on the future of digital payments in India

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### Abstract :

*This paper seeks to spot the current trend towards the adoption of digital payments in India. The term Digital Payment means that creating payment to alternative person with the assistance of web or through electronic mode rather than paper currency. The initiative of Digital Payments was taken by Government of India once the announcement of demonetisation on eighth Gregorian calendar month 2016. Digital Payments was initiated to bring transparency in transactions and eliminating black cash. It had been truly a move towards cashless economy. Further, digital payments was inspired to produce decent money accessibility to the banks for providing credit to folks. Till date, a substantial part of society has started exploitation Digital mode of Payments, however still folks feel petrified of exploitation web Banking, debit cards, e-cash etc. at first the govt. was providing tidy incentives for digital payments however currently a decline has been seen during this push. This paper tries to spot the explanations for adoption of digital payments by folks in India and it conjointly tries to seek out the issues long-faced by folks in creating Digital Payments.*

**Keyword s:** Digital Payments, Cashback, Incentives etc.

### Introduction

This paper is concerning the angle of individuals towards adoption of Digital Payments strategies so as to own transparency in their operations. Digital Payments were inspired by Government of India once the announcement of demonetisation on eighth Gregorian calendar month 2016. The essential objective behind the initiative of Digital Payments was to realize cashless economy within the long haul. because of the increasing corruption and black cash in India, it had been turning into troublesome to avail the statement of transactions and transfers created by folks to alternative parties. Digital India was a campaign launched by Government to extend transparency in operations and attain governance.

### Objectives Of The Study

- 1) To Find out the angle of individuals towards adoption of digital payments in India.
- 2) To Find out the issues long-faced by folks in creating digital transfers
- 3) To Find out the foremost in style methodology of digital payments.
- 4) To own a plan concerning the expected way forward for digital payments in India.

### Research Methodology

For the aim of our study, each Primary and Secondary knowledge are used. Primary knowledge has been collected exploitation form methodology from a hundred and twenty folks. Secondary knowledge are collected from varied on-line sources like websites, articles, Journals, news etc.

### Various strategies of Digital Payments out there in India are as follows:

#### NFC or MST transmission waves platform

Companies have come back up with creating group action through NFC (Near Field Communication) and local time (Magnetic Secure Transmission) technology. while not swiping your card through POS (Point of Sales) machines, you'll simply build payment to merchants through its wireless transmission magnetic waves. you'll avail this facility by downloading local time enabled app and conjointly, your phone ought to support NFC facility. Once it's done, once registering your card details, you'll build contactless transactions through your phone on any of merchants' POS terminal.

#### Digital case payment system

Through this platform cash is loaded in wallets. equally with the launch of e-wallets you'll add cash exploitation digital case apps. However, the constraint is you'll transfer fund to constant case solely. It implies that if you've got PayTM or SBI's friend app on your phone then you'll solely transfer cash to a different person's PayTM case or SBI's friend app World Health Organization has these app's put in severally. merely in differently spherical, you can not transfer cash from PayTM case to SBI friend case app. There area unit another e-wallets out there within the digital marketplace like Mobikwik, Freecharge, Oxigen, JioMoney, Paypal, Buddy, Pockets etc.

### USSD code payments system

If you are doing not have a smartphone or web facility, still you'll build payments through dialing USSD (Unstructured Supplementary Service Data) code even from your basic phone and following the sure instruction, you'll simply build your payments done. it's GSM-based technology wherever transactions occur through messages. it's a platform that forms a medium between the telecommunication and banking monetary services altogether. for each banking app, you've got a distinct dialing code that you would like to visualize from your service supplier whereas creating the transfer of payments.

### Mobile Money Identifier

MMID could be a seven digit distinctive range that issued by the bank once you've got registered your mobile range. someone World Health Organization desires to send cash and therefore the one who desires to receive that money ought to have MMID for the actual interbank funds transfer. However, through MMID you'll transfer solely alittle quantity (around Rs ten,000) among every day. the majority banks area unit providing this facility of creating tiny payments.

### UPI App primarily based payments platform

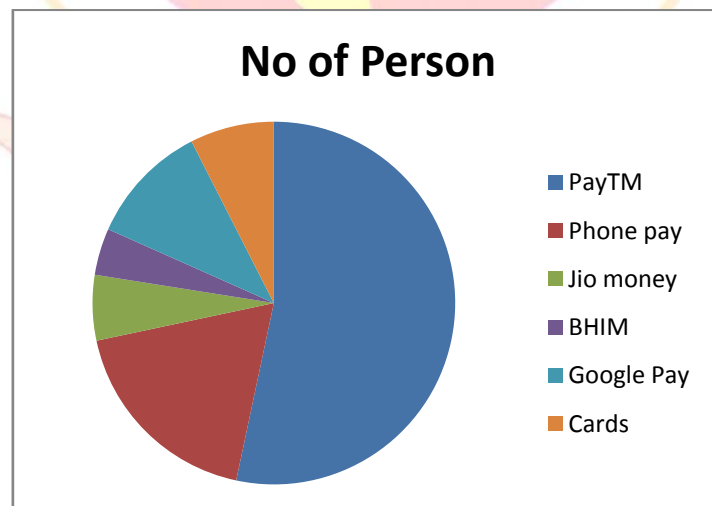
UPI has come back up with a singular feature of making virtual address through that you'll transfer cash while not revealing your account range and IFS code to the receiver. UPI works on a true time basis which implies the cash is transferred in a flash. UPI conjointly supports the opposite medium of doing funds transfer. UPI facility is on the market with all the banking apps like HDFC UPI, SBI UPI, ICICI UPI, AXIS UPI, and the majority the opposite personal and public banks. Now, most of the bank area unit embedding their UPI feature among their mobile banking app solely.

### QR Code primarily based payments system

QR code is once more a distinct mechanism of creating the transfer of payment wherever you simply got to scan the QR code of the businessperson and do the transfer of payments. it's being principally employed by all the digital payments app like BHIM, alternative banking apps to create the transfer of payments simply. The black sq. holds info|the knowledge|the data} concerning the things whereby scanning the code information gets transmit mechanically through the smartphone and payments get done. you are doing not got to enter something manually whereas exploitation QR code facility.

### Data Analysis And Interpretation

#### Q1- Which mode of Digital Payment you use ?



Answer:

#### Interpretation

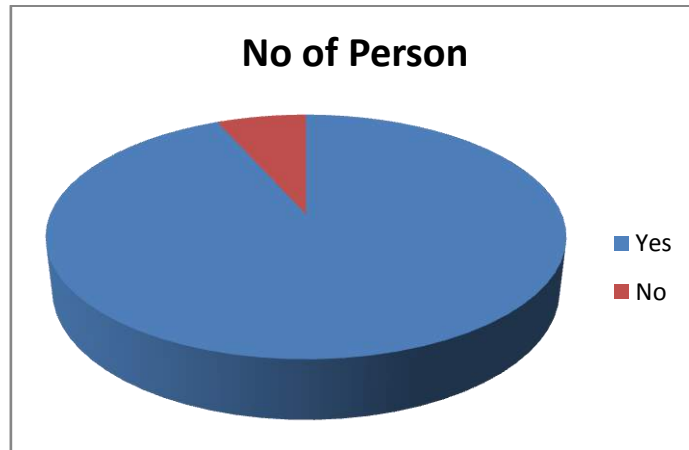
The above data has shown that PayTM has been the most favorite app for digital payments.

- 64 persons out of 120 persons use PayTM for their Payments.
- 22 persons use PhonePe.
- 06 persons use JioMoney.
- 5 persons use BHIM.
- 12 persons use Google Pay(TEZ).
- 08 persons use Cards for making payments.



**Q2- Do you think that Digital Payments are safe enough?**

Answer:



**Interpretation**

- 112 persons said they found digital payments safe enough.
- 8 persons said they found digital payments unsafe to some extent.

**Q3- How frequently do you make Digital Payments in a week?**

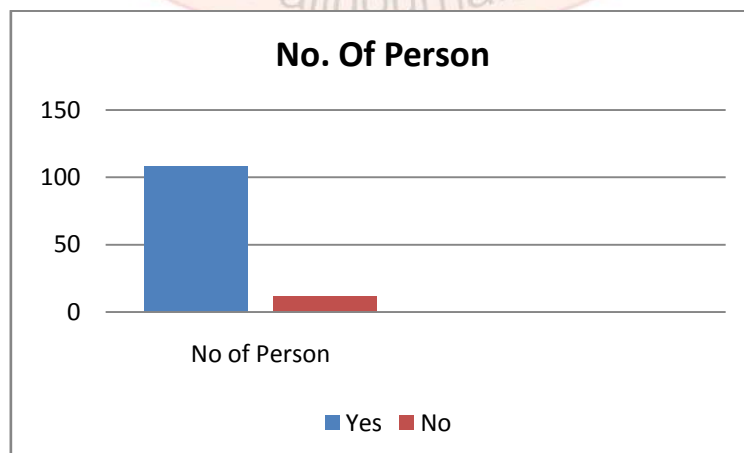


Answer:

**Interpretation**

- 42 persons said they make Digital Payments for less than 5 times a week.
- 66 persons said they make Digital Payments between 5 to 10 times a week.
- 12 persons said they make Digital Payments for more than 10 times a week.

**Q4- Do you think Digital Payments can reduce or eliminate black money from India?**

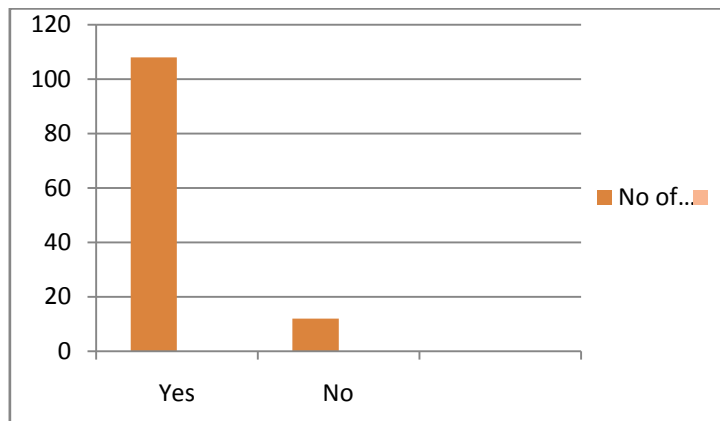


Answer

**Interpretation**

- 102 persons said digital payments can reduce or eliminate black money from India.
- 18 persons said they don't think it can help in reducing corruption or black money.

**Q5- Do you find digital payments as cheap mode than cash payments?**



Answer:

**Interpretation**

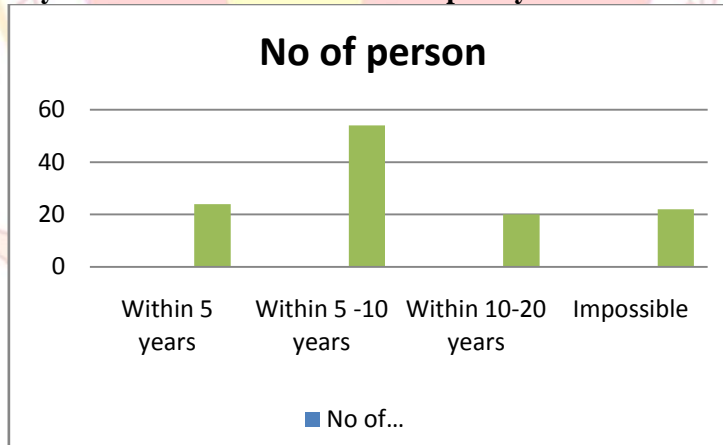
- 108 persons found digital payments to be cheaper than cash payments.
- 12 persons said they didn't find digital payments cheaper than cash payments.

**Q6-What is the reason behind your shift towards digital payments?**

Answer: People provided opinions and reasons for their shift. These are as follows:

- No need to carry huge cash.
- Cashback offers.
- Easy and fast way to make payments.
- Easy to track the record of Payments.
- 24\*7 transfer.
- Discounts and reward points.
- Time saving.

**Q7- In how much time do you think India can achieve completely cashless economy?**



Answer:

**Interpretation**

- 24 persons said India can become completely cashless economy within 5 years.
- 54 persons said India can become completely cashless economy within 5-10 years.
- 20 persons said it will take 10-20 years to become completely cashless economy for India.
- 22 persons said it is impossible at all.

**Major Challenges/ Problems Of Digital Payments**

1. Lack of trust among people in digital payments.
2. Lack of knowledge and awareness among uneducated or less advanced people.
3. Less reliability due to scams and hacking cases.
4. Loss of internet connection sometimes.
5. Delay in cashback processing by E-commerce Companies and e- wallet Companies.
6. Sometimes the payments get blocked and no confirmation is sent to customer regarding status of payment.

### Future Of Digital Payments In India

It seems that it will take enough time in India to become completely cashless economy. It will require complete support from people and more awareness and knowledge among people. The problem of lack of education and digital literacy needs to be solved first to have more number of digital transactions. Further, cashback offers are working well at present but it will require a committed, secure and highly reliable payments network to boost digital transactions in India to have transparency in the transactions, eradication of black money and to have long run economic development by cashless economy. By doing this, we can surely have a great future of digital payments in India.

### Conclusion

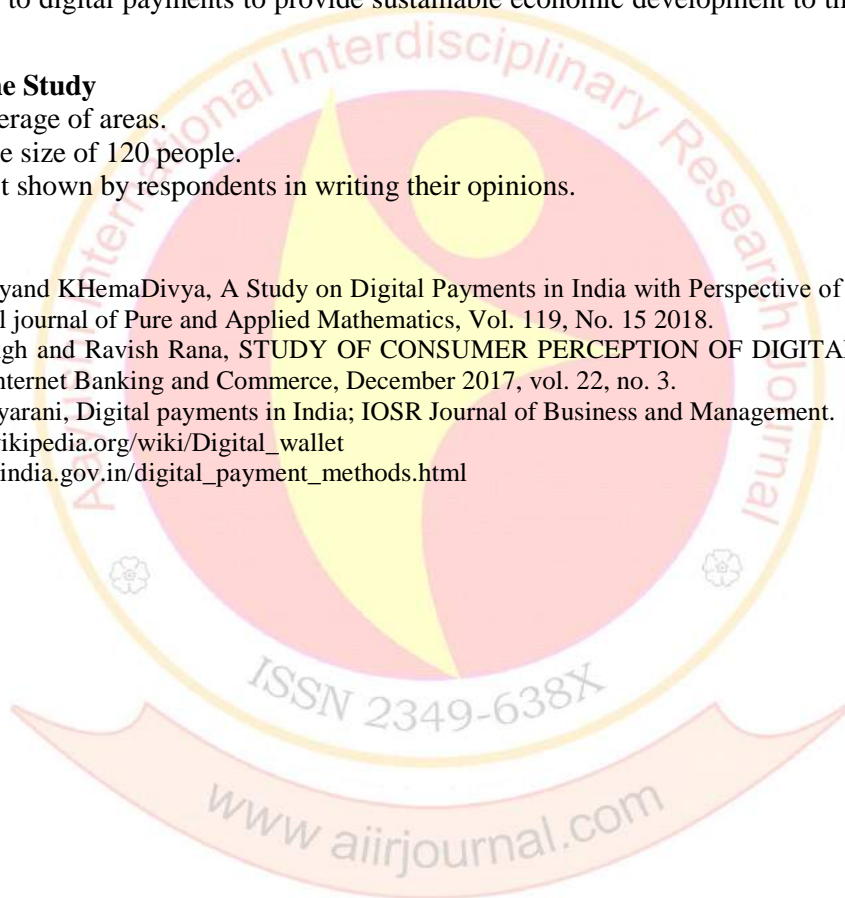
The move towards cashless economy is definitely a good one but it will take much time to have I completely cashless economy. The efforts are going well by the government as well as the private sector companies having there e-wallets apps such as PayTM, PhonePe etc. The biggest challenge in front of government is the lack of knowledge and awareness among people and fear of loss of money by use of digital payment methods risk of hacking. The government needs to tackle these challenges to have cashless economy and to give a boost to digital payments to provide sustainable economic development to the country in the long run.

### Limitations Of The Study

- 1) Limited coverage of areas.
- 2) Small sample size of 120 people.
- 3 ) Less interest shown by respondents in writing their opinions.

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## Challenges and Prospects of Cashless Economy in India

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### Abstract:

India is an ardent effort to transport closer to a cashless transaction economy through minimizing the use of physical cash. The leading gain of building a cashless economic system is elimination of black money. Digitalization of transactions is the fine manner to move in the direction of cashless economy. one of these cashless financial system is realizable via selling electronic cash units, developing financial infrastructure and spreading digital transaction behavior amongst human beings. RBI's payment and settlement imaginative and prescient file 2018 offers targets and pointers toward cashless financial system.

**Keywords:** India, RBI, Digitization, monetary infrastructure.

### Introduction:

Economic improvement throughout all sectors is a number of the most important priorities of the authorities. This segment takes you via the diverse regulations and initiatives of the authorities in this regard. How has Make in India enhanced the producing enterprise, what's start Up India all about, what are the various inflation manage measures taken by means of the authorities and what has been their effect, how did we gain the modern GDP boom rate, the re-bureaucracy using the FDI growth, monetary inclusion.

India remains pushed by means of using coins; much less than five% of all payments show up electronically however the finance minister, in 2016 price range speech, mentioned the concept of creating India a cashless society, with the intention of curbing the float of black money. Even the RBI has also currently unveiled a record — “payments and Settlement structures in India:

Imaginative and prescient 2018” — setting out a plan to inspire electronic payments and to enable India to transport in the direction of a cashless society or economic system within the medium and long term.

### Cashless Economic System in India:

1. A cashless economy is one in which all of the transactions are accomplished using cards or virtual way. The move of physical forex is minimum.
2. India uses too much cash for transactions. The ratio of coins to gross domestic product is one of the maximum within the world—12.42% in 2014, as compared with 9.47% in China or 4% in Brazil.
2. •Less than 5% of all bills appear electronically.
1. The range of forex notes in circulate is also far better than in other big economies. India had seventy 6.47billions currency notes in circulation in 2012-13 in comparison with 34.50 billion in the US.
2. A few studies display that money dominates even in department stores, that are visited by way of people who are probable to have credit cards, so it is no marvel that cash dominates in different markets as nicely.

### Benefit of Cashless Economic system:

1. Reduced times of tax avoidance because it's far financial institutions primarily based financial system wherein transaction trails are left.
2. It's going to cut back era of black money
3. Will reduce actual property fees because of curbs on black money as maximum of black money is invested in actual estate costs which inflates the costs of real estate markets
4. In economic year 2015, RBI spent Rs27 billion on just the pastime of currency issuance and management. this will be avoided if we emerge as cashless society.
5. It will pave manner for regularly occurring availability of banking offerings to all as no bodily infrastructure is wanted other than virtual.as cash is stressed at once into the bills of recipients. Consequently as soon as cash is transferred at once into a beneficiary's bank account, the whole system turns into transparent. payments may be without problems traced and amassed, and corruption will mechanically drop, so people will not must pay to acquire what's rightfully theirs.
6. There will be efficiency profits as transaction prices throughout the financial system should also come down.
7. 1 in 7 notes is meant to be faux, which has a huge bad impact on economic system, with the aid of going cashless, that can be prevented.

8. Hygiene – soiled, tobacco stained notes full of germs are a norm in India. there are many such incidents in our existence in which we knowingly or unknowingly provide and take germs inside the form of rupee notes. this can be avoided if we move toward Cashless financial system.
9. In a cashless economic system there could be no trouble of dirty notes or counterfeit forex
10. decreased fees of operating ATMs.
11. pace and satisfaction of operations for customers, no delays and queues, no interactions with financial institution personnel required.
12. A Moody's document pegged the impact of digital transactions to 0.8% boom in GDP for rising markets and zero.3% boom for advanced markets because of multiplied speed of money.
13. An expanded use of credit score cards rather than cash might often allow a greater exact record of all the transactions which take location in the society, allowing more transparency in enterprise operations and money transfers.

#### Implications:

1. Development in credit score get entry to and financial inclusion, with a purpose to advantage the growth of SMEs within the medium/ long term.
2. Reduce tax avoidance and money laundering thanks to the higher traceability of all of the transactions.
3. The increased use of credit score playing cards will honestly reduce the amount of cash that humans will bring and as a consequence, lessen the chance and the fee associated with that.

#### Objective of the Study:

1. To apprehend the benefits of Cashless Transaction system in India.
  2. To identify the prospects and challenges of Cashless Transaction System in India.
  3. To find out the steps taken by the RBI and government to discourage the use of cash.
- Methodology:**
1. The present have a look at is based at the secondary records. The secondary data is taken from decided on authority's websites and RBI reports, literature from in advance published studies.

#### Challenges and Prospects for Cashless Transaction Economy:

Government's demonetization pressure is also supposed to advantage cashless economic system. Nonetheless there are several constraints as well as prospects in the adventure toward cashless economy.

#### Challenges:

1. **Currency dominated economy:** excessive degree of coins circulation in India. coins in circulation amounts to around thirteen% of India's GDP.
2. **Transactions are mainly in cash:** almost 95% of trans moves takes vicinity in cash. huge size of informal/unprepared zone entities and people decide upon cash based transactions. They don't have required digital and fintech literacy.
3. **ATM use is especially for coins withdrawals and no longer for settling online transactions:** there's large quantity of ATM playing cards along with round 21 crore Rupaya cards. however almost ninety two% of ATM playing cards are used for coins withdrawals. most effective low level of digital price using ATM playing cards. a couple of protecting of cards in city and semi-urban areas show low rural penetration.
4. **Limited availability of point of Sale terminals and terrible transaction tradition in POS:** consistent with RBI, there are 1.44 million POS terminals hooked up by way of various banks throughout locations at the stop of July 2016. but most of them remain in city/ semi-city areas.
5. **Mobile internet penetration remains weak in rural India:** For settling transactions digitally, internet connection is needed. Bu in India, there may be negative connectivity in rural regions. similarly to this, a lower literacy level in negative and rural elements of the us of a, make it problematic to push using plastic money on a much broader scale.
6. There is additionally vested interest in no longer transferring towards cashless economic system.
7. India is ruled by means of small retailers. They don't have sufficient sources to put money into electronic charge infra-structure.
8. The perception of purchasers additionally once in a while acts a barrier. The advantage of cashless transactions isn't always glaring to even those who've credit cards. coins, alternatively, is appeared to be the fastest manner of transacting for eighty two% of credit card customers. it's miles universally believed that having cash facilitates you negotiate better.
9. Most card and coins users worry that they'll be charged more in the event that they use playing cards. similarly, non-customers of credit score playing cards are not aware about the advantages of credit cards.

10. Indian banks are making it hard for digital wal-we could issued by using non-public zone businesses for use on the respective bank websites. it could be restrictions on the use of bank debts to fill up digital wallets or a lack of access to fee gateways. Regulators will have to take a hard stand towards such hire-in search of behaviour with the aid of the banks.

### Prospects:

The JAM (Jan dhan, Aadhar and mobile) infrastructure can inspire virtual transaction lifestyle: The JAM infrastructure is spreading to reach each far off corner of the country in addition to to each citizen. almost 24 JDY money owed, 124 Aadhar identity cards and nearly 90crore cell telephones. further, 33 million internet customers are in India. this means that the JAM infrastructure can be used to sell cashless transactions. A large wide variety of government transfers (DBT) are made via JAM mode. this will help human beings to get digital transaction awareness. The growth in extent and price of transactions the use of prepaid price units (PPIs) issued with the aid of banks and licensed non-financial institution entities has additionally been big. NPCI promoted Aadhar enabled charge device, IMPS and many others and they have registered huge turnover in transactions.

Newly released UPI (Unified payment Interface) is ex-pected to provide a massive improve to cashless transactions. Number of credit and debit cards is multiplied to 25.4 million and 691.1 million, respectively. The demonetization drive may also encourage human beings to analyze and settle transaction the usage of on line. RTGS and NEFT volumes extended nearly three-fold between 2013 and 2016 reflecting greater adoption of the machine through all segments of customers. As greater people begin the usage of RuPay debit cards and Aadhar for digital pay-ments, it's going to facilitate a less coins economic system. With increas-ing cellular banking offerings, increase in e-trade and use of cell fee packages, the usage of coins will lower. The RBI has made numerous efforts to sell digital settlements. most crucial of them are release of a regulatory set up for pay as you go contraptions (PPIs). similarly, encouragement to cell banking and internet banking will assist to lessen using bodily coins.

### Steps Taken By Rbi And Govern-Ment To Discourage Use Of Cash

1. Licensing of payment banks
2. Authorities likewise promoting mobile wallets. mobile pockets permits customers to immediately ship money, pay bills, re-rate mobiles, book movie tickets, ship bodily and e-presents each on-line and offline. lately, the RBI had issued positive guidelines that permit the users to increase their limit to Rs 1,00,000 based totally on a certain KYC verification.
3. Advertising of e-trade by liberalizing the FDI norms for this zone.
4. Government has also released UPI so one can make digital transaction a whole lot easier and faster.
5. Authorities has additionally withdrawn surcharge, provider charge on playing cards and virtual payments. things to do:
6. Open financial institution debts and make certain they may be operational-ized.
7. Abolishment of presidency prices on credit card transactions; reduction of interchange fee.
8. on card transactions; growth in taxes on ATM with-drawls.
9. Tax rebates for customers and for traders who adopt digital bills.
10. Making digital fee infrastructure completely safe and comfy in order that incidents of Cybercrimes may be minimized and people broaden faith in electronic payment system.
11. Create a way of life of saving and religion in monetary gadget among the rural terrible.
12. The Reserve bank of India too will ought to come to terms with a few problems, from identifying what digital bills throughout borders way for its capital controls to how the new modes of payment have an effect on key monetary variables which include the rate of cash.
13. RBI may also must shed a number of its conservatism, a part of that's because it has often visible itself because the seasoned tector of banking hobbies instead of average economic development.
14. The regulators also need to hold a sharp eye on any ability restrictive practices that banks may also indulge in to preserve their present day dominance over the profitable payments business. even though it's going to take time for moving in the direction of a entire cashless economy, efforts should be made to transform city regions as cashless regions. As 70% of India's GDP comes from city regions if government can convert that into cashless it is going to be a big gain. consequently distinctive trajectories need to be planned for migration to cashless for those having bank account and for those no longer having.

### Conclusion:

India is step by step transitioning from a coins-centric to cashless financial system. The benefits of the cashless financial system have now began trickling in with more and more human beings switching to digital



modes of receiving and making payment. Digital transactions are traceable, therefore easily taxable, leaving no room for the flow of black cash.

The complete United States is undergoing the technique of modern dayization in cash transactions, with e-payment offerings gaining unparalleled momentum. A big wide variety of agencies, even road providers, at the moment are accepting electronic payments, prompting the humans to learn how to transact the cashless manner at a quicker tempo than ever before.

The cashless transaction device is reaching its boom daily , as quickly as the marketplace grow to be globalized and the increase of banking region an increasing number of the human beings moves from coins to cashless gadget. The cashless transition is not simplest safer than the cash transaction but is much less time ingesting and now not a problem of carrying and trouble of wear and tear like paper cash. It additionally allows in record of the all the transaction done. there are problems in enforcing the idea of cashless financial system in a large united states of America like India where a big variety of human beings are living under distress and poverty, but a starting needed to be made sooner or later. these days, there may be a sea alternate in the mindset of humans in regards to virtual manner of economic dealings which can be secure, clean, handy and transparent. there may be no region for black money or counterfeit foreign money in cashless India.

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## Digital Payment System: Advantages and Difficulties

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### Introduction:

Digital payment system for cashless India is a mission launched by the government of India after demonetization. Cashless economy is one of the motive of demonetization. The Cashless transactions have the benefit of transferency. Digitization of the economy has been undertaken in various countries with some being successful and some not very successfully. A number of countries including Sweden, Kenya and Brazil have successfully moved towards less cash economy. A cashless economy is the desired state for many countries around the world. However, in India where a large proportion of the population illiterate and the rural areas have inadequate infrastructure for digital transactions. It is not possible to create totally cashless economy. So, now the efforts have been made to create less cash economy.

In March 2011, an RBI document revealed that the number of non-cash transaction per individual, stood at mere six per annum. According to the document, only a miniscule fraction of the approximately 10 million retailers in India accepted card payments. Nearly 145 million households were also completely excluded from banking, let alone online banking. There is a vast disparity in the number of people who used digital payments versus those who didn't, was worrisome, especially because of financial nuisances such as black money and corruption. (Digit, Vol-19) The Reserve Bank has been at the fore front of creating an enabling environment for growth of digital technology for new financial products and services. A committee is deepening of digital payments under the chairmanship of Shri Nandan Nilekani. Recently, the Reserve Bank come up with a payment system 2021 to ensure uninterrupted availability of safe, secure, accessible and affordable payment systems. (Southern Economist, Vol. 58)

On other side, due to the advancement in the technology, there is a direct impact of digital technology on the social, culture, technological and economic environment. In 21<sup>st</sup> century every business is going online, so that they can attract customers via E-Commerce and its offers. In this paper an effort has been made to discuss the advantages and difficulties in digital payment system.

### Few definitions:

1. **Digital Literacy** – Digital literacy is the human ability to recognize, consume and use the data with the help of Computers and other channels of internet (Glister 1997)
2. **Financial Literacy**- Financial literacy can be defined as the knowledge or the set of skills that a person holds which can help him to take the effective decisions on using its financial resources. (CSI Communication, April 2019)
3. **Internet banking** – Internet banking which is also known as online and electronic banking is the process by which the banks and other financial institutions customers perform their online transactions through the instructions websites or Apps (Southern Economist Jan, 2019)
4. **Cashless Economy** – Cashless economy is an economy where maximum transactions are done without using the physical cash or the means of hard cash. It is the economy where economic transactions are done with the facilities like Credit card, debit cards and online transactions by means of fund transfer and using e-wallets (Southern Economist Oct 15, 2019)

### Importance of Financial literacy and Digital Literacy

1. The person with better understanding of using its money and resources usually take better investment decisions that also includes savings, investments on different plans.
2. Digital literacy for financial operations will be great help in making the investments decisions, choosing profitable savings techniques, managing debit. This all become easy if a person is digitally literate for financial operations also.
3. The financial e-literacy and operations help people to get a knowledge regarding various principles of financing like online money transfer, financial planning, planning of internet, handling of dues techniques of saving and the time value of money (CSI Communications, April 2019)

### Advantages of digital payment system

1. The government of India has introduced a number of schemes for poverty alleviation. However, leakages and corruption have made many schemes dysfunctional. Thus direct cash transfer scheme have been introduced by government of India to reduce leakages, cut down, corruption, eliminate intermediaries target beneficiaries and speed up.

2. Government has announcement a big reform that subsidies on kerosene, food grains, fertilizers and LPG delivery through the public distribution system could be replaced by direct cash transfer in a phased manner for people (Accst Research Journal – Jan 15)
3. The exchange or buying and selling of commodities and services using the internet on a large scale facilitating the feature of transportation from one place to another is known as E-Commerce. The trend of taking business online has seen a rapid growth over the past few years. The online transactions to take place in due course are made with the help of various forms. (CSI Communications, May 2019)
4. Internet banking provides accessibility, security and 24X7 availability. Internet banking results in efficiency expansions. By enabling customers to make bill payments online, it reduces the need to physically visiting the bank.

#### Difficulties for digital payment systems

1. Adhar and bank account are the two pillars for implementation of cash transfer. Financial inclusion survey conducted by the World Bank team found that only 35 percent of Indians had account in formal financial institutions and only 21 crore people have Adhar card under such circumstances the proper implementation of cash transfer will not be so easy. (Accst Research Journal 2015) Government of India launched Jandhan Yojana on Aug 15, 2014, but rural peoples are not interested in banking so they cannot get benefits of that account.
2. As much as E-Commerce has been able to simplify transactions, it is oftenly plagued by serious threats that compromise its security as a medium for money and data exchanged (CSI Communication, May 2019)
3. India has vast illiterate and semi-literate population they are not using credit card, debit cards or internet. India's population is digital illiterate so they are not interested in cashless transaction.
4. In rural area have virtually no or very less access to Internet.
5. A case study of Patna shows 84% the respondents fear fraud or cheating due to cashless selling, while only 16% of them have no such apprehension. (Tanya Sharma, Southern Economist, Sept 1, 2019)

#### Conclusion

A cashless economy is the desired state of government of India. One cannot deny the importance of cashless Economy. Cashless India is a mission to reduce dependence on India Economy on cash and to bring hoards of stashed black money lying unused into the banking system. People around the world have started showing preference for digital money over the traditional currencies. Indian government is trying to bring transparency in financial transaction by launching digital India project. However, lack of proper literacy and infrastructural bottlenecks are slowing the speed of Indian's transaction to digital economy. There are some difficulties in using digital payment system but in future this transaction will take place and people will be ready for this transaction to speed up the Indian's transaction to digital Economy.

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## Digital Payment System In India

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### Abstract:

Today's commercial banking occupies an important place in the financial frame-work of every economy. Banking system is a dynamic sector of economy. They keep changing and this continuing process of change constantly challenges those who are responsible for management of the banks and those who observe and study their performance. The nature of banking system growth of the Internet, electronic-commerce (e-commerce) is an increasingly important segment of commercial activities on the web. In Digital payments world million dollar question comes in at every stage what is more important security or speed. Digital payments are to finance what invention of wheel was to transport. It offers an unprecedented opportunity to our people, most of who live in rural India or are migrants in big cities. It promises access to formal financial services and benefits from e-commerce, especially for those who continue to be excluded 2015 year can be written down as year of awareness & noticing payment methods other than cash. Year 2016 was the year of financial services with greater technology with too much of Innovations there after trials and adoptions. . The focus of this paper is to identify and explain the different methods of digital payment, we analyze the challenges of digital payments from different perspective and provide preliminary security countermeasures for each of the issues. Finally, a number of solutions have been proposed based on the problem and discussed on the prospect of digital payment system.

Keywords: Challenges, Different Methods, Digital Payments, Security, Solutions

### Introduction:

Digital payment system is a technology-mediated exchange between parties (individuals or organizations) as well as the electronically based intra-or inter organizational activities that facilitate such exchanges. It is the business option in which the transactions take place via telecommunications networks. It changes the way one can shop, learn, interact and transact business; this wave of emerging technology affects every facet of lifestyle, home as well as workplace. E-commerce is directly or indirectly applicable in all areas of our life be it banking, entertainment, on line order processing cycle or SCM (Supply Chain Management). Owing to its wide variety of applications e-commerce has gained a lot of popularity over the decade. It has drawn the attention of researchers regarding the new technologies and resolving the security issues regarding the electronic transactions. E-commerce has been defined broadly as the business transactions of business over the web.

### Objectives:

1. To study digital payment system .
2. To study advantage and disadvantage DPS.
3. TO study challenges of this system.

### Advantages And Disadvantages Of Digital Pament Sstem :

#### Cost Reduction Device :-

In terms of cost reduction, E-commerce helps organizations decrease costs in creating, processing, distributing, storing and retrieving information. For example the communication and advertising costs could be lower by sending e mails and using online advertising channels, than by using television commercials or the print media. In terms of online ordering and online auction organizations, the costs could be lower than running an actual shop with the associated manpower.

#### Extended Trading Hour :-

Extended trading hours is another benefit, the 24 hours a day. 7 days a week in 365 days allows business always free to open on the Internet without overtime and extra cost.

#### Advantages To Society :

By telecommuting, individuals can nowadays work and do their purchasing at home rather than by travelling around. This will result in less traffic and air through pollution. For people in Third World countries, many service and products are now available which were un- available in the past; opportunities and higher education services are more achievable for students. Non-profit organizations, including government services, also benefit from E-commerce by the online payment system which supports the payment of tax refunds and pensions quickly and securely. Public services such as health care, education, and public social service also benefit from E-commerce. For example, rural doctors and nurses can access professional information and the latest health care technologies. Overall, e-commerce makes products and services more easily available without geographic limitations

### Disadvantages :

The main disadvantage of DPS is the lack of a business model, lack of trust and key public infrastructure, slow navigation on the Internet, the high risk of buying unsatisfactory products, and most of all lack of security. The limitations of e-commerce can be classified as technological and non technological. Technological limitations of EC For the E-commerce system itself, there is no universally accepted standard for quality, security and reliability. The software of e-commerce development tools are always evolving, and have difficulties in integrating the Internet and E-commerce software with parts of the existing applications and databases. For general users of e-commerce, the accessibility to Internet, such as Digital Divide, is unstable, expensive and insufficient in particular areas. This will generate limitations for business in accessing wider markets. Another problem is that if a business system's scalability is not sufficient and upgradeable, it will result in degradation, slowdown, and eventually loss of customers.

Non-Technological limitations of EC The lack of trust is one main reasons why customers are unwilling to accept E-commerce due to privacy and security concerns. Some C2C action organizations are under an unencrypted payment environment, in which a customers' number might be stolen in the payment process. However, recent payment systems can solve this kind of problem. The danger of hackers accessing customer files and corrupting accounts is also related to privacy and legal issues. For some customers, it is hard to change their habit of viewing merchandise in online; those customers resist traditional ways of purchasing physical goods in actual shops and have difficulties in changing from a real to a virtual store. Another drawback is that there are some products that people will not buy online. For some high-cost and unique item businesses such as those involved with jewelry or antiques which have difficulties in offering the items in the DPS. made in the same way as online books and CD sales. Another example is furniture companies: many of them have websites that allow customers to browse, but most customers still want to feel and touch the item before they make a decision. Different expectations of goods and services from customers are typical of the online purchasing environment. An example is in the perception of colour. Owing to different monitor settings, inaccurate information about colour makes it difficult for the customers to make an accurate decision when purchasing is made in online. Because customers are unable to trial or access the actual goods before purchasing and delivery, many customers will not take the risk of purchasing through the Internet.

### E-Banking :-

E-Banking, Electronic Banking, Internet Banking (or) Online Banking relates to a Variety of Banking business conducted in online. They include banking service providers selling services to customers. All the banking business transactions are done through the interne. Online Banking is important because it offers customers convenience that has never before been available. The technology is now available allows customers to withdraw money on the internet by using ATM, 24 hours a day and 7 days a week with out having to go to banks. E-Banking is a term used for performing transactions payments etc, over the internet through a Bank credit union or building societies under secured website. Online shopping is important because it offers buyers convenience that has never before been achievable. The technology that is now available allows customers to shop on the intern& 24 hours a day and seven days a week, without having to leave their homes or offices. Shoppers are provided with an abundance of merchant sites where almost any goods on earth can be bought. Consumers can also compare prices from a variety of different retailers with greater ease, compared to them physically going to shopping centres to check prices.

Banking cards offer consumers more security, convenience, and control than any other payment method. The wide variety of cards available – including credit, debit and prepaid. These cards provide 2 factor authentications for secure payments e.g. secure PIN and OTP. RuPay, Visa, MasterCard are some of the example of card payment systems.

### Internet Banking :

Internet banking or e-banking is the latest series of technological wonders in the recent past which involves use of internet for delivery of banking products and services. It is the service being utilized intensively by most of the consumers of the digital world. It enables customers of a bank or other financial institution to conduct different financial transactions through the financial institution's website. Different financial transactions are:

### National Electronic Fund Transfer (Neft):

National Electronic Funds Transfer (NEFT) is a nation-wide payment system facilitating one-to-one funds transfer. Under this System, individuals, firms and corporates can electronically transfer funds from any bank branch to any individual, firm or corporate having an account with any other bank branch in the country participating in the System. However, cash remittances will be restricted to a maximum of Rs. 50,000/- per transaction.

### **Real Time Gross Settlement (Rtgs) :**

RTGS is the continuous settlement of funds transfers individually on an order by order basis. 'Real Time' means the processing of instructions at the time they are received rather than processing some time later; 'Gross Settlement' means the settlement of funds transfer instructions occurs individually. This system is primarily meant for large value transactions. The minimum amount to be remitted through RTGS is 2 lakhs and there is no upper ceiling for these transactions.

### **Electronic Clearing System (Ecs):**

ECS is an alternative method for effecting payment transactions in respect of the utility-bill payments such as telephone bills, electricity bills, insurance premium, card payments and loan repayments, etc., which would eliminate the need for issuing and handling paper instruments and thereby facilitate improved customer service by banks / companies / corporations / government departments, etc., in collecting / receiving the Payments. This Works As Per The Standing Instructions Of The Customer Given To His/Her Bank.

### **Immediate Payment Service (Imps):**

IMPS offer an instant, 24X7, interbank electronic fund transfer service through mobile phones. IMPS is an emphatic tool to transfer money instantly within banks across India through mobile, internet and ATM which is not only safe but also economical both in financial and non-financial perspectives. It sub-serves the goal of Reserve Bank of India (RBI) in electronification of retail payments and builds the foundation for a full range of mobile based Banking services.

### **Mobile Banking :**

Mobile banking is a service provided by a bank or other financial institution which allows its customers to conduct different types of financial transactions using a mobile device through software called an app. It fulfills the ability and the increasing demand of consumers, to perform more and more sophisticated financial transactions on a smartphone or tablet with one or two taps of a finger. Examples: Axis mobile, icici mobile, state bank anywhere, state bank buddy, kotak bank and many more.

### **Unstructured Supplementary Service Data (Ussd):**

It is a service which allows mobile banking transactions using basic feature mobile phone, without having mobile internet data facility. This innovative payment service \*99# works on National Unified USSD Platform (NUUP) channel. The key services offered under this service include, interbank account to account fund transfer, balance enquiry, mini statement besides other services. Account in a bank and any mobile phone on gsm network are required for activation. There is a transaction limit of Rs 5000 per day per customer. Registered mobile number with any phone, Mobile Money Identifier (MMID) and Mobile PIN (MPIN) will pave way for transactions.

### **Unified Payments Interface Upi:**

is a system that combines multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood. A Smartphone with internet facility and Bank Account details, are required for registration. Virtual payment address and UPI pin enables transactions. Example: Phone pay, Google Tez, and BHIM etc.

### **Mobile Wallets :**

Mobile wallet is a path to carry digital cash. This can be done by linking credit card or debit card information in mobile device to mobile wallet application or you can transfer money online to mobile wallet. The Basic Requirements to Start Using a Wallet are Bank Account, Smartphone, internet Connection and A Free Wallet App. For Consumer the Wallet Limits are: Rs.20,000/month for all. Rs.1 lakh/month with KYC (know your customer) and for Merchants the Wallet Limits are Rs.50,000/month with Self Declaration and Rs.1 lakh/month with KYC. e.g. Paytm, Freecharge, Mobikwik, Oxigen, mRuppee, Airtel Money, Jio Money.

### **Micro Atms:**

A device used by a million Business Correspondents (who could be a local kirana shop owner and will act as 'micro ATM') to deliver basic banking services. It is based on a mobile phone connection and is available at every BC. Customers would just have to get their identity authenticated and withdraw or put money into their bank accounts. This platform will enable function through low cost devices (micro ATMs) that will be connected to banks across the country.

### **Challenges :**

On a macro level, consumer level and the business perspective, the challenges being faced are-

### **Unbanked Population :**

The government along with Reserve Bank of India (RBI) implemented and initiated numerous schemes like Pradhan Mantri Jan Dhan Yojana, digital India payments limited etc., to promote financial inclusion, especially in rural India. Despite all the efforts, about 19 percent of the Indian population still doesn't have access to



banks, according to a study jointly conducted by ASSOCHAM and the consultancy firm, Ernest & Young. Recent data from the government and other sources refute a claim that declared 99% of households to be in possession of bank accounts but the facts are stated above. All the popular methods of payment like E-wallets, United Payment Interface and BHIM etc., are dependent on bank accounts, if not also smartphones and internet access.

### **Cybersecurity:**

Globally, numerous events of hacking occur, of email accounts, databases, bank details etc. The increasing digital transactions pose cyber security as the main challenge for public, institutions and government. Mobile Banking Malware is a sophisticated virus infecting banks mobile apps user to steal password details and even hinders the two-factor authentication, by presenting victims with a fake version of the login screen when they access their legitimate banking application. Jailbreak or Rooted Devices, this is a practice to gain unrestricted or administrative access to the device's entire file system, by breaking its inherent security model and limitations, allowing mobile malware and rogue apps to infect the device and control critical functions. Outdated OSs and NoSecure Network Connections Factors such as outdated operating system versions, use of no secure or public WIFI network in mobile devices allow cybercriminals to exploit an existing online banking session to steal funds and credentials.

### **Cash Dependent Economy :**

Cash Dependent Economy 92% of the Indian economy is made up of informal workers, who contribute around 50% of the GDP; 80-90% of these workers are paid in cash which are often undeclared assets. These figures spell out the importance of cash in the Indian economy. Mediums like smartphones and internet connectivity are still unaffordable to a sizeable population thus denying them access to digital forms of transaction. As per the reports, till December 2016 out of 1.324 billion population the smartphone users are 350 million. Awareness about using the digital solutions like smartphone based transactions, feature phone based transactions, use of credit/debit cards at PoS solutions etc is still a persistent issue. A survey conducted by Bill and Melinda Gates Foundation shows that till January 2017 only 8 percent of the users are aware of the mobile money. The other key issue is lack of bandwidth and reach of technology to various locations. Though, it is being sounded that every corner of India shall have ICT (information and communication) services in place, still in many of the locations services are not available for the customers. Gaining the trust of consumers is one of the key challenges facing the mobile wallets, digital transaction service providers like banks, fin-tech companies etc. After the above discussion we are left with different questions about the usage, security, problems faced and preparedness of the public to make a switch to cashless society. To

### **Conclusion :**

India is among the fast emerging as one of the largest and strong economies. For sustained development and growth with robust economic development, certain integral factors like improved transparency, corporate governance etc, play a major role. All developments could be feasible only when the population embraces the digital payments and digital transactions. Hence, if the challenges that are discussed are addressed and improved solutions in terms of digital transactions with more secured features, ease of transactions and reduced cost of managing the digital payments could lead to more potential developments and supporting in improved conditions of digital payments processing.

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## Demonetization and its impact on adoption of digital payment

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*The Prime Minister's announcement of the withdrawal of high denomination notes ranks amongst the most significant economic measures taken by the government. This unexpected announcement and prolonged cash shortages created an increase in digital transactions across the country. Digital Payment Habit has changed after demonetization. People have no other option for transaction so Indian society move slowly from cash to digital transaction system. More Indians from smaller towns and cities are paying digitally for goods and services, raising expectations of sustained growth for non-cash payments. A Cashless economy is an economy in which all types of transaction carried through digital means. It includes E- Banking, mobile banking, Debit and Credit card, Digital wallet etc. The paper tries to throw a light on the rising trend of digital transaction in India being carried out in various cashless modes after Demonetization. The findings of the study reveal that after demonetization, there has been a shift towards digital payment mechanism in post demonetization.*

**Keywords:** Demonetization, Digital Payment, E-banking,

### Introduction:

The Indian rupee is the official currency of the Republic of India. The Reserve Bank manages this currency in India and derives its role in currency management on the basis of the Reserve Bank of India Act, 1934. In a major step to check undeclared black money, the Government of India on the 8 November 2016 announced demonetization of high denomination notes with effect from the midnight of 9<sup>th</sup> November 2016, making these notes invalid. Apart from combating black money, the stated purpose is also to check fake currency. Monetization is the process of converting or establishing something into legal tender. While it usually refers to the coining of currency or the printing of banknotes by central banks, it may also take the form of a promissory currency. It is Process of removing a currency from general usage, or circulation. The unexpected announcement and prolonged cash shortages worked as an impetus to increase in digital transactions. Payment through digital modes include banking cards, USSD, UPI, Mobile Wallets, prepaid cards, POS, Internet banking, Mobile Banking, etc. Banking cards offer consumers more security, convenience and control than any other payment method. The Digital India is a flagship program by the Government of India with a vision to transform India into a digital society and knowledge economy. —Faceless, Paperless, Cashless|| is one of professed role of Digital India. India continues to be driven by the use of cash; less than 5% of payments happen electronically, however the finance minister, in the budget speech, spoke about the idea of making India a cashless society, with the aim of mopping black money. Even the RBI has also recently announced a document “Payments and Settlement Systems in India: Vision 2018” with a plan to encourage e-payments and to make India to move towards a cashless economy in the medium and long term.

### Objectives of Study

1. To understand meaning and reasons of demonetisation
2. To Study the Impacts of demonetization on adoption of Digital Payments.
3. Suggesting measures for smooth implementation of digital and Cashless Economy.

### Research Methodology

The paper is exploratory in nature. The study has been carried out based on the collection of the relevant secondary data. Secondary data collection was based on various sources such as NPCI, RBI.

### Impact of Demonetisation on digital payments in India:

announcement of Demonetization and prolonged cash shortages created an increase in digital transactions. One of the talking points of the digital payments story has been the phenomenal growth witnessed by new age instruments such as Unified Payments Interface (UPI), prepaid payment instruments (PPIs), Aadhaar Enabled Payment System (AEPS), along with well-established ones such as National Electronic Fund Transfer (NEFT), Real Time Gross Settlement (RTGS) and cards. Demonetization's motto was to encourage the cashless/digital economy. More and more cash-less or less-cash transactions will lead to more disclosure of income which will increase the direct tax collections. With a reduction in cash transactions, alternative forms of payment will more in demand. Electronic mode of payment like online transaction, payment through applications, E-wallets E-banking, usage of debit and credit cards etc. will surely see the substantial increase in demand

### **Mobile Wallets:**

Mobile Wallets have become very famous nowadays. After demonetisation, use of e wallets has been implemented at a very large-scale. These e wallets allow users to make payments using your mobile number or by scanning a QR code which takes place in a jiffy. All you need to do is simply download a wallet like paytm. Instead of using your physical plastic card to make purchases, you can pay with your smartphone, tablet, or smart watch. An individual's account is required to be linked to the digital wallet to load money in it. Most banks have their e-wallets and some private companies. Paytm received more than 25,000 signups

### **Unified Payment Interface:**

UPI also known as Unified Payments Interface is another great way to go cashless. Unified payments interface also called UPI is system of payments. Using unified payments interface, people can transact using their smartphones. To pay using this system called unified payments interface, you need 2 important things: Smartphone and a Bank Account.

### **Aadhaar Card enabled payment system:**

This System developed by the National Payments Corporation of India (NPCI) that allows people to carry out financial transactions on a Micro-ATM by furnishing just their Aadhaar number and verifying it with the help of their fingerprint scan. This system allows a person to pay using his Aadhaar card if it is linked to his bank account. Once you link your Aadhaar card to your bank, you can make payments using your finger prints.

### **Plastic Money:**

Plastic Money has revolutionised the economy. The term 'plastic money' refers to the use of technology to facilitate digital transactions that can be conveniently carried out without having to visit the banks every time. Plastic Money means debit cards and credit cards that are used at ATM's for cash withdrawal and POS machines while shopping. Having a debit or credit cards make you burden free from carrying cash. Plastic Money has a host of advantages. First and foremost, the transactions are very transparent when done via technology. This keeps corrupt practices at bay. Further, plastic money is extremely convenient to use. There's no need to carry lots of paper currency in your wallet- all you need is a smart debit card!

### **Net Banking:**

Net Banking is another handy way to get cashless transactions done. All you need is a bank account with e banking facility enabled on it. You can transfer funds to others account from the comfort of your home. There is no need of going to your bank to get transfers done. You can make all payments and transfers yourself. This is a very convenient way to go cashless in India as well.

### **Immediate payment service:**

IMPS offer an immediate, 24X7, interbank electronic fund transferservice through mobile phones. IMPS is AN emphatic tool to transfer cash instantly among banks across Asian country through mobile, net and ATM that isn't solely safe however conjointly economical each in money and non-financial views.

### **E-Transaction Increase in Small Town:**

Demonetization makes big effect on small city's /town's online payment habit. Tier 2 city online transaction increased by 150% and tier 3 online transaction increases by 157% (Innovate payments solutions CEO 2017). They shift from cash to online payment for purchase and payment purpose. Its increase online business and profit in long term.

### **Policy Suggestion:**

1. E- governance should be started by the government i.e. the use of technology be made as far as possible like E- Registration with Revenue Authorities, E- filing of Returns, etc. ultimately corruption will be minimized.
2. Black money revolves around in cash transactions only so Government should put restriction on cash transactions wherever possible and should promote use of plastic money like Debit Cards, Credit cards, etc.
3. Government should provide incentives on online payments to promote it and should reduce the various surcharges levied on online payment on certain transactions.( Ex. Card payment at petrol pumps)

### **Conclusion:**

Demonetization affects every field of life like social field, economic, political and legal field, but its main effect is on economic and business activity of the country. Demonetization also has too much effect on e-commerce industry in India. Demonetization has opened many inroads in the digital payment system in India. People are now becoming less apprehensive of technology, and are becoming comfortable with the digital world with every passing day. It may be a move towards the cashless economy. The demonetization has introduced a new method or style of the cashless payments in the country. This recent move of demonetization



will also help in curbing the black money to some extent and reducing the counterfeit notes and their supply to terrorist activities. This bold decision is one of the step towards making India a great nation.

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## Cashless India: Challenges Ahead

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### Introduction:-

India continues to be driven by the use of cash; less than 5% of all payments happen electronically however the finance minister, in 2016 budget speech, talked about the idea of making India a cashless society, with the aim of curbing the flow of black money.

Even the RBI has also recently unveiled a document — **“Payments and Settlement Systems in India: Vision 2018”** — setting out a plan to encourage electronic payments and to enable India to move towards a cashless society or economy in the medium and long term.

### What is a cashless economy and where does India stand?

1. A cashless economy is one in which all the transactions are done using cards or digital means. The circulation of physical currency is minimal.
2. India uses too much cash for transactions. The ratio of cash to gross domestic product is one of the highest in the world—12.42% in 2014, compared with 9.47% in China or 4% in Brazil.
3. Less than 5% of all payments happen electronically
4. The number of currency notes in circulation is also far higher than in other large economies. India had 76.47 billion currency notes in circulation in 2012-13 compared with 34.5 billion in the US.
5. Some studies show that cash dominates even in malls, which are visited by people who are likely to have credit cards, so it is no surprise that cash dominates in other markets as well.

### Benefits of Cashless economy

1. Reduced instances of tax avoidance because it is financial institutions based economy where transaction trails are left.
2. It will curb generation of black money
3. Will reduce real estate prices because of curbs on black money as most of black money is invested in Real estate prices which inflates the prices of Real estate markets
4. In Financial year 2015, RBI spent Rs. 27 billion on just the activity of currency issuance and management. **This could be avoided if we become cashless society.**
5. It will pave way for universal availability of banking services to all as no physical infrastructure is needed other than digital.
6. There will be greater efficiency in welfare programmes as money is wired directly into the accounts of recipients. Thus once money is transferred directly into a beneficiary's bank account, the entire process becomes transparent. Payments can be easily traced and collected, and corruption will automatically drop, so people will no longer have to pay to collect what is rightfully theirs.
7. There will be efficiency gains as transaction costs across the economy should also come down.
8. *1 in 7 notes is supposed to be fake, which has a huge negative impact on economy, by going cashless, that can be avoided.*
9. **Hygiene** – Soiled, tobacco stained notes full of germs are a norm in India. There are many such incidents in our life where we knowingly or unknowingly give and take germs in the form of rupee notes. This could be avoided if we move towards Cashless economy.
10. In a cashless economy there will be no problem of soiled notes or counterfeit currency
11. Reduced costs of operating ATMs.
12. Speed and satisfaction of operations for customers, no delays and queues, no interactions with bank staff required.
13. A Moody's report pegged the impact of electronic transactions to 0.8% increase in GDP for emerging markets and 0.3% increase for developed markets because of increased velocity of money
14. An increased use of credit cards instead of cash would primarily enable a more detailed record of all the transactions which take place in the society, allowing more transparency in business operations and money transfers.

### Drawback of Cashless Economy:-

Against the backdrop of the demonetization exercise that shook up the Indian economy last November, there's a major tussle brewing in the consumer banking space in India. Vying for the chance to handle citizens' money are two major sets of players – the traditional banks, and a new age of “Payments banks” – organizations that have received licenses to run partial banks, where they can accept deposits,

offer services like debit cards and remittances, but not provide loans (at least not yet). It's a battle between the old and the new that we've rarely seen the likes of elsewhere in the world.

Demonetization, arguably the most significant trigger of this race, was an involuntary exercise that the country underwent, where, overnight, the two largest currency denominations – The INR 500 and the INR 1,000 notes – were declared by the government as no longer being legal transacting tender. Instead, the government would introduce a new set of INR 500 notes along with an entirely new denomination of INR 2,000 notes. INR 1,000 is approximately US \$16, which in an Indian metropolitan city, would buy four movie tickets to a high-end cinema. Unfortunately, the execution of the exercise was patchy – there was a period of three months after the declaration of the old notes as illegal that the country was waiting for the new notes to be printed. The printing had begun during these months, but the demand far outstripped the supply, leading to daily cash shortages at banks and ATMs.

The move was initially portrayed by the Indian government as a way to combat undeclared income held privately by entities, outside of the country's banking system, but when the move encountered criticism, the government changed the PR spin, reframing it into an effort to make India go cashless. In hindsight, this was a good reframe of the exercise, because it shifted focus from the troubled execution of the demonetization exercise to an India of the future where transactions are digital (read: 'easy'), and accounted for.

The payments banks offer interesting competition to the traditional banks because of the profile of companies that have received these licenses. Two such prominent licensees are the Indian telecom giant, Airtel (founded in 1995, \$14.5 billion revenues in 2016), and the e-wallet + online payment facilitator PayTM (founded in 2010, valued by some sources at \$1 billion, in its latest fund-raise, with controlling ownership held by Alibaba's parent company).

E-wallets like PayTM have a straightforward operational model – Effectively, they act like PayPal with an online store and a network of offline retailers that customers can buy from. Once the user loads money into her or his e-wallet, they can buy from a selection of products, both online, and from the network of retailers that the particular e-wallet has tied up with. If the consumer decides to withdraw money back into their bank accounts, they pay a transaction fee of anywhere between 1 and 4 percent of the amount they're withdrawing.

### **The challenge to go digital**

A major obstacle for the quick adoption of alternate mode of payments is mobile internet penetration, which is crucial because point-of-sale (PoS) terminal works over mobile internet connections, while banks have been charging money on card-based transactions, which is seen as a hurdle. The low literacy rates in rural India, along with the lack of infrastructure like internet access and Power make things extremely difficult for people to adopt e-transaction route.

The financial safety over the digital payment channels is important for pushing the cashless economy idea. Imagine losing your credit cards or being the victim of digital hackers can lead to a whole host of issues like denied payment, identity theft, account takeover, fraudulent transactions and data breaches. According to the digital security company Gemalto, more than 1 billion personal records were compromised in 2014.

### **Cash is Here to Stay!**

Despite the numerous State endeavours, India has always been driven by cash; while electronic payments are seen restricted to a small size of the population, compared to the cash transactions. Considering the demographics of India, two-thirds of the population live in rural areas, where farmers and poor people are still struggling to get their hands on their own money. As per Data in July this year, 881 million transactions were made using debit cards at ATMs and PoS terminals. Out of these, 92 per cent were cash withdrawals from ATMs. The sole purpose for cards in Indian is to withdraw cash. Changing this mind set will be an uphill task. The last few days have clearly shown that the country is highly underpenetrated as far as ATMs per million people and it's the ATM which will help the government fulfill its ambition of financial inclusion as the ATM will play a key role in the last mile towards customer fulfillment which is self-service 24\*7 which even a Business Correspondent or Micro ATM cannot do.

Currently, there is a mix of cash and cashless transactions happening across the country, while many enablers are working towards turning the cashless economy dream into a reality. We have taken big strides towards becoming a cashless economy; however it will take more than a generation to change the habit from cash to no cash transaction. Rushing the economy into a cashless state without proper planning and infrastructure will be disastrous and its consequences will be everlasting. A gradual move towards less-cash society as said by the Prime Minister is the right way forward.

Also, important to note that if people start flocking to alternate currencies, governments could wind up losing much of their power to influence economic issues such as inflation and unemployment. The government can't set an interest rate for institutions lending in a currency it doesn't control.



### Challenges in transitioning to a Cashless society –

1. **Acceptance infrastructure and digital inclusion:** Lack of adequate infrastructure is a major hurdle in setting up a cashless economy. Inefficient banking systems, poor digital infrastructure, poor internet connectivity, lack of robust digital payment interface and poor penetration of PoS terminals are some of the issues that need to be overcome. Increasing smartphone penetration, boosting internet connectivity and building a secure, seamless payments infrastructure is a pre requisite to transition into a cashless economy.
2. **Financial Inclusion** – For a cashless economy to take off the primary precondition that should exist is that, there should be universal financial inclusion. Every individual must have access to banking facilities and should hold a bank account with debit/credit card and online banking facilities.
3. **Digital and Financial Literacy** – Ensuring financial and digital inclusion alone is not sufficient to transition to a cashless economy. The citizens should also be made aware of the financial and digital instruments available and how to transact using them.
4. **Cyber Security** – Digital infrastructure is highly vulnerable to cyber-attacks, cyber frauds, phishing and identity theft. Off late cyber-attacks have become more sophisticated and organised and poses a clear and present danger. Hence establishing secure and resilient payment interfaces is a pre-requisite for going cashless. This includes enhanced defences against attacks, data protection, addressing privacy concerns, robust surveillance to pre-empt attacks and institutionalised cyber security architecture.
5. **Changing habits and attitude** – Indian economy functions primarily on cash due to lack of penetration of e-payment modes, digital illiteracy of e-payment and cashless transaction methods and thirdly habit of handling cash as a convenience. In this scenario, the ideal thing to do is to make people adopt e-payments in an incremental fashion and spread awareness to initiate behavioural change in habits and attitude.
6. **Urban – Rural Divide** – While urban centres mostly enjoy high speed internet connectivity, semi urban and rural areas are deprived of a stable net connection. Therefore, even though India has more than 200 million smartphones, it is still some time away for rural India to seamlessly transact through mobile phones. Even with regard to presence of ATM's, PoS terminals and bank branches there exists a significant urban-rural divide and bridging this gap is a must to enable a cashless economy.
7. **Indian Scenario**
8. **India's reliance on cash**
9. Indian economy is primarily to be driven by the use of cash and less than 5% of all payments happen electronically. This is largely due to the lack of access to the formal banking system for a large part of the population and as well as cash being the only means available for many. Large and small transactions continue to be carried out via cash. Even those who can use electronic payments, use cash.
10. Indians traditionally prefer to spend and save in cash and a vast majority of the more-than 1.2 billion population doesn't even have a bank account.
11. Indian economy is primarily driven by the informal sector and it relies heavily on cash based transactions.
12. A report by Google India and Boston Consulting Group showed that IN 2015 around 75% of transactions in India were cash-based while in developed countries like USA, Japan, France, Germany etc. it was just around 20-25%.
13. RBI estimates for July 2016 show that banks had issued around 697.2 million debit cards and 25.9 million credit cards to customers after deducting withdrawn or cancelled cards. However, cards on their own cannot turn the economy into a cashless one. It is Important to note that the number of cards in operation is not equal to the number of individuals holding those cards. It basically means that many customers hold multiple accounts and cards.
14. The difficulty in going digital is exemplified by the data on debit card usage — over 85% (in volume) and 94% (in value) of all debit card usage is at ATMs for the purpose of withdrawing cash. The principal purpose for cards in an Indian context is thus a means to withdraw cash. The exponential growth in debit cards (over 600 million) is a direct consequence of the financial inclusion drive that led to the opening of over 170 million bank accounts. Though the move put plastic money into the hands of millions, effectively it has only shifted cash withdrawals from banks to ATMs, which was not quite the intent.

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1. No cash in hand. Always a dependency on your card or bank system connectivity.
2. Major part of Indian population is not educated about banking systems, specifically about the digital aspect of it. Hence they may resist to make online transactions.  
Automation and online transactions will cut down large number of jobs.

## Digital Payment System Feat in India

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### Abstracts

Digital India campaign launched on Honorable Prime Minister Shri Narendra Modi the stated role of digital India is faceless, paperless, cashless, super cashless as a part of digital India campaign government has intuited with difference mode on digital payment system few old new modes were promoted to develop cashless economy which are the need of today for development country like India this paper is an attempt to study the trend in digital payment like NFT and RTGS inter Bank ATM cash withdrawal , NACH,CTS, IMPS,AEPS,BBPS,UPI, BHIM (UPI) AND NETC in last three year. there is remarkable growth in digital payment in volume and value both.

INDIAN Banks association in December 2008 and the certificate of commencement of business was issued in April 2009 was aimed to operate for the benefit of all the member banks and their customers NPCI has ten promoter banks namely State Bank of India , ICICI Bank ,National Bank ,Bank of Maharashtra , HSBC.

Regulations and rules had been framed for enrolling all banks in the country as members, third was done so that when the nation wide payment systems are launched all world get included on a standardized platform. Thus all these product and services are great inactive of government towards development of digital payment system in India. Following literature study help me in understanding of current state of current state of sanitations in digital payment system in India. NPCI took various initiatives to improve digital payment system in this regard launched various product and services such products are services are Bharat Interface for Money (BHIM) unified payment interface (UPI) immediate payment service (IMPS) National Automated clearing House (NACH) Cheque Truncation system (CTS) Aadhar Enabled Payment System (AEPS) Rupay ,Bharat Bill Payment system (BBPS) Bharat QR (BQR) and National Electronic toll collection(NETC).

### Objectives:-

1. To study a trend in digital payment through various modes.
2. To compare new modes of digital payment system with older ones.
3. To study the performance of new fangled digital payment system mode.

Presentation presenting bank etc. cheque truncation thus obviates the need to move the physical instrument across bank branches, other than in exceptional circumstances for clearing purposes.

1. IMPS offer an instant 24X7 interbank electronic fund transfer service through mobile phones. IMPS is an emphatic tool to transfer money instantly within banks across India through mobile, intermit and ATM which is not only safe but also economical both in finical and non-finical perspectives.
2. Rupay is a new card payment scheme that has been conceived of fulfill RBI's vision to offer a domestic, open-loop, multilateral system which will allow all Indian banks and finical institutions in India to participate in electronic payments.
3. AEPS is bank led model which allows online interoperable finical inclusiontransation at pos(Micro ATM) through the business correspondent of any bank using the Aadhaar authentication.
4. BBPS is a one stop payment platform for all bills providing an interoperable and assessable "Anytime Anywhere" bill payment service to all customers across India with certainty reliability and safety of transactions. Credit card, Debit card. Account transfer, IMPS Internet Banking UPI wallets, AEPS and Cash.
5. UPI is a system that powers multiple bank account into a single mobile application merging several banking features seamless fund routing& Merchant payments into one hood. It also caters to the collect request .
6. BHIM is an app that lets you make single easy and quick payment transaction using Unified payment Interface (UPI) you can make instant bank-to-bank payments and pay and collect money using just mobile number or virtual payment assess.

Following table shows retail digital payment done on NPCI plat from during last three years in terms of volume (in Million) of those transactions in rupees.

### Total retail payment on NPCI platform.

	F.Y. 2014-15	F.Y. 2015-16	F.Y. 2016-17
Volume (In min)	3,709.46	5,406.41	7,138.42
Value (in Bn)	76,111.29	85,271.12	96,626.07

Retail Payment on NPCI platform with various mode

Sr.no	NPCI operated system	F.Y.2014-15		F.Y. 2015-16		F.Y.2016-17	
		Volume (Inmin)	Value (in Bn)	Volume (In min)	Value (In Bn)	Volume (In min)	Value (in Bn)
1	NFS INTER BANK ATM Chas Withdrawal	2,374.30	8311.67	2,837.01	9,993.22	3,170.18	10,818.39
2	NACH-National automated clearing house	324.63	1,196.97	1,392.79	3,715.09	1,968.03	7,207.81
3	CTSCheque clearing	926.00	66,009.50	919.80	69,889.15	1,111.86	74,035.22
4	IMPS	78.44	581.89	220.81	1,622.89	506.84	4,116.24

Shows major mode of retail digital payment on NCPI platform we can observe that NFSI n ter Bank ATM cash withdrawal have maximum number of transations in tremes of volume and in terms ov values allthree years second highest mode of retail digital payment is NACH CT and IMPS are least are least in f.y. 2014-15 but growth in both are highest among all four mode in last year f.y. 2016-17 CTS has high number in terms of value of trasaction done .

Shows that in last three years traditional fine transfer system like ATM cash withdrawal and in cheque clearing grown at normal rate. But growth of NACH and IMPS as new mode of digital payment system shoot upat high rate CAGR of IMPS and NACH from 2014-15 2016-1`7 they are 253.7% and 201% repectively it showa highly acceptability of new digital payment system due to various reasons like speed, security and convenient way of fine transfer.

**Retial Payment Newfangled mode of retaildigital payment (Voliumein million) NPCI Plarfrom in Year 2017-2018**

NPCI operated system	Jan'17	Fub'17	Mar'17	Apr'17	May'17	Jun'17	Jul'17
AEPS	1.97	2.65	3.28	5.04	6.13	6.86	6.68
BBPS	0.008	0.02	0.03	0.04	0.10	0.17	0.36
UPI	4.46	4.38	6.37	7.20	9.36	10.35	11.63
BHIM(UPI)	1.72	1.97	2.46	3.19	3.98	4.62	5.43
UPI&USSD	0.31	0.22	0.21	0.19	0.19	0.20	0.19
NETC	6.28	6.55	7.50	7.41	8.07	8.21	8.64

In last seven month of current year we can observe that even monthly data advocate growth in new digital payment system of NACH and IMPS. while at the same time in digital payment system ATM , Cheque , UPI digital payment system this downfall In ATM withdrawal and cheque clearing system .growth in volue in millions in newfangled modes of digital payment system under NPCI .They show there is high growth in all modes except USSD2.0 (UPI) thus there remarkable growth in both in terms of volume and value in digital payment system

**Conclusion**

Current government took enhanced initiative to develop digital payment system in India there is remarkable growth found in digital payment inlast three years people are proactively adopting new modes of digital payment and also hoist the usage of digital payment modes over old digital payment modes demonetization also amplified in digital payment transactions especially in new fangled modes of digital payment like NACH IMPSAEPS UPI BHIM(UPI) and NETC looking to wads government action and target based implementations in must importions .

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## Demonetization and Digital Payment System

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### Abstract:

The Government has implemented a major change in Economic environment by Demonetizing high value of currency notes –Rs. 500 and Rs.1000 denomination. Demonetization is a sudden stop in terms of currency availability. It created a situation of currency jams on consumption, investment, production, employment etc. This paper examined the impact of Demonetization on the digital payment system and also made an attempt in evaluating the awareness and usage of digital payment by consumers after demonetization. A digital economy is an economy in which all types of transaction carried through digital means. It includes E- Banking, mobile banking, Debit and Credit card, Digital wallet etc. The paper tries to throw a light on the rising trend of digital transaction in India being out in various digital modes after Demonetization. The study shows that impact of Demonetization has felt by every Indian Citizen and Introduction of digital payment system in India can be seen as a step in right direction as it helps in growth and development of economy in India.  
**Keywords:** Digital Economy, Demonetization, Digital payment transaction.

### Introduction:

Demonetization is the act of changing the existing currency in another form. It also means either introducing new notes of the same currency or fully replacing the old currency with new one. Some of the reasons why government demonetized their nation's currency is because resisting inflation, resist corruption and discouraging cash system in the country etc. on 08, November 2016, the Indian government has taken a bold step to demonetize the Rs.500 and Rs 1000. These two biggest denominated notes accounted 80% of the currency supply. The government's main objectives of note ban is, to eradicate counterfeit currency, resist tax evasion, destroy black the money and terrorist financing activities, and to encourage the country toward the cashless economy. Nearly a year after India's momentous demonetization, the government continues to expand options digital payments to reduce the economy's dependence on cash. New digital payment methods are building momentum. These innovations offer simple universal tools to reach a cashless economy.

### Literature Review :

Deepika Kumari says that "as the demonetization applied by government of India, Government trying to aware its people for cashless transaction by various kind of advertisement method but still a large number of people are awaiting for the introduction of digital payment system" This paper is a study of digital payment system, its different methods, advantages and challenges. This paper will help to understand the basic of cashless transaction. The cashless transaction system is reaching its growth day by day. As soon as the market become globalized and the growth of banking sector more and more, the people moves from cash to cashless system. The cashless system is not only requirement but also a need of today society. All the online market basically depends on cashless transaction system. The cashless transition is not only safer than the cash transaction but is less time consuming and not a trouble of carrying and trouble of wear and tear like paper money. It also help in record of the all the transaction done. So, it is no doubt to say that future transaction system will be cashless transaction system.

Sani, B.M. says that "cashless transaction will lead to e-transactions." There has been a drastic improvement in electronic transaction which may boots cyber crime, so we make people aware of ways to keep credit, debit card safe and to train them to teach the measures to keep our transactions hassle free. We need a specially trained cyber police, forensic labs withstate of the art this evidence gathering tools, public prosecutors who understand technology and cyber courts to punish cyber criminals. This hope India will be in line of developed countries in the days to come.

### Demonetization of Indian Economy:

Demonetization refers to an economic policy where a certain currency unit ceases to be recognized or used as a form of legal tender. In other words, a currency unit loses its legal tender status and a new currency comes into circulation. From time to time the Government formulates fiscal policies to encourage economic growth. A lot of black money circulates in the economy and most of them are unaccounted because the sources of income are not known to the government. To wipe this money out of circulation, the government can demonetize currency notes, so that the money holed are forced to deposit their money in bank or lose their wealth. It is a strategy that worked quite well for many countries. Demonetization is also referred as the process of moving people from a cash-based system to a digital system. Keeping hard cash is a practice that is not encouraged by the government. Therefore, moving people to a digital system is a favorable economic policy for the development of the country. On November 8<sup>th</sup> 2016, the Prime Minister of India Mr. Narendra Modi

announced one of the boldest moves in the history of India by banning Rs.500 and Rs. 1000 currency notes. The impact of banning the currency notes was felt by every Indian Citizen.

#### **Political Impact:**

The political impact of demonetization was felt by the whole country with majority of the educated people offering support to the demonetization. The speeches against black money made by Prime Minister Mr. Narendra Modi are attracting huge crowds turning into vote banks for BJP. There is a growing support for BJP from the educated people and especially the youth for the bold step taken to curb black money.

The opposition parties however oppose the demonetization drive. The continuous adjournment of both the house indicates this scenario. Dr. Manmohan Singh, ex-prime minister of India has said this move as unlawful against democracy. His statement came out in the Rajya Sabha in the presence of Mr. Narendra Modi. Opposition parties strongly oppose the demonetization.

#### **Social Impact:**

The banning of Rs.500 and Rs.1000 notes was released suddenly and the worst affected was the common man. The social impact was drastic with marriages facing severe issues with cash transactions. People conducting marriages must produce the marriage invitation to withdraw 2,50,000 and above. This has caused great difficulty among the public.

The impact on the health care sector was huge with hospital refusing to accept the old currency. The common man faced severe issues transacting in the hospital with old currency and several cases of death had been registered for not attending the patient due to demonetization.

Salaried employees faced the issue on the opening day of the month with their salaries credited in the bank account but they were able to withdraw only 2,000 rupees from the ATM machines. Many salaried people have gone to the bank branch to withdraw their full salary amount with loss of pay.

Social problems in the form of road blockades and quarrels arose with people waiting in long queues before the bank and ATM machines. People become restless spending an entire day to withdraw money. Several death have been registered as a result of waiting in long queue. Pensioners are worst affected with no special provision made for senior citizens in banks.

#### **Economic Impact:**

Demonetization is viewed as a measure of sterilizing the money. RBI plays the pivotal role in this demonetization drive. All the banking experts welcome this demonetization measure. Considering the banking sector, both public and private sector banks are facing the issue of Non-Performing Assets (NPA) or Bad loans to the tune of 10 lakhs crore including the stressed assets according to RBI sources. This demonetization measure will help banks to recover some bad loans and improve their financial position.

Considering the entire economy of India as a whole, demonetization will make most of the transactions to be done through the formal banking sector. This will increase the transparency with people and corporate paying tax properly. Income tax department has reported that only 4 percent of the individuals pay income tax while this figure has to be increased to 28 percent. The demonetization will help to achieve this target of the Income tax department. When black money within India gets curbed, it will result in the overall economic development of the nation.

#### **Digital Payment System in India:**

The Digital India is a flagship program by the Government of India with a vision to transform India into a digital society and knowledge economy. "Faceless, Paperless, Cashless" is one of professed role of Digital India. India continues to be drive by the use of cash ; less than 5% of payments happen electronically, however the finance minister, in the budget speech, spoke about the ideas of making India a digital society, with the aim of mopping black money. Even the RBI has also recently announced a document-"**Payments and Settlement Systems in India: vision 2018**"- with a plan to encourage electronic payments and to make India to move towards a digital economy in the medium and long term.

#### **Benefits of digital payment system:**

1. In financial year 2015, RBI spent Rs. 27 billion on just the activity of currency issuance and management. This could be avoided if we use digital payment system.
2. It will pave way for universal availability of banking services to all as physical infrastructure is needed other than digital.
3. There will be greater efficiency in welfare programmes as money is wired directly into the accounts of recipients. Thus once money is transferred into a beneficiary's bank account, the entire process become transparent. Payment can be easily traced and collected, and corruption will automatically drop, so people will no longer have to pay to collect what is rightfully theirs.
4. There will be efficiency gains as transaction costs across the economy should also come down.

5. 1 in 7 notes is supposed to be fake, which has a huge negative impact on economy, by going digital, that can be avoided.
6. Hygiene – soiled, tobacco stained notes full of germs are a norm in India. There are many such incidents in our life where we knowingly or unknowingly give and take germs in the form of rupee notes. This could be avoided if we move towards digital economy.
7. Reduced costs of operating ATMs.
8. Speed and satisfaction of operations for customers, no delays and queues, no interactions with bank staff required.
9. Reduction of tax avoidance because it is financial institution based economy where transaction trails are left.
10. It will curb generation of black money.
11. Will reduce real estate prices because of curbs on black money as most of black money is invested in real estate prices which inflates the prices of Real estate markets.

#### **Suggestion:**

The digital transaction activity had a great step to enhance the transparent economic development empower the financial inclusion and integrates the parallel economy with main stream. In present scenario the country needs to move away from traditional cash based transaction towards a digital payment system Therefore the following suggestions will help to improve digital transaction among the consumers.

- The Government of Maharashtra along with banks should be organize intensive awareness program about the benefits and need of digital payments to students of colleges, higher educational intuitions.
- The banks should organize camp at village to educate the people about digital payment system.
- The Government of India should make necessary step to enhance broadband speed and wide coverage of internet to all areas.
- The government should continue and give some incentive benefits to those who are using regular digital payments because It will motivate not only the regular user but also new user.

#### **Conclusion:**

The Government has implemented various reforms for sustainable and transparent economic development. The demonetization and digital payment system is most important among the reforms. The impact of demonetization was felt more in the social sector and the worst affected was also the poor and common people. The digital transaction is not only requirements but also emerging need of today transparent economic development. In any metropolis can be achieved easily because most of them already adopting digital payment, there is only need of Government should ensure first availability and quality of telecom network in all parts of country. Financial institutes like banks and related service providers will have to constantly invest in technology in order to improve security and ease of transaction. People as a customer will only shift when it's easier, certain and safe to make digital transactions. Government and banks should adopt strategy of incentivize cashless transactions and discourage cash payments by the way of proper implementation and supervision of restrictions for using cash based transaction then the digital Indian will come to true in future.

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## Role and Contribution of RBI in Financial Literacy

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### 1.0 Introduction:

Financial inclusion enables improved and better sustainable economic and social development of the country. It helps in the empowerment of the underprivileged, poor and women of the society with the mission of making them self-sufficient and well informed to take better financial decisions. Financial inclusion takes into account the participation of vulnerable groups such as weaker sections of the society and low income groups, based on the extent of their access to financial services such as savings and payment account, credit insurance, pensions etc. Also the objective of financial inclusion exercise is easy availability of financial services which allows maximum investment in business opportunities, education, save for retirement, insurance against risks, etc. by the rural individuals and firms.

According to the Planning Commission (2009), financial inclusion refers to universal access to a wide range of financial services at a reasonable cost. These include not only banking products but also other financial services such as insurance and equity products. The household access to financial services includes access to contingency planning, credit and wealth creation. Access to contingency planning would help for future savings such as retirement savings, buffer savings and insurable contingencies and access to credit includes emergency loans, housing loans and consumption loans. On the other hand, access to wealth creation includes savings and investment based on household's level of financial literacy and risk perception.

According to Chakraborty (2011), financial inclusion is the process of ensuring access to appropriate financial products and services needed by all sections of society including vulnerable groups such as weaker sections and low income groups at an affordable cost in a fair and transparent manner by mainstream institutional players.

To sensitise financially illiterate people, financial literacy programmes have been initiated by the Reserve Bank in collaboration with commercial banks. Opening multiple channels of credit delivery is expected to improve access to institutional credit for excluded people who, in turn, may help bring them within the ambit of the growth process. Building financial capability through financial literacy is a key component of financial inclusion. It means providing financial education so that individuals can identify and use appropriate financial products and services in order to build and preserve their assets over time. There is expectation of making people better informed, better educated and more confident, able to take greater responsibility for their financial affairs and able to play a more active role in the market for financial services.

Financial Literacy is essential for improving quality of life. It is specifically expected that someone should know to manage his/her personal finance effectively. Financial literacy is the ability to understand how money works in the world: how someone manages to earn or make it, how that person manages it, how he/she invests it (turn it into more) and how that person donates it to help others. The absence of financial literacy can lead to making poor financial decisions that can have adverse effects on the financial health of an individual. Financial literacy is having the knowledge, skills and confidence to make responsible financial decisions. Management of own fund and utilization of the surplus Funds earned by an individual through formal financial system is the basic need for the sustainable development of the economy, for which financial literacy is vital. Financial literacy often entail the knowledge of properly making decision pertaining to certain personal finance like banking, insurance, investing saving and retirement. It also involves intimate knowledge of financial concepts relating to day to day life of an individual. Currently, there is no standard system to provide financial literacy to the population in general. Improving financial literacy can have significant benefits for everyone, no matter what their age or income. By developing confidence, knowledge and skills to manage financial products and services, individuals will be better able to overcome or avoid financial exclusion. Such exclusion impacts on the opportunities individuals can pursue their sense of security and their overall emotional and physical wellbeing. Improved financial literacy can increase economic participation and social inclusion, drive competition and market efficiency in the financial services sector, and potentially reduce regulatory intervention.

Since 2005, the Reserve Bank of India (RBI) and the Government of India (GOI) have been making efforts to increase financial inclusion. Measures such as SHG-bank linkage program, use of business facilitators and correspondents, easing of Know Your Customer (KYC) norms, electronic benefit transfer, separate plan for urban financial inclusion, use of mobile technology, bank branches and ATMs, opening and encouraging 'no-frill-accounts' and emphasis on financial literacy have played a significant role for increasing the use of formal sources for availing loan/ credit. Measures initiated by the government include, opening customer service

centres, credit counselling centres, Kisan Credit Card, Mahatma Gandhi National Rural Employment Guarantee Scheme and Aadhar Scheme. These renewed efforts are more focused than the earlier measures which were more general in nature having a much wider scope. Though the measures were initiated earlier, their impact on the rural population needs to be analysed and reframed in order to understand the present scenario in the rural areas.

## 2.0 Objectives of the Study:

1. To study role of RBI in financial literacy
2. To study performance of RBI in financial literacy
3. To overview financial awareness policy of RBI
- 4.

## 3.0 Research Methodology of the study:

This study is purely depending on secondary data. Data is collected from various reference books, research articles, reports and websites. For analysis researcher used descriptive and analytical research methods.

## 4.0 Role and Contribution of RBI in Financial Literacy:

Financial literacy is crucial for imparting efficacy to financial inclusion initiatives of the RBI. The RBI has adopted a planned, structured, and integrated approach to achieving financial inclusion through financial literacy. 718 Financial Literacy Centres (FLCs) have been set up as at the end of March 2013. A total of 2.2 million people have been educated through indoor education to walk in persons and through outdoor activities such as awareness camps, ghostis, seminars and lectures in a one year period from April 2012 to March 2013. It has advised all FLCs and rural branches of scheduled commercial banks to conduct a minimum of one outdoor financial literacy camp every month, to link the financially excluded segment with the banking system. The RBI has designed a Model Architecture for conducting the literacy camps, which deals the operational modalities so that it culminates in effective financial access for excluded people. The National Strategy for Financial Education (NSFE) will be implemented in a timeframe of five years and aims to establish initial contact with 500 million adults and educate them on key savings, protection and investment-related products so that they are empowered to take prudent financial decisions. It also seeks to create awareness about consumer protection and grievance redressal mechanisms available in the country.

As at end March 2015, 1181 FLCs were operational in the country, up from 942 as at end March 2014. During the period April 2014 to March 2015, financial literacy camps were conducted by 32509 rural branches of banks and 1.4 million and 5.7 million participants opened accounts in the camps organised by the FLCs and rural branches of banks, respectively. In order to explore innovative and participatory approaches to financial literacy, a block level CFL project was initiated in 2017 by the RBI across 80 blocks in 9 states. The project is currently being implemented by 6 NGOs in collaboration with 10 sponsor banks. To create awareness at a large scale on key topics every year, the RBI had decided to observe one week in a year as “Financial Literacy Week” starting from 2017. As at end March 2018, 1395 FLCs were operational in the country. During the year ended March 2018, 129280 financial literacy related activities were conducted by the FLCs as against 96315 activities during the preceding year.

### i) Financial literacy for Farmers:

The Kisan Credit Card Scheme aims at providing timely and adequate credit to farmers to meet their needs at the time of crop production (cultivation expenses), besides meeting contingency expenses. It also covers expenses related to ancillary activities through simplified procedures in obtaining loans as and when needed. While 10 per cent of the short-term limit under KCC can be used for household consumption purposes, it is advisable not to divert more funds for consumption expenditure. A 4 per cent rate of interest for short-term crop loans up to Rs. 3 lakhs during 2017–18 (Interest Subvention Schemes as announced by the Government of India from time to time)\*. Even when you have a good harvest, the job is only half done. You need to sell your produce at good prices. If you feel you are not getting a fair price, store your produce in warehouses against warehouse receipts. # You will get financing from the bank for your immediate cash needs—the benefit of interest subvention will be available to small and marginal farmers having a Kisan Credit Card (KCC). This will be for a further period of up to six months post-harvest and at a rate of 7 per cent\* against negotiable warehouse receipts for keeping their produce in warehouses. PradhanMantriFasalBimaYojana (PMFBY) provides a comprehensive insurance cover against crop failure, thus helping in stabilising the income of farmers and encouraging them to adopt innovative practices. Once the central/state Government has declared your area as affected by a natural calamity (e.g., cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloud burst, pest attack and cold wave/frost), and if the crop loss is assessed to be 33 per cent or more, it is imperative that you approach the branch of your bank that has provided you the loan, as your repaying capacity gets impaired due to the damage caused by the natural calamity.



**ii) Financial literacy for Entrepreneurs:**

Non-farm entrepreneurs can obtain credit facilities for both working capital and term loan requirements by getting a General Credit Card (GCC) from the bank. The Banking Codes and Standards Board of India (BCSBI) has prescribed timelines for disposal of loan applications that are complete in all respects and are accompanied by documents as per the 'checklist' provided. The banks which are members of the BCSBI have to adhere to the following:

- a. MSE loan application for a credit limit or enhancement in the existing credit limit of up to Rs. 5 lakhs: 2 weeks
- b. For credit limit above Rs. 5 lakhs and up to Rs 25 lakhs: 3 weeks

The Code does not replace or supersede regulatory or supervisory instructions issued by the Reserve Bank of India (RBI) and banks will comply with such instructions/directions issued by the RBI from time to time. In business, it is often necessary to provide credit, which means to accept payments from customers on a future date as per agreement. When that happens, there is not enough money to buy supplies for the next day and pay for other obligations like rent and wages. The payments that are to be received at a later date as per agreement are called receivables and the customer who is expected to pay at a later date is called a debtor. In such a situation, when money from sales is delayed, business need not stop for want of funds. The vegetable seller can go to the bank and request lending against receivables. The bank provides finance against the amount of receivables after reduction of margin. Interest on the loan is charged only on the outstanding amount of the loan. Loans that are availed for a specific purpose and are to be repaid over a long period (one year and above) are called 'Term Loans'.

**iii) Financial literacy for Self-Help Groups:**

Suppose you have formed a Self-help Group (SHG) of 10–20 people for engaging in thrift and credit activities and you would like to now open a savings bank account for the SHG. You should be aware that the KYC verification of all the members of the SHG need not be done while opening the savings bank account of the SHG. The KYC verification of all the office-bearers would suffice. However, resolution of SHG indicating the name of office-bearers authorised to open the account on behalf of the SHG is required to be submitted. The bank may sanction your SHG, a loan based on your total corpus. Suppose your SHG has a corpus of Rs. 10,000 (in the form of cash balance with the SHG + savings account balance with bank + amount lent to members), the loan amount may vary from Rs. 10,000 to Rs. 40,000. Generally, as a member of an SHG, you would contribute a fixed amount as compulsory savings in weekly/fortnightly/monthly SHG meetings. Your capacity to earn and capacity to save would increase substantially over time and it may be different from the other members of the group. You may voluntarily contribute more than the fixed amount of savings that the other members contribute. An individual member of a group can have two savings contributions, one fixed by the group and the second voluntary. You may open an individual bank account/revive your existing individual basic savings account by depositing your surplus so that your planned expenditure in the future is met from such savings. Alternatively, you can park your surplus within the SHG itself in the form of voluntary savings over and above the compulsory savings mandated in the group. The members of the SHG shall decide the periodicity of the meetings. Such meetings should preferably be on a weekly basis but can also be on fortnightly/monthly basis, based on the convenience of the group. Full participation by all members in the group meetings will facilitate stabilisation of the group, which will start working for the benefit and satisfaction of all. Lending and borrowing is fundamentally based on trust and creditworthiness of the borrower. It is the duty of the borrower to pay back instalments on time. Delayed payment of instalments results in paying more interest, leads to bad credit history and makes future borrowing difficult on account of poor credit record/scores. A credit score is a statistically derived numeric expression of a person's creditworthiness, arrived at by credit information companies (CIC), that is used by banks to assess the likelihood that a person will repay his or her debts. A credit score is based on, among other things, a person's past credit history. It is a number between 300 and 900—the higher the number, the more creditworthy the person is deemed to be.

**iv) Financial literacy for School Children:**

The first step in managing money successfully is being able to differentiate between NEEDS and WANTS. As we can see from the photos above, NEEDS are a must-have, whereas WANTS are good to have. WANTS can be postponed and acquired later. When we learn to identify our WANTS and inculcate the habit of postponing those WANTS, we should be able to achieve most of our financial goals. Budgeting is the art of balancing income and expenses to ensure that expenses are always less than income. The surplus generated, if any, can be invested for future needs. An investment is like planting a tree. If monitored regularly and allowed sufficient time to grow, good returns can be expected. Traditionally, investors preferred gold, land and real estate as investment. Lately, however, the number of investors choosing financial assets like stocks or mutual funds is on the rise. The popularity of an education loan option is increasing with each passing year. More students are exploring the option of funding the cost of their higher education through education loans. Recognising the growing need for education loans, a new portal has been launched to provide not only information on education loans, but also a single-window application process to multiple banks.



**v) Financial literacy for Senior Citizens:**

There are many tools available for estate planning for senior citizens. Most important among them is what is called 'Nomination'. However, a WILL can supersede a Nomination. No need to open separate account for pension. Pension account can be transferred to another branch or different bank. Existing account can be used for receiving pension. Do remember to submit your 'Life Certificate' to your bank branch in November, every year and obtain a duly signed acknowledgement receipt of the same from the concerned bank. In case a pensioner is unable to obtain a Life Certificate on account of serious illness/incapacitation, a bank official will visit his/her residence/hospital for the purpose of obtaining the Life Certificate. 'JeevanPramaan' – Digital Life Certificate using Aadhar and mobile at: [www.jeevanpramaan.gov.in](http://www.jeevanpramaan.gov.in) It is advisable to keep a joint account with your spouse and have the nomination registered or have 'either or survivor' or 'former or survivor' operating instructions in your account.

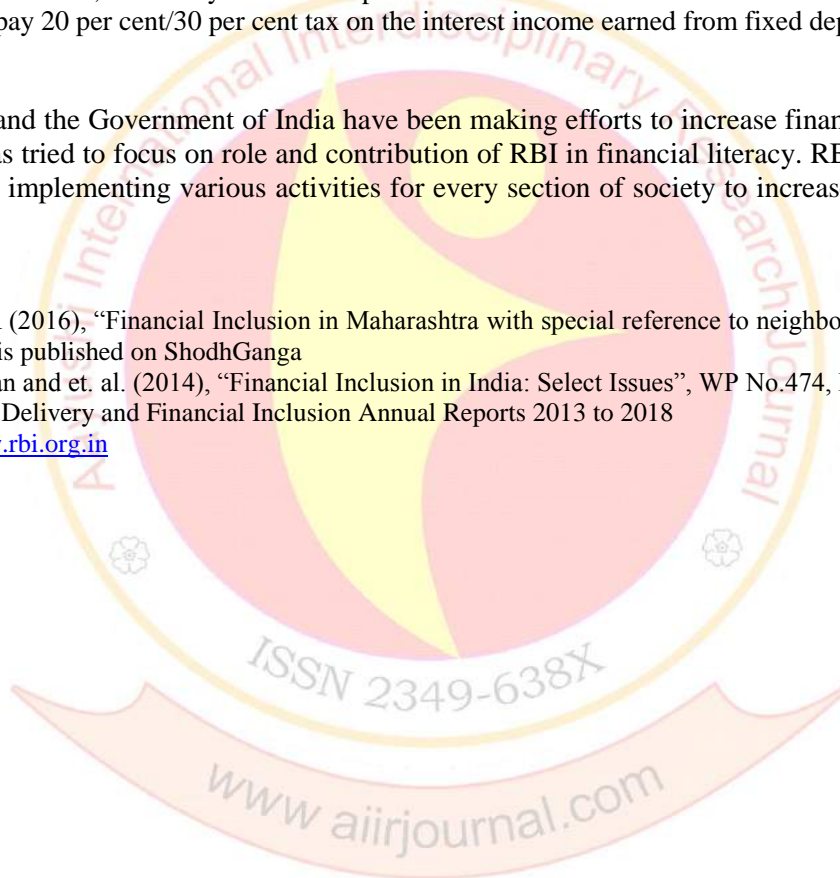
To withdraw your fixed/term deposits prematurely in case of need, you have to ensure that you have given the bank a mandate for the same at the time of making the deposit or at any time during the tenure of the deposit. The Senior Citizen Savings Scheme (SCSS) 2004 is a very good option for retired persons. The SCSS offers an attractive rate of return and interest is paid quarterly. The interest received will be subjected to tax at applicable rates. The investment is limited to Rs.15 lakhs per person. Fixed deposits are a very good option for those who have an annual income less than Rs. 5 lakhs, since they are in the 5 per cent tax bracket. Those who have an annual income of above Rs. 5 lakhs need to pay 20 per cent/30 per cent tax on the interest income earned from fixed deposits.

**5.0 Conclusion:**

Thus RBI and the Government of India have been making efforts to increase financial inclusion. In this study researcher has tried to focus on role and contribution of RBI in financial literacy. RBI is publishing target group material and implementing various activities for every section of society to increase financial literacy in the country.

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## A Conceptual Study On Digital Payment

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### Introduction

India is primarily cash-intensive economy. In India people prefer cash transactions, due to some causes like that, Lack of infrastructure to accept payment, Most people view a bank account as a savings account rather than a means of payment, Cash based payments are free of charges and people find it annoying. The Digitally, Empowered economy such as 'Faceless, Paperless and Cashless' economy were created by the government of India through 'Digital India' Campaign. The most countries in the world have adopted digital payment. But in India's case, the decision taken by the central government on November 8, 2016, demonetization shows the use of digital payment in the country. The demonetization shows to changed digital payments in the country has a lot of positive part of reason that the trends of large numbers of people has increased towards digital payment.

### Concept of Digital payment –

Digital payment defined by the payment and settlement act 2007. Digital payment means 'electronic funds transfer'. All the transaction carried out between two individual can be occur by payment through payment gateway. It is done with primary aim of uncovering the non-registered transaction. Indian government with another aim to promote the economy through non-cash transactions has introduced channels/ mediums such as Banking cards, USSD, AEPS, UPI, mobile wallets, Bank prepaid card, point of sale, internet banking, mobile banking, micro ATMs, etc. reducing the economy's dependence on the cash.

### Benefits of Digital Payment

Digital payments are simply enough payment's made through digital channels. They convert traditional cash operation to cashless one. All transactions are complete online. some of the advantages of digital payment are following

- Financial inclusion by advancing access to range financial services in including saving account and insurance product's.
- Transferency and security by increasing accountability and tracking reducing corruption and theft as a result.
- cost saving through increased efficiency and speed.
- More secure than tradition transaction because they are processed by secure gateway which are hard to tamper with.
- Customer's has no longer need to carry cash because customers can pay any time any part of the world by using digital payment channels.
- Digital transactions will be help to the government keep track of things and it will be help eliminate the circulation of black money and counter felt notes in long run.

### Digital transactions in India

In India to promote digital payments in all over the country, The Reserve Bank of India has commercial banks, government entities and other regulatory bodies to work in collaboration with the start-up eco system. A numeral tax benefits are expected to be offered for those business proprietors who have integrate digital payment in their transactions. After demonetization, it was found that around 60% of all India's transaction were made by digitally.

#### Digital transactions in India (values Rs. Crore)

Payment system indicators					
Sr.no	System	July	Aug	Sep	Oct
1	RTGS	16004194	14842138	14298230	13861415
2	Cards	400703	405536	389350	457099
3	Prepaid payment instruments(PPIs)	18437	18324	17835	18658
4	Paper clearing	682194	637093	591754	660305
5	Mobile Banking	563140	328043	470168	532731
6	Electronic clearing	2114124	2136863	2140501	2274223

Source- RBI Bulletin

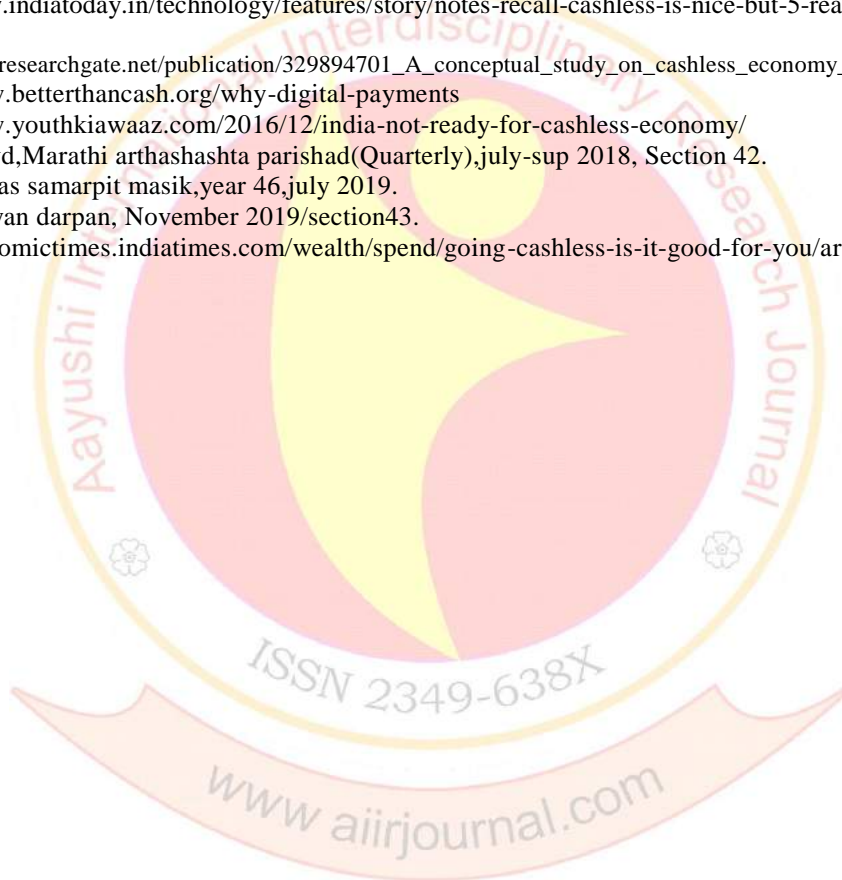
Above table give the details at transactions made by using digital payment in India. In RTGS & paper clearing uses, decline 16004194 core to 13861415 core & 682194 to 660305 crore respectively from the month July 2019 to oct 2019. Uses of cards, mobile banking properly increasing during that period.

### Conclusion

It will expectation from the upcoming years the number of digital payment transactions rise in India. Over the next few years, large number of Indian's using digital payment medium/ channels will help become a cashless economy. Under the guidance of Government of India, banking and financial services sector has taken to build trust. Surely, due to the constant innovation in the technology and the increasing awareness about digital payment, the Indian economy can be cashless in future.

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## Digital Payment System in India: Facts & Figures

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### Introduction

21<sup>st</sup> century is a area of Computerization and internet. Every sectors deal with internet & telecommunication networking. It's included education, science, agricultural and defense sectors also. The banking sectors are not exempted from these. In old day, we used cash for purchasing our goods or services, standing in a long queue. But today, there is no need to used cash for purchasing our goods or services that means, we are used digital cash. We are able to find out the alternative to Cash i.e. digital cash. Day today, many people have reluctantly adopted the alternate payment system due to the cash crunch and now more and more people are willingly adopting this alternative payment system leaving traditional cash based payments system. There are various alternative payments channels used in day today life like Internet Banking, Mobile-Banking, POS (Point of Sale terminal), Mobile Wallets, MPOS (Mobile Point of Sale terminal), Kiosk, ATM, USSD, BHIM Adhar pay etc.

Day to day, Digital payment system is become popular. Digital payment especially Retail payment has been growing speedily in India. According to RBI data, Volume of Financial & Non-Financial transaction was growing rapidly. In 2014-15, financial transaction volume was 3,709.46 million; they increased up to 16,799.46 million. As a same manner, volume of non-financial transaction has increased from 720.36 million to 7960.42 million in 2014 to 2019. At present most used digital payment mode are UPI and Rupay Card respectively. The uses of UPI are tremendously increased in India. As per data, taking base year 2016-17 use of UPI has growing 98.05% in 2017-18 and 82.90% in 2018-19. It is clear that, Digital payment system in India are Growing faster.

In this article, main focused on retail payment system in India. Because of people are use and they have changed his behavior pattern about using digital payment system like that, Digidhan Campaign, Digital India etc. Not only people but also Indian Government agencies are help to motivate the people and launching various scheme for promote Digital Payment system.

### Objectives of the study

The objectives of the present research to focus on the Digital payment system in India: facts and figures.

1. To know about Digital payment system segments
2. To analyses Retail payment System in India.
3. To Know about digital payment system facts & figures in India.

### Research methodology

#### 1. Research area:-

The present study deals with the Digital payment system in India: facts and figures. The principal objective of study is to know about digital payment system facts & figures in India.

#### 2. Data Collection and analysis

This study is based on only secondary data to meet the objective of study. The secondary data was collected through Books, Magazine, and Internet especially through RBI website report. The data was analyzed with the help of Advance Ms-Excel software and presented with a Graph. AAGR and Graph are used as a statistical tools.

### Segments of Payment systems

The payment system could be divided into two main segments. The first segment contains of instruments which are covered under systemically important financial market Infrastructure (SIFMs) and the second part consists of retail payments. Following are the instruments covered under the segments of Payment Systems.

#### A) Systemically Important Financial Market Infrastructure (SIFMs)

1. RTGS
2. Financial Markets Clearing i.e. CBLO, Government Securities Clearing, Forex Clearing etc.

#### B) Retail Payments

1. Paper Clearing i.e. CTS, MICR Clearing and Non-MICR Clearing
2. Retail Electronic Clearing

In retail Electronic Clearing consist ECS DR, ECS CR, EFT/NEFT, Immediate payment service (IMPS) UPI, NACH, Credit Cards, Debit Cards, PPIs etc.

These are the segments of Payment system. This research paper focused on only retail payment system because of it shows the facts and figure of Digital Payment system in India which is used by himself people.

### Growth of Digital Transaction In 2014 to 2019

Chart 1 & II is given the information of the growth trends in Digital payments over the past five year. As per the RBI data source, the analysis covers the trends over the year 2014-15 to 2018-19 i.e. years of demonetization and Digidhan campaign.

The following analysis on growth trends is based on data provided by RBI.

#### Value overall growth performance

The value of overall payments gradually increased over the period 2014-15 to 2018-19, recording a compound average annual growth rate (CAGR) of over 13 per cent. The growth in 2017-18 and 2018-19 is spectacular and could be recognized to development of innovative digital payments platform.

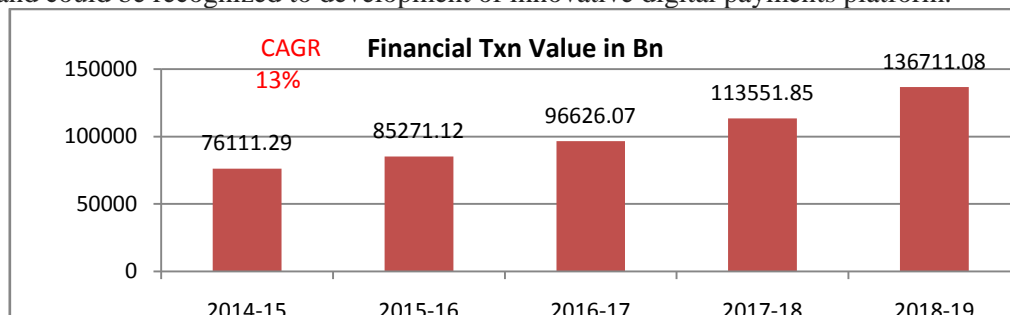


Chart 01 (Source: RBI Website)

#### Volume overall growth performance of Non Financial Transactions

The Volume of non financial transactions of retail payment are rapidly increased over the period 2014-15 to 2018-19, the growth in 2017-18 and 2018-19 is impressive and could be recognized to development of innovative digital payments platform and started of DigiDhan Campaign in India.

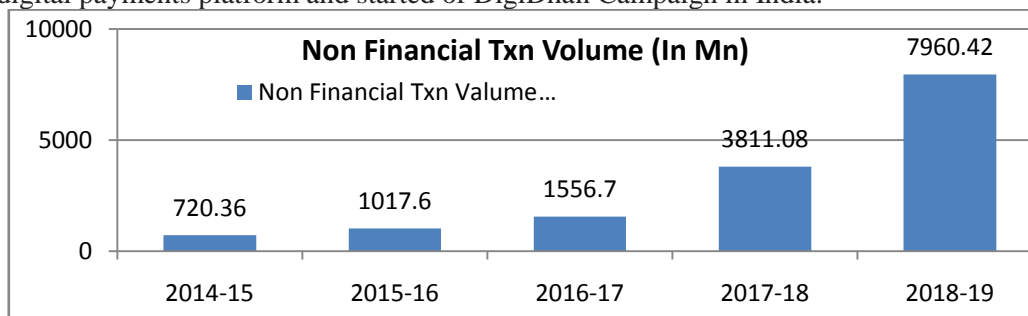


Chart 02 (Source: RBI Website)

#### Overall Growth performance of Financial Transaction in Retail Payment

Chart 3, indicates that the Growth of Digital payment system in India especially in 2018-19. It shows that day today use of digital payment aspects are used in the India.

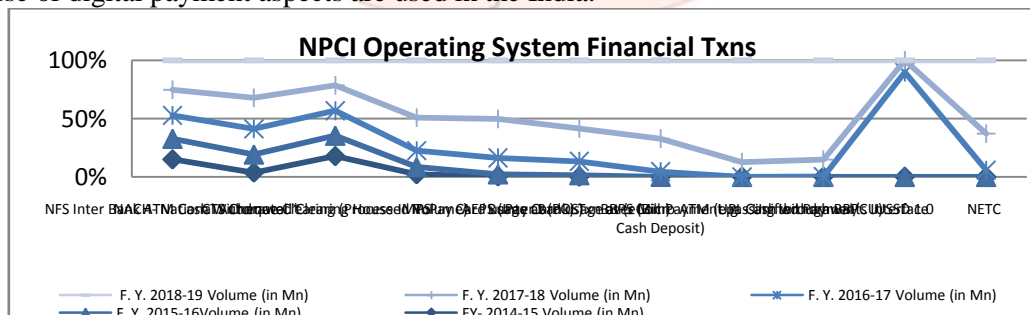


Chart 03 (Source: RBI Website)

#### Overall Growth performance of Non-Financial Transaction in Retail Payment

Chart 4, indicates that the Growth of Non-Financial Transaction in India especially in 2018-19. It shows that, Most of non-financial transactions are done through Digital Payment system.

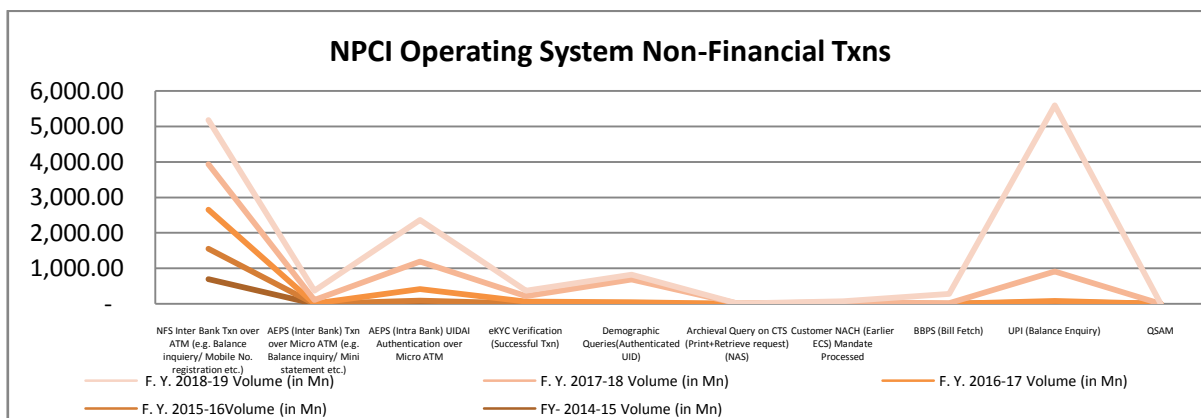


Chart 04 (Source: RBI Website)

**Facts and Face of Retail Payment (People Used)**

Chart 5, Focused on the use of people of Digital payment system in India. It shows that, people was not more used Digital Payment mode to transaction in 2014 to 18. But it was increased in 2018-19.

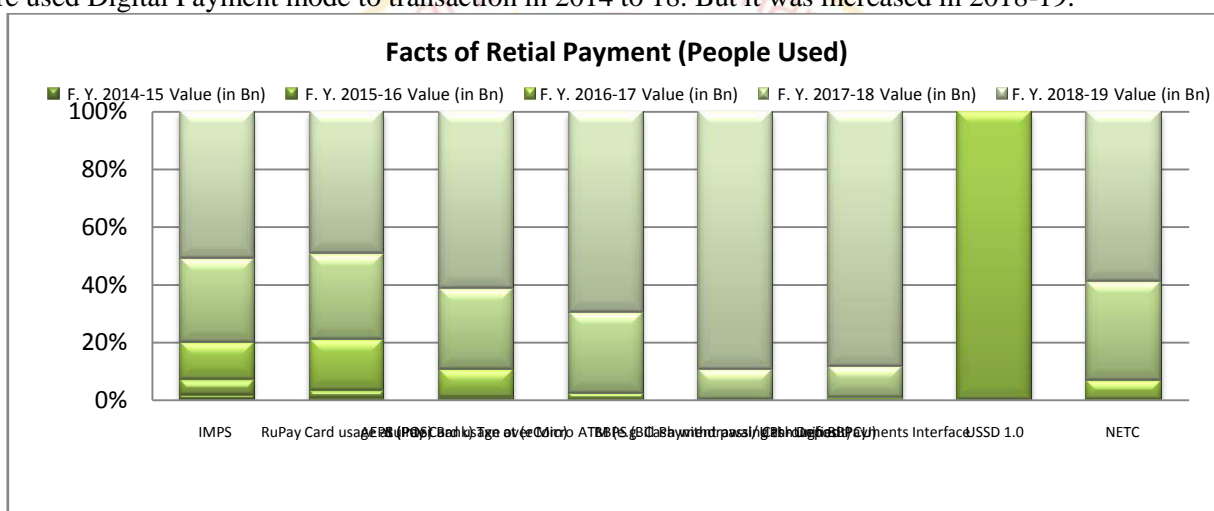


Chart 05 (Source: RBI Website)

**Most Used Payment mode in India through Customer**

Chart 06 indicates that, the UPI is the first place and RuPay card in second place mode used in India. From 2016 to 2019, use of UPI has speedily increased i.e. 17.86 billion to 5,353.40 billion.

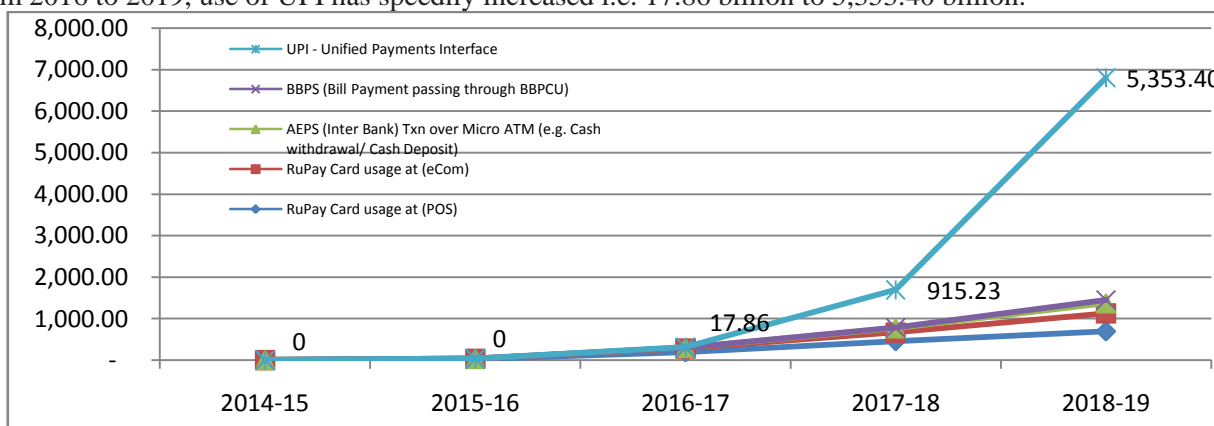


Chart 06 (Source: RBI Website)

**Key Finding:**

1. The value of Retail payments gradually increased over the period 2014-15 to 2018-19, recording a compound average annual growth rate (CAGR) of over 13 per cent.
2. The **Volume** of non financial transactions of retail payment is rapidly increased over the period 2014-15 to 2018-19.
3. In 2018-19, financial & Non-financial transactions are increased from last five years.



4. From 2016 to 2019, use of UPI has speedily increased i.e. 17.86 billion to 5,353.40 billion.
5. All data shows that, use of digital payment system in India are incised.

### Conclusion

Day to day, Digital payment system is become popular. Digital payment especially Retail payment has been growing speedily in India. According to RBI data, Volume of Financial & Non-Financial transaction was growing rapidly. In 2014-15, financial transaction volume was 3,709.46 million; they increased up to 16,799.46 million. As a same manner, volume of non-financial transaction has increased from 720.36 million to 7960.42 million in 2014 to 2019. At present most used digital payment mode are UPI and Rupay Card respectively. The uses of UPI are tremendously increased in India. As per data, taking base year 2016-17 use of UPI has growing 98.05% in 2017-18 and 82.90% in 2018-19. It is clear that, Digital payment system in India are Growing faster.

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## Digital Payments: Advantages And Difficulties

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### 1. Concept of Digital Payments:-

“Cashless payment is a way of payment which is made through digital modes. In digital payments, payer and payee both use digital modes to send and receive money. It is also called electronic payment.”

No hard cash is involved in digital payments. All the transactions in digital payments are completed online. It is an instant and convenient way to make payments. This process is automatic and neither you nor the shopkeeper is required to visit the bank. It saves you from long queues of ATMs and banks.

### 2. Growth of Digital payments in India:-

Digital payments in India are witnessing thriving growth with a compound annual growth rate (CAGR) of 12.7 per cent in the number of non-cash transactions, A KPMG report said that the mobile payment with its evolving form factors has led to a boom in the number of merchants adopting digital payments. From close to 1.5 million digital payment acceptance locations in 2016-17, the number of merchants accepting digital payment modes has increased to over 10 million, in a short span of two to three years, “the report “Fintech in India – Powering mobile payments” said.

The global digital payments market is expected to touch \$10.07 trillion by 2026. The mobile wallet market is expected to continue its expansion at a CAGR of nearly 52.2 per cent by volume during 2019-23, it added.

Another factor that has led to the next wave in mobile payments is the Unified Payments Interface (UPI)-based real time payments. The volume of UPI transactions have increased at a CAGR of 246 per cent during the period from 2016-17 to 2018-19.

Some factors such as inter-operability, and possibility of origination across different platforms such as mobile wallets, are further fueling the growth of UPI transactions.

Mobile payments have witnessed a major shift in the past five years with the proliferation of payments like UPI, mobile wallets, Bharat Interface for Money (BHIM), BharatQR and Unstructured Supplementary Service Data (USSD), it said.

The Reserve Bank of India has forecast an outcome of 50 percent increase in mobile-based payment transactions as per its ‘2021 vision document’. This shift can be attributed to driving factors such as robust payment infrastructure, evolution of form factors, availability of structured data, shift in consumer behavior and the government’s vision of transforming India into a cashless economy.

According to the report, while feature phones were limited to USSD, the advent of smartphones and the Internet has opened up a host of form factors and access to payment technologies. The Digital India program is a flagship programs of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy. ‘Faceless, Paperless, Caseless’ is one of professed role of Digital India.

### 3. Type of modes:-

As part of promoting cashless transactions and converting India into less-cash society, various modes of digital payments are available

#### 1. Banking Cards (Debit/Credit/Cash/Travel/Others):-

Banking cards offer consumers more security, convenience, & control than any other payment method. The wide variety of cards available—including credit, debit and prepaid—offers enormous flexibility, as well. These cards provide 2 factor authentication for secure payments e.g. secure PIN and OTP. Rupay, Visa, MasterCard are some of the example of card payment systems. Payment cards give people the power to purchase items in stores, on the Internet, through mail-order catalogues and over the telephone. They save both customers and merchants’ time and money, and thus enable them for ease of transaction.

#### 2. Unstructured Supplementary Service Data (USSD) :-

The innovative payment service \*99# works on Unstructured Supplementary Service Data (USSD) channel. This service allows mobile banking transactions using basic feature mobile phone, there is no need to have mobile internet data facility for using USSD based mobile banking. It is envisioned to provide financial deepening and inclusion of underbanked society in the mainstream banking services.

\*99# service has been launched to take the banking services to every common man across the country. Banking customers can avail this service by dialing \*99#, a “Common number across all Telecom Service Providers (TSPs)” on their mobile phone and transact through an interactive menu displayed on the mobile screen. Key services offered under \*99# service include, interbank account to account fund transfer, balance enquiry, mini

statement besides host of other services. \*99# service is currently offered by 51 leading banks & all GSM service providers and can be accessed in 12 different languages including Hindi & English as on 30.11.2016 (Source: NPCI). \*99# service is a unique interoperable direct to consumer service that brings together the diverse ecosystem partners such as Banks & TSPs (Telecom Service Providers).

### **3. Aadhaar Enabled Payment System (AEPS):-**

AEPS is a bank led model which allows online interoperable financial transaction at PoS (Point of Sale / Micro ATM) through the Business Correspondent (BC)/Bank Mitra of any bank using the Aadhaar authentication.

### **4. Unified Payments Interface (UPI):-**

Unified Payments Interface is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood. It also caters to the "Peer to Peer" collect request which can be scheduled and paid as per requirement and convenience. Each Bank provides its own UPI App for Android, Windows and iOS mobile platform(s).

### **5. Mobile Wallet:-**

A mobile wallet is way to carry cash in digital format. You can link your credit card or debit card information in mobile device to mobile wallet application or you can transfer money online to mobile wallet. Instead of using your physical plastic card to make purchases, you can pay with your smartphone, tablet, or smart watch. An individual's account is required to be linked to the digital wallet to load money in it. Most banks have their e-wallet and some private companies. E.g. Paytm, Freecharge, Mobikwik, Oxigen, mRuppee, Airtel Money, Jio Money, SBI Buddy, itz Cash, Citrus Pay, Vodafone M-Pesa, Axis Bank Lime, ICICI Pockets, Speed Pay etc.

### **6. Point of Sale:**

A point of sale (PoS) is the place where sales are made. On a macro level, a PoS may be a mall, a market or a city. On a micro level, retailers consider a PoS to be the area where a customer completes a transaction, such as a checkout counter. It is also known as a point of purchase.

### **7. Internet Banking:-**

Internet Banking, also known as online banking, e-banking or virtual banking, is an electronic payment system that enables customers of bank or other financial institution to conduct a range of financial transaction through the financial institution's website.

### **8. Mobile Banking:-**

Mobile Banking is a service provided by a bank or other financial institution that allows its customers to conduct different types of financial transaction remotely using a mobile device such as a mobile phone or tablet. It uses software, usually called an app, provided by the banks or financial institution for the purpose. Each Bank provides its own mobile banking App for Android, Windows and iOS mobile platform(s).

**9. Micro ATMs:-**Micro ATM meant to be a device that is used by a million Business Correspondents (BC) to deliver basic banking services. The platform will enable Business Correspondents (who could be a local kirana shop owner and will act as 'micro ATM') to conduct instant transactions.

The micro platform will enable function through low cost devices (micro ATMs) that will be connected to banks across the country. This would enable a person to instantly deposit or withdraw funds regardless of the bank associated with a particular BC. Essentially, BCs will act as bank for the customers and all they need to be supported by micro ATM, are Deposit, Withdrawal, Fund transfer and Balance enquiry.

### **4. Advantages of Digital payments:-**

E-payments have several advantages, which were never available through the traditional modes of payment. Some of the most important are:

1. Times savings. Money transfer between virtual accounts usually takes a few minutes, while a wire transfer or a postal or a postal one may take several days. Also, you will not waste your time waiting in lines at a bank or post office.
2. Expenses control. Even if someone is eager to bring his disbursements under control, it is necessary to be patient enough to write down all the petty expenses, which often takes a large part of the total amount of disbursements. The virtual account contains the history of all transactions indicating the store and amount you spent. And you can check it anytime you want. This advantage of electronic payment system is pretty important in this case.
3. Reduced risk of loss and theft. You cannot forget your virtual wallet somewhere and it cannot be taken away by robbers. Although in cyberspace there are many scammers, in one of the previous articles we described in detail how to make your e-currency account secure.
4. Low commissions. If you pay for internet service provider or a mobile account replenishment through the UPT (unattended payment terminal), you will encounter high fees. As for the electronic payment system: a fee of this kind of operations consist of 1% of the total amount, and this is a considerable advantage.



5. User-friendly. Usually every service is designed to reach the widest possible audience, so it has the intuitively understandable user interface. In addition, there is always the opportunity to submit a question to a support team, which often works 24/7. Any way you can always get an answer using the forums on the subject.

6. Convenience. All the transfers can be performed at anytime, anywhere. It's enough to have an access to the Internet Individuals can pay their bills and make purchases at unconventional locations 24 hours a day, 7 days a week, 365 days a year. There is no waiting for a merchant or business to open. Debit cards and online bill payments allow immediate transfer of funds from an individual's personal account to a business's account regardless the designated place (around the globe) by few clicks without any actual paper transfer of money.

#### 5. Disadvantages of Digital payments:-:-

**1. Authentication/Fraud-** There is no way to authenticate or verify that the individual entering the information online is who they are. There is no request for picture identification or even a signature. Therefore, an unauthorized user may carry out transactions in your name before you have time to alert authorities the information has been taken. Because no identifying information is provided at the time of the online payment, an individual may have an extremely hard time disputing a charge later. Further, given the benefits of convenience and speed that come along with e-payments, this creates the perfect opportunity for fraudulent credit and card transactions.

**2. Restrictions-** Each payment system has its limits regarding the maximum amount in the account, the number of transactions per day and the amount of output.

**3. Hacking-** If you follow the security rules the threat is minimal, it can be compared to the risk of something like broken, because it leads to the leak of personal data on cards and its owners. Even if the electronic payment system does not launch plastic cards, it can be involved in scandals regarding the Identity theft.

**4. Transferring money between different payment systems-** Usually the majority of electronic payment systems do not cooperate with each other. In this case, you have to use the services of e-currency exchange, and it can be time-consuming if you still do not have a trusted service for this purpose. Our article on how to choose the best e-currency exchanger greatly facilitates the search process.

**5. The lack of anonymity-** The information about all the transactions, including the amount, time and recipient are stored in the database of the payment system. And it means the intelligence agency has an access to this information. You should decide whether it's bad or good.

**6. Internet access-** If Internet connection fails, you cannot get your online account. There is also a pressing issue regarding the technology involved in electronic cash such power failures, internet connection failure, loss of records and undependable software. These often cause a major setback in promoting the technology.

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## Cashless Economy – Challenges and Opportunities in India.

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### Abstract

In recent years, economic transactions are carried out through electronic or online or cashless means all over the world especially in developed countries and developing countries like India. As a result of increased digital means of payment has brought down usage of cash transactions in the economy. A cashless transaction in India is an effort to move towards a cashless economy by minimizing the use of physical cash. The main objective of the study is to present the current status of India in usage of digital currency in comparison to other developed countries and find the challenges and opportunities which are associated with the cashless transaction in India. The data of different countries which are related to usage of digital currencies has been gathered. Data is gathered by using secondary data collection method and then graphical representation is being used. The findings of the study revealed that the introduction of cashless economy in India can be seen as a step in the right direction of economy growth and development. It has been conducted to unravel the challenges and opportunities of cashless economy by promoting electronic money instruments, developing electronic financial infrastructures and spreading digital transaction habits among people. Demonetization announcement (2016) is a revolutionary move towards the cashless economy in India. The study recommends that more people should start using digital payment methods which will serve a cashless economy or less cash economy.

Digital transactions have the features of speed, less cost, and comfort. A well-functioning digital payment system has much relevance on overall economic activity, monetary policy, and financial stability of a country. This study tries to verify the impact of digital payments on the economic growth of India. The economic growth is measured through a proxy-real Gross Domestic Product. Digital payments are measured using Real Time Gross Settlement (RTGS), Clearing Corporation of India Ltd (CCIL) operated systems, paper clearing, retail electronic clearing, Card payments, and Prepaid Payment Instruments (PPIs). Data for digital payments and real GDP are collected from the year 2011 to 2019. Ordinary Least Square Regression, Auto-Regressive Distributed Lag (ADRL) co-integration approach and ARDL Bounds test are employed for the analysis. The study results reveal that digital payments impact economic growth significantly in the short run. But, digital payments don't impact economic growth in the long-run.

**Keywords:-**Cashless Economy, Digital Currency, Global Economy, GDP(Gross Domestic Product), Economic Freedom, Intern

### Review of Literature

The demise of cash and the emergence of a cashless society pose a lot of benefits for the society (Humphrey et.al., 1996). According to CBN (2011), an effective and modern payment system is positively correlated with economic growth. In the growth of Global economy, digital currency has a key role for transaction of money for businessmen, consumers and governments around the world. Almost 25 percent of worldwide consumer spending was through some form of payment card, up from 16 percent in 2003. The report says, Digital currency delivered an additional \$1.1 trillion to the global economy cumulatively in the six years from 2003 through 2008. On average, that represents a 0.5 percent increase in total annual gross domestic product (GDP). During the same period, real Global GDP grew by an average of 3.4 percent (Moody's, 2008). Country's economic health can be measured by the evaluation of country's economic growth and development. Economic growth is usually indicated by an increase in the country's gross domestic product (GDP) which is the total value of any goods and services produced in the country mostly it is associated with the new technologies and development. In other way economic development is usually indicated by an increase in citizens' quality of life which covers literacy rate, life expectancy and poverty etc. (Duggeri Ashley) Digitalization of traditional payment methods is a revolutionary development of banking industries, Internet services and mobile industries. Digital payment methods provide more economic freedom to people. It may give an opportunity to establish new technologies and developments worldwide, resulting growth of the country's GDP and economy. New developments of industries provide more employments, increase in per capita income, improve people quality life etc.. It reduces corruption and bribery too. In the last two decades, the average growth of Economic freedom globally is only 3 percent (from 57% to 60% approximately – Figure2) (Index of Economic Freedom 2017) but increase of digital currency can develop more economic freedom in the world which can serve new technologies and innovations, growth in GDPs, more opportunities of employments, reduce corruption and terrorism and raise peace and happiness all over the world.

### Research Methodology

Electronic databases and online libraries are searched for relevant literature using a comprehensive set of keywords and graphical representation relating to cashless technology of different countries including India. Information was gathered from web based search engines, published literatures.

Secondary Data: The secondary data are collected through government records, Articles, Journals, Survey reports, Research Data and Websites information.

### Objectives of the Study :

The main objective of the study is to examine that the importance of cashless policies in the economy of a country and how it affects to their economic growth. Specifically the objective of this study includes:

- To find out the status of India in comparison of other countries in terms of cashless economy.
- To find out various challenges and opportunity associated with the implementation of the cashless policies in India.
- To find out solutions to be adopted against challenges associated with the implementation of the cashless policies in India.

Limitation of the Study:- This study is limited in terms of providing model scope to show the relationship between cashless policies and different variables of finance

### Scope of the study

Work on the cashless economy is scarce, so scope of study is more. Researchers further need to understand the mechanism of cashless policies effecting cashless payments and their effect on the Indian economy.

### Analysis of the Study:

Challenges of Cashless Economy In the process of digitalization's of an economy of the country, it is very important to assure that the availability of proper sources to setup require technology and sufficient manpower to provide prompt services in time. A bank account is a primary requirement for digitalization. Hence Banks have a core responsibility to improve and develop them self -first. There are some challenges in the process of cashless economy in India.

a) Internet plays vital role between banks and customers to receive and deliver information, this forms of banking is describes as Internet banking (Reserve Bank of India, 2001). The figures showing in Figure-5 the percentage of Internet users of India in comparison of other develop countries financial literacy is another big challenge in India to adopt digital currency system. Financial literacy basically has based on the use of technology to effectively use the power of medium like computer, mobile and internet to enable people to have skills, knowledge or information about financial instruments. In India, the total literacy rate is 74.04%. (India fact, March 17, 2013 as per India Census 2011). Out of that, Male literacy rate is 82.14% and Female literacy rate is 65.46% according to Census 2011 and Internet users number of Male is 71% and Female is 29% respectively.

b) Though bank accounts have been opened through Pradhan Mantri Jan-Dhan Yojna (PMJDY), most of them are not in operation. There were 256 million accounts, roughly one for every household. Opening accounts only does not empower citizens to make digital financial transactions. A recent investigation found that 23% of PMJDY accounts lie empty; 10 million accounts held only Rs. 1 and only 33% of all were ready to use their Rupay cards (September, 2016). 99% of households in both rural and urban India have at least one member with bank account. In one of every five Indian households is a chief wage earner (CWE). CWE is a breadwinner who does not save money in a bank (MRSI 1998). We can see the Figure-7 and it is clear that still huge population are there in the country who are not operating their transaction through banks even having accounts in the bank.

c) India has a wide network of small retailers in all over countries area and most of they do not have enough resources to invest in electronic payment infrastructure to receive and make payments digitally. d) The perception of consumers on use of credit and debit cards and belief that cash helps you negotiate better. e) There is also vested interest in not moving towards cashless economy and most card and cash users fear that they will be charged more if they use cards. Further, non-users of credit cards are not aware of the benefits of credit cards due to lack of awareness of new technologies and financial literacy. f) Indian banks are making it difficult for digital wallets issued by private sector companies to be used on the respective bank websites. It could be restrictions on using bank accounts to refill digital wallets or a lack of access to payments gateways. Regulators will have to take a tough stand against such rent-seeking behavior by the banks.

### Opportunities of Cashless Economy:-



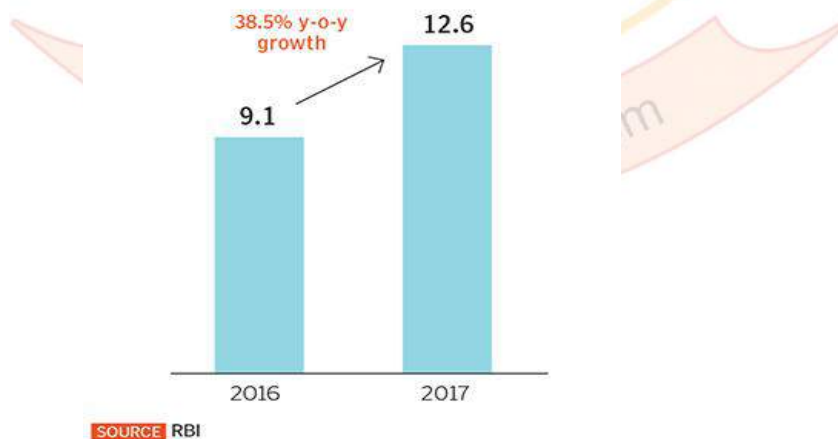
The main advantage of cashless transactions is that a proper record of all economic transactions is possible to keep. It is remedy to remove black market or underground economies that often prove damaging national economies. Since, cash is the primary mode of transactions in money laundering and terrorism financing, a cashless economy discourages such activities. Central government also get benefit from such cashless transactions as it allows central control of money supply and it is easier to monitor income tax paid by an individual. Cashless transactions are helpful in the context of negative global inflation and quantitative easing. Going cashless is also reducing the levels of corruption prevalent in the country.

Some more benefits of cashless economy are as follows:

- a) Real estate prices will reduce because of curbs on black money as most of black money is invested in Real estate.
- b) There is a process of issuance of currency where government bear costs against designing, developing, printing, storing, transporting and placing etc. All this can be avoided by digitalization of cash transactions. In Financial year 2015, RBI spent Rs. 27 billion for currency issuance and management.
- c) It pave way for universal availability of banking services to all as no physical infrastructure is needed other than digital. People can make their payments and receive globally.
- d) There is greater efficiency in welfare programmers as money is wired directly into the accounts of recipients with great transparency.
- e) There are efficiency gains as transaction costs will also come down by using methods of digital payments.
- f) In India, 1 in 7 notes is supposed to be fake, which has a huge negative impact on economy. By going cashless transaction, accountability of notes and coins in circulation will be possible.
- g) Soiled or tobacco stained notes full of germs are a norm in India. There are many such incidents in our life where we knowingly or unknowing give and take germs in the form of rupee notes. This can be avoided.
- h) In the recent trends of digitalisation will reduce costs of operating ATM's.
- i) Impact of digital transactions increase in GDP by emerging markets resulting growth of country economy.

India saw a 38.5 percent jump in non-cash transaction volumes between 2016 and 2017, second only to Russia (39.5 percent). The adoption of digital wallets, the success of ecommerce platforms and innovation in mobile payments have driven this growth, notes consultancy Capgemini in its World Payments Report 2019. India, in particular, is seeing a digital payments boom. The National Payment Council of India's efforts in promoting instant payments and open APIs is also key.

### Cashless Transactions (bln)



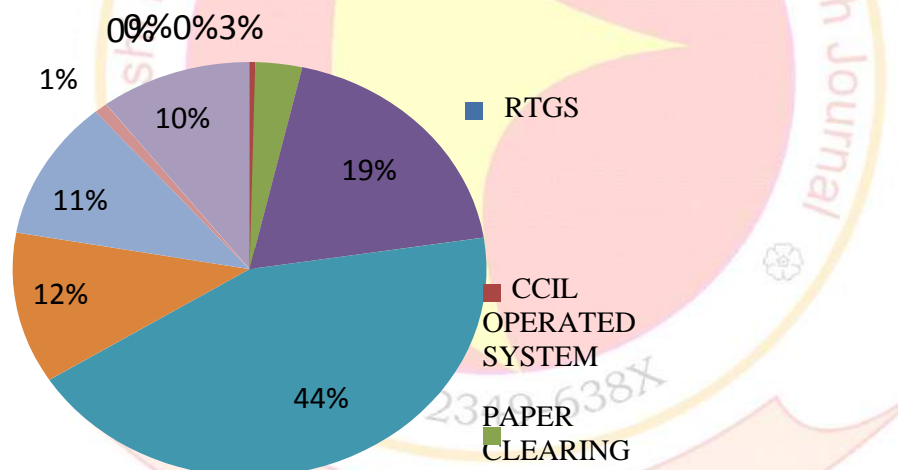
Cards were the most dominant form of payment globally in 2017, says the report. Debit card transaction volumes grew by 17 percent, most noticeably in emerging markets. Emerging Asia, which includes India, recorded 34 percent growth, Latin America 14 percent and the Middle East and Africa region 23 percent. Credit card volumes grew only by 11 percent globally. "More and more millennials appear to be avoiding credit, while the current levels of interest rates and capital adequacy ratios are challenging the industry,"

#### Analysis and Interpretation

The analysis for this paper is based on secondary data, sourced from RBI. The data gives a meaningful insight on India's road to cashless economy.

COMPONENTS	OCT2016 volume (million)	JULY2018 Volume (million)	Growth rate since DEMON
RTGS	9.01	10.97	21%
CCIL-Operated System	0.27	0.31	14%
Paper clearing	88.03	95.03	7%
Retail-electronic clearing	346.46	565.02	63%
Cards	1,032.14	1,293.28	25%
M-wallets	99.57	325.18	226%
PPI cards	27.29	26.62	-2%
Paper voucher	0.04	0.00	-100%
Mobile banking	78.12	307.74	293%
No. of ATMS	2,19,578	2,27,758	3%
NO. of POS	15,12,068	33,40,029	120%

- The striking fact is that on one hand, there is 226% percentage increase in the use of m-wallets and on the other hand, there is hundred percentage decline in use of paper vouchers. This change manifests that India is rapidly embracing cashless economy by gradually shifting to less-cash.
- Economy. This tells the future trend of Cashless and Digital India.



#### Sources: RBI

This pie-diagram shows the share of various digital modes of payment in July 2018. As per data, the cards have major share which stand at 44% and e-wallets has 11% share and RTGS and CCIL operated system has least share.

India has 102,395 million bank notes in circulation (in July 2018). Even RBI'S Payment and Settlement Systems in India: Vision 2018 emphasize on encouragement of digital payment across all section of Indian society. This road to cashless economy is not an easy one Government should take necessary steps in capacity-building of people, banking infrastructure, digital infrastructure.

#### Findings and Suggestions:-

The findings of the study show that India in terms of using digital payment methods is still very poor in comparison to other developed countries in the world. As many countries are already turned up with their electronic payment system, India is in its initial stage and most of the population are dependent on cash based transaction because of unavailability of proper internet connectivity, lack of awareness and knowledge of financial transaction, charges on card payments and un operational bank accounts. India needs to come up with the new policies of digital transactions. It is recommended that government should promote their agencies and private sector service providers to spread financial literacy at a great extent especially in rural areas. Government should provide extra benefits on digital transaction payments and offer extra incentives or interest

rate on cash saving in bank accounts. At the same time reduction in charges of digital transaction or exemption completely on digital banking should be offered for few initial years which can be more helpful for speeding up the process of digitalisation of payments in India.

#### Conclusions:

The objective of this study is to find the challenges and opportunities of cashless economy. Cashless economy can be achieved by adoption of proper methods of digital payments. It only requires full proved new financial policies, centralized administrative control, regular monetary attention on the bankers, government agencies and other private service. Safe and secured services like immediate certification of payments , clear statement of their accounts, no hidden charges, full control on money, shorten process of transaction by fulfil of mandatory information . As an overall review, most of the major developed countries in the world are moving in a very excellent way of cashless economy. A history of delayed in development in India is too long. Now the time, India should progress in full steam ahead and create a new legacy. This is time to embrace the cashless economy like other developed countries and we must make the most of it. **With an aim to promote Digital Payments and converting India to a less-cash society, a large number of policy and implementation initiatives are being taken by the Government for its procurement, service offering and disbursements.**

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## Demonetization And Digital Payment System

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### Introduction

The government of India demonetized the highest value currency notes of Rs.500 and Rs.1000 on 8<sup>th</sup> November 2016. Demonetization of Rs.500 and Rs.1000 currency notes means withdrawing the above mentioned currency notes from circulation or these are no more the legal tender in India and abroad. On 28 October 2016, the total currency in circulation in India was Rs.17.77 lakh crore. In terms of value, the annual report of Reserve Bank of India of 31<sup>st</sup> March 2016 stated that total bank notes in circulation valued to Rs.16.42Lakh crore of which nearly 86% i.e. Rs.14.18Lakh crore was Rs.500 and Rs.1000 notes. This measure of the demonetization taken in an attempt to arrest black money, inflation, counterfeit notes and mainly to encourage cashless transactions and use of digital payment systems UPI, Net banking, debit card, credit card, IMPS, BBPS transactions.

### Objective

- Objectives of Demonetization are to curb black money, which included income which had not been reported and thus was untaxed, money gained through corruption, illegal means.
- To expand the tax base and increasing the number of taxpayers, reducing the number of transactions carried out by cash encouraging use of digital payments towards less cash economy.
- Demonetization was positive step ahead to dream of Digital India.
- To encourage people for use of digital payments instead of cash transaction
- One most significant contribution of the digital payments is that it is expected to reduce risk associated with carrying cash like loss of cash, theft and armed robbery, which will drastically reduce.

### Modes of digital payment

Numerous platforms are available for Indians who wish to take part in the digital payments revolution, listed below.

#### 1. Banking Cards.

Banking cards offer consumers more security, convenience, and control than any other payment method. The wide variety of cards available – including credit, debit, and prepaid – offers enormous flexibility as well. These cards provide 2-factor authentication for secure payments. RuPay, Visa, and MasterCard are some of the most prevalent examples of card payment systems. Payment cards give people the power to purchase items in stores, on the Internet, through mail-order catalogues and over the telephone. They save both customers and merchants' time and money, simplifying and streamlining transactions.

#### 2. Aadhaar Enabled Payment System (AEPS)

This bank-led model allows online interoperable financial transactions at Points of Sale and Micro ATMs through the Business Correspondent (BC) or Bank Mitra of any bank using Aadhaar authentication.

#### 3. Unified Payments Interface (UPI)

This system, built on top of the RBI's Immediate Payment Service (IMPS), allows participating banks to combine basic banking features, seamless fund routing and merchant payments into a single mobile application. In this way customers can conduct financial transactions remotely using their mobile device. UPI also supports "Peer to Peer" collection requests, which can be scheduled and paid at the user's convenience.

#### 4. Unstructured Supplementary Service Data (USSD)

This innovative payment service expands the UPI system to support mobile banking transactions using basic feature mobile phones. USSD-based mobile banking does not require mobile data and will provide deeper financial inclusion for the under-banked using mainstream banking services.

#### 5. Mobile Wallets

Mobile wallets allow users to carry cash digitally by either linking their cards to a mobile wallet application or preemptively transferring money online to their mobile wallet. In this way, users can pay with smartphones, tablets or smart watches instead of a physical card. In addition to most banks, some private companies provide e-wallet services, for instance Paytm, Freecharge, Mobikwik, Oxigen, mRupee, Airtel Money, Jio Money, SBI Buddy, itz Cash, Citrus Pay, Vodafone M-Pesa, Axis Bank Lime, ICICI Pockets, and SpeedPay.

6. Bank Pre-paid Cards Most banks offer pre-paid cards, in addition to their normal credit and debit card services.

## 7. Internet Banking

Also known as online banking, e-banking or virtual banking, this e-payment system allows users to conduct a range of financial transactions through a financial institution's website.

## 8. Micro ATMs

The Micro ATM platform is a low cost device connected to banks throughout the country and used by over a million Business Correspondents (BCs) to deliver basic banking services. This platform allows customers to instantly deposit or withdraw funds at convenient locations, such as local shops.

## Impact of demonetization and digital payment system

Demonetization is historic and revolutionary decision in economic reforms, and is imposing significant changes in economy.

The Shortage of cash due to demonetization resulted in slowdown in GDP growth for 2016-17. According to Asian development outlook 2017 GDP growth rebounded in second quarter from 5.7% to 6.3% in September quarter after five quarter of consecutive decline.

After demonetization tax base has increased and 56 lakh new tax payers has filed their income tax return. According to ministry of finance in current financial year of 2017-18 from April to October direct tax collection has increased by 15.2%

No doubt demonetization proved to a boon to digital transactions and e-wallets and there was significant increase in use of BHIM App and Aadhar enabled services. The exorbitant increase in the number of Point of Sale (PoS) machines which reached 1.6 million in 20 year, jumped by 62% in the six month from October 2016 to April 2017(Nilekani, 2017). According to NITI Aayog digital transactions increased by 23 times more from 2.80 thousands to 63.80 thousand with value of 2,425 crore till March 2017. Aadhar enabled transactions increased from 2.5 crore in November 2016 to 5 Crore in March 2017.

## Conclusion

Prior to demonetization, non-cash payments in India were facilitated by a wide array of different platforms and technologies supported by the banking industry and the Reserve Bank of India. The need for an easier, simpler way to make payment has recently caused e-wallets to become dominant at the expense of the banking system. E-wallets represented an improvement over prior systems, which are access-restricted (not everyone has credit/debit cards), complicated (requiring entering net banking/card details for every transaction), and experience high failure rates due to complicated processes. In response, a coalition of banks created the Unified Payments Interface (UPI) to enable remote digital payments directly from customers' bank accounts, skipping the intermediate step of adding money to a mobile wallet. Between January 2017 and January 2018, UPI transaction volume grew from 4.5 million to 151.8 million. It is estimated that by December 2018, UPI transactions will cross the one billion mark, making this the most popular domestic payment system in the country

UPI and USSD received official support post-demonetization, with the government's December 2016 launch of the Bharat Interface for Money (BHIM) service. Offering functionality through both a mobile app and \*99# service, over 2 million transactions were completed on BHIM within the first ten days of its launch, with the app downloaded ten million times on the Google Play store alone. BHIM allows merchants to accept payments directly into their bank accounts via a ready to use virtual payment address (VPA) and a printable QR code, improving payment speed, functionality and liquidity.

According to Ghosh (2017) "Clearly, people still prefer to use cash – not because they are corrupt or engaging in criminal activities, but because cash is convenient, universally accepted, does not depend on technology, infrastructure and connectivity, maintains privacy and does not expose person to possibility of cyber-fraud"

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## A Study Of Advantages And Challenges Of Digital Payment Systems And It's Future In India

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### Introduction

The Government of India has been taking several measures to promote and encourage digital payments in the country. As part of the 'Digital India' campaign, the government aims to create a 'digitally empowered' economy that is 'Faceless, Paperless, and Cashless'. In recent years, purchase of goods and services with the help of digital payment modes has been increasing due to its popularity and convenience. The different modes of digital payments are available in India.

Digital payment methods are easy to make payments. These are more convenient and provide customers the flexibility to make payments from anywhere and at anytime. Traditional methods are replaced by these modern methods as it requires less time. In the post demonetization years, people slowly started using digital payments modes and currently small merchants and shop owners started accepting payments through the digital mode.

The RBI Ombudsman scheme for digital transactions defines a 'Digital Transaction' as "Digital Transaction means a payment transaction in a seamless system effected without the need for cash at least in one of the two legs, if not in both. This includes transactions made through digital / electronic modes wherein both the originator and the beneficiary use digital / electronic medium to send or receive money."

### Importance Of The Study

The digital transaction is one of the major thrust areas in India for the digitalization purpose. Around 5% of fund transactions in India are driven by the use of mobile wallets and electronic payment system. The main advantages of digital transactions are that the digital transactions ensure recording of all economic transactions from the point or view of safety. Digitalization means makes it almost possible to control black money markets which often prove damaging to national economics. It helps to increase the tax income of the government. The risk of carrying currency notes and loss of hard earned money can be avoided by making the use of digital payments. Digital payments also reduce the transaction costs and promote time utilization of customers. Cashless transaction is convenient for shopping, payment of bills and scheduling of financial transactions managed from home, office or wherever with a smart phone. It also reduces expenditure of printing of currency notes and its transportation.

### Objectives Of The Study

1. To know the importance of the digital payment methods.
2. To examine various methods of digital payments in the India.
3. To analyses the benefits and challenges of digital transactions system.
4. To get an idea regarding the expected future of digital transactions in India.

### Review Of Literature

- **Karamjeet Kaur And Dr Ashutosh Pathak (2016)** have explained in their research paper titled "E-Payment System on E-Commerce in India" the different types of cashless transactions methods including their functionality and processing. They have revealed that it is quite difficult, but not impossible, to suggest that which payment system is best. Thus there are number of factors that affect the usage of ecommerce payment systems.
- **Dr. Hitesh Kapoor (2016)**, in his research paper titled "Consumer satisfaction and E-Banking" has attempted to identify the factors that contribute to the consumer satisfaction with internet banking. Banking sector is one of the first sectors to make global presence. With the change in technologies adopted by banks, strategies used by the banks are also changing.
- **Mrinalini Kaul, Purvi Mathur. (2017)**, Digitalization brings many benefits like transparent flow of funds, reduce tax evasion, easy of working, new job opportunities etc, but it is necessary to have financial literacy and financial knowledge. Their study indicated that there is inconvenience of digital and financial knowledge in cashless transactions and had to overcome by raising awareness programme of its functional benefits to people and businesses.



## Digital Payment Methods In India

In India the widely used methods of digital payments are mentioned below-

### 1. Banking cards

Now a day's most of the banking sector has using one of the largest payment method is card payment method through various cards like debit card, credit card, green card and prepaid banking cards etc. It has various advantages like security of payments, convenience, avoid carting etc. The main benefit of debit/credit or prepaid banking cards is that they can be used to make other types of digital payments. Some of the most reputed and well-known card payment systems are Visa, Rupay and MasterCard.

### 2. USSD

This payment system can use without any app and internet facility and we can use mobile transactions. These types of payments can also be made with no mobile data facility. The main intention of this kind of payment service is to adopt low level economic people and join together in nationalized banking service. This facility is backed by the USSD along with the National Payments Corporation of India (NPCI). The main aim of this type of digital payment service is to create an environment of financial inclusion among the underserved and unorganized sections of society and integrate them into mainstream banking.

### 3. AEPS

In India, presently Aadhaar card is becoming most importance to the Indian citizen because the present government made a rule that Aadhaar card attaching with like LPG, banking, Driving License and all the Indian Identify cards and system. This AEPS (Aadhaar Enabled Payment System) which can be use for all kind of banking transactions like balance enquiry, cash withdrawal, cash deposit, payment transactions, Aadhaar to Aadhaar fund transfers, etc. this AEPS helps to the people that all the transaction have been done through banking based the Aadhaar verification.

### 4. UPI

UPI (Unified Payment Interface) is an app based payment system; App can download in android. The users need to connect their bank account along with IFSC code with a register mobile number of bank account. Based on this app we can transfer money bank to bank and bank to users on a 24/7 basis and on all 365 days a year. There are no transaction charges for using UPI. Through this, a customer can send and receive money and make balance enquiries.

### 5. Mobile Wallets

A mobile wallet is a sign of virtual wallet benefit that can be utility by downloading an app. The digital or mobile wallet plenty bank narrative or debit/credit card advertisement or bank account information in an encoded data format to permit careless payments. Many banks in the country have pierce e-wallet services and asunder from banks, there are also many private players. Some of the mobile wallet apps in the market are Paytm, Mobikwik, Freecharge, etc.

### 6. Bank pre-paid cards

A prepaid card is a type of payment instrument on to which you load money to make purchases. The type of card may not be linked to the bank account of the customer. However, a debit card issued by the bank is linked with the bank account of the customer.

### 7. PoS terminals

Traditionally, PoS terminals referred to those that were installed at all stores where purchases were made by customers using credit/debit cards. It is usually a hand held device that reads banking cards. There are different types of PoS terminals such as Physical PoS, Mobile PoS and Virtual PoS. Physical PoS terminals are the ones that are kept at shops and stores. This is advantageous for small time business owners as they do not have to invest in expensive electronic registers.

### 8. Internet Banking

Internet banking refers to the process of carrying out banking transactions online. These may include many services such as transferring funds, opening a new fixed or recurring deposit, closing an account, etc. Internet banking is also referred to as e-banking or virtual banking. Internet banking is usually used to make online fund transfers via NEFT, RTGS or IMPS.

### 9. Mobile Banking

Mobile banking is referred to the process of carrying out financial transactions through a smart phone. The scope of mobile banking is only expanding with the introduction of many mobile wallets, digital payment apps and other services like the UPI. Many banks have their own apps and customers can download the same to carry out banking transactions at the click of a button.

## 10. Bharat Interface for Money (BHIM)

The BHIM app allows users to make payments using the UPI application. This also works in collaboration with UPI and transactions can be carried out using a VPA. One can link his/her bank account with the BHIM interface easily. It is also possible to link multiple bank accounts. The BHIM app can be used by anyone who has a mobile number, debit card and a valid bank account.

### Advantages Of Digital Payment Methods

#### 1. Convenient and Less Time Consuming

The major advantage of cashless payments is that it speeds up the payment process and there is no need to fill in lengthy information. There is no need to stand in a line to withdraw money from an ATM or carry cards in the wallet. Also, with the move to digital, banking services will be available to customers on a 24/7 basis and on all days of a year.

#### 2. Requires less transaction fee

There are many payment apps and mobile wallets that do not charge any kind of service fee or processing fee for the service provided. The UPI interface is one such example, where services can be utilized by the customer free of cost. Various digital payments systems are bringing down costs.

#### 3. Rewards and Discount Offers

There are many rewards and discounts offered to customers using digital payment apps and mobile wallets. There are attractive cash back offers given by many digital payment banks. This comes as boon to customers and also acts a motivational factor to go cashless.

#### 4. Proof of Transaction in form of Digital record

In the case of digital transactions, the most important benefit is digital record of all transactions can be maintained. Customers can track each and every transaction that is made, whether the amount of transaction is heavy or small.

#### 5. Convenient payment platform

Many digital wallets and payment apps have become a convenient platform for paying transaction bills. It may be mobile phone bills, internet or electricity bills, all such utility bills can be paid through a single app.

#### 6. Helps keep black money under control

Digital transactions will help the government keep a track of things and it will help eliminate the circulation of black money and counterfeit notes in the long run. Apart from this, this may also give a boost to the economy as the cost of minting currency also goes down.

Digital payments are slowly gaining popularity in India and there are many apps that are being launched in this sector.

### Major Challenges Of Digital Payment Systems

#### 1. Security

The major challenge in digital transaction is of security. These transactions must be highly secured because someone may hack of your personal and financial details. Threats and virus are also dangerous as it may affect this transaction and stealing of money from bank accounts.

#### 2. Availability of Internet Connection

The most important element in completion of digital transaction is the smooth internet connection for making digital payment. This internet connects banks for making the payments. While purchasing the goods in online, internet is required. Sometimes, without internet connection also customers can use certain apps to make the payments.

#### 3. Cost Requirement

While assembly and trade are gift their customers so much of discounts on the tackle of things through digital gold, there are several covert costs inclination sustain servers, data storing cost, the demand of coach which are really load strong cash oppress on them intelligently.

#### 4. Data management

While doing the transaction we have share our account, card details and personal detail to the third party. The third party must ensure that don't share our data to someone else, if they shared to somebody in that moment the risk level increases. So the data management is most important issue in digital transaction.

### Future Of Digital Payments In India

The cashless methods of transactions are more prominent in developed countries like Belgium, France, Canada, and the United Kingdom etc. In the modern world, India is very famous for its development in the field of information technology and software development but it is very far behind in the usage of the cashless transactions if compared to other countries.

It seems that it will take enough time in India to become completely digital economy. It will require complete support from people and more awareness and knowledge among people. The problem of lack of education and digital literacy needs to be solved first to have more number of digital transactions. Presently, cashback and discount offers are working well at present but it will require a committed, secure and highly reliable payments network to boost digital transactions in India to have transparency in the transactions, eradication of black money and to have long run economic development by cashless economy. By doing this, we can surely have a great future of digital payments in India.

India is moving towards digital economy is absolutely good but it will take much time to have a completely cashless and digital economy. The efforts are going well by the government as well as the private sector companies having there e-wallets apps such as PayTM, GooglePay, PhonePe etc. The major challenge in front of government is the lack of knowledge and awareness among people and fear of loss of money by use of digital payment mode. The government needs to tackle these challenges to have cashless economy and to give a boost to digital payments to provide sustainable economic development to the country in the long run.

### Findings Of The Study

Following are some of the findings of the research work -

1. Digital transactions are helpful to reduce black money which means all the transaction to be legalized.
2. This digital transactions has reduce the human effort like physical present in bank, standing in queue, and unnecessary arguments with banker are to be avoided.
3. This digital transactions help to avoid the people to carry the physical cash and also avoid robber in banks and outside also.
4. This digital transactions help to transfer the money from one person to another person easily in case of some urgent need.
5. While using digital transactions the customers get some benefit like discounts, gifts, offers etc.
6. This digital transactions are helpful to banks to minimize the burden on bank employees and to avoid big crowd in banks.

### Conclusion

As per Reserve Bank of India (RBI) and National Payments Corporation of India (NPCI), the cashless transactions had been more intensive in familiar channels such as NEFT, Mobile Wallets, Mobile Banking, BHIM, Banking Cards and Internet Banking etc. In recent days' the number of users has been increasing day by day with more number of young and adults. Digital payments are becoming very famous in public as well private sector due to quick payment, avoiding to carry physical cash, save time, high secured payment, getting discounts and offer, easy recharge and green payment system etc. This will induce India towards more digital and developed economy in India.

Financial literacy and awareness about digital payments in India is required in India for making the digitalization of Indian Economy. Nearly 26% of India has internet access, and total transaction value in the digital payments amount to US\$ 51.756 million in 2018. For attracting customers and for making paperless transactions, banks and financial institutions are also offering discounts on purchase with credit/ debit cards and online wallets. Mobile payments are a top investment priority for banks. Therefore, the world's biggest banks continue to focus most of their announced IT initiatives on mobile financial services and online banking.

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## Impact Of Digital Payment System On Business

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### Abstract:

There are various types and modes of digital payments. Some of these include the use of debit/credit cards, internet banking, mobile wallets, digital payment apps, Unified Payments Interface (UPI) service, Unstructured Supplementary Service Data (USSD), Bank prepaid cards, mobile banking, etc.

Digital Payments are payments that are conducted over the internet and mobile channels and hence, any payment that is sent online or through mobile computing and internet-enabled devices can be called such.

Digital payment acceptance also generates revenue by increasing consumer spending, the Visa report found. As a result of the adoption of digital payments, SMB sales increased by 8 percent and medium-sized businesses increased by 17 percent. Because of this, 78% of consumers consider digital payment to be their preferred payment option. Two out of three SMBs told Visa that consumers spend more when using cash versus cash.

**Keywords:** Digital Payment System, Unified Payments Interface, India's Digital payment System, ITZCard, OxiCash, Electronic Payment Systems.

### Introduction:

According to the Digital Payment System, SMB estimates that digital payments acceptance costs 57 percent less for SMBs than other payment types, such as cash, checks and money orders. The costs and time associated with accepting digital payments such as fees, charge backs and system installations, including cash fraud, theft and procedural costs, and the risk and loss of labor costs are significantly higher.

The time savings of processing and handling of digital payments versus digital payments can also be significant for SMBs. On average, SMBs surveyed by Visa estimate that it only takes 542 hours to process to \$ 100, 00 in non-digital to process digital payments only for 189 an hour.

Further, digital payments help SMBs stay competitive and drive sales through enhanced marketing and customer experience capabilities like ecommerce, loyalty programs and online orders. Digital payment acceptance also generates revenue by increasing consumer spending, the Visa report found. As a result of the adoption of digital payments, SMB sales increased by 8 percent and medium-sized businesses increased by 17 percent. Because of this, 78% of consumers consider digital payment to be their preferred payment option. Two out of three SMBs told Visa that consumers spend more when using cash versus cash.

When asked what benefits or services motivate customers to buy into the business, 80 percent of people cite digital-related benefits like loyalty programs, birthday emails and quick responses to inquiries. In fact, the survey found that 92 percent of consumers are continually looking for loyalty programs at retail stores, 80 percent expect online orders for pickups when deciding where to spend, and 91 percent explore both store and online shopping options. In restaurants, 87 percent of respondents say that using cards and giving tips is a high consideration, and percent said that ordering food through the web is an important potential.

### Advantages of Digital payment System:

1. Digital payments can increase entrepreneur's profits by making financial transactions at a more convenient, safe and affordable price to consumers, suppliers and governments.
2. Paying employees benefits digitally and is safer and more effective for employers.
3. Digital payments automatically provide users with a credit history and thus can improve an entrepreneur's access to credit.
4. Digital payments give women entrepreneurs more control over their income, potentially benefiting their entire households, and especially children.
5. Supporting the digital payment system requires strong financial infrastructure, including access points such as mobile phones.
6. Many entrepreneurs and employees do not have government-issued IDs or birth certificates that require them to use digital services.
7. Entrepreneurs and employees often lack financial literacy and quantitative thinking, making it difficult to use digital financial products efficiently.

### Disadvantages of Digital payment System:

**1. Security concerns** Although rigorous measures like symmetric encryption have been put in place to secure and secure e-payment, it is still vulnerable to hacking. For example, fraudulent employees use phishing attacks to trick unconscious users into providing login details of their e-wallets, which they capture and use to access victims' personal and financial information. Inadequate authentication also makes the e-payment system sick. Without excellent identity verification such as biometrics and facial recognition, anyone can use another person's cards and e-

wallet and escape without being caught. Some people may be reluctant to use e-payment system due to these security issues.

## 2. Disputed transaction

If someone uses your company's electronic money without your authorization, you will recognize unfamiliar charges and file a claim with your bank, online payment processor, or Credit Card Company. Without enough information about the person who made the transaction, it can be difficult to win a claim and get a refund.

## 3. Increased business costs

The e-payment system has an increased need to protect sensitive financial information stored in the business computer system from unauthorized access. Organizations with an in-house e-payment system will need to spend extra on purchasing, installing and maintaining sophisticated payment-security technology.

### Scope for Digital payment System:

1. Provide access to financial payment services to every citizen with the ability to do card / digital transactions.
2. Digitalize government collections by equipping each collection point with a method of accepting card / digital payments.
3. Transfer payments from cash to cash by promoting card digital transactions and discontinuing cash based transactions.
4. Increase the country's acceptance infrastructure for promoting digital transactions.  
Encourage corporations, institutions and merchants to set up card / digital payments.

### India's Digital payment System:

The most popular online payment methods in India are as follows:

1. Pay with credit/debit cards (PayuIndia, Skrill, CCAvenue, Citrus Pay, Worldpay, Hipay, BlueSnap, QHWR/BillriantPay)
2. Pay in cash
3. Pay with eWallets (Stripe, Skrill, BlueSnap)
4. Pay by PayPal (BlueSnap)
5. Pay by invoice (BlueSnap). Pay with bank transfers, pay using prepaid cards, pay using other money transfers such as Western Union, pay using prepaid coupons, pay with ITZ Card, and pay with Oxycash, Strategic Funding.
6. Oxycash Oxycash is a payment platform that lets people in India with phones use it as an eWallet. They can pay for purchases like mobile phone refills, electricity bills, movie tickets, train and plane tickets, hotels, and more.
7. ITZ Card ITZ Card is a prepaid mobile top-up whose motto is "Pay now and use at your convenience. It can be used as a reliable payment system that can be taken anywhere, without the need to carry cash.

### Electronic Payment Systems in India

Money transfers can be transferred electronically from one person to another through various electronic payment systems in India. Initiatives and steps taken by the Reserve Bank of India have created a technology-based mechanism for electronic payment to enable continuous electronic fund transfer between both parties with very low cost. In this article, we look at the different types of electronic payment systems currently in operation.

**1. National Electronic Funds Transfer (NEFT)** Money transfers can be transferred electronically from one person to another through various electronic payment systems in India. Initiatives and steps taken by the Reserve Bank of India have created a technology-based mechanism for electronic payment to enable continuous electronic fund transfer between both parties with very low cost. In this article, we look at the different types of electronic payment systems currently in operation.

**2. Real Time Gross Settlement (RTGS)** In the RTGS system, funds are classified from one bank account holder to another on a real time and "gross" basis. Settlement in the RTGS system means "real time" on a single basis and there is no batching or batching like the NEFT system, in which payments are processed in batches. Once payment is processed by the RTGS system, it cannot be undone and will be final and irreversible. The RTGS system has been in operation since 2004 and is used to resolve inter-bank payments.

**3. Electronic Clearing Service (ECS)** ECS Payment was introduced by RBI in India in the 1990s. Since its introduction, the platform has become more robust and has been scaled up to handle large volumes. ECS payments are used for large and recurring payments such as salary, interest, dividend payments to companies, corporations and institutions. Using the ECS payment system, a certain amount can be credited to the customer's account on a specified date.

**4. National Electronic Clearing Service (NECS)** During September 2, the bank launched a new service in the National Clearing Cell (NCC), Mumbai, known as the National Electronic Clearing Service (NECS). NECS (Credit) facilitates multiple credits to the beneficiaries' accounts at destination branches across the country against a single debit from the sponsor's bank account.

This system is a pan-India feature on the core banking solutions (CBS) of member banks, irrespective of their location across the country and all CBS banks provide facilities to participate in the branch system.

5. **Funds Transfer (EFT)** Electronic Funds Transfer System - In the late 1990s, bank account holders were able to electronically transfer funds to another account holder. The EFT system was gradually built up for use by the general public and submitted by the National Electronic Funds Transfer (NEFT) system.

6. **Regional ECS (RECS)** Like the NECS, the RECS serves as a short NECS limited to a bank branch within the territory of the RBI's regional office. The RECS system is available in Ahmadabad, Bangalore, Chennai and Kolkata. Under the system, the sponsoring bank will upload verified data through RBI's Secure Web Server with credit / debit instructions to the customer. The RECS center will process the statistics, arrive at the settlement, provide credit / debit to the beneficiary's account using the bank's core banking system.

### **Impact of digital payment system on Business**

Here are 4 ways to ensure digital payments business is successful:

#### **1. Grow your customer base**

With regard to physical money .Many consumers prefer to go cashless. Offering your clients different ways of dealing with you allows you to attract a larger and sometimes global customer base as well. Ideal options for providing your customers with Cards, Net Banking, Mobile Banking, Wallets, UPI and NEFT.

#### **2. Secure transaction**

Using the secure payment gateway is a great new ball game to encourage your customers to do transactions online. With the vast majority of cyber crime that plagues the market, it is important to increase your customer trust. One of the ideal ways to do this is to choose a payment gateway that emphasizes the safety of your business and customers.

#### **3. Improved customer experience and satisfaction**

The quick fix is to choose a payment gateway option for customer satisfaction if you feel it is right. Payments gateways help your customers pay you without any space limitations. This streamlined process of collecting payments ensures seamless communication between you and your customers. It helps to create and improve your overall user experience, which ensures brand loyalty and reinvents customers.

#### **4. Maximum Investment Usage**

Traditional payment methods come with a lot of paperwork and documents. With a payment gateway like Instamozo, you can not only collect easy payments, but also use our free tools and services to grow your business. You can also collect payments through our Payment Links and Smart Links, which can be shared across multiple social media platforms. In addition, our free online store will also help you showcase, sell, and collect payments through our easy dashboard.

#### **5. Commerce payment systems**

Commerce payment systems (or electronic payment systems) make it easy to accept electronic payments for online transactions. Known as a subsidiary of Electronic Data Interchange (EDI), e-commerce payment systems have become more popular due to the widespread use of Internet-based shopping and banking.

#### **6. Credit Card**

Credit cards are one of the most common types of e-commerce transactions. As of 2008, approximately 90% of online retail transactions in North America were made by this form of payment. Due to their wide use for online retailers, it is difficult to operate without the support of credit and debit cards. Online merchants must adhere to stringent rules for credit and debit card issuers (e.g. Visa and MasterCard) in accordance with bank and financial regulation in the countries in which the debit / credit services business operates.

### **Conclusions**

I came to the conclusion that the Impact of digital payment system on Business, this payment system is beneficial to the citizens or users or entrepreneurs of India. Digital payment system is so beneficial to men as well as women entrepreneurs. These digital payment systems save time and money. Hence no other system is as beneficial as this digital payment system. The digital payment systems are helpful to growing various Indian digital systems in India.

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## Digital Payment System: Problems and Prospects

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### I. Introduction

The payment landscape in India has witnessed some structural dramatic changes during the last couple of years which is considered a watershed period in the payment industry. In the early 1990s, the Reserve Bank of India spearheaded the development of technological infrastructure that facilitated the creation of a Department of Payment and Settlement System (DPSS). In 2007, the Indian Parliament passed the Payment and Settlement Systems Act. Since the inception, the department continued its focus on migrating to a cashless economy through a process of stakeholder consultation for developing a regulatory framework that is responsive to emerging developments and innovations.

Digital payments can enable greater economic growth, growth in international e-commerce, and aid in social and financial inclusion. Presently, India represents one of the largest market opportunities for payments. The population is eager to participate in the rapid evolving advancement in technology. The growth of the India cashless payment space is expected to be driven by four trends:

**1. Cash being expensive:**

Though there are several perceived benefits of transacting in cash (such as instantaneous settlement, relative anonymity, and the notion of security associated with holding physical value), there are several latent and implicit costs associated with cash.

**2. Advancement in technology:**

Technology has been advancing at a rapid pace to deliver robust, secure and convenient payments solutions. This enables rapid delivery of payment services to large sections of the population.

**3. Economical:**

Digital payments allow for services to be delivered at lower costs, afford greater scalability and greater ease of access. This in turn, helps in fostering economic growth and financial inclusion.

**4. Government initiatives:**

Initiatives taken by the government have created a catalytic environment for the greater proliferation and growth of digital payments. As and when we transition from nascent cashless economy to a mature one, we would witness a significant drop in cash/paperless based transactions. While the transition in its course would have its own share of pains for different stakeholders owing to overall structural changes that the system would encounter.

### II. Objective Of The Study

The overall objective of the study is to examine the role of digitization in transforming India into a cashless economy. Following are the objectives of the paper;

**1.** To assess the infrastructure available in India to support the digital payment system

**2.** To analyze the different digital modes of payment system available in India

**3.** To investigate problems and prospects of cashless economy and the challenges in making India a cashless Economy.

### Research Methodology

In pursuance of above objectives the following research methodology was used for this study. The objectives of the study were achieved through collection and analysis of secondary Data. The secondary data has been mainly drawn from various records and publications of Reserve Bank of India (RBI), Digital India, National Payments Corporation of India (NCPI), Journals and websites of government and non government organization.

### III. Review Of Literature

Indian payments industry is undergoing an ecosystem expansion and transformation and at the same time entry of new banks, acquiring and processing companies, is likely to bring unique business model nuance to the fore. With a large number of organizations conducting business this way, it has become evident that the field of e-commerce has a promising future ahead and businesses are going to obtain maximum benefit from it (Abrazhevich, 2004, p.1). Electronic Payments provides greater freedom to individuals in paying their taxes, licenses, fees, fines and purchases at unconventional locations and at whichever time of the day, 365 days of the year [Kaur.k& Dr. Pathak. A,2015]. However, there are several barriers identified to the adoption of this

payment method [Bezhovski. Z]; such as digital literacy, digital usage, fraud, consumers' privacy, application technology, and computer security. So certain measures should be taken to grant this industry a promising future ahead.

#### IV. Financial Infrastructure in India

For three decades financial inclusion and financial literacy have been important policy goals on the government's and RBI's agenda. Numerous steps have been taken by the government, RBI along with National Payments Corporation of India (NPCI) such as opening of no frills accounts, relaxation of KYC norms, Pradhan Mantri Jan Dhan Yojna, Aadhaar-enabled payment system, e-wallets and National Financial Switch (NFS) and now, payments banks to leverage technology and introduced newer avenues for banking with the overall objective of improving customer experience, security and ease of transactions. The evolution of India's financial infrastructure can be divided into three phases:

FIRST PHASE	SECOND PHASE	THIRD PHASE
<b>1984:</b> Introduction of Magnetic Ink Character Recognition (MICR) technology	<b>2001:</b> Internet banking	<b>2010:</b> Immediate Payment Service (IMPS)
<b>1987:</b> First ATM installed in Kolkata	<b>2004:</b> National Financial Switch (NFS)	<b>2012:</b> Adoption of ISO 20022 messaging standard in the Next Generation RTGS (NG-RTGS) system
<b>1988:</b> Computerized settlement operations at clearing houses of RBI	<b>2004–2005:</b> Real Time Gross Settlement (RTGS), National Electronic Funds Transfer (NEFT)	<b>2014:</b> Jan Dhan Yojana, National Unified USSD Platform, RuPay Card, Bharat Bill Payment System (BBPS)
<b>1998–2000:</b> Core banking software	<b>2007 :</b> Mobile banking	<b>2016:</b> Unified Payment Interface (UPI), payment banks, mobile wallets,
	<b>2008:</b> Cheque truncation systems	<b>2017:</b> Bharat Interface for Money (BHIM) app

*\*Source: Assocham Report 2017*

#### V. Indian Transaction System

With the evolution of the financial infrastructure ecosystem, the digital platforms available for payments have transformed. Financial inclusion has gained prominence as the banking system flourished and various platforms were adopted in India. The combination of regulatory innovation in the form of Payments Bank, institutional innovation in the form of National Payments Corporation of India (NPCI) and establishment of Aadhaar as a digital identity platform, along with the rapid adoption of mobile phones, have laid the foundation for rapid growth in digital payments in India.

The Reserve Bank continued its efforts towards building robust and secure payment and settlement systems for achieving a cashless society. It aims to facilitate provision of a payment system for the future that combines the much-valued attributes of safety, security and universal reach with technological solutions which enable faster processing, enhanced convenience, and the extraction and use of valuable information that accompanies payments. The vision document 2018 of RBI aims at building premier payment and settlement systems for a cashless India which will revolve around central theme of 5C's - coverage, convenience, confidence, convergence and cost, which in turn expected to result in,

- 1 Reduction in the share of paper-based clearing instruments,
- 2 Consistent growth in individual segments of retail electronic payment systems viz., NEFT, IMPS, card transactions and mobile banking,
3. Increase in the registered customer base for mobile banking,
4. Significant growth in acceptance infrastructure and
- 5 Accelerated use of Aadhaar in payment systems.

The payment system initiatives undertaken by the RBI have resulted in deeper acceptance and penetration of modern electronic payment systems in the country. The shares of electronic payments in noncash payments have shown an upward trend. The main focus is to provide a thrust to modern electronic payments that are safe, simple and low cost for use by all.

Digital payments is estimated to bring about a significant reduction in costs incurred on account of inefficiencies associated with cash and other paper based payments. The central government has taken numerous measures to provide incentives to boost digital payment systems across the nation. The incentives can be summed up as follows:

- Digitalization of India
- Conducive Regulatory Environment
- Emergence of Service Provider
- Incentivize Consumers

### **Digitalization Of India:**

The Government aims to transform India into a digitally empowered society and knowledge economy. Digitalization will play a catalyst role in transformation of Indian economy into less cash economy. It will bridge the stark differences between digital “haves” and digital “have-nots” to ensure that government services reach every household in order to create a long-lasting developmental impact.

### **Internet Network:**

A substantial increase in 3G and 4G connection both in rural and urban areas led to rapid expand of internet connectivity. The National Optical Fiber Network (NOFN) initiated by Digital India is set to provide broadband connectivity to cover 250,000 gram panchayats across rural India. Thus, the growth prospects of the m-commerce industry looks promising considering robust growth in infrastructural touch points such as smartphones and internet penetration.

### **Smartphone User:**

With a mobile subscriber base of nearly 1 billion, India accounted for the second-largest telecom network in the world. Of this, approximately 240 million consumer uses smartphone and this base is projected to increase to over 520 million by 2020. Hence, it will provide huge opportunity to the technology providers and app developers.

### **Conducive Regulatory Environment**

RBI along with government and various agencies works to create and sustain an environment conducive for the development of digital payment systems across the nation which includes accessibility 24 x 7, Large geographical reach, Indirect customer interaction. The key regulatory steps that are currently enabling digital payment in India are as follows:

### **Relaxation of KYC:**

As per RBI guidelines, customers are not required to undergo KYC process for transaction of small value i.e.Rs 10,000 on prepaid instruments. This guideline will enable the customer to download the wallet of choice and use the same for transaction as against the traditional bank.

### **Unified Payment Interface (UPI):**

The Unified Payments Interface (UPI) launched by National Payments Corporation of India (NPCI) which offers architecture and a set of standard Application Programming Interface (API) specifications to facilitate online payments. It aims to simplify and provide a single interface across all NPCI systems besides creating interoperability and superior customer experience. Like IMPS, UPI will facilitate round-the-clock funds transfer service.

### **Bharat Bill Payment System (BBPS):**

Bill payment is a major component of the retail payment transactions in India where billers provides a variety of payment options to their customers. The Bharat Bill Payment System (BBPS) offers interoperable and accessible bill payment services to customers through a network of agents, allows multiple payment modes and provides instant confirmation of payments.

### **Emergence Of Service Provider**

The payments landscape in India is at a point of inflexion. With intense competition and strategic collaboration among market participants, banks are lowering the costs of banking and underserved and unbanked consumers beginning to find utility in formal financial services, the opportunity will be immense.

### **Banks Wallet:**

Banks have now started offering their own mobile wallets in addition to the mobile banking apps which have been proved to seamless and quick, leading to customer preferring wallets for mobile recharge and bill payment. Few includes Payzapp by HDFC Bank, SBI Buddy by SBI, pockets by ICICI, Lime by Axis, Ziggit by IDFC Bank.

### **Payment Solution by Telco:**

To facilitate non-digital savvy customer's in conducting a variety of financial transaction conveniently large companies like Airtel, Vodafone, Idea cellular has launched payment solution like Airtel Money by Airtel, Vodafone M-pesa by Vodafone, Idea money by Idea Cellular, mRUPEE by TATA, Jio Money by Reliance. The primary uses of these solutions were largely mobile recharge and remittance.

### **Incentivize Consumers**

To incentivize consumers and merchants to go for digital payments, the government has launched two schemes that would give cash prizes to consumers and merchants who use digital modes of payments.

The two scheme, Lucky GrahakYojana and the Digi-DhanVyapariYojana which will be run by the National Payment Corporation of India for 100 days. Under the lucky grahakyojana scheme, 15000 winners will be awarded



daily for 100 days, starting from 25 December, 2016 with Rs 1000 each and a weekly cash prize of worth Rs. 50,000, Rs 5,000 and Rs. 2,500 to the merchant's who uses digital mode of payments under Digi-DhanVyapariYojana.

## VI. Challenges In Digital Adoption

The banking industry is going through exciting times and technology, digitization, social media and mobility are changing rapidly altering the way in which we live, work and interact with each other. As the government presses ahead with cash to less cash to cashless economy, the success of the transition will depend on various factors such as:

### Slow Internet speeds:

India is plagued with very low internet speeds, which continue to inch up but are lower than global benchmarks. As per the Akamai reports Q4 2016 the average internet speed in India is 5.6mbps which is still behind when compared to other countries in Asia Pacific region. India's globalrank is 97, a little behind China and Indonesiaout of 149 qualifying countries.

### Risk of Piracy:

The digital media industry has not been able to fully monetize the content due to rampant piracy in India. Weak IP regulations and ineffective enforcement has discouraged players to produce original content and IP.

### Online Payments:

One of the primary forces impeding the growth of subscription and pay-per-view revenue models are the hassles that the consumer faces while making payments on digital platforms, even when they are willing to pay. This is on account of low credit card penetration, fear of using netbanking and credit cards online due to security threats and the lack of experience of transactingonline.

### Risk of Cyber Fraud:

As the digital channel in financial services continues to evolve, cyber security has become a business risk, rather than simply a technical risk. Security breaches can damage reputations and destroy trust, thereby jeopardizing the investments made in digital solutions. A single hack can ensure millions of accounts being compromised, as it happened in October when3.2 million card details were stolen in a malware related security breach. These cards from customers of State Bank of India, HDFC Bank, ICICI Bank, Axis Bank and others were used at ATMs. The stolen debit cards were used in China. The heist is still under investigation, but is almost forgotten in the scramble for a digital payments future.

## Conclusion

India is at the cusp of transformation as we embark upon the new phase of banking and financial inclusion. New technology in particular has both enabled and in turn been fuelled by a huge influx of new providers and products, all vying to enter the payments space. However, government impetus to digital transaction by demonetization of high value currency notes and providing various initiatives, still majority of transactions are cash based and cash is still king for Indian consumers, hence achieving a 100% cashless society will not be possible in near future, but one can always start from a less cash society and then move towards becoming mostly cashless. Thus, cash continue to play an important role for discrete transactions, especially in the most remote areas and informal sector.

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## Digital Payments for Rural India - Challenges and Opportunities

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### Abstract:

Rural India has significant impact on the economic progress of the country, and with the emerging changes of ICT penetration, and the impact of demonetisation, alongside the digital initiatives carried out for rural segments, the need for improving the trends of digital payments model in rural India is very important. Considering the benefits like transparency in transactions, scope for curtailing parallel economy and improving the ease of business, it is very essential that the transformation towards digital payments, even in the rural economy is empowered. Some of the revolutionary developments in the recent past like launch of many digital wallets like – Paytm, Mobiwik, Free Charge etc. and government launching many UPI (united payment interface) solutions and BHIM app for smooth transition to digital payments, there are significant developments taking place.

Stats from the market research also depict considerable rise in digital transactions post de-monetisation period. In terms of challenges, certain key factors like limited options for digital transactions based on feature phones, issues of awareness towards digital transactions, constraints of PoS transactions etc are some of the intrinsic issues that impact the digital transactions.

Despite the fact that the social trends are being very positive in rural segments for embracing the digital payments, still there are considerable challenges too in succeeding the paradigm shift. The futuristic steps like enabling digital payment transactions based on Aadhar numbers could be game changers if handled effectively. In this manuscript, the factors that impact and support towards digital transactions in rural economy is reviewed taking stock of current trends, market analysis, readiness of the infrastructure and the stakeholder accountabilities, to gain insights to the critical success factors to be addressed. It is imperative from the review of research reports, statistics over the digital payment trends, that if some of the key macro challenges, business limitations and consumer related issues are addressed, there could be potential developments envisaged in the process.

**Key Words:** digital payment, rural ecommerce, UPI, BHIM, M- Wallet, Digital Divide, Rural and Urban India, Government, PoS, digital transactions, demonetization.

### Introduction:

Indian economy is one of the fast growing economies of the world. Despite of global turbulences of economic conditions, Indian economy has been focusing on development. In the recent past, there are significant developments that have taken place in the Indian financial system, which has led to huge transformations, trends and changes in the business dynamics. Though the government of India has been focusing on the digital transactions initiatives since last few years, the actual impact of digital payments has taken place in India in significant manner post the demonetization period.

### Digital Payments in Rural Sector:

Rural sector holds significant importance in the economic development of the country, and in the recent past, many fin-tech companies are focusing on rural markets to increase its operational base. For instance, many of the mobile wallets and ecommerce companies are focusing on the rural locations and are adapting strategic approach towards attaining a good market share. Also, some of the recent developments like the demonetization and its related impacts has led to huge transformation in the market dynamics. Unlike the pre-demonetization period where very few merchants and consumers from rural segments were using the digital payment solutions, post-demonetization has seen exponential growth in the number of users using PoS and digital payment interface. Timed issuance of payment banks, easing the norms of mobile wallet transactions, increasing the bandwidth to rural locations, and government encouraging public with incentive schemes for using the UPI (United Payment Interface), reducing the service tax over digital transactions over government e-services signify that there is huge transformation taking place towards digital payments.

### Opportunities for Digital Payments

Digital payments in India are at nascent stage, and there is a push from varied quarters towards adapting the platform of digital payment solutions. Some of the reverent steps that have been incorporated in the recent past towards improving the scope of digital payments are:

1. RBI has regulated the cash payments in a phased manner. For example, imposing restrictions and tax on cash purchase of jewelers beyond a prescribed value.
2. Imposing transaction charges for cash payments for payment to vendors, suppliers and services etc.
3. Imposing higher transaction charges for banking transactions like cash with draws, deposits etc.
4. More scrutiny over the cash transactions

### Launch of More Digital Payment Solutions

1. Though India is cash based economy, slowly the transition has started towards digital economy.
2. RBI issuing payment bank licenses to many fin-tech companies like Paytm and many competitive mobile wallet solutions emerging from existing banking companies lead to foray of digital payment options available for stakeholders like merchants and consumers
3. Strategic launch of UPI solutions like BHIM by Government of India, to enable hassle free digital transactions on a government platform leads to more secured platform for consumers.
4. Aadhar based payment solutions that are emerging strongly in to the Indian market signifies potential scope of carrying out digital payments even with feature phones.

### Challenges of Implementing Digital Transactions in Rural Markets:

Prior to the demonetization period, usage of digital payments was an option. However, in the rural market segment where cash was the king, the options of digital payments were exercised by very few retail outlets and also the consumers were wary of using such trends. Though, with the rampant penetration of ICT such trends has been changing, still the quantum of digital payments has gone up significantly post the demonetization period.

Phenomenal developments has taken place in the process of digital payments and many mobile wallet companies, PoS service providers, ecommerce players, and government initiatives has been focusing on improving the digital payment solutions. But some of the significant challenges that is thwarting the desired growth and propelling the market towards digitization are:

#### Macro Level Challenges:

1. Consumers are yet to get rid of the cash based transaction habits, as for decades India has been a cash based economy.
2. Digital divide in terms of awareness about using the digital solutions like Smartphone based transactions, feature phone based transactions, usage of credit/debit cards at PoS solutions etc are some of the key issues.
3. The other significant issue of digital divide is the lack of bandwidth and reach of technology to various locations. Though, it is being sounded that every corner of India shall have ICT services in place, still in many of the locations where the installations were complete, services are not available for the customers.
4. (For instance, as a part of Govt. Initiative from Rajasthan towards streamlining the ration supplies, bio-metric verification of Aadhar details at the dealership has been made mandatory, however, the dealers could barely have connectivity to ensure timely verification and the public face challenges)
5. Such instances signify that the digital payments modality can only be practical and true to nature, when the loop holes like connectivity, adequate PoS solutions and other such factors are addressed in quick turnaround time.
6. Availability of PoS solutions has also become a challenging issue. As the demand for PoS solutions has raised in a compounding way, and the demand is not adhered too, fast track progress of digital payments are getting impacted in rural locations.

#### Consumer Challenges:

Trust factor is one of the integral challenges to growth of digital payments in rural sector. Irrespective of whether it is attributed to emerging information security challenges, or lack of awareness of the consumers, still the challenge of gaining the trust of consumers is one of the key challenges facing the mobile wallets, digital transaction service providers like banks, fin-tech companies etc.

Secondarily, the cost of transactions that are levied over the consumers is also a major concern. For example, over every debit card transaction, some retailers are charging the transaction cost from consumers and it is additional burden. To ensure that debit and credit cards are used prevalently, such transaction charges have to be evaded. Mobile wallet companies has certainly made the transaction process much simpler to the customers, but the costs charged over switching the money from wallet to bank accounts are again a key concern. As the mobile wallet companies are charging anywhere around 1% to 4% for transactions to bank accounts, consumers are wary of using mobile wallets for business transactions.

#### Business Limitations

In India, the modality of digital payments are at nascent stages and there is considerable need for more effective laws, guidelines, and compliance trends that can support in improving the process. Supply of PoS solutions in the market, leverage of technology, ease of compliance terms is also essential in encouraging more retailers, merchants and professionals to embrace the solution more effectively.



Reconciliation of transactions for merchants from the banks, taking considerable time is the other key challenge impacting the acceptance of digital payments by the merchants. Transactional issues like merchant accepting the digital payments from consumers, and in turn vendors and suppliers not accepting digital payments from such merchants are the other level of hurdle impacting the growth of digital payments in rural segments.

If the above issues are addressed in an effective manner, certainly the outcome can be more resourceful in improving the effectiveness of digital payments in the rural economy and attaining the objective of digital and cashless economy.

### Conclusions:

India is among the fast emerging as one of the largest and strong economies. For sustained development and growth with robust economic development, certain integral factors like improved transparency, corporate governance and restricting the parallel cash based economy. Such developments could be feasible only with rural India too embracing the digital payments and digital transactions. Considering the quantum of opportunities that are unfolding for market dynamics of digital payments, if the challenges that are discussed are addressed and improved solutions in terms of UPIs, mobile wallets, and digital transactions with more secured features, ease of transactions and reduced cost of managing the digital payments could lead to more potential developments and supporting in improved conditions of digital payments processing in rural sectors. In terms of capitalizing on the opportunities, it is very essential that the solutions has to be more robust and following are certain key policies that has to be in force for effectively implementing the digital payment solutions across the rural sectors

1. Reducing the digital divide and increasing the awareness in the rural public.
2. Ease the complexities and enable end-of-day settlement process for the merchants (As small retailers and merchants need rotation of cash-flow in quick turnaround time for their business operations)
3. Reduce the transaction charges over the digital payments and discourage cash transactions.
4. ICT infrastructure plays a vital role in successful adaptation of digital payments and hence there is intrinsic need to improve and offer requisite infrastructure for digital payments
5. Emphasis on integrated system of digital payments that can reduce the existing challenges and support in quality outcome (For instance, ensuring more stringent laws for security breach, IT ACT for digital payment transactions etc.)
6. The aforesaid factors are key developments that could be more effective for enabling more digital payments taking place in the rural sectors

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## Stress Management Among The Employees Of Banks: An Analytical Study

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### Abstract:

Stress has become significant due to dynamic social factor and changing needs of the life styles. The productivity of work force is the most crucial factor as far as the success of an organization is concerned. The productivity is the outcome of psychological well-being of the employees. Bankers are under a great deal of stress and due to many antecedents of stress such as Overload, Role ambiguity, Role Conflict, Responsibility for people, Participation, Lack of Feedback, Keeping with rapid technological change. One of the affected outcomes of Stress is on job performance. Stress is man's adaptive reaction to an outward situation which would lead to physical, mental, and behavioral changes. Stress is unavoidable on the part of the employees as the systems, procedures, techniques, are getting complicated with the use of advance technology.

Every employee cannot cope with such rapid changes taking place in the jobs. This will lead to arising of stress among employees. An attempt has been made through this research paper to know the reasons of stress among the bank employees and the ways used by employees to cope up with the stress generated at workplace. It is found that maximum number of employees in banks remains in stress. Majority of the employees try to find solution to relieve them from stress. Also the measures are also suggested in the paper to overcome stress that affects their physical and mental health.

**Keywords:** Workplace stress, Stress management, Employees, Yoga & Mediation.

### Introduction:

Stress is natural and even desirable. It represents those challenges, which excite us and without which life would become dull and boring. It represents those conditions under which individuals have demands made upon them they cannot meet psychologically and physically. Sometime it is life saver; however, sometime it is life destroyer. Stress is welcome and helpful if the capabilities of the mind and body can handle the demand and enjoy the stimulation involved. So the Stress is a demand made upon the body's capacities. Appropriate amount of stress can actually trigger passion for work, tap latent abilities and even ignite inspirations. Stress can make a person productive and constructive, when it is identified and well managed.

### Objectives:

Following are the main objective of this paper:

- 1) To study the causes of stress among employees.
- 2) To know the level of stress among employees.
- 3) To study the effects of stress on the health of employees.
- 4) To analyze the importance of interventional strategies to manage stress among bank employees.
- 5) To study effectiveness of stress management program organized by the banks.
- 6) To study the steps for stress reduction.

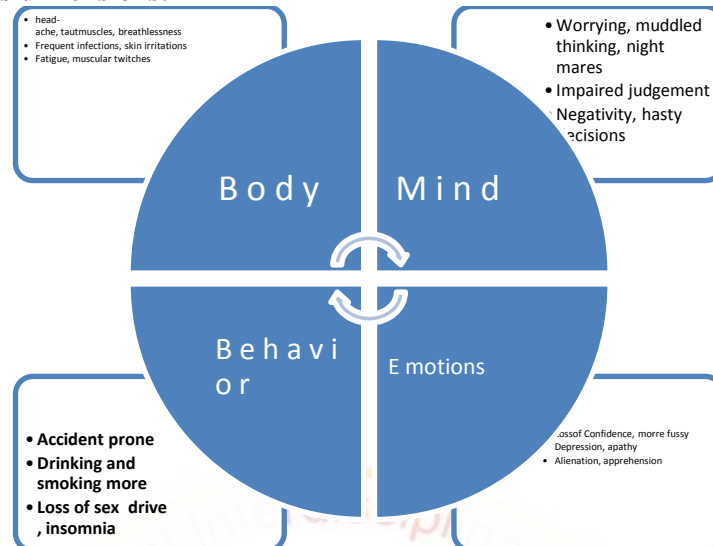
### Research methodology:

The study is based on both primary and secondary sources of data for the fulfillment of the objective in present study. The sample size is 50. It was collected from the employees of various bank situated in Nanded. Data was collected through self- structured questionnaire. Books, internet, web sites, journals etc. were used as a source of secondary data. Percentage Analysis method was used to analyze and interpret results and achieves research objectives.

### Causes of Stress:

1. Poor Status
2. Insufficient Backup
3. High self - expectations
4. Organizational problems
5. Unclear role Specifications
6. Inability to Influence decision-making
7. Over- burden of work
8. Poor Communication
9. Improper training
10. Lack of colleagues support
11. Weak leadership
12. Conflict with colleagues
13. Frequent clashes with superior

### Impact of stress in various dimensions:



### Observations:

Most of the employees fear with the fact that they lack quality in their work. This puts stress on them. It is found that maximum number of employees in banks remains in stress. 50% employees feel that they are overloaded with work. 44% employees feel tensed due to their non-achievement of their target of work. 34% employees accepted that they will obey the order of their boss by sacrificing their important domestic function. It indicates fear and stress among employees. 32% employees feel stress due to their family related problems. It means such employees feel greater level of stress as compared to other employees. Half of the employees accepted that there is conflict among the employees. It is concern for top management. Only 39% employees feel that strategies used by banks to manage stress of employees are effective. Majority of the employees try to find solution to relieve them from stress. 48% employees use YOGA or other ways to relieve them from stress. In spite of stress, majority of the employees balance in their social life.

### Stress Management:

Stress management is important for both individual and from the point of view of the organization. It is generally assumed that there are two basic approaches to cope with the stress i.e. individual oriented approach and organizational oriented approach.

#### Individual Oriented Strategies for Coping with Stress:

1. Solo Activities- Reading, Writing, Photography, Art, Playing a musical instrument Hobbies, Vacations, Listening to music, Television.
2. Group Activities– Sports, Games, vacations.
3. Yoga and Meditation- It is a tool to cope with stress.

#### The Organizational Oriented Strategies for Coping with Stress:

- **Stress Audit**

Stress audit is helpful for teaching the individual causes of stress and its impact on themselves.

- **Stress management programs**

Stress management programs help employees to learn stress management techniques.

- **Stress counseling programs**

Conducting stress counseling programs in order to understand and solve stress related problems.

- **Spiritual programs**

Conducting spiritual programs at organizational level will leads to introspection of employees and reduce stress among the employees and consequently organizational performance can increase.

- **Flex time**

Allowing workers flex time to work can reduce life stress, especially for working parents.

- **Work from home**

Allowing work from home results in high morale, productivity and job satisfaction. Working from home also helps workers manage better personal life.



### Conclusion:

Stress management is need of the hour. Stress management is getting more and more attention now-a-days, particularly in the banking sectors. Stress can be minimized if companies take the right steps. Stress can make an individual productive and constructive when it is identified and well managed. Meditation, proper exercise and positive attitude will be helpful for coping stress. With the increasing expectations, stress management plays a key role in the success of an organization. Having broader perspective of life will definitely change the perception of stress. Let us hope that we will be successful in overcoming the stress and ultimately help to impact more productive employees that will help the banks to achieve greater heights.

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## Cashless Transactions :- Challenges & Remedies

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### Abstract :-

The RBI and the Government are making several efforts to reduce the use of cash in the economy by promoting the digital payment devices including prepaid instruments & cards. RBI's effort to encourage these new varieties of payment and settlement facilities aims to achieve the goal of a "less cash" Society, with limited cash in hand and an indefinite crunch in sight most people are rushing to cashless transactions Digital transactions bring in better transparency scalability & accountability. The new move will complete more merchants to accept digital money, cash may no longer be king.



### Introduction:-

The RBI and the Govt. and making several efforts to reduce the use of cash in the economy by promoting the digital payment devices including prepaid instruments and cards. RBIS effort to encourage these new varieties of payments and settlement facilities aims to achieve the goal of a less cash society. Here the term less cash society & cashless transaction economy indicate the something of Reducing cash transactions and settlement rather doing transactions digitally.

Cashless transaction economy doesn't mean shortage of cash rather it indicates a culture of people settling transaction digitally. In a modern economy, money moves electronically. Hence, the spread of digital payment culture along with the expansion of achieve the goal .

On November 8<sup>th</sup> government withdrawn Rs 500 and Rs 1000 notes. Two highest denominations in circulation main objectives were to fight counter felt money & Black money. The action has given tremendous boost to cashless transaction as card based & digital payments were not hindered when all high denomination cash transaction suffered because of high denomination currencies.

The whole of country is witnessing the effects of demonetization and with our prime minster hinting at a cashless economy many people are left in confusion. How would a cashless economy be beneficial is the question of many cashless transfer is soon becoming the most preferred option & there are a number of benefits of going cashless. The digital or electronic transaction of the capital by using net banking, credit cards etc, is called cashless transfer people can easily pay their bills online shop & schedule transactions & manage all the finances using their laptops or smart phone. Going cashless not only one's life but also helps authenticate and formalize the transaction that are done.

This helps to curb corruption the flow of black money which results in an increase of economic growth. The expenditure incurred in printing & transportation of currency notes is reduced, In nation like India, cashless transactions were not widespread and this is due to the technology gap and the lack of proper education. Though these are the matter of the concern the government or the financial institutions need to address them to create a strong cashless economy.

### Meaning:-

Cashless transactions refer to electronic transactions made online through internet banking credit card, debit card, UPI and wallets. The cashless transactions process is fast enough that it can be done in a moment without detract which makes it easier and highly convenient option for shopping, fund transfer, Bill payments & Receiving etc.

### List of 10 Best cashless transactions apps:-

- 1) Pay Tm
- 2) Free charge
- 3) Pay Pal
- 4) Pay U money seller
- 5) Ultra cash
- 6) Mobikwik
- 7) Square cash
- 8) Samsung pay
- 9) Google wallet
- 10) Oxigen wallet

### Challenges :

- 1. Lack of Digital literacy :-**  
There are large numbers of people who are still illiterate in India and can be victims of fraud or other malpractices while using digital payment options. This is due to lack of training to handle software. People do not know the way to make digital payments and use of debit cards & credit cards. Many street vendors, shopkeepers don't know how to use swipe machines. Also, these are not available to them. People in rural areas still don't know what a smart phone means for them. Mobile is still a mode of communication only.
- 2. Internet Facility :**  
Lack of internet facilities and without it a country cannot think of becoming digital. There are still many rural & urban areas where you might have difficulty in having access to 2G network, let alone 3G, 4G. Another issue is that sometimes it becomes difficult to know whether your transactions were successful or not. It may be due to the loss of net connectivity in between, or due to slow connection, or the bank's server is down.
- 3. Higher risk :**  
The biggest fear is the risk of identity theft. Since we are culturally not used to digital transactions even well-educated people run the risk of falling into phishing traps, with the rising incidence of online fraud the risk of hacking will only grow as more people hop on to the digital platform. Besides, the latest move by the government to remove the two-factor authentication process for online transactions up to 2000 will not help.
- 4. High cash Dependency :**  
India has a high cash penetration in almost all of its transactions that happen as B2C transactions. Total cash in the market accounts for 12.04% of the GDP which is among the highest in developing countries. This goes to show our dependence on cash is acute; it requires time to tackle it.
- 5. High merchant Discount rate :**  
These are the percentages deducted from each purchase a merchant makes by the card issuing authority or bank. They are volume-dependent & are more economical if the merchant is able to sell a large amount of products there by beneficial for big merchants. For smaller merchants it does not provide enough incentive to make the shift from cash.

### Remedies :

- 1. Enhancing online Transactions :-** Efforts should be made both by the Govt bank and the public to encourage online transaction there by promoting digital cashless society. Earlier, the income tax regulations imposed a rule of scrutiny for transactions above Rs. 2 lakh through credit cards in a year & the customers were reluctant to show electronic payments. Now this limit will be extended. Debit cards are growing at the rate of 40% credit cards at 15-20% but with the growth in the overall spend and cash was also growing. Now it's the beginning of the new and the cashless industry is all set to expand at the rate of 100% in the next two years. This is a positive sign for the Indian economy to move in the cashless direction.
- 2. Financial Security :-** Financial security over all the digital payment channels is imperative for pushing the cashless economy idea when recently the data of lakhs of debit cards was rather than easily stolen by attackers, the ability of Indian financial institutions to safeguard electronic currency & exchanges came into question. Also a big reason why people prefer cash as financial fraud has become too common & complicated for the common person. Huge sums are being invested in anti-fraud systems.
- 3. Learning from other Cashless Economies :-** India can take into consideration the model of those economies which have already moved towards being cashless economies. In the place incentives for merchants to prefer digital payments India may need to think about doing so too. Sweden is another example. Even after a full scale-up, a fully financially digitized economy like Sweden still conducts 20% of its money transaction in cash.
- 4. Mobile POS :-** The latest solution for enabling new business models in the acquiring chain mobile pos exploits synergies between an ordinary smartphone or tablet & a PIN pad that reads payment cards & processes transactions in line with the card networks standards.
- 5. Mobile wallet :-** Credit system supports various payments, methods from cards – credit card prepaid cards and international debit card from any issues-to alternatives like bank transfer direct debit, phone credit, payment account or electronic money. The platform mobile wallet feature brings together a range of payment methods for consumers to choose the most generate economies of scale by introducing additional scenarios but also enable added value services like loyalty & couponing.





### Go Digital get Discount :

1. Service Tax:- Waiver of service tax of 15% on digital transactions up to 2000
2. Fuel:- 0.75% discount on digital purchase of fuel through credit debit | cards, e-wallets or mobile wallets.
3. Rail tickets :- 0.5% Discount on monthly & seasonal suburban railway tickets from 1 jan 2017 online rail tickets bugers get up to 10lakh free accident insurance too.
4. Rail Catering :- 5% Discount on Digital payments for railway catering accommodation, Retiring rooms etc.
5. Highway toll:- 10% discount on NH toll payment via RFID or fast tags.
6. Insurance:-
7. 10% Discount by government general insurers on premium paid online via their porfals 8% Discounts on new LIC policies bought online via its site.pos. Rs 100 a month is the maximum rent than Psu banks can change for pos terminals.
8. Ruay:- Kisan credit card holders to get Rupay kisan cards.

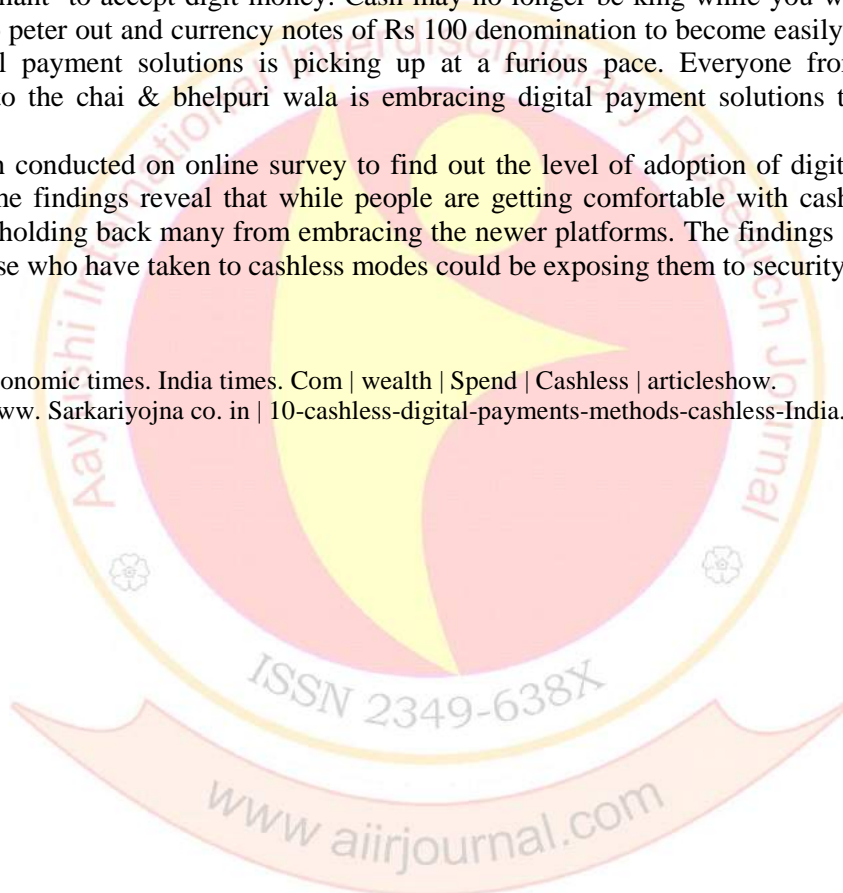
### Conclusions:-

Digital transactions bring in better transparency, scalability & accountability. The new move will compel more merchant to accept digit money. Cash may no longer be king while you wait for the serpentine queues at ATMs to peter out and currency notes of Rs 100 denomination to become easily accessible again, the adoption of digital payment solutions is picking up at a furious pace. Everyone from the neighborhood vegetable vendor to the chai & bhelpuri wala is embracing digital payment solutions to tide over the cash crunch.

E T wealth conducted on online survey to find out the level of adoption of digital payment solutions and user habits. The findings reveal that while people are getting comfortable with cashless payments some mindset issues are holding back many from embracing the newer platforms. The findings also suggests that the usage habits of those who have taken to cashless modes could be exposing them to security threats.

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## Positive Impact Of Digital Payment System On Social Life In India

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### Abstract

*This research article focused on the impact and importance of digital payment in India. According to the Government of India it will increase the employment, reduces risk related to cash like corruption, robbery, and storage of large amount of cash. It makes all transactions to be done digitalised or cashless which helps the people to transfer the money with security and safety with high speed. This step even attracted various investors in the country. The impact is a step towards the modernisation and globalisation by making the economy cashless of country. Banking sector plays a major role by providing digital instruments such as debit cards, mobile banking, mobile wallets etc in digital payment,. A major obstacle for the adoption of this digital payment system in India is slow internet connectivity and the additional charges over the digital transactions.*

**Keywords:** Digital payment, Cashless, Security, Technology, Transactions, India.

### Introduction:

Digitalization means to deal money digitally with less use of hard form of money or computerized or digitalized modes of transactions. India is a growing economy where 67% of the population is still from rural areas (World Bank, 2016). The literacy rate of 74% . Huge mass of population lacks technological knowledge. Therefore, in the world, the problem of digitalization is big in India as compared to other countries. In 1987, Automated Teller Machines (ATMs) are the first form of digitalization that was introduced in India. It took more than twelve years by the people to accept it as a mode of transaction. But as the time has passed people understood how to use it and its importance increased gradually.

In India, as the population increased and the need of ATMs also increased. RBI focused on introducing E-banking in the country. The main focus of Reserve Bank of India (RBI) was to ensure safer and authorized payment system to the people. With this objective, in 1990s, Electronic Clearing Service (ECS) was introduced. In the year 2008, National Electronic Clearing cell was launched to handle multiple transactions of individuals and corporate. Hence, many people find it as easy, quick and fastest mode of transaction to transfer their funds to any part of the world. During this transformation in 2006, a national level e-Governance plan was initiated. So keeping the focus on rural areas to expand the e-banking and better internet facilities "Digital India" campaign was launched on 1st July 2015. The objective of the campaign is to develop secure and digital infrastructure, delivering government services digitally and universal digital literacy.

According to Internet and Mobile Association of India (IAMAI) and Kantar IMRB report out of 918 million rural population of India only 186 million are using internet. The ratio of male to female Internet users is 64:36. To reduce the burden of printing more currency and dependency of people on paper currency domentisation of Rs.500 and Rs.1000 was done on 8th November 2016. In order to inculcate the habit of using digital currency government unveiled two schemes for traders such as Lucky Grahak Yojana for customers and Digi Dhan Vyapaar Yojana. The Indian government and Reserve Bank of India is trying very hard to promote mobile banking and e-payments. Along with these efforts recently various small finance banks and payments banks have also been brought to fulfill the motto of financial inclusion and innovative banking solutions.

**Objective** There are three main objectives as--

1. To analyse the impact of digital payment system in India.
2. To understand the consequences of digital system.
3. To check the adoption of technology by the people.

**Research Methodology:** On the basis of different research papers, reports & government data, the impact of digitalization has been studied and analyzed.

### Results and Discussion :

Indian economy is growing very fast. The literacy rate of the people is also growing. It is calculated on the basis of number of people enrolled in the schools and colleges. Recently, we will find even a labor class possess good quality android mobile phones but they do not have complete knowledge of operating it in a better manner. If some of the people know how to use it but, they fear from using banking through online due to online frauds, cybercrimes, limited literacy, unaware of online rules, etc. Most of the population residing in rural areas still trusts on visiting banks to make any kind of transactions than performing it online because they believe that face value of an employee is more important to them. When they face any kind of trouble they know whom to catch but while doing transaction online does not bound any particular person. Therefore, the

government took initiative of linking Aadhar number of the customers to catch the culprits. But many people reduced their bank accounts in order to make them safe from paying any kind of tax to the government. With every new implementation of rural people find new methods or ways to save themselves. It is important to change the perception of the people. Whatever is being implemented is basically for their own betterment. It is difficult and illogical to do today but it will be fruitful in longer terms. It is a combination of individual perceptions and lack of financial literacy among the people. All banks played very crucial role in spreading the information. For that purpose the employees need to keep themselves up to date. Next problem that can be seen as great hurdle to turn paper economy into digital economy is poor or no internet connectivity. About internet connectivity still there are number of government banks where there is no internet connectivity. These problems are much more in the higher altitude areas. Hence without internet facilities it is completely impossible to meet the target of making economy digital. Sometimes, ATMs have money but unable to dispense the amount as it is unable to read the card without proper internet connectivity. Therefore, these prevailing issues customers feel safe to directly visit the banks and perform their tasks. Apart from these problems it has been observed that people thinks that by using net banking, ATMs or any other e-banking facilities they have to face unnecessary burden of paying various charges. Hence, they try to avoid using these facilities. Implementation of these facilities in the rural areas the other problems like lack of infrastructure facilities, tough terrain, and electric power are the common issues found in rural India.

#### **Conclusion:**

First and important issues of literacy needs to be tackled by the government and for that we need to make our education system strong right from the starting. For the elder people, bank personals need to play very important role. There is a need to set up information centers from where any kind of query regarding programs, policies, new applications, or any technological information can be taken. The educated young peoples also play a role by helping others and passing on their knowledge to those peoples who cannot perform their task on their own. Cyber crimes and cyber security is the another issue of need to be tackled by the implementing and creating more strict rules regarding cyber security. Education and training in terms now and latest technology for its advancement in urban as well rural areas can help the economy to be digitalized with its use in everyday life. Banking sector could also initiate in this training policy by giving knowledge and supporting people with less awareness in relation to its use can leads to a drastic change by adoption of digital payment system by people with its full knowledge in their everyday life like withdrawal of cash, deposit of cash and cheque.

In India Digital payment is one of the empowering system promoting digital India started by our honorable Prime Minister Narendra Modi. This leads to transparency of cash in the country and directly control the black money in India by tax payment and transparent cash flow of every individual. It helps India in every sector by providing security and safety in relation to cash and advancing the lifestyle by adoption of latest technologies for globalization and modernization of our country which leads to the development. All the steps and policies creation by government of India helps Indian society to get knowledge and awareness. India government taking all the steps and polices as digital India, digitalization, demonetization, better infrastructure etc. leads to the development of India. So, Indian society should also help government to adopt these system and policies as per Indian for our nation development and growth. Even slowly and gradually change is taking place but how much time it will take it cannot be judged at this hour when technology and digital payment market has just started in the country.

#### **Key Suggestions:**

1. Government of India should try to educate people about the benefits of going cashless before taking any crucial steps.
2. They should also be able to implement their plans properly and without troubling the public
3. They should also tell about the opportunities which the public will get if they become digital.
4. People should try and use any digital payment method at least once.
5. Government should develop infrastructure to cope up with any policy change or a plan implementation before hand.
6. People and government should work together to develop infrastructure and technology to digitalize India.

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## Cashless Transaction: Challenges And Remedies In India

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### Abstract:

*In India cashless transaction is an effort to move towards a cashless economy by minimizing the use of physical cash. The main objective of the study is to present the current status of India in usage of digital currency in comparison to other developed countries and find the challenges and opportunities which are associated with the cashless transaction in India. Data is gathered by using secondary data collection method and then graphical representation is being used. The findings of the study revealed that the introduction of cashless economy in India can be seen as a step in the right direction of economy growth and development.*

*Keywords: Digital payment, Rural and Urban India, Digital Transaction.*

### Objectives of the study:

1. To identify the different modes of cashless transaction.
2. To examine the various challenges in cashless transaction.
3. To suggest various remedial measure to overcome challenges in cashless transaction.

### Methodology of the study:

This study has been undertaken on the basis of secondary data, the data are collected through journals, articles, books, internet and news paper etc.

### Introduction:

Indian economy is one of the fast growing economies of the world. Despite of global turbulences of economic conditions, Indian economy has been focusing on development. In the recent past, there are significant developments that have taken place in the Indian financial system, which has led to huge transformations, trends and changes in the business dynamics. Though the government of India has been focusing on the digital transactions initiatives since last few years, the actual impact of digital payments has taken place in India in significant manner post the demonetization period. India has joined other countries in the digital payment revolution a lot faster than the past where we often lagged behind in adopting technology, especially in the financial sector.

### Financial Digital Literacy and Awareness:

#### What are Digital Payments?

Digital Payments is nothing but the transfer of money between the two Bank Accounts or Mobile Wallets in Digitalized form. There is no involvement of physical cash transactions. The Bank Accounts may be between any same Banks or other Banks or mobile wallets between the same service providers or the different providers.

#### Mode of Cashless Transaction:

1. **Mobile Wallet:** Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct financial transactions remotely using a mobile device such as a Smartphone or tablet. It allows you to use your banking services from any place across the country.
2. **Rtgs/Neft:** Online banking, also known as internet banking, it is an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website. The online banking system will typically connect to or be part of the core banking system operated by a bank and is in contrast to branch banking which was the traditional way customers accessed banking services.
3. **Credit Card or Debit Card:** Credit card or debit card is another mode of cashless payment .The uses of credit card and debit card is increasing continuously because of multiple uses.
4. **Online Banking:** National Electronic Fund Transfer (NEFT) and Real Time Gross Settlement (RTGS) allow individuals, companies and firms to transfer funds from one bank to another. We can check the RBI website for a list of NEFT and RTGS-enabled branches of bank.
5. **Cheques:** Cheque is one of the popular modes of cashless payment. In this method one issue a cheque for the specific amount to anyone else. The person deposits the cheque into the concern bank. Within two day bank get cleared the amount. The maximum validity of a cheque is three month from the date of issue.

**6. Demand Draft:** A demand draft is a negotiable instrument similar to a bill of exchange. A bank issues a demand draft to a client (drawer), directing another bank (drawee) or one of its own branches to pay a certain sum to the specified party (payee).

**7. Mobile Banking:** Mobile wallet is a virtual wallet that stores payment card information on a mobile device. Mobile wallets are a convenient way for a user to make in-store payments and can be used at merchants listed with the mobile wallet service provider.

**8. Unified Payment Interface:** UPI is a single window mobile payment system launched by the National Payments Corporation of India (NPCI).

**9. E- Coupons:** These electronic coupons are offered by various online mega stores. They are very helpful in taking discounts on purchase done through online shopping. We only need to enter the e-code and get the discount automatically.

**10. Gift Card:** The next cashless payment method is a gift card. Gift card is a readymade card and can be purchased from a merchant or from the bank.

**11. Aadhaar Enabled Payment System:** Aadhaar Enabled Payment System (AEPS) is one of the best cashless payment methods. AEPS is like Micro ATM it uses smartphone and a finger-print scanner for the transaction. In order to use this facility, it is mandatory to link your Aadhaar card to your bank account. You can use AEPS in order to perform transactions like Aadhaar to Aadhaar fund transfer, Cash withdrawn, Cash deposit, etc.

### Challenges of Cashless Transaction in India:

Some of the challenge which stand in the way of India becoming a cashless transaction there are. However, in a country of 1.3 billion people, all are not perfect. Going cashless must be an exponential curve, slow initial buildup then fast paced in later stages, not a digital step signal.

**1. Lack of Digital Literacy:** There are large number of people is still illiterate in India and can be victim of fraud or other malpractices while using digital payment options. This is due to lack of training to handle software; people do not know the way to make digital payments and use of debit and credit card. Many Street vendors, shopkeepers don't know how to use Swipe machines. Also these are not available to them. People in rural still don't know what actually Smartphone mean. For them mobile is still a mode of communication only.

**2. Internet Facility:** Lack of internet facilities and without it a country cannot think of becoming digital. There are still many rural and urban areas where you might difficulty in having access to 2G network, let alone 3G, 4G. Another issue is that sometimes it becomes difficult to note whether your transaction was successful or not. It may be due to the loss of net connectivity in between, or due to a slow connection, or the bank's server is down.

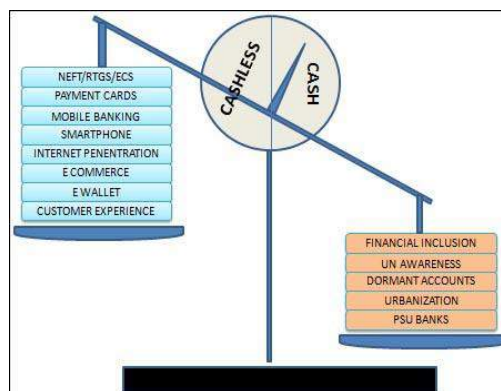
**3. Higher risk of identity theft:** "The biggest fear is the risk of identity theft. Since we are culturally not attuned to digital transactions, even well-educated people run the risk of falling into phishing traps. With the rising incidence of online fraud, the risk of hacking will only grow as more people hop on to the digital platform. Besides, the latest move by the government to remove the two-factor authentication process for online transactions up to ₹2,000, will not help. Irrespective of the size of transaction, the absence of this additional layer of security will expose thousands to the risk of identity theft.

**4. High Cash Dependency:** India has a high cash penetration in almost all of its transactions that happen as B2C transactions. Total cash flow in the market accounts for 12.04% of the GDP, which is among the highest in developing countries. This goes to show our dependence on cash is acute and it requires time to tackle it.

**5. Lack of Digital Infrastructure in Rural Area:** In rural area there are no banks branches. No Atm machines or e lobby facility. Many of the villages where is no electricity and telecom facility so far. The first and foremost requirement of a digital economy is the penetration of internet and smartphone. Not all Indians have mobiles, leave alone net connections.

**6. Skepticism in Merchants:** Small time merchants as well as users have high amount of suspicion over plastic money and they need to be educated over the potential benefits of using it. One cannot expect an overnight change in the perception of a majority of Indians over the use of plastic money. Government needs to come out with awareness and incentive schemes to promote digital economy.

**7. High Merchant Discount Rate:** These are the percentage deducted from each purchase a merchant makes by the card issuing authority or bank. These are volume dependent and are more economical if the merchant is able to sell a large amount of products, thereby beneficial for big merchants. For smaller merchants, it does not provide enough incentive to make the shift from cash.





**Remedial Measure to Improve Cashless Transaction:** Government is promoting Mobile wallets, Mobile wallet allows were to instantly send money pay bills recharge mobile book movie tickets send physical and e gifts both online and offline these are the helps to the Cashless Economy.

### 1. Enhancing Online Transactions:

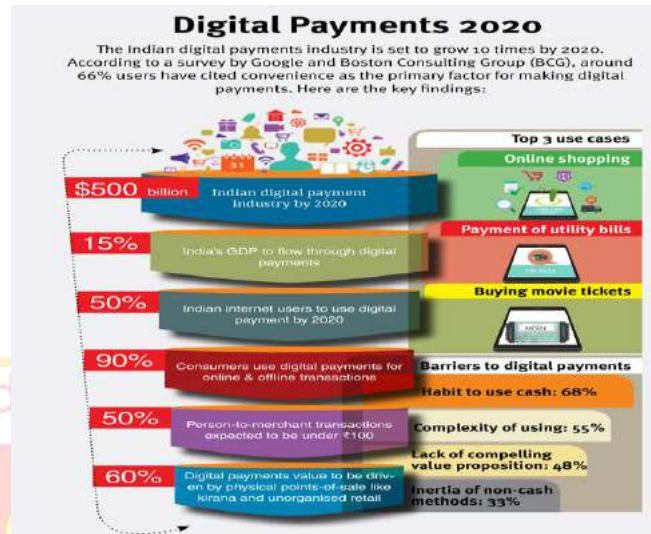
Efforts should be made both by the government, bank and the public to encourage online transaction, thereby promoting digital cashless society. Earlier, the income tax regulations had imposed a rule of scrutiny for transactions above Rs.2 lakh through credit cards in a year and the customers were reluctant to show electronic payments. Now this limit will be extended further. Payments Council of India (PCI) of India released a statement in which it said that overall growth rate of digital payments has already been around 40-70% between different payment products.

**2. Financial Security:** Financial security over the digital payment channels is imperative for pushing the cashless economy idea. When recently, the data of lakhs of debit cards was rather easily stolen by attackers, the ability of Indian financial institutions to safeguard electronic currency and exchanges came into question.

**3. Learning from other Cashless Economies:** India can take into considerations the model of those economies which have already moved towards being cashless economies. Uruguay has put in place incentives for merchants to prefer digital payments.

**4. Mobile Wallet:** Credits system supports various payment methods, from cards – credit cards, prepaid cards and international debit cards from any issuer – to alternatives like bank transfer, direct debit, phone credit, payment accounts or electronic money.

**5. Mobile POS:** The latest solution for enabling new business models in the acquiring chain. Mobile POS exploits synergies between an ordinary smart phone or tablet and a PIN pad that reads payment cards and processes transactions in line with the card networks' standards.



### Conclusion:

To conclude an important growth of cash less transactions has been the inducement to digital economy. It has boost to financial Inclusion efforts. There has been a distinct increase in proper saving flows. There has been a sharp increase in the number of accounts. India cannot completely become a cashless economy considering its high proportion of digital illiteracy and cash transaction but Indian government is working towards increasing the share of cashless transitions which is a good thing for any economy.

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## Digital Payment System Is An Important Instrument For Today's Transaction

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### Abstract

The Government of India has been taking several measures to promote and encourage digital payments in the country. Digital India campaign launched on 2nd July 2015 by our Honorable Prime Minister Shri Narendra Modi. As part of the 'Digital India' campaign, the government aims to create a 'digitally empowered' economy that is 'Faceless, Paperless, Cashless'. To support Cashless as a part of Digital India Campaign government has initiated with different modes of digital payment system. Some of these include the use of debit/credit cards, internet banking, mobile wallets, digital payment apps, Unified Payments Interface (UPI) service, Unstructured Supplementary Service Data (USSD), Bank prepaid cards, mobile banking, etc. A digital payment occurs when goods or services are purchased through the use of various electronic mediums. There is no use of cash or cheques for transaction.

### Introduction

Indian economy is one of the fast growing economies of the world. Indian economy has been focusing on development. In the recent past, there are significant developments that have taken place in the Indian financial system, which has led to huge transformations, trends and changes in the business dynamics. Though the government of India has been focusing on the digital transactions initiatives since last few years, the actual impact of digital payments has taken place in India in significant manner post the demonetization period. The Government of India has been taking several measures to promote and encourage digital payments in the country. As part of the 'Digital India' campaign, the government aims to create a 'digitally empowered' economy that is 'Faceless, Paperless, Cashless'. There are various types and modes of digital payments. Some of these include the use of debit/credit cards, internet banking, mobile wallets, digital payment apps, Unified Payments Interface (UPI) service, Unstructured Supplementary Service Data (USSD), Bank prepaid cards, mobile banking, etc.

Digital payment methods are often easy to make, more convenient and provide customers the flexibility to make payments from anywhere and at anytime. These are a good alternative to traditional methods of payment and speed up transaction cycles. Post demonetization, people slowly started embracing digital payments and even small time merchants and shop owners started accepting payments through the digital mode. Government of India emphasized on digital payment system. To give boost and better settlement of digital payment system government initiated number of new modes of digital payment under National Payments Corporation of India (NPCI). It is an umbrella organization for all retail payments system in India.

### Objectives

- 1) To study digital payment system through types of digital payment system.
- 2) To study advantages and disadvantages of digital payment system

### Research Methodology

This study has been carried out on digital payment system. Data used in this study collected basically from the secondary sources. Secondary data have been collected from various sources including websites, newspapers, various published and unpublished articles.

### Meaning of Digital Payment

Digital payment is a way of payment which is made through digital modes. In digital payments, payer and payee both use digital modes to send and receive money. It is also called electronic payment. No hard cash is involved in the digital payments. All the transactions in digital payments are completed online. It is an instant and convenient way to make payments. If we talk about cash payments, you have to first withdraw cash from your account. Then you use this cash to pay at shops. Shopkeeper goes to the bank to deposit the cash which he got from you. This process is time-consuming for you and also for the shopkeeper. But in digital payments, the money transfers from your account to the shopkeeper's account immediately. This process is automatic and neither you nor the shopkeeper is required to visit the bank.

The Payment and Settlement Act, 2007 has defined Digital Payments. As per this any "electronic funds transfer" means any transfer of funds which is initiated by a person by way of instruction, authorization or order to a bank to debit or credit an account maintained with that bank through electronic means and includes point of

sale transfers; automated teller machine transactions, direct deposits or withdrawal of funds, transfers initiated by telephone, internet and, card payment.

“A digital payment occurs when goods or services are purchased through the use of various electronic mediums. There is no use of cash or cheques in this type of payment method. “  
Digital transactions are defined as transactions in which the customer authorizes the transfer of money through electronic means, and the funds flow directly from one account to another. These accounts could be held in banks, or with entities/ providers

### **Types Of Digital Payments**

#### **Banking Cards (Debit / Credit / Cash / Travel / Others)**

Banking cards offer consumers more security, convenience, and control than any other payment method. The wide variety of cards available – including credit, debit and prepaid – offers enormous flexibility, as well. These cards provide 2 factor authentication for secure payments e.g secure PIN and OTP. RuPay, Visa, MasterCard are some of the example of card payment systems. Payment cards give people the power to purchase items in stores, on the Internet, through mail-order catalogues and over the telephone. They save both customers and merchants’ time and money, and thus enable them for ease of transaction

#### **Unstructured Supplementary Service Data (USSD)**

The innovative payment service \*99# works on Unstructured Supplementary Service Data (USSD) channel. This service allows mobile banking transactions using basic feature mobile phone, there is no need to have mobile internet data facility for using USSD based mobile banking. It is envisioned to provide financial deepening and inclusion of underbanked society in the mainstream banking services.

\*99# service has been launched to take the banking services to every common man across the country. Banking customers can avail this service by dialling \*99#, a “Common number across all Telecom Service Providers (TSPs)” on their mobile phone and transact through an interactive menu displayed on the mobile screen.

#### **Aadhaar Enabled Payment System (AEPS)**

AEPS is a bank led model which allows online interoperable financial transaction at POS (Point of Sale / Micro ATM) through the Business Correspondent (BC)/Bank Mitra of any bank using the Aadhaar authentication.

#### **Unified Payments Interface (UPI)**

Unified Payments Interface (UPI) is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood. It also caters to the “Peer to Peer” collect request which can be scheduled and paid as per requirement and convenience. Each Bank provides its own UPI App for Android, Windows and IOS mobile platform(s).

#### **Mobile Wallets**

A **mobile wallet** is a way to carry cash in digital format. You can link your credit card or debit card information in mobile device to mobile wallet application or you can transfer money online to mobile wallet. Instead of using your physical plastic card to make purchases, you can pay with your smartphone, tablet, or smart watch. An individual's account is required to be linked to the **digital wallet** to load money in it. Most banks have their e-wallets and some private companies. e.g. **Paytm, Freecharge, Mobikwik, Oxigen, mRuppee, Airtel Money, Jio Money, SBI Buddy, itz Cash, Citrus Pay, Vodafone M-Pesa, Axis Bank Lime, ICICI Pockets, SpeedPay** etc.

#### **Point of Sale**

A point of sale (POS) is the place where sales are made. On a macro level, a POS may be a mall, a market or a city. On a micro level, retailers consider a POS to be the area where a customer completes a transaction, such as a checkout counter. It is also known as a point of purchase.

#### **Internet Banking**

Internet banking, also known as online banking, e-banking or virtual banking, is an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website

#### **National Electronic Fund Transfer (NEFT)**

National Electronic Funds Transfer (NEFT) is a nation-wide payment system facilitating one-to-one funds transfer. Under this Scheme, individuals, firms and corporates can electronically transfer funds from any bank branch to any individual, firm or corporate having an account with any other bank branch in the country participating in the Scheme. Individuals, firms or corporates maintaining accounts with a bank branch can transfer funds using NEFT. Even such individuals who do not have a bank account (walk-in customers) can also deposit cash at the NEFT-enabled branches with instructions to transfer funds using NEFT.

### Real Time Gross Settlement (RTGS)

RTGS is defined as the continuous (real-time) settlement of funds transfers individually on an order by order basis (without netting). 'Real Time' means the processing of instructions at the time they are received rather than at some later time; 'Gross Settlement' means the settlement of funds transfer instructions occurs individually (on an instruction by instruction basis). Considering that the funds settlement takes place in the books of the Reserve Bank of India, the payments are final and irrevocable.

### Electronic Clearing System (ECS)

ECS is an alternative method for effecting payment transactions in respect of the utility-bill-payments such as telephone bills, electricity bills, insurance premia, card payments and loan repayments, etc., which would obviate the need for issuing and handling paper instruments and thereby facilitate improved customer service by banks / companies / corporations / government departments, etc., collecting / receiving the payments.

### Immediate Payment Service (IMPS)

IMPS offers an instant, 24X7, interbank electronic fund transfer service through mobile phones. IMPS is an emphatic tool to transfer money instantly within banks across India through mobile, internet and ATM which is not only safe but also economical both in financial and non-financial perspectives.

### Mobile Banking

Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct different types of financial transactions remotely using a mobile device such as a mobile phone or tablet. It uses software, usually called an app, provided by the banks or financial institution for the purpose. Each Bank provides its own mobile banking App for Android, Windows and iOS mobile platform(s).

### Micro ATMs

Micro ATM meant to be a device that is used by a million Business Correspondents (BC) to deliver basic banking services. The platform will enable Business Correspondents (who could be a local kirana shop owner and will act as 'micro ATM') to conduct instant transactions. The micro platform will enable function through low cost devices (micro ATMs) that will be connected to banks across the country. This would enable a person to instantly deposit or withdraw funds regardless of the bank associated with a particular BC. This device will be based on a mobile phone connection and would be made available at every BC.

### Disadvantages

1. **Restrictions.** Each payment system has its limits regarding the maximum amount in the account, the number of transactions per day and the amount of output.
2. **The risk of being hacked.** If you follow the security rules the threat is minimal, it can be compared to the risk of something like a robbery. The worse situation when the system of processing company has been broken, because it leads to the leak of personal data on cards and its owners. Even if the electronic payment system does not launch plastic cards, it can be involved in scandals regarding the Identity theft.
3. The problem of transferring money between different payment systems ( For example Wallets). Usually the majority of electronic payment systems do not cooperate with each other.
4. **The lack of anonymity.** The information about all the transactions, including the amount, time and recipient are stored in the database of the payment system. And it means the Government agencies has an access to this information. You should decide whether it's bad or good.
5. **The necessity of Internet access.** If Internet connection fails, you can not access the funds or make the payments
6. **Requires basic literacy.** The use of digital technologies requires basic literacy and numeracy as well as special technical knowledge and skills. People without such competencies can end up marginalized in increasingly digitally driven societies

### Advantages

1. **Convenience & accessibility:** Customers no longer need to carry cash or visit an ATM. In fact, they don't even need to be physically present to pay! Customers can pay anytime from any part of the world.
2. **Lower risk:** Digital transactions are much more secure than traditional transactions because they are processed by secure gateways which are hard to tamper with.
3. **Easily traceable:** Details of payments are stored in a merchant-specific data bases. Both merchants and customers have easy access to payment information. This avoids ambiguity and confusion while tracking payments.



4. **For Farmer:** The use of mobile applications providing price information to farmers can reduce market distortions and help farmers to plan production processes. Technologies can also support farmers to anticipate and respond to pest attacks, crop failures and climatic changes through timely weather-based agro-advisory messages;

#### **Digital Currencies Require Lower Fees:**

When you start comparing crypto currencies to some of the most widely spread payment methods and gateways (like PayPal), what you will notice is that the transfer fees are significantly lower. It gets even better, seeing as how the standard crypto currency fee of between 0 and 1 percent is also significantly lower than credit card fees. These differences are huge even for the smaller transactions and become more and more substantial as the value of transaction goes.

#### **Fraud Protection:**

Unlike the popular belief that the theft of physical assets is the most dangerous thing out there, you need to keep in mind that in the age of information, losing your personal info or revealing identity to an unknown third party online can be much more dangerous. By trading with crypto currency you won't be forced to reveal your personal information such as personal name or address. On the other hand, such a thing is impossible to imagine with a standard payment method such as credit card. For this reason alone, a lot of people are drawing a parallel between paying with crypto currencies and paying with cash. In fact, some even speculate that crypto currencies might replace cash altogether in the future.

#### **Conclusion**

India's cashless economy has indeed picked up steam in the past few years . Digital payment system is playing important role in growing the overall market. Digital payment is the future of India's economy Banks are also introducing several innovative digital payment modes every day. Everyone should try to understand digital payment system and get benefit by using it for daily transaction.

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## Digital Payment for Indian Economy

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### Abstract:

From 8th November, the government has made a big change in the financial environment by destroying the high denomination currency denomination of 500 and 1000 rupees and moving India towards a cashless future. What is a cashless economy: A cashless economy is all that works through electronic channels such as debit / credit card, instant payment service (IMPS), National Electronic Funds Transfer (NEFT) and Real Time Gross Settlement (RTGS). The prevalence of physical currency is minimal. The Indian economy is driven by the use of cashless which accounts for about% of all payments electronically. Electronic based transactions seek to develop and modernize India's payment system. The essence of this policy is to divert the economy from cash-based to cashless. An efficient and modern payment system is one of the main enablers for the growth and development of driving. The purpose of this policy is to improve the effectiveness of monetary policy, manage inflation in the economy, maintain a stable pricing system. India's GDP accounts for 12.42% of GDP; It is one of the tallest in the world. That was 9.47% in China or 4% in Brazil. In addition, the currency notes are very high in currency compared to other large economies, in which 4-4 in. India issued .476..47 billion currency notes, compared to US \$ 345.5 billion government. Cash-PM-Narendra Modi unveils Digi Dhananpyaar Yojana, a two-time favorite scheme for promoting mobile banking and e-payments for consumers and businesses. It is important to make a habit of e-payment to encourage and strengthen the cashless economy.

### Introduction:

The government promotes cashless transactions like mobile banking, Rs-pay cards, UPI, USSD. These are digital payment tools and methods. A low cash economy is in everyone's interest and will help to create a clear economy in the future. The government has also introduced Aadhaar based payment system, which is for people who don't have cards or mobile phones. The Indian economy is well positioned to reduce its dependence on cash. Controlling counterfeit currency notes that can lead to terrorism also has implications on our country's monetary policy and can be used to eliminate black money without paper money and curb illegal actions. A large portion of black money is involved in illegal transactions such as selling drugs that would make it difficult to trade without cash or with less cash. The RBI has also issued licenses to open new-age micro finance banks and payment banks, which are expected to push. To bring financial inclusion and new banking solutions. For India, things are also getting worse in terms of technology. The recently launched Unified Payments Interface by National Payments Corporation of India simplifies digital transactions. The Reserve Bank recently unveiled the document "Payments and Settlement System in India: Vision 1", in which India plans to encourage electronic payments and enable India to move towards a cashless society or economy in the medium and long term.

### Objectives

The objectives of this study are to:

- Analyzing the Impact of Digital Payment Systems in India
- Understand the side effects of the digital system. T. Examining technology adoption by people.

### Research Methodology

To study the impact of digitalization of secondary data in various research papers, reports and government data were studied and analyzed.

### Findings:

The Indian economy is growing very fast and the literacy rate of the people is increasing but this is calculated on the basis of the number of people attending schools and colleges. But how many people actually know how to operate a desktop; Laptops, mobiles or operating systems of any kind cannot be evaluated by literacy rate. Nowadays we will find that even the working class has quality Android mobile phones but they do not have full knowledge of how to operate them properly. Although some people know how to use it, they are afraid of using online banking because of online fraud, cyber crime, limited literacy, lack of information about online rules, etc. Residents of rural areas still believe in visiting banks. Instead of doing it online, do any kind of transaction because they believe that an employee's worth is more important to them. Coincidentally they know who to catch if they face any kind of problem, but there is no restriction on any particular person when dealing online. The government has taken initiative to add customer base numbers to catch criminals. But many people

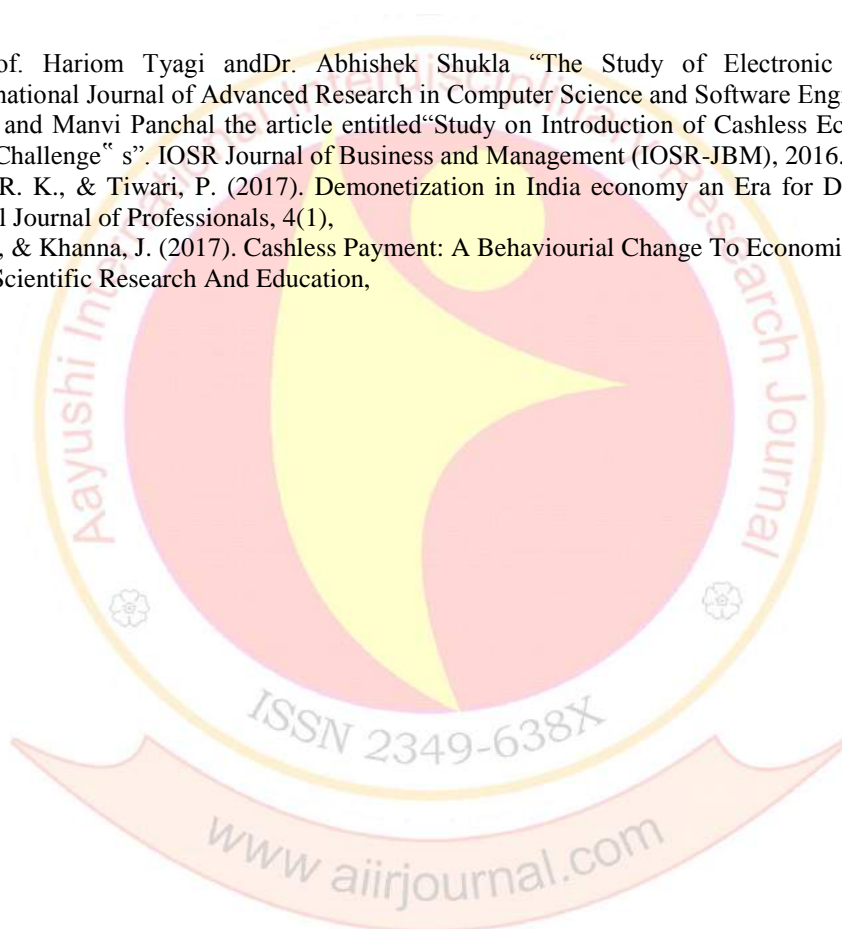
reduced their bank accounts to protect the government from paying any kind of tax. With each new implementation of the rules, people find new ways or ways to protect themselves.

### Conclusions

A cash-based economy and a less cash-free economy are less viable, viable, and more efficient. It turns out that people are open to the concept of a low cash economy and they are easy to adapt to. The low cash economy will boost the economy of the nation as it will reduce the amount of cash to make and handle on paper. The low cash economy reduces terrorist activity because most terrorist activities eliminate the hard cash money and help counter the problem of counterfeit money. Smartphones India is the largest market for smartphones and mobile applications, providing an easy transition towards low cash. Economy. Local markets have already accepted the transition to paperless transactions. Banks and payment gateways are moving towards payment via smart phones soon. Therefore, research shows that there is a consortium for moving from a cash-based society, both individually and nationally, to the cashless economy.

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## Demonetisation And Its Impacts On Indian Economy

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### Abstract:

*Demonetization is the process of withdrawal of a particular form of currency from circulation. Demonetization becomes necessary whenever there is a change in the national currency. The current form or forms of money is pulled from circulation and retired, often to be replaced with new notes or coins. Sometimes, a country completely replaces the old currency with new currency.*

*India initiated its controversial plan of demonetization on 8th Nov 2016, by making the Rs 500 /1000 notes not as legal tender. Through this momentous move the Indian Government tried to tackle four key issues: undesirable upsurge of black money, corruption, fake currency circulation and funding of terrorist activities in the country. Implementation of demonetization had a phenomenal impact on slowing down the growth rate of the Indian economy. Ten sectors in India were majorly impacted by Demonetization: Agriculture, Real Estate, Construction, Manufacturing, Financial, Aviation, Tourism and Hospitality, Telecom, Healthcare and Automobile. The worst affected sectors being Financial and Real Estate, Construction, Tourism and Hospitality. The purpose of this study is to analyze the short term impact of demonetizations and their significance in the economic development of India. It outlines the effects of demonetization on GDP and other economic and social indicators. This paper concludes with some interesting findings*

**Keywords:** Black Money, Currency, Demonetization, Gross Domestic Product,

### Introduction:

The history of the discovery and evolution of money presents an interesting study of ingenuity of the mind of primitive man to enable him to consume what he did not directly produce. Today, life cannot be understood without money. In fact, money is one of the greatest inventions of man.

Money is a medium of exchange. However, a good medium of exchange possesses certain qualities; such as: general acceptability, durability, portability, transferability, divisibility, cognoscibility and a certain degree of stability in its own value; and thus eventually metallic coins and paper money came to be accepted as medium of exchange.

### History:

In India, there were many occasions when high denomination banknotes were demonetized. RBI printed the highest denomination notes of Rs. 10,000 in 1938. After that government demonetize Rs.1,000 and higher denomination banknotes in 1946. Higher denomination banknotes (Rs. 1,000, 5,000, 10,000) reintroduced in 1954 and all of them were demonetized in 1978 to curb unaccounted money. First time Rs. 500 banknotes were introduced in 1987 in order to restrain over increasing banknotes, due to inflation and in 2000 again Rs.1000 banknotes came back in circulation in order to contain the volume of bank notes in circulation, due to inflation.

The whole country was taken aback when Prime Minister Narendra Modi on 8 November, 2016 announced that the currencies in the denominations of Rs 500 and Rs 1,000 will be invalid post midnight. However, the lower denomination –Rs 10, Rs 20, Rs 50, Rs 100 and coins –will be valid. He further announced that new notes of Rs 500 and Rs 2,000 would introduce shortly. Thus, giving millions of Indians a panic attack Along with India many countries in the world had done demonetization in the history.

Almost countries that had done demonetization had some common objectives of demonetization which were to curb corruption and black money and their government decided to demonetize their higher denomination notes to rid of these problems. Here is the list of some countries that had done demonetization: Nigeria -1984 , Soviet Union- 1991, Ghana- 1982, Myanmar- 1987, North Korea -2010, Zimbabwe- 2010, Australia- 1996, Britain -1971, Zaire- 1990, USA- 1969, Pakistan-2015, Germany- 1923 and Philippines- 2016

### Need of Demonetization in India:

The Indian government claims that the demonetization effort is to stop the counterfeiting of the current currency notes allegedly used for funding terrorism across the border by the neighboring countries, and as an attack on the black money in the country. The move was claimed as an initiative to curb corruption, trafficking of drugs, and smuggling across borders. The supply of currency notes of all denominations has seen an increase by about 40% during the period between 2011 and 2016..

The government's aim was to wipe out the counterfeit currency, scrap tax evasion, abolish black money generated out of money laundering and terrorist funding activities, and to promote a Cashless economy. By announcing the larger denomination notes to be useless, the individuals And various black money launderers with huge collection of black money generated from the parallel black cash systems were affected and made to convert the cash money through a banking System which requires tax information from the entity. In case, if the entity is not providing any proof of paying any tax on the cash, a 200% penalty of the tax owed was imposed. Besides combating black money, the purpose mentioned is also to curb fake currency (financing terrorism) and also corruption.

#### Objectives of the Study:

1. To analyze the history of demonetization in India.
2. To explain the causes of demonetization in India.
3. To study the impact of demonetization on GDP in India.
4. To explain the facts and finding of demonetization in India.

#### Scope and Limitations of the Study:

The scope of the study is limited to Indian economy. This study only covers the impact of demonetization on GDP of Indian economy.

**Types of data:** The present study is quantitative in nature and secondary data used for the purpose of analysis.

**Source of Data:** The present study is based on secondary data and secondary data collected from various journals, articles, RBI reports and websites.

#### Review of Literature:

**Syamsundar P, Sabariga E, (2017)** : “Demonetization - A Comparative Study” With Special Reference To India; in this article they explain the Indian and world history of demonetization. They also explain the need, importance, causes and effects of demonetization on Indian economy.

**MuthuKumar V, Shashi Kumar M (2017):** “ A Study On The Impact Of Demonetization In Real Estate With Special Reference To bengaluru” this research paper focus on impacts of demonization on real estate in Indian economy. They have selected there are two objectives-1) To study the impact of demonetization on real estate sector with special reference to bengalure and 2) the identify the price variance in the real estate sector before and after demonetization. The hypothesis taken for the study – $H_0$ : There will be no impact of demonetization on real estate sector and  $H_1$ : There will be impact of demonetization on real estate sector, here  $H_0$  is rejected and  $H_1$  is accepted.

**I. Sundar (2017):** “Demonetization Scenario In India” in this article researcher explain the various causes and effects of demonetization in India and suggest some important point for the success for demonetization in India.

**Peter Beyes, Reema Bhattacharya (2017):** “India's 2016 demonetization drive: A case study on innovation in anti-corruption policies, government communications and political integrity”, this article published in OECD Global Anti – Corruption & Integrity Forum. They explain the policy mechanics of demonetization, Demonetization and the relationship between cash and corruption, Policy challenges and response

**CMA Jai Bansal (2017):** “Impact of Demonetization on Indian Economy” for this research researcher use secondary data and desire some objectives. Sir have explained the impact of demonetization on different segment of economy like Agriculture, manufacture, GDP, Business, real estate, Service Sector etc.

**Charan Singh (2018):** “India since Demonetization”, in his working paper they described casus of demonetization and its impacts on various sector.

**Nitin Bansal (2019):** “Impact of Demonetization on Indian Banking Sector: A Step towards Governance”, studied the impact of demonetization in banking sector, specially focus on Pradhan Mantri Jan Dhan Yojana (PMJDY)

#### Causes of Demonetization in India:

**Fake Currency:** We know that our western neighbor Pakistan has been printing fake currency notes to sponsor the terror activities in India. Apart from supporting the terror activities, these fake currency notes are an attack on the Indian economy as well which increase money supply in the economy ultimately leading to inflationary pressure in the economy. So demonetization would help in curbing the terror activities sponsored from across the border.

**Black Money:** Since high denomination notes have ceased to be legal tenders, those holding undisclosed black money would find it difficult to get it converted to the new currency. Hence most of this black undisclosed income would be rendered useless and just a piece of paper without having any purchasing power.

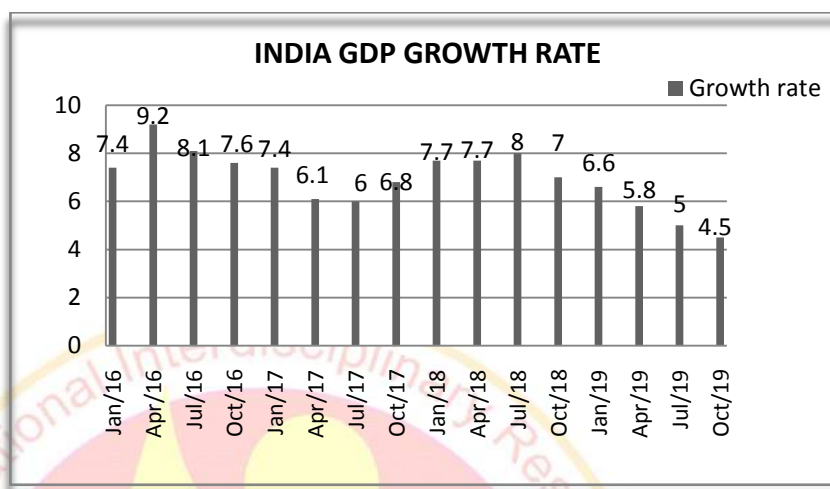
**Cashless Economy:** India is a country with one of the highest cash to GDP ratio in the world (of about 12). This enormous amount of cash in the economy leaves scope for manipulations in cash transactions and

consequent base erosion and tax evasion. So this demonetization move would encourage the population to move towards a cashless economy using digital means of payments such as Debit Card, NEFT, IMPS, TRGS, Mobile Wallet and Net Banking.

**Effects of Demonetization on GDP Growth rate:**

India GDP Annual Growth Rate (%)

Year	GDP Growth Rate
Jan 2016	7.4
Apr 2016	9.2
Jul 2016	8.1
Oct 2016	7.6
Jan 2017	7.4
Apr 2017	6.1
Jul 2017	6
Oct 2017	6.8
Jan 2018	7.7
Apr 2018	7.7
Jul 2018	8
Oct 2018	7
Jan 2019	6.6
Apr 2019	5.8
Jul 2019	5
Oct 2019	4.5



Source: Ministry of Statistics & Programme Implementation (MOSPI)

Demonetization will slow down growth rate in short term and medium term. Some rating agencies have estimated a decline of around 40 basis points in GDP growth for 2016-17 and of a smaller magnitude in 2018-19. These estimates are based on quicker liquidity injection and a sharp shift to cashless transactions. Last three years demonetization adversely affects on Agricultural, Industrial & Services sectors due to growth rate slow down 4.5 percent.

According to India Today online survey 66 percent of respondents have said that demonetization had negative impact on economy and labour employment.

**Conclusions:**

1. No preparation by government to implement the demonetization scheme.
2. Basic objectives of the demonetization still not accomplished.
3. Credibility of the RBI has been seriously dented beyond repair.
4. Seriously hated major sector of economy will take many months for economy to recover.

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## Cashless Transactions: Challenges and Remedies

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### **Abstract:**

Last fifteen to twenty years the communication and information technology specially the internet has become increasingly popular. With emerging information technology the global economy has changed tremendously and has evolved the new system of transactions that relies less on cash called cashless economy. Government of India and Reserve Bank of India are trying continuously cashless transactions by using digital mediums like credit cards, net banking, debit cards, etc. The digital payments mechanism is a flagship program of the government with a vision to transform India to a digital empowered society. All people want no heavy cash on wallet and want digital payment for day to day needs. They want to take advantages of discount by cashless transactions. The term cashless transactions means to reduce cash transactions and settlement of payment through transactions digitally.

**Keywords:** Digital Payments, Cashless transactions, security, challenges, remedies.

### **Introduction:**

Cashless transaction is the system where the transactions are done without using of hard cash. The Government of India and Reserve Bank of India are making several efforts to reduce the use of cash in the economy. Different methods are used for doing cashless transactions like internet banking, mobile banking, prepaid instruments, credit cards, debit cards, e-wallets, etc. and at the same time electronic payment system is fast growing. It seems that while people are getting comfortable with cashless transactions, some kind of negative perceptions like security problems, poor network coverage, lack of merchant willingness, lack of users knowledge, high transaction cost, lack of users knowledge on technology are holding back many from adopting the new system.

On November 8<sup>th</sup>, Government withdrew Rs. 1000 and Rs. 500 hundred notes. Main objectives were to fight against black money, corruption, convenience, counterfeit money. The electronic transaction of the capital by using internet banking, credit card, debit card, etc. is called cashless transfer. In order to promote cashless transactions Government of India make available various modes of cashless transactions like, banking cards, USSD, AEPD, UPI, Mobile Net, Bank Prepaid Card, POS, internet banking, mobile banking, micro ATM etc. The emphasis is on the different methods of digital payments by considering the challenges and providing solutions according to existing scenario.

### **Objectives:**

The main objectives of this paper are as follows.

1. To focus on the issues and challenges in cashless transactions.
2. To identify the security threats and prospectus related to cashless transactions.
3. To suggest various remedial measures to overcome challenges in cashless transactions.

**Methodology:** This paper is mainly theoretical in nature. The main purpose of this paper is to analyze the need and importance of cashless transactions and its security measures. The study is mainly based on secondary data which has been collected from internet sources, newspapers, articles, available research journals and data related to cashless transactions.

### **Cashless Economy:**

A situation in which the flow of cash within an economy is non-existent and all transactions must be through electronic channels is called cashless economy. Credit card, debit card, ECS, IMPS, NEFT, RTGS these are some electronic channels of cashless economy. In simple words no liquid money of paper currency will be used by the people in a given country. The third party will be in possession of your money in cashless economy. Third party will allow you to transact that money whenever it is needed. If it is not needed the third party can use that money. Third party can be a Government or any other private or public sector.

There are some benefits of cashless economy. Many people from urban areas had supported to cashless economy. But in rural areas very few number of smart phone users are exists and very low coverage and scope of internet access in rural area. There was big trouble for them to go cashless. But still there are some serious benefits of cashless transactions like, convenience, saves money and time, expenditure management, ease of financial transactions, going cashless decreases crime, reduces currency production cost, less cash more data and avoidance of currency rejection, more discount offers in electronic transactions will encourage the users to go cashless.

### **Challenges for Cashless Transactions:**

To promote cashless transactions is an appreciated move that will help to reduce the use of cash and papers in the economy. For using cashless transactions in economy wholly desirable objectives, equally important is the need to protect consumers and business from frauds that can happen digital platforms. In a country of 1.3 billion people all are not perfect. In cashless transactions slow initial buildup then fast paced in later stages not a digital step signal. India is a large country that needs a systematic change. On macro level business perspectives, consumer level the challenges being faced by cashless transactions are as follows.

1. **Internet Facilities and Cost:**

The internet cost and facility in India is still high. There is no Wi-Fi at every public places. Internet connectivity is needed even for the e-wallets. In order to convince people to do cashless transactions, the cost of internet should be lowered and free. Wi-Fi should also be provided at public places. Since demonetization several people have faced trouble while standing in line to pay for a transaction at a shop when the card machines have stopped working due to network connectivity. Connectivity issues must be resolved before dreaming about a cashless society.

2. **Lack of Digital Literacy:**

In India there are large number of people is still illiterate and can be victim of fraud while using digital payment. This is due to lack of digital literacy. They do not have training to handle software; they do not know the way to make digital payments and use of credit card, debit card, online banking. Many shopkeepers, street vendors don't know how to use swipe machines. In India peoples in rural area still don't know what actually smart phone. Before promoting cashless society efforts needs to be taken to educate people on how to use phone for transactions.

3. **Smartphone Affordability:**

Many companies have come up with new and inexpensive phones, but they still affordable for most of the population in country. More affordable options should be launched by the government for people to buy smart phones for digital and cashless transactions.

4. **Higher Risk of Identity Theft:**

The biggest fear in cashless transactions is the risk of identity theft. Since we are not adjusted for cashless transactions, even well-educated people run the risk of falling into phishing traps. With the risk of hacking rising incidence of online fraud will only grow as more people hope on to the digital transactions.

5. **Not enough Bank Accounts and High Cash Dependency:**

In India of peoples still do not have bank accounts. Most happen there is just one account per family, which also limits the number of cards peoples can have individually. India has a high cash penetration in almost all of its transactions that happen as Bank to cash transactions. Most of people in rural area are depends on high cash in hand. This shows that our dependence on cash is acute and it requires time to tackle it.

6. **Lack of Digital Infrastructure and proper Internet Access in Rural Area:**

There are some hilly and rural areas in India where the internet connections are not so smooth and frequent. In rural area there are no bank branches, no AT machines. In India many of the villages where is no electricity and telecom facilities so far. India still lacks when it comes to supporting a mobile society. It is extremely difficult to find a public charging point if the phone battery discharges. The first requirement of a digital economy is the penetration of internet and smartphone.

7. **Doubting in Merchants and Users:**

Small time users and merchants have high amount suspicion over plastic money and they need to be educating over the potential benefits of using it. One cannot say and expect an overnight change in the perception of a majority of Indians over Government needs to come out with awareness and incentive schemes to promote digital economy and cashless transactions.

**Remedies for Cashless Transactions:** Considering security as the major issue of cashless transactions the remedies are discussed below.

1. More infrastructure needs for cashless society. The banks need to be fully equipped to handle the e-transactions. Proper infrastructure is also needed in terms of opening more accounts in the bank.
2. Spending by debit, credit cards often encourages people to spend more giving cash by hand helps people keep a check on their expenses but paying by cards gives people a free hand.

3. For hilly and internal areas where the internet connection is not so smooth and frequents for such areas it is a serious problem to get or access the internet connection properly.
4. Prevent account data from social media pages and use official mobile apps linked from an official website. Protect the mobile device from unauthorized applications.
5. Choose a strong password to keep the account and data safe and to set the maximum number of incorrect password submission no more than three.
6. Never give the PIN and account details to anyone and review the account statements frequently to check for any unauthorized transactions.
7. For enhancing online transactions efforts should be made by both banks and government and the public encourage online transactions for promoting digital cashless society.
8. Those economies in the world which have already moved towards being cashless economies India can take into consideration.
9. Latest solution for enabling new business models in the acquiring chain is point of sale machines.
10. Before promoting cashless society efforts needs to be taken to educate people on how to use mobile phones for transactions. In order to convince people to do cashless transactions the cost of the internet should be lowered and free Wi-Fi should also be provided at public places.

### Conclusion:

The Reserve Bank of India and the Government of India are making several efforts to reduce the use cash in the economy by promoting the digital payment devices including prepaid instruments and cards. Indian Economy is among the fast emerging as one of the largest and strong economies in the world. All developments could be feasible only when the population embraces the digital payments and cashless transactions. Digital transactions are traceable, therefore easily taxable, leaving no room for the circulation of black money. A large number of businesses, even street vendors are now accepting e-payments.

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## Cashless Economy of India: Challenges and Prospects

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### Abstract:

*In India, money is like water, a basic want while not that survival could be a challenge. still, money use does not appear to be waning all that a lot of, with around eighty fifth of world payments still created victimization money. one in every of the most reasons is that there's nothing to really contend with the flexibleness of notes and coins. Of course, the digital era are a few things to embrace, and new strategies of payments can still be introduced. however Indians ought to establish the risks and blessings of various payment tools; the risks related to electronic payment tools ar way more various and severe. Despite the various State endeavors, Republic of India has invariably been driven by cash; whereas electronic payments ar seen restricted to atiny low size of the population, compared to the money transactions. At present, there's a mix of money and cashless business happening across the state, whereas numerous enablers ar functioning towards turning the cashless economy vision into a reality. we've got taken huge strides towards turning into a moneyless economy; but it'll take over a generation to vary the habit from money to no cash dealing. A gradual move towards cashless society as same by the Prime Minister is that the right method forward. a significant obstacle for the fast adoption of alternate mode of payments is mobile net penetration, that is crucial as a result of location (PoS) terminal works over mobile net connections, whereas banks are charging cash on card-based transactions, that is seen as a hurdle. The low skill rates in rural Republic of India, along side the shortage of infrastructure like net access and Power create things extraordinarily troublesome for individuals to adopt e dealing route.*

**Key words:** Cashless, Electronic payment, Economy

### Introduction:

India could be a dedicated effort to maneuver towards a moneyless dealings economy by minimizing the employment of physical cash. The foremost good thing about building a cashless economy is conclusion of black cash. Digitalization of transactions is that the finest thanks to move within the direction of cashless economy. Such a cashless economy is recognizable by encouraging electronic cash mechanism, budding money infrastructure and distributive digital dealing practices among public. RBI's Payment and Settlement Vision document 2018 provides intentions and course of action towards cashless financial set-up. Republic of India persists to be determined by the employment of cash; but five-hitter of all payments occur electronically still the minister, in 2016 budget speech, spoke concerning the set up of constructing Republic of India a cashless culture, with the Endeavour of cutting the gush of black cash.

Even the run has additionally recently exposed a manuscript- "Payments and Settlement Systems in Republic of India: Vision 2018" - starting off an inspiration to encourage electronic payments and to change India to maneuver towards a cashless society or economy within the medium and long run. A cashless financial set-up is one during which all the transactions ar created victimization cards or electronic suggests that. The movement of physical currency is negligible. Republic of India makes use of enormous quantity of money for transactions. The proportion of money to gross domestic product is one in every of the topmost within the world—12.4 share in 2014, compared with nine.4 share in China or four share in Brazil. but five % of all payments occur electronically. the number of currency notes in movement is additionally so much superior to in alternative large economies. Republic of India had seventy six.47 billion currency notes in motion in 2012-13 distinction with thirty four.5 billion within the North American nation. many researches demonstrate that money dominates even in malls, that ar visited by folks that ar expected to own credit cards, therefore it's no shock that money dominates in alternative markets yet.

According to the Ministry of physics and IT 'The infrastructure of electronic payments in Republic of India is anticipated to spice up three-fold by the tip of 2017 with close to 5 million electronic points of sale machines'

The ground truth exposed, a majority of business transactions in confectionery stores, the go-to buy daily looking in Republic of India ar money supported transactions, as these ar sometimes tiny tag transactions. The shoppers, yet as confectionery store homeowners feel additional quiet in doing business with money for tiny transactions, tho' these vendors additionally offer credit service to customers.

### Challenges in creating Republic of India a Cashless Economy

Between Gregorian calendar month eight and Gregorian calendar month twenty seven, 2016, the govt modified its explicit goal from that of removing 'black money' and 'counterfeit currency' to creating Republic of India a cashless economy. however many challenges beset this dream, from an oversized unbanked

population and rising cyber security problems to a visit usage of digital transactions. the most recent obstacle being the twenty first visit digital transactions since Dec 2016, in keeping with RBI's provisional reports.

A major obstacle for the fast adoption of alternate mode of payments is mobile net penetration, that is crucial as a result of location (PoS) terminal works over mobile net connections, whereas banks are charging cash on card-based transactions, that is seen as a hurdle. The low skill rates in rural Republic of India, along side the shortage of infrastructure like net access and Power create things extraordinarily troublesome for individuals to adopt e-transaction route. successive major obstacle is access of bank accounts. tho' bank accounts are opened through January DhanYojana, most of them don't seem to be been operated. Unless and till individuals begin accessing bank accounts, cashless economy isn't attainable.

There is additionally unconditional interest in not getting the direction of cashless economy. Republic of India is dominated by little retailers. They don't have enough funds to take a position in electronic payment infrastructure.

The money security over the electronic payment channels is important for approaching the cashless economy set up. Imagine losing your credit cards or being the victim of digital hackers will cause a full host of problems like denied payment, fraud, account takeover, dishonorable transactions and information breaches. in keeping with the digital security company Gemal to, over one billion personal records were compromised in 2014.

#### Further, challenges might be:

1. Currency conquered economy: High stage of money movement in Republic of India. take advantage motion amounts to close to thirteen you look after India's value.
2. Transactions ar primarily in money: nearly ninety five nothing transactions takes place in cash. giant size of informal/unorganized sector entities and staff like money based mostly transactions. They don't have necessary digital and fine school skill.
3. ATM use is primarily for money extraction and not for clearing up e transactions: There ar giant numbers of ATM cards together with around twenty one large integer Rupaya cards. however nearly ninety two you look after ATM cards arutilised for money withdrawals. many holding of cards in urban and semi-urban regions show low rural diffusion.
4. Restricted accessibility of POS station and poor operation culture in POS: in keeping with run, there ar one.44 million POS terminals discovered by completely different banks across locations at the tip of July 2016 however most of them keep in urban/ semi-urban space.
5. Mobile net diffusion remains fragile in rural India: For sinking transactions electronically, net association is required however in Republic of India, there's poor property in rural regions. additionally to the present, a lower skill stage in poor and rural divisions of the country, create it difficult to push the employment of plastic cash on a bigger scale.
6. Accessibility of net association and money awareness.
7. tho' bank accounts are opened through January DhanYojana, most of them ar
8. laying global organization operational. Unless and till individuals begin accessing bank accounts cashless economy isn't attainable.
9. there's additionally unconditional interest in not moving towards cashless economy.
10. Republic of India is dominated by tiny retailers. They don't have enough resources to take a position in electronic payment infrastructure.
11. The insight of shoppers additionally from time to time acts as associate obstacle. The advantage of cashless transactions isn't apparent to even those that ar victimization credit cards. Cash, on the opposite hand, is meant to be the simplest method of transacting for eighty two you look after mastercard customers. it'sneminecontradicente believed that having money facilitate someone hash out in a very superior method.
12. mostly card and money users dread that they're going to be charged further if they use cards. to boot, non-users of credit cards don't seem to be attentive of the benefits of credit cards.
13. Indian banks ar making it troublesome for electronic wallets issued by personal section firms to be used on the actual bank websites. There may be restrictions on victimization bank accounts to refill electronic wallets or an absence of access to payment gateways. Regulators can got to take a troublesome stand against such rent-seeking behavior by the banks.

#### Measures taken by run and Government to discourage use of money

Taking into thought that a private has to have a checking account so as to use most cashless structure of dealing, the cashless economy needs money inclusion. E-wallets, debit cards, credit cards or payment gateways

like the United Payment Interface and BHIM are the favored strategies of payment, however all of them are keen about bank accounts, if not additionally good phones and net access. The government's agenda of the monumental shift to digital payments from cash-based ones needs universal money inclusion, that so becomes central to their objective.

### **Licensing of Payment banks**

Government is additionally promoting mobile wallets. Mobile notecase permits users to instantly send cash, pay bills, recharge mobiles, book motion-picture show tickets, send physical and e-gifts each on-line and offline. In recent times, the run had arranged assured tips that let the users to enlarge their limit to rupees one 100000 supported a precise KYC authentication.

### **Encouragement of e-commerce by quiet the FDI norms for this division.**

Government has additionally begun UPI which is able to create Electronic business a lot of less complicated and quicker.

Government has additionally reserved surcharge, charge on payments cards and electronic payments.

### **What additionally has to be done?**

Government has to open bank accounts and additionally ensures that they're being operated. abolition of state fees on mastercard transactions; reduction of interchange fee on card transactions; increase in taxes on ATM withdrawals can cause usage of e-banking services. Policy manufacturers ought to offer Tax rebates to shoppers and merchants World Health Organization adopt electronic payments in order that they get driven to use these payment services. Safety is additionally a significant issue whereas we have a tendency to state e-payments. therefore for this, government ought to prefer some live and create Electronic payment infrastructure fully safe and secure in order that incidents of Cyber-crimes can be decreased and other people develop religion in electronic payment system.

The Federal Reserve Bank of Republic of India too can got to arrive to terms with many problems, from deciding what electronic payments across borders suggests that for its capital controls to however the new modes of payment influence key money variables like the pace of cash. Federal Reserve Bank of Republic of India yet has to shed a number of its conservatism, element of that is because it has oftentimes seen itself because the preserver of banking interests instead of overall money development.

The regulative bodies additionally ought to keep a prickly eye on any probable restrictive practices that banks might delight in to uphold their current ascendance over the profitable payments business.

Opportunities in creating Republic of India a Cashless Economy

Open Bank accounts and guarantee they're operationalized.

Abolishment of state fees on mastercard transactions; reduction of interchange fee on card transactions; increase in taxes on ATM withdrawals.

Tax rebates for shoppers and for merchants World Health Organization adopt electronic payments.

Making Electronic payment infrastructure fully safe and secure in order that incidents of Cyber offences can be reduced and other people develop religion in electronic payment system.

Create a culture of saving and religion in financial set-up among the agricultural poor.

Reserve Bank of Republic of India can ought to discard a number of its conservatism, a part of that is as a result of it's typically seen itself because the preserver of banking interests instead of overall money growth.

The observance bodies additionally ought to keep a pointy eye on any potential restrictive practices that banks might delight in to take care of their current dominance over the moneymaking payments business.

The Federal Reserve Bank of Republic of India ought to go together with few problems, from deciding what electronic payments across borders suggests that for its investment controls to grasp however the most recent varieties of payment influence key financial variables like the speed of cash.

Although it'll take time for stepping into the direction of a whole cashless system, efforts ought to be created to convert urban regions as cashless regions. As seventy share of India's value seems from urban areas if government will modification that into cashless it'll be an enormous accomplishment. As a result completely different methods ought to be planned for migration to cashless for those having checking account and for those not having.

### **Conclusion:**

At present, there's a mix of money and cashless business happening across the state, whereas numerous enablers are functioning towards turning the cashless economy vision into a reality. we've got occupied huge strides towards fitting {in a|duringa|in associate exceedingly|in a very} moneyless economy; however it'll take



over an age band to rework the habit from money to no cash dealing. fast the state into a cashless state while not acceptable designing and infrastructure are unfortunate and its impact are unending. A gradual move towards money less society as same by the Prime Minister is that the right method forward. Also, important to notice that if public begin grouping to rotate currency, governments might set-up losing a lot of their power to steer economic issues like inflation and state. thegovt cannot rest associate rate of interest for bodies loaning in a very currency it does not run. For a sleek conversion to a cashless economy, the govtcan ought to make sure that the mostly cash-dependent informal sector in Republic of India is assimilated into the system. the employment of money remains high in Republic of India despite the overall increase in digital transactions and money inclusion. Through the employment of mobile phones, last-mile banking issues ar expected to disappear. Affordability of good phones and net property to informal laborers ar still in question.while not informal laborers having access to appropriate money merchandise and awareness on them, digital money inclusion and a cashless Republic of India can stay a dream. tho' 'Digital Republic of India' and a cashless India might facilitate push the Indian economy to become additional clear, the infrastructure has to be in situ and establishments ought to create the choice of going cashless additional economically viable to the typical Indian. Considering that the per capita financial gain of Republic of India in 2015-16 was just Rs ninety four,178 which over ninetieth of the entire hands depends on money transactions, the assignment of eliminating obstacles to digital money inclusion can't be undermined.

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## Digital Payment System In Rural Indian

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### Introduction : –

India is known as an agricultural country, as agriculture true is the major source of income for the rural population. The country economy is largely dependent an agriculture. According to sagayarani (2018), Digital payment is payment method which is made through advanced modes. In digital payment payee and payee bothutilize advanced methods to receive as well as send money and is also referred to as electronic payment. Digital payment do not involve cash transaction. Every one of the exchanges in digital payment is made through web transactions. This sector also contribute most to the overall economic development of the country. It has been few decades that there is thrust on rural reconstruction and development. , causing a rapid transformation in the Indian rural economic structure. To be in with trust for development was laid on agriculture, industry communication, education, health and allied sectors.

### Objectives:

1. To study Digital payment system in rural economy.
2. To know the problems and challenges of digital payment in rural India.

### Research Methodology:

This investigation is completed to quake the status, potential and significance digital payment system in rural India in economy in the nation.

The examination enters on broad investigation in view of as secondary date information. The information has been using previous researches, e-books, journals and research articles.

### The Digital Story All Numbers in Millions

Month 2017	No.of digital Transaction*	No of PoS terminals	No. of UPI Transactions	No. of PPI Transactions	No.of. Credit Debit Card
April	909.6	2.61	07	89.2	231.1
May	926.55	2.69	9.16	91.3	233.4
June	920.02	2.77	10.15	84.7	232.4
July	938	2.84	11.44	88.7	237.6
August	964.04	2.88	16.06	89.7	243
September	958.06	2.09	30.07	87.7	240.3
October	1048.03	2.95	76.07	96.2	255.7
November	1081.58	2.99	104.8	92.8	244.6
December	1150.28	NA	145.4	99.1	263.9

Source:RBI,NPCI.

### Digital payment in Rural India:

A times or India report cited unique Identification authority of India (UIDAI). The app works on any android based phone, even a lost cost one, with an attached finger biometric devices. More than half a million volunteers helping job seekers in different rural schemes now have a new argent. To enroll people and shops in e-economy and train them in cashless transactions and despite an incentive of (Rs. 100) for making each village shop accept any form of daunting task. So far just (55,000) merchants have gone digital and 2.5 million rural Indians enrolled in cashless transactions after the government recalled Rs. 1,000 and Rs 500 notes on November 8. The National Payment Corporation of India (NPCI) to ease formats of two payment system USSD and UPI. In villages, people prefer fingerprints over true security features and it will help in higher rats of enrolment. But even the rural development cashless economy needs major improvements.

1. Actions that can Enable Digital Payments in the agricultural sector.
2. Governments, particularly ministries of finance and agriculture.
3. Digitize, the payment of routine subsidies social transfers and food and as a means more effectively reaching remote populations and encouraging digital payment uptake.

4. Incorporate training in digital payment usage as a standard part of agricultural extension services.
5. Implement a low cost voluntary digital ID program as a way of allowing millions of smallholder farmers to access digital payments and financial services.

#### **Digital payment system in agriculture system:**

Agriculture remains an important economic sector in low and middle income countries. Agriculture value added accounted for 9.5% of GDP for low and middle income countries in 2015, and for the 10 middle income APEC economies that reported data to the World Bank in 2015, in the media. Percentage of the workforce employed in agriculture was 28.3% yet. More farmers does not mean less hunger, seventy five to 85% of the world's poor live in rural areas and account for the majority of the worlds hungry.

#### **Digital payments system in market:**

The global digital payments market was valued at USD 3417 39 billion in 2018 and is expected to reach USD 7,640 billion by 2024 recording a CAGR of 13% during the forecast period of 2019-2024. Money and the idea of its exchange through payments have evolved drastically after their. Inception from metal coin to paper, from bank account to e- wallets, money has taken various shapes, sizes, and forms.

#### **Problems of digital payments in rural India:**

These are the problems that may occur in rural areas if digital payments system is applied in India.

1. Electricity is not provided to villages.
2. Quality electricity to be provided to village.
3. Digital cable is not covered to the whole in India.
4. Villagers may not be able to purchase smart phones of laptops.
5. Operation of accounts conducting transactions through mobiles and to make online payments need training.
6. ATM centers to be provided at least at a distance of 3 kms for easy access.
7. At present there are 480 accounts for every 1000 adults. This need rectification and covers the entire adult population.
8. There are only 40,000 banks for six lakh villages. At least one bank for every.

#### **Challenges in Digital payment system:**

1. India is played with very low internet speeds, which continue to inch up but are lower than global benchmarks.
2. Risk of piracy the digital media industry has not been able to fully monetize the content due to rampant piracy in India.
3. Online payments system an of the primary forces impeding the growth of subscription and pay –per –view revenue models are the hastes that the consumer faces while making payments. On digital platforms, even when they are willing to pay.

#### **Conclusion:**

India is among the fast emerging as one of the largest and strong economies. For sustained development and growth with robust economic development. Certain interred factors like improved transparency, corporate government etc. play a major role. All development could be feasible only when the population embraces the digital payments and transactions. Hence, if the challenges that are discussed are addressed and reduced cost of managing the digital payment could lead to more potential development and supporting in improved conditions of digital payments processing.

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## Cashless Economy In India

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### Introduction:

Technology has changed the modus operandi of cash transactions. Many of the countries all around the world are becoming cashless economy. The cashless methods of transactions are more prominent in developed countries.

Along with development of e-commerce cashless payment systems have been developed globally. In cashless economy financial transactions are performed using plastic money like credit cards, debit cards or through the digital means like electronic fund transfer (ECS, NEFT, RTGS, USSD, UPI) instead of using physical cash money like currency notes or coins. Most of the young generation carry their financial transactions like shopping, recharge, paying bills etc. using smart phone<sup>[1]</sup>. Due to ease of conducting financial transactions by using cards or internet on smart phone, laptop or computers societies are becoming cashless societies.

### Merits of cashless transactions:

1. Cashless economy saves the cost of currency designing, developing, printing, storing, transporting and placing.
2. Electronic payments will enhance transparency and accountability.
3. Cashless transactions reduce generation of black money as one can check history of financial transactions.
4. By going cashless transaction printing and circulation of fake and duplicate currencies can be stopped.
5. Most of the cashless societies are corrupt free.
6. Amount of tax collected will also maximize.
7. In cashless economy there is no need to carry cash in your wallet.
8. It will minimize pick pocketing and robbery of cash.

### Challenges of Cashless Transactions<sup>[2]</sup>

1. A large number of Indian populations lives in rural area.
2. There are several villages and Tehsils that do not have banks.
3. There are several villages with no electricity and telecommunication facility.
4. In many areas no proper internet facilities are available to make online payments. If internet facility is present sometimes network problem persists for online transactions.
5. POS that is point of sale are not available at many places in India. Many shopkeepers and street vendors cannot afford costly swipe machines.
6. For a total of 1.02 billion credit and debit cards in the country, there are only 3.3 million POS devices and only 228,422 ATMs. That means for every 309 million cards in the country there is one POS machine available as an acceptance point.
7. Many peoples in rural as well as urban area are illiterate about the digital mode of payment systems.
8. Still large number of peoples are not having smartphones and internet facility.
9. Hacking, virus attack and cyber theft are challenging issues caused during online transactions.
10. Most of the Indian peoples do not believe in digital payment methods
11. 90 % of ATM cards are used for cash withdrawals.

### Efforts of Indian Government and RBI for digitization of economy:

By considering the advantages of cashless economy, money should move electronically. India is far behind in cashless transactions if compared to developed nations all around the globe. Hence the literacy about use of digital payment systems must be increased. The RBI and the Government of India are making various efforts to become cashless economy by promoting the digital payment systems and services. On 8<sup>th</sup> November 2016 Government of India banned Rs 500 and Rs 1000 two highest denominations notes from circulation. It was done in order to fight counterfeit money and black money circulation in economy. Effects of this demonetization of notes results in absence of physical cash in circulations which boosts the cashless transactions.

### Steps taken by Government:

The JAM that is Jan-dhan yojna, Aadhar cards and mobile banking are introduced and popularized by government to become cashless economy. A large number of government transactions are carried out through JAM mode.

1. Launch of BHIM app for smartphone users based on UPI.
2. Launch of Aadhar merchant pay.
3. Direct benefit transfer
4. Jan-dhan yojna

To bring the momentum in cashless transactions, government has given many discounts such as

1. Waiver in service tax of 15 % on digital transactions upto 2000,
2. 0.75 % discount on digital purchase of fuel like petrol and diesel,
3. 5 % discount on digital payments for railway services.
4. Mobile wallet companies like Pay tm give cash backs offers and discounts.
5. Credit and Debit card companies offers loyalty benefits as well as reward points on usage of plastic cards due to which savings increase and cash flow marginality is improved.

SBI has established 10000 point of sale (POS) terminals across India to boost digital payments. A Point of sale terminal is a location where hardware and software required to process smart cards, print receipt and maintain an electronic cash register are available.

### Digital India programme:

The Government of India starts Digital India programme with a vision to transform India into a digitally empowered economy<sup>[3]</sup>. Through this programme Indian Government wants to become an economy which is "Faceless, Paperless, Cashless". Through "Digital India" website Indian Government promotes various modes of digital systems.

1. Banking cards: Credit card or debit card can be used as one of the modes of cashless payment.
2. USSD: Unstructured Supplementary Service Data is mobile banking service can be used without the use of internet and smartphone. From any mobile phone, you can dial \*99# and use this service
3. AEPS: Through Aadhaar Enabled Payment System (AEPS) one can make financial transactions at the point of sale by Aadhaar authentication by using smart phone and a finger-print scanner.
4. UPI: Unified Payment Interface is a single window mobile payment system launched by the National Payments Corporation of India (NPCI). It brings multiple bank accounts into a single mobile application, merging all or some of the banking services.
5. Mobile Wallet: It is a virtual wallet carrying cash in digital format. Credit card or debit card can be linked to the mobile wallet for transactions.
6. POS: A Point of sale is a location where digital device is used to process smart cards, debit cards for financial transactions.
7. Internet banking: Most of the bank customers are promoted to use internet banking facility for transactions.
8. NEFT and RTGS are promoted for financial transactions.
9. Mobile Banking: Mobile banking is a platform provided by a bank through the apps to conduct various banking services by use of their mobile phones or tablets.
10. Cheques: Cheques are orders of payment from an account holder to the bank.
11. Demand drafts: Demand drafts are orders of payment by a bank to another bank.

### Few facts that shows a change in trend towards cashless India:

1. Due to demonetization on 8<sup>th</sup> November 2016 by Government of India 22 billion currency notes of Rs. 500 and Rs. 1,000 are cancelled.
2. According to RBI report India has reported 597 ATM's less in 2019 than 2017, indicating the growth of a cashless India.
3. RBI annual report 2017-18 shows a growth of 92 % and 13 % in terms of volume and value respectively in mobile banking services.
4. RBI annual report 2017-18 have seen a 44.6 % increase in volume and 11.9 % increase in the value of funds transferred in digital payment and settlement systems - NEFT, IMPS, UPI, NACH, card payments, Electronic Clearing Systems.
5. According to the RBI Point of Sale (POS) terminals increased by 24 % from 2.53 million in 2016-17 to 3.08 million in 2017-18.

**Conclusion:**

After 8<sup>th</sup> November 2016 India has witnessed tremendous growth in the digitization of payments<sup>[4]</sup>. The number of merchants accepting card payments has been doubled and crossed 3 million figures till June 2018. Digitization of transactions is one of the good and strong decisions taken by government of India. The number of UPI transactions touched 250 million in June 2018. The cash transactions in the country has decreased from 78 % in 2015 to 68 % in 2017. In spite of many challenges, India is moving fast towards cashless economy due to strong willingness of Indian Government to make India digital.

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## Impact And Importance Of Digital Payment In India

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### Introduction:

The term digitalization means to deal money digitally with less use of hard form of money or in a layman's language using computerized or digitalized modes of transactions is digitalization India is a growing economy where 67 % of the population is still from rural areas (World Bank.2006) No doubt we have achieved the literacy rate of 74 % but still a huge mass of population lacks technological knowledge and so the problem of digitalization is big in India as compared to other countries in the world. Automated Teller Machines (ATMs) are the first form of digitalization that was introduced in India in the 1987. It took more than twelve years by the people to accept it as a mode of transaction, But as the time has passed people understood how to use it and its importance increased gradually.

As the population increased in India the need of ATMs also increased in various parts of the country so in order to reduce the rush of ATMs, RBI focused on introducing E-banking in the country. The main focus of Reserve Bank of India (RBI) was to ensure safer and authorized payment system to the people. With this objective Electronic Clearing Service (ECS) was introduced in the 1990s. In the year 2008 National Electronic Clearing cell was launched to handle multiple transactions to individual and corporate. It came as a boon for the economy as many people find it as an easy, quick and faster mode of transaction to transfer their funds to any part of the world. During this transformation a national level e-Governance plan was initiated in 2006 so keeping the focus on rural areas to expand the e-banking and better internet facilities "Digital India" campaign was launched on 1<sup>st</sup> July 2015. The objective of the campaign is to develop secure and digital infrastructure, delivering government services digitally and universal digital literacy.

According to Internet and Mobile Association of India (IAMAI) and Kantar IMRB report out of 918 million rural population of India only 186 million are using internet and leaving out 732 million potential users. The ratio of male to female internet users is 64:36. No matter these digital changes have taken place about ten years ago but it is unable to reduce dependency of the people on paper currency in the economy. To reduce the burden of printing more currency and dependency of people on paper currency demonetisation of Rs 500 and Rs 1000 was done on 8<sup>th</sup> November 2016. Apart from this in order to inculcate the habit of using digital currency government unveiled two schemes namely lucky Grahak yojana for customers and DigiDhan Vyapaar Yojana for trades. The Indian government and Reserve Bank of India is trying very hard to promote mobile banking and e payments. Along with these efforts recently various small finance banks and payments banks have also been brought to fulfill the motto of financial inclusion and innovative banking solutions. While Digital India is trying its way in rural India but the digital literacy one of the biggest hurdles in making it a great success. The IMAI report finds that an estimated 28 Million daily internet users, out of which 182.9 million or 62% access internet daily in urban areas compared to only 98 million users or 53% in rural India. Almost double the proportion of Rural Users access internet less than once a month in rural India as compared to Urban India. Therefore, to make economy digitalized a joint effort of banks, government, educated youth and telecom industry will be required to spread the knowledge. They have to gain the trust of the people that their money is safe if they are doing transaction digitally. There is a requirement of making strict rules regarding cybercrime, online frauds and strengthening the internet security.

### Objective

The objectives of this study are :-

1. To analyze the impact of digital payment system in India.
2. To understand the consequences of digital system.
3. To check the adoption of technology by the people.

### Research Methodology

In order to study the impact of digitalization secondary data from different research papers, & government data has been studied and analyzed.

### Results and Discussion

Indian economy is growing very fast and literacy rate of the people is also growing but it is calculated on the basis of number of people enrolled in the schools and colleges, But actually how many people have the knowledge of operating a desktop, laptop, mobile or any kind of operating system cannot be assessed through literacy rate. Now a days we will find even a labor class possess good quality android mobile phones but they do not have complete knowledge of operating it in a better manner, Even though if some of the people know

how to use in but, they fear from using banking through online due to online due to noline frauds, cybercrimes, limited literacy, unaware of online rules,etc Moreover population residing in rural areas still trusts on visiting banks to make any kind of transactions rater than performing it online because they believe that face value of an empoloyee is more important to them. If by chance they face any kind of trouble they know whom to eatch ut while doing transaction online does not bound any particular person.

The government took initiative of linking Adhar number of the customers to eatch the culprits,But many people reduced their bank accounts in order to make them safe from paying any kind of tax to the government. With every new implementation of rule people find new methods or ways to save themselves.In first view it is important to change the perception of the people that whatever is being implemented is basically for

Their own betterment.It might seem difficult and illogical to do today but it will be fruitful in longer terms.It a combination of individual perceptions and lack of financial literacy among the people.To spread these information the role of banks are very crucial and for that the employees need to keep themselves up to date.

Another problem that can be seen ass great hurdle to turn paper economy into digital economy impossible to meet the target of making economy digital Many times ATSS have money but unable to dispense the amount as it is unable to read the card without proper internet connectivity.Due to these prevailing issues customers feel safe to directly visit the banks and perform their tasks. Apart from these problems it has been observed that people thinks that by using net banking.ATMs or any other e-banking facilities they have to face unnecessary urden of paying various charges,Hence they try to avoid using these facilities.

Moreover when it comes at implementation of these facilities in the rural areas the other problems like lack of infrastrudcture facilities.tough terrain,and electric power are the common issues found in rural India.

### Discussion and Conclusion

The first and foremost issue of literacy needs to be tackled by the government and for that we need to make our education system strong right from the starting. For the elder people bank personals need to play very important role There is a need to set up information centers from where any kind of query regarding programs, politices new applications or any technological information can be taken.Moreover the educated youths should also play a role by helping others and passing on their knowledge to those who cannot perform their task on their own Another issue of cybercrimes and cyber security need to be tackled by the implementing and creating more strict rules regarding cyber security.

Education and training in terms now and latest technology for its advancement in urban as well rural areas can help the economy to be digitalized with its use in every day life.Banking sector could also initiate in this training policy by giving knowledge and supporting people with less awareness or no knowledge in relation to its use can leads to a drastic change by adoption of digital payment system by people with its full knowledge in relation to its use can leads to a drastic change by adoption of digital payment system by people with its full knowledge in their everyday life like withdrawal of cash, deosit of cash and cheaque

Digital payment helps India in every sector by providing security and safety in relation to cash and also by advancing the lifestyle by adoption of latest technologies for globalization and modernization of our country which leads to the development All the steps and policies creation by government of India helps Indian society to get knowledge and awareness.

India government taking all the steps and polices as digital India, digitalization better infrastructure etc. leads to the development of India. So, Indian society should also help government adopt these system and policies as per Indian for our nation development and growth. Even slowly and gradually change is taking place but how much time it will take it cannot be

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## Recent Trends and Development in E-banking in India

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*The Banking industry and financial institutions are vital sectors of any economy. Development of these two sections of the economy can impact the growth of the country in an incredible way. Since 1969, tremendous changes have taken place in the banking industry. The banks have shed their traditional functions and have been innovating, improving and coming out with new types of the services to cater to the emerging needs of their customers. The growth in e-banking with the increase in the range of interface options available to access online banking solutions has resulted in a steady increase in the number of customers interacting through remote channels to a greater extent than before. The traditional branch model of bank is now giving place to an alternative delivery channels with ATM network. Most traditional banks offer e-banking services as an additional method of providing service. Further, many new banks deliver banking services primarily through the internet or other electronic delivery channels. Also, some banks are 'internet only' banks without any physical branch anywhere in the country. The basic advantage of E-banking over traditional is cost saving. The research objectives are to investigate the recent trends and developments in e-banking and provide managerial insights for the banking industry in India.*

**Keywords:** E-Banking, Financial Sector, Online Banking, Recent Trends.

### Introduction:

E-banking is defined as "Offering ,providing and Delivering banking products and services to a customer at his office or home through various electronic delivery channels via electronic device such as a personal computer and a mobile phone with browser or desktop software, telephone or digital television". It includes RTGS, NEFT, ECS, Credit cards/Debit cards and Smart cards, CTS, ATM and Mobile banking. Often E-banking is defined as web based banking. In E-banking system the bank has a centralized database that is web-enabled. All the services that the bank has permitted on the internet are displayed in menu. Any service can be selected and further interaction is dictated by the nature of service. From the consumers' point of view, automation of banking services by introducing E-banking service delivery channels provides 24 hours accessibility, reduced costs in accessing and using of banking products and services, proper cash management, reduced time demands, increased comfort as well as quick and continuous access to the information. . E-banking as per as information technology is concerned may be identified with three channels viz., ATM, Internet Banking and Tele Banking.. It is a generic term encompassing internet banking, telephone banking, mobile banking etc. It provides lot of benefits which add value to customers' satisfaction and to reach out consumers through many routes in terms of better quality of service offerings such as ATMs, telephone, internet and wireless channels which are now available to the consumers to perform their banking transactions in addition to the traditional branch banking and at the same time enables the banks gain more advantage over other competitors. Most traditional banks offer e-banking services as an additional method of providing service.

### Objectives of study:

1. To study new Trends and innovations in e-banking in India.
2. To present the technological developments in Indian banking sector.
3. To Study the benefits of new innovations to the society.

### Research methodology:

The present study is based on Secondary data collected from various books, National & international Journals, publications from various websites which focused on various aspects of banking sector.

### E-banking in India:

The Reserve Bank of India constituted a working group on E- Banking. The group divided the Electronic Banking products in India into 3 types based on the levels of access granted. They are as follows:

#### 1. Information Only System:

This is the basic level of service that banks offer through their websites. Through this service, the bank offers information about its products and services to customers. General purpose information like interest rates, branch location, bank products and their features, loan and deposit calculations are provided in the banks website.



## 2. **Electronic Information Transfer System:**

In this level, banks allow their customers to submit instructions or applications for different services, check their account balance, etc. However, banks do not permit their customers to do any fund-based transactions on their accounts. The system provides customer-specific information in the form of account balances, transaction details, and statement of accounts.

## 3. **Fully Electronic Transactional System:**

In the third level, banks allow their customers to operate their accounts for funds transfer, bill payments, and purchase and redeem securities, etc. This system allows bi-directional capabilities. Transactions can be submitted by the customer for online update. This system requires high degree of security and control.

## **Recent Trends and Developments in Banking Sector**

There has been considerable innovation and diversification in the business of major commercial banks. Different payment and settlement systems in India have made the task of transferring money from one bank account to another easier and faster. Now account holders don't have to wait for days to receive money in their bank accounts. With the help of the latest digital payment systems, money can be sent and received in an instant anytime from anywhere. A large number of banks, private companies and government bodies along with others are adopting different payment and settlement methods. This has helped in reducing the gap between the entities and their customers and other concerned people. These methods are fast, convenient and useful for documentation purposes. They also are superior in terms of reliability and cost involved. Following are the few new innovations in banking sector:

- **Mobile banking:**

Mobile banking is one of the most dominant current trends in banking systems. As per the definition, it is the use of a smartphone to perform various banking procedures like checking account balance, fund transfer, and bill payments, without the need of visiting the branch. Most banks now also have an application for Mobile Banking. Just like the online portal of the bank used for Internet Banking, you can use the app for many different types of banking transactions. If you use an Android or iOS device, you can download the app of your bank and use this facility. The apps can also be used for transferring funds, checking account statements, locate the nearest ATM, and other banking services

- **UPI payment system**

Unified Payment Interface is a mobile centric, real time interbank payment system which has the potential to transform and universalize digital payments in India. The Unified Payments Interface (UPI) offers architecture and a set of standard Application Programming Interface (API) specifications to facilitate online payments. UPI allows users to send or request money instantly from their bank accounts using a mobile phone, making mobile phone a primary payment device. It aims to simplify and provide a single interface across all NPCI systems besides creating interoperability and superior customer experience

- **Real time gross settlement:**

This is a system where the processing of funds transfer instructions takes place at the time they are received (real time). Also the settlement of funds transfer instructions occurs individually on an instruction by instruction basis (gross settlement). RTGS is the fastest possible interbank money transfer facility available through secure banking channels in India.

- **National Electronic Fund Transfer**

NEFT transfers funds between two bank accounts through electronic messages. This transaction happens on a one – to – one basis. Fund transfer through NEFT doesn't occur on a real-time basis which is unlike RTGS and IMPS. This system of fund transfer operates on a Deferred Net Settlement basis. Fund transfer transactions are settled in batches as opposed to the continuous, individual settlement in RTGS.

- **IMPS**

Immediate Payment Service (IMPS) is an instant interbank electronic fund transfer service through mobile phones. It is also being extended through other channels such as ATM, Internet Banking, etc. Unlike NEFT and RTGS, the service is available 24/7 throughout the year including bank holidays. It is managed by the National Payments Corporation of India (NPCI) and is built upon the existing National Financial Switch network. It is a great banking platform in case of emergencies. The transaction charges of this platform are also very nominal and the transfer limit is also considerable, approximately Rupees 2 lakhs per day. Moreover, IMPS is available on mobile too which makes it super-convenient.

- **Electronic Clearing System:**

ECS is an electronic method of fund transfer from one bank account to another. It is generally used for bulk transfers performed by institutions for making payments such as distribution of dividend interest, salary, and pension, among other. It can also be used to pay bills and other charges such as electricity, water, Telephone or for making EMI payments on loans. It is an electronic clearing system that facilitates paperless credit / debit

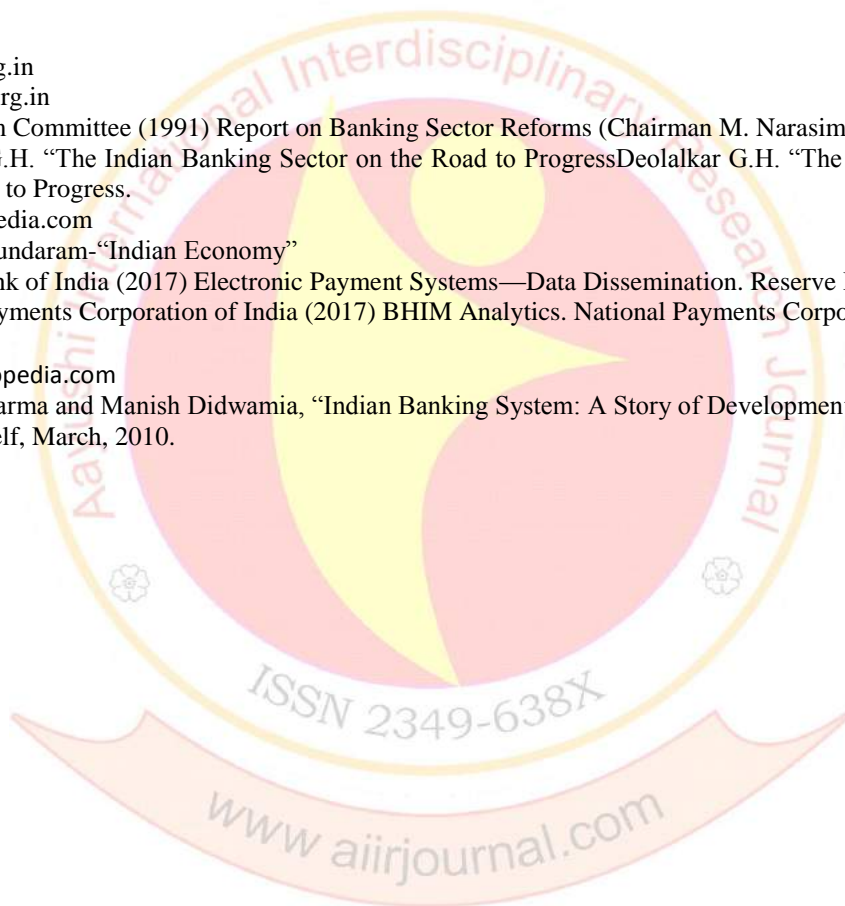
transaction directly linked to your account and also provides for a faster method of effecting periodic and repetitive payments. ECS can be used for both ECS credit and ECS debit

### Conclusion:

In the era of “Digital India”, the banking and financial services in India have undergone a massive evolution and the phenomenon continues. The change can be attributed to various components like new regulatory policies and customer expectations. However, the one element that has affected banking and financial services the most is technological advancement. Modern trends in banking system make it easier, simpler, paperless and branchless with various features like IMPS (Immediate Payment Service), RTGS (Real Time Gross Settlement), NEFT (National Electronic Funds Transfer), Online Banking, and Telebanking. Digitization has created the comfort of “anywhere and anytime banking.” It has resulted in the reduced cost of various banking procedures, improved revenue generation, and reduced human error. Along with increased customer satisfaction, it has enabled the customers creating personalized solutions for their investment plans and improves the overall banking experience.

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## Cashless Transaction : Opportunity, Challenges and Remedies

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### Introduction:

A cashless transaction is an automated or online operation that may take place between two people, business, or organizations. A digital transaction is a cashless transaction which specifically involves no paper for completion of the transaction. Purchasing goods from e-commerce websites, signing of business contracts online, or even buying movie tickets through your smartphone app fall under the umbrella of digital transactions. Such operations are accurate, quicker, convenient, and certainly easier. Many are unwilling to accept that there are benefits to a cashless transaction simply because they cannot navigate their way around digital devices, or are just happier to transact using cash. Read on about an array of cashless transactions that simplify day-to-day trading. The RBI and government have launched several measures for the spread of electronic and other non-cash settlement culture.

The Vision-2018 for Payment and Settlement Systems in India brought by the RBI in June 2016 reiterates the commitment to encourage greater use of electronic payments by all sections of society so as to achieve a “less-cash” society.

### Importance Of The Study:

In a cashless economy, all financial transactions are executed electronically rather than using banknotes. Several countries around the world have been steadily moving towards a completely cashless society for a number of years. Sweden is leading the charge, where more than 59 percent of consumer transactions are completed through non-cash methods, which includes credit, debit, and mobile banking solutions. Canada is close behind, with 57 percent of transactions made using alternative methods. In 2016 India eliminated its highest denomination bills—removing 90 percent of paper money from circulation. And The People’s Bank of China has publicly acknowledged that physical cash may one day become obsolete.

With limited cash in hand and an indefinite crunch in sight, most people are rushing to cashless transactions. Digital transactions bring in better transparency, scalability and accountability. The new move will compel more merchants to accept digital money.

### Objective Of The Study:

- 1) To Study Concept of Cashless Transaction
- 2) To discuss the opportunity of Cashless Transaction
- 3) To Study method of Cashless Transaction
- 4) To study of problems and give the measures of Cashless Transaction

### Research Methodology:

The present study aims to concept of Cashless Transaction, opportunity of Cashless Transaction, method of Cashless Transaction and solve the various problems. The analysis is mainly based on secondary sources of the data. The Secondary data collected from the books, journals, Govt. publications library and Internet etc.

### Types Of Cashless Transaction Methods :

There are numerous ways to go cashless. Here are some of the best methods to help you pilot your way into a cashless transaction:

**1. Cheques and Demand Drafts :** A cheque is one of the safest and oldest methods of cashless payment. A cheque is issued to a person or business for a specific amount. This cheque is deposited in the receiver’s bank, and the money is received through a payment processed by a clearinghouse.

A demand draft is safer than a cheque because it cannot be defaulted or dishonoured, unlike a cheque. The DD is signed by a banker to ensure that sufficient funds are available for a successful transaction. The disadvantage of cheques and DDs are that they are time-consuming because a person has to visit the bank and then wait for the cheque or DD to clear.

**2. Debit and Credit Cards :** Debit and credit cards have caught on as a method of cashless trading. A debit card is considered by many to be safer because you are transacting with money in your account. The risk with a credit card is overspending. Debit and credit cards can be used to make purchases online as well as over-the-counter at a store.

**3. UPI Applications :** UPI stands for Unified Payment Interface. UPI has changed the way we transact. At the core of a UPIs functionality is the fact that our mobile numbers are registered with our respective banks and linked to our accounts.



A virtual payment address helps to send or receive money without entering any bank related information. Merchants would need to have a current account to receive UPI payments. UPI applications that are currently popular are BHIM, PhonePe, Google Pay/ Tez, ICICI Pocket, and SBI Pay.

**4. Mobile Wallets :** Mobile wallets have become a convenient way of making payments without cash. Once you load money into your mobile wallet, you can use it wherever it is accepted. The most popular mobile wallet that is trending is Paytm.

**5. NEFT & RTGS :** National Electronic Fund Transfer and Real Time Gross Settlement are electronic payment systems that allow convenient fund transfer between bank accounts. Both facilities are maintained by the RBI (Reserve Bank of India). The facilities can be used to transfer money only within India. The RTGS transfer window is from 8 am to 4.30pm on weekdays and bank working days. NEFT settlements happen in deferred batches between 8 am to 7 pm on bank working days..

**6. IMPS :** IMPS, which stands for Immediate Payment Service, is a service that was initiated by the National Payment Corporation of India. The pre-condition to avail IMPS services is that a user needs to also register for mobile banking.

**7. USSD :** Unstructured Supplementary Service Data is a cashless option for those who do not carry a smartphone or tablet. It works without an internet connection as opposed to most of the other digital payment services. It is a form of mobile banking where you must dial \*99# to use the service. The service mirrors the IMPS service and uses MMID with a mobile number or IFSC code with the account number for the transaction to be successful.

**8. ECS :** ECS stands for Electronic Clearance Service. It is a convenient method to make bulk payments, especially to pay off your utility services, equated monthly instalments, and for financial institutions to disburse payments like pensions, salaries, or dividend interest.

**9. QR Codes :** QR codes are an extension of the mobile wallet payment services. You simply scan the code of the merchant service to complete your transaction. This would require a smart device with a camera and a scanning facility. It is a quick and hassle-free method of transacting digitally.

**10. Net Banking :** Net banking is an alternative to using your debit or credit card. The user needs to login to their net banking account to approve a payment. Net banking gives you the flexibility of transacting even if you have misplaced your debit card or lost it. You can use internet banking to make utility payments, purchase goods and services online, or send and receive money.

**11. Gift Cards or Vouchers :** Gift vouchers are a handy way of going cashless and are a great gift idea because the receiver can decide what they would like to purchase with the voucher. Stores also give out discounts on gift vouchers which work well for the purchaser as well.

**12. Aadhaar Enabled Payment System:** Aadhaar Enabled Payment System (AEPS) is one of the best cashless payment methods. AEPS is like Micro ATM it uses smartphone and a finger-print scanner for the transaction. In order to use this facility, it is mandatory to link your Aadhaar card to your bank account. You can use AEPS in order to perform transactions like Aadhaar to Aadhaar fund transfer, Cash withdrawn, Cash deposit, etc.

You can do all these things which are available to a person with smartphone and internet connection. Almost including SBI, ICICI, BOB, Axis Bank and PNB supports USSD payment option.

### Benefits Of Cashless Transactions :

There are more benefits to having a cashless economy. Although it will take India a few more years to be a completely cashless economy, cashless transactions in India have seen a steep upsurge since the first quarter of 2017.

1. Being a cashless economy furthers the cause of digitization and takes us one step closer to utilizing technology at its finest.
2. Physical thefts and robberies will reduce with a reduction in cash circulation.
3. The printing cost for currency will come down by and large. Fake currency issues will also reduce.
4. Cards and Mobile Wallets are handier to carry around and take up less space than cash.
5. It becomes easier to follow your expenditure because everything is tracked online.
6. Discounts and cashbacks are being offered for making online payments. Reward points are also being offered by mobile wallets and UPI applications to entice more users.
7. Service tax has been waived on card transactions up to Rp2000.
8. Transacting online improves your budgetary discipline. Having less cash in your wallet forces you to cut down on the smaller yet regular expenses that sneak up into your expenditure list.
9. Transacting online can help you with exact amounts. This means that there is no fighting for small change or paying an extra rupee because you are short of coins.

### Challenges Of Cashless Transaction :

higher risk of identity theft the biggest fear is the risk of identity theft. Since we are culturally not attuned to digital transactions, even well-educated people run the risk of falling into phishing traps. With the rising incidence of online fraud, the risk of hacking will only grow as more people hop on to the digital platform.

rickshaw puller will do if he has his Aadhaar ID stolen? Given the tedious process and poor grievance redressal, people will have no easy recourse if they lose money online. There is no stringent legal process to deal with this kind or scale of fraud.

### **Losing phone**

Since you will be dependent on your phone for all your transactions on the move, losing it can prove to be a double whammy. It can not only make you susceptible to identity Theft, but you could also be rendered helpless in the absence of physical cash or any other payment option. This can be especially problematic if you are travelling abroad or in smaller towns or villages with lack of banking infrastructure or other payment options. Another drawback is that you need to keep your phone constantly charged. If the phone dies on you, you will be stranded, particularly if you are in the middle of an important purchase or dealing with an emergency.

### **Difficult for Low Internet Connectivity :**

India has a low Internet penetration of 34.8%(2016), according to the Internet Live Stats, and only 26.3% of all mobile phone users have a smartphone (2015), as per Statista figures.

### **Overspending**

While there is no denying the convenience of card or mobile wallet transactions, it could open a spending trap for an unsuspecting population. According to behavioral finance Theorists, the pain of parting with money is felt more acutely if you use physical cash instead of a card.

### **Measures To Solve The Problems Of Cashless Transaction:**

1. The security and safety in access the ATM, Mobile Banking, Internet Banking has to be keenly noted.
2. Make use of the technology much easier.
3. The thumb impression is used as a PIN code or Password for Internet Banking to avoid hacker's money theft in technological banking.
4. The software application for mobile banking is not suitable for all mobile phones. Due to tremendous development in the latest technologies in the mobile phones. Customers have various models of mobiles. So satisfy their customers banker has to take proper steps in having suitable software for all types of mobile phones.

### **Conclusion :**

The RBI and the Government are making several efforts to reduce the use of cash in the economy by promoting the digital/payment devices including prepaid instruments and cards. RBI's effort to encourage these new varieties of payment and settlement facilities aims to achieve the goal of a 'less cash' society. With limited cash in hand and an indefinite crunch in sight, most people are rushing to cashless transactions. Digital transactions bring in better transparency, scalability and accountability. The new move will compel more merchants to accept digital money. Cash may no longer be king.

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## Impact of Digital Payment System on Unorganized Retail Sector

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As per AT Kearney's annual Global Retail Development Index (GRDI), 2010 India is ranked third in the list of most attractive market for retail investment. Organized retail involves the sale of merchandise by licensed retailers. Indian apparel retail is divided between two sectors: organized and unorganized. Present retail scenario with respect to the share of unorganized retailers, the factors affecting the purchase behavior of consumers with respect to food and grocery and the perception of unorganized retailer on the entry of organized players based on performance of last two years. The Indian retail market is one of the fastest growing retail markets in the world. With over 12 million retail outlets, India has one of the highest density of retailers in the world at one retail for every 90 people.

The unorganized retailer survey revealed that using the facilities like air-conditioning, electronic weighing machines, computerized billing etc which has been the strong features of organized retailers and by incorporating the services like home delivery and cash credit would help them retain their customers as well as attract more customers. The unorganized retail sector in India refers to the traditional retailing formats of pavement vendors, mobile vendors, and traditional local kirana shops. Unorganized retail generally involves the sale of unbranded merchandise.

Financial Inclusion in India has historically focused on a few core objectives such as providing institutional credit to small borrowers, creating an ecosystem by which financial products, services and literacy can be provided within the framework of the banking system, disbursing government cash benefits directly to the beneficiary through his/her bank account to promote financial inclusion and to curb leakages. In the recent years, financial inclusion drives have targeted opening of bank accounts, with banks and Banking Correspondents being incentivized based on the number of accounts opened. This has resulted in opening of large number of accounts; in many cases, individuals have multiple inoperative bank accounts because the individual did not incur any cost due to opening of a bank account.

While India now has a well-established mobile communications infrastructure and a payment infrastructure, the use of cash for retail transactions in the Indian economy is still quite high. This imposes massive transaction costs on the economy and introduces inefficiencies typically associated with a high cash economy. Large parts of the population also do not have access to banking facilities. However, this scenario is changing with the advent of the "Jan Dhan Yojana" which aims to put a bank account within reach of most Indians, with debit cards in their pockets.

Kirana stores are an important part of the unorganized retail ecosystem by being present in rural and in urban areas, sometimes serving as the only local outlet for purchase of food and other items. Thus enormous benefits can accrue through making these transactions cashless.

Hence, it is important to gain an understanding of the cost of operations of a typical kirana store through a research study and develop a reference model around key financial and operational parameters that would enable kirana stores to transition from cash-based to a cashless model. While kirana stores thrive on local entrepreneurship which has often been highlighted in the economic press, not much research has been done in this area from the perspective of moving towards a cashless economy and its positive impact on existing kirana business models.

This ongoing research study, funded by CDFI, is attempting to analyse the business model of a typical kirana store and study the potential financial impact of introduction of new payment systems and inventory tracking systems at the retail level, not only on the operations of the kirana stores, but also on upstream suppliers including manufacturers. It is also investigating and will propose a new strategic architecture and business model involving other stakeholders such as banks, consumers, Government, manufacturers and distributors that could potentially reap the benefits of cashless micro-transactions and digitization of retail operations at the kirana store.

2016 saw the epilogue of higher denomination currency, our government's decision of demonetization changed the financial landscape of India. That decision also led to the rise of digital payment systems and a cashless economy. Before talking about Digital payment system penetration, let's talk about Internet penetration.

Internet users in India have grown extensively in the last couple of years. In 2017, we had around 429 million internet users in India, the Cisco reports project the users may double by 2020. Smooth mobile network



connectivity will ease our growth, making India the second country with the largest mobile and internet penetration, second only to China. A retail tech platform provides value-added services via digital payment not just to the last mile but also to the retailers. Financial product partners' like Pragati capital provide quick and hassle-free e-loans to the retailers to increase their offerings. If the retailer gets an e-loan, services EMIs via digital transactions, the whole up chain and down chain become digital.

Thus the 'press enter' becomes the digital currency According to the numbers shared by the ministry of finance in December 2017, near to 30.71 crore people are covered in Jan-dhan scheme which includes 12 crore people residing in urban areas. Which means till date Jan-dhan scheme has covered only 18 crores of the population, out of which near to 100 crore people residing in the nonurban regions of India. With aggressive promotions carried out by the government and private companies regarding mPOS, UPI and AEPS services, the psyche of rural residents may have been shifting a bit towards growing digital services. But shifting the agrarian economy to digital payments will need the entire value chain to adopt the digital payments. This coupled with the lack of technology savviness compounds the problem. It is important to make spread awareness and benefits of digital payments.

We aim to provide retailers with digital, financial and business solutions such that each small business and retail store can use technology to expand their business offerings. Want to know more? For "Digital India" revolution to pick momentum we need the farmers, retailers and other traders to adopt the digital services. The government, as well as private organisations, needs to set up educational camps to educate people about digital payments and bank accounts and why it is important for every citizen to be covered under a financial scheme.

Over the past two decades, India has pushed hard to become a less-cash society. In the early 1990s, the Reserve Bank of India spearheaded the development of technological infrastructure that facilitated the creation of a payment and settlement ecosystem. Now a day's Indian consumers are showing rapid changes by shifting their buying attitude from unorganized outlets to organized outlets. In the emerging Indian retail environment, importance of unorganized retail sector in India and unorganized retailers to frame strategies to face the opportunities and challenges in this sector.

The Government of India has encouraged the shift to a less-cash society with its push for digital payments through the JAM Trinity: the Prime Minister's Jan-Dhan Yojana, Aadhaar, and mobile connectivity. We welcome the government's efforts, including the short and medium-term measures outlined in the Office Memorandum of February 29, 2016, to accelerate the adoption of digital payments.

Finally, steadfastly focusing on enhancing safety and security of digital payments while improving consumer experience would help accelerate the adoption of digital payments. Equally, efforts to increase customer awareness and robust customer grievance redressal would play an important role in building consumer confidence in innovative digital payment instruments. The 2016 "Beyond Cash" study published by USAID, which included a survey of 2,500 Indian consumers and merchants, cites four main reasons for the slow growth of card acceptance.

**Merchant awareness and interest is low:** 60 percent of the merchants sampled were unaware that they could accept debit cards for receiving payments. Of those who were aware, only 40 percent were interested in accepting cards in the future. The need to make cash payments to suppliers is the leading reason for lack of merchant interest.

**Merchant readiness and willingness:** Merchants don't fully understand and appreciate the benefits of the efficiencies and security of electronic payments relative to cash payments.

**Consumer demand is low:** Building stronger cardholder and merchant awareness of the benefits of accepting electronic and card payments is a critical success factor.

**Security concerns:** Merchants and cardholders fear the security risks of paying electronically. These findings point to the need to bolster financial literacy. To that end, we propose interventions below that could gradually improve financial literacy in India, and outline the institutional architecture to do so. We also share examples of successful models for encouraging financial literacy, including those adopted by microfinance institutions.

In summary, India is at an inflection point in its payment digitisation journey. Innovations in form factors, technology, and measures like the Bharat Bill Payment System, Payments and Small Finance Banks are all building blocks of a less-cash society. Together, with a series of interventions by the Government of India, these building blocks could accelerate the pace and scale of digitisation.

A detailed study of the consumers and retailers would reflect the behavior, usage patterns, access and literacy with respect to digital payments. While mobile payments appear to be gradually finding space in the

minds of the consumers because of their perceived value and usefulness, adoption and usage will continue to remain low if the perceived value for the merchants remain low or is not clearly understood by the merchants.

Having used a credit card realizes and appreciates the benefits of cashless transactions. There are many such examples wherein the younger generation is helping the older generation connect to the digital world. This is not only true in digital payments but also in using digital media such as smart phones, social networking etc. The youth today is familiarizing the older generation with these products and services. They are helping the older generation overcome their apprehensions and appreciate the benefits in unorganized retail sectors.

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## A Study on impact of Cash less Transaction on the Indian Economy

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### Abstract:

*With restricted benefit hand associate degreed an indefinite crunch in view, most of the people ar speeding to cashless transactions. Digital transactions usher in higher transparency, quantifiability and answerability. The world is speedily moving towards digitalisation, and there's no denying its presence in the majority fields of our lives. Whether or not it's looking, education, banking, groceries, bill payments, tax filing or any legal documentation. Even cash has gone digital, with a lot of and a lot of individuals preferring to use digital money payment ways instead of carrying dough around. Reducing the economy's dependence on the money and creating it a lot of deviated towards these mediums would result into the betterment of the country and therefore the economy. it'll facilitate in curb the generation of black cash. The cashless economy has attacked the parallel economy. folks that hoard cash below their bed, people who launder cash bypassing banking channels, terrorist WHO would like cash to finance their terror can notice problem in cashless economy. it'll facilitate in reducing instances of minimization. Cashless economy can boost consumption as individuals wouldn't be attracted towards keeping cash in banks. a lot of consumption can result in a lot of production, a lot of employment opportunities, income of [individuals] can increase.*

**Key words:** digitalisation, Indian Economy, Technological advancement, Paperless dealings.

### Introduction:

The immense Indian economy that supports and provides its large population has its own momentum and inertia. whereas the policy moves and technological developments have created a cashless system potential, it's still faraway from simple. For the Indian economy to become cashless, every conceivable use of cash these days should have a digital equivalent or technique of purchase; in different words, every shop, merchant, and industrial company that sells to shoppers should be able to receive payments digitally. Urban retailers and shoppers notice the shift to a digital system way more convenient than their rural counterparts, WHO lack location (PoS) card systems or digital payment accounts. firms have piggy-backed upon the spectacular penetration of cell phones into the Indian market, and e-wallets ar a good thanks to cost-effectively provide this technology to succeed in every corner of the state. For Republic of India to meaningfully understand the promise of a digital economy, it must make a significant effort towards increasing the access of individuals to the Republic of India Stack, and account for the fact that several won't have web access or sensible phones. It should conjointly develop stronger systems to protect against fraud, theft, and crime. Cashless economy or cashless suggests that all the transactions disbursed between 2 people can occur by payment through payment gateways or through the plastic cash. it's finished the primary aim of uncovering the non-registered transactions. The Indian government with another aim to promote the economy through non-cash transactions has introduced mediums such as: Banking cards, USSD, AEPS, UPI, Mobile Wallets, Banks Pre-Paid Cards, purpose of Sale, Internet Banking, Mobile Banking, small ATM's. Reducing the economy's dependence on the money and making it a lot of deviated towards these mediums would result into the betterment of the country and the economy

### 2. Review of literature:

Paves means for a transparent understanding of the areas of analysis already undertaken and throws alight on the potential areas that are nonetheless to be coated. Keeping this read in mind, an endeavor has been created to form a short survey of the work undertaken on the sphere of Cashless economy. Thereviews of a number of the vital studies ar bestowed below. Cashless economy isn't the whole absence of money, it's associate degree economic setting during which merchandise and services ar bought and purchased through electronic media.

**Ashish Das, and Rakhi Agarwal**, (2010) in their article "Cashless Payment System in India- A Roadmap" money as a mode of payment is an upscale proposition for the govt. The country needs to move removed from cash based towards a cashless (electronic) payment system. this may facilitate reduce currency management value, track transactions, check minimization / fraud etc., enhance financial inclusion and integrate the parallel economy with main stream.

**Alvares, Clifford** (2009) in their reports —The drawback relating to faux currency in Republic of India. || it's aforesaid that the country's battle against faux currency isn't obtaining easier and plenty of fakes go undiscovered. It is also expressed that counterfeiters so far had restricted printing facilities that created it easier to get fakes.

**3. Statement of the matter:** A cashless economy is one during which all the transactions ar done using cards or digital suggests that. The circulation of physical currency is bottom. Republic of India uses an excessive amount of money for transactions. The number of currency notes in circulation is additionally so much above in different giant economies. In this context recent trend are modified, whereas revolution within the info



technology in Republic of India. The researcher tries to bridge the gap between awareness regarding the sensible phone makes use of it in rural India.

#### 4. Objective of the study

1. To establish the advantages of going cashless.
2. To take up the challenges in creating Republic of India cashless.
3. To access growth of Republic of India on the trail of being cashless in terms of digital transactions like credit, Debit & bank payments.
5. To serve the goal of run in electrification of payments.

#### 5. Importance of cashless dealings:

The cashless economy has importance hooked up to that within the following ways:

1. Taxation: with lesser availability of dough at homes and a lot of in banks, there's lesser scope of hiding financial gain and evading taxation and once there are a lot of tax payers it ultimately ends up in a lesser rate of taxation for the total country.
2. Transparency and accountability: it becomes loads easier to trace the flow of cash with each transaction being recorded with the client, merchantiser also as restrictive bodies, creating the system much more clear and compliant. within the future it ends up in higher business and investment prospects for the economy as a full. a lot of currency in bank can mean a lot of circulation of cash in the economy, resulting in larger liquidity and would eventually mean lesser interest rates (according to the financial policy of the country).
3. Reduced red tapism and bureaucracy: with cashless transactions through electronic suggests that the wire transfers are tracked and folks are responsible that successively reduces corruption and improves service time.
4. Less availability of money for extralegal activities: once individuals are inspired to travel cashless, there is lesser money offered with the individuals and there won't be a method to speculate in different activities to use the idle cash. Channels like banking system (illegal remittance) can ultimately suffer the strength of a cashless economy.
5. Pack of cards: No ought to carry large notes during a case. simply carrying the desired cards or mobile banking can satisfy. a lot of sense of safety with a PIN protected card etc. which can work solely with your own credentials.
6. No concern of being robbed not like carrying money and rental everybody recognize that there can be something value snatching.
7. Tracking of expenses: it becomes easier to see what quantity was spent wherever.
8. The actual quantity in tiny denominations may be paid. not like money transactions, there's no would like to pay fringe quantity just in case the precise quantity isn't offered with either of the parties. a crucial, though ostensibly insignificant issue is that of hygiene of the notes.
9. Easier accounting: Direct payment to checking account. You don't ought to go daily to deposit money to your accounting.
10. Easier dealings: we are able to simply do any transaction with security.
11. Benefit to Government: the govt can like the cashless economy within the space of adequate budgeting and taxation, improved restrictive services, improved body processes (automation), and reduced value of currency administration and management (Ashike, 2011). Jimi Agbaje, one amongst the previous office candidates on the platform of DPA in port State states that the advantages of a cashless society vary from control and dominant to securing the money system of our economy.
12. legal political funding: contribution is that the major concern within the country. Majority of the funding within the organisation is unaccountable that isn't disclosed by the party also because the donor. All that sort of extralegal dealings would be stopped if a government follows cashless dealings.
13. Cost of printing and distribution of currency: the price of printing and distribution of currency would be zero for the cashless dealings as no paper notes to print and distribute.

#### 6. Benefits of going cashless:

**Convenience:** The ease of conducting money transactions is perhaps the largest rational motive to travel digital. You will no longer ought to carry wads of money, plastic cards, or maybe stand up for ATM withdrawals. It's conjointly a safer and easier defrayal choice after you are motion. "The advantages are huge if you permit out the low-income cluster, which can face an enormous challenge," says Hindu calendar month Jhaveri, Director, Transcend Consulting. "For the remainder of the country, it's constructing. it'll be particularly helpful just in case of emergencies, say, in hospitals," he says. Adds Jayant Pai, Head, Marketing, PPFAS Mutual Fund: "You have the liberty to interact whenever and where you would like. You don't got to be physically present to conduct a dealings or be forced to try and do thus solely throughout workplace hours."

**Discounts:** The recent relinquishment of service tax on card transactions up to Rs.2000 is one amongst the incentives provided by the govt to push digital transactions. This has been followed by a series of cuts and freebies. It's an honest time to extend your savings if you are taking advantage of those. For instance, 0.75% discount on digital purchase of fuel means the gasoline value in city at Rs63.47 per l may be brought right down to Rs sixty two.99/l with digital payment. Similarly, saving on rail tickets, main road toll, or purchase of insurance will facilitate cut your prices. increase these the money back offers and discounts offered by mobile

wallets like Paytm, also because the reward points and loyalty benefits on existing credit and store cards, and it may facilitate improve your income marginally.

**Tracking spends:** If all transactions are on record, it'll be terribly simple for individuals to stay track of their defrayal. It'll conjointly facilitate whereas filing tax returns and, just in case of a scrutiny, individuals can find it simple to clarify their spends," says Manoj Nagpal, CEO, Outlook Asia Capital. "Besides the tax, it'll have an honest impact on budgeting," says Pai.

**Budget discipline:** The written account can assist you keep tabs on your defrayal and this may end in better budgeting. "Various apps and tools can facilitate individuals analyse their defrayal patterns and throw up smart insights over a handful of years," says Jhaveri. Controlled defrayal may conjointly end in higher investing. If identical quantity of money doesn't flow into circulation and folks still use mobile wallets and cards, it's conjointly seemingly to bring down the espresso issue.

**Lower risk:** If taken, it's simple to dam a mastercard or mobile note case remotely, however it's not possible to get your money back. "In that sense, the digital choice offers restricted security," says Pai. This is especially true whereas motion, particularly abroad, wherever loss of money will cause nice inconvenience. Besides, if the futurist cards evolve to use biometric ID (finger prints, eye scan, etc), it can be extremely tough to repeat, creating it a awfully safe choice.

**Small gains:** it's going to not appear to be a lot of a bonus, however being cashless makes it simple to push back borrowers. Another and is that you simply will pay the precise quantity without concern regarding not having changed or obtaining it back from shopkeepers.

### 7. Challenges in creating Republic of India money less Economy:

1. Availability of web affiliation and money accomplishment.
2. Though bank accounts are opened through January Dhan Yojana, most of them are birth unoperational. Unless individuals begin operational bank accounts cashless economy isn't potential.
3. There is additionally unconditional interest in not moving towards cashless economy.
4. India is dominated by tiny retailers. They don't have enough resources to speculate in electronic payment infrastructure. The perception of shoppers conjointly typically acts a barrier. The advantage of cashless transactions isn't evident to even those that have credit cards. Cash, on the opposite hand, is appeared to be the quickest way of transacting for eighty two of MasterCard users. It's universally believed that having money helps you negotiate higher. Most card and money users concern that they're going to be charged a lot of if they use cards. Further, non-users of credit cards don't seem to be responsive to the advantages of credit cards. Indian banks are creating it tough for digital wallets issued by non-public sector firms to be used on the several bank websites. It can be restrictions on victimization bank accounts to refill digital wallets or an absence of access to payment gateways. Regulators can go to take a tricky stand against such rent seeking behavior by the banks.

### 8. Steps taken by run and Government to discourage use of cash:

1. Licensing of Payment banks
2. Government is additionally promoting mobile wallets. Mobile note case permits users to instantly send cash, pay bills, recharge mobiles, book film tickets, send physical and e-gifts each on-line and offline. Recently, the run has issued sure pointers that permit the users to extend their limit to Rs1,00,000 supported an explicit KYC verification
3. Promotion of e-commerce by liberalizing the FDI norms for this sector.
4. Government has conjointly launched UPI which can create Electronic dealings a lot of easier and quicker.
5. Government has conjointly withdrawn surcharge, charge on cards and digital payments

### 9. Types of on-line transaction:

**1. National Electronic Fund Transfer (NEFT):** National Electronic Funds Transfer (NEFT) may be a nation-wide payment system facilitating matched funds transfer. Below this theme, individuals, firms and corporates will electronically transfer funds from any bank branch to someone, firm or corporate having associate degree account with the other bank branch within the country taking part within the theme. Individuals, corporations or corporates maintaining accounts with a bank branch will transfer funds using NEFT. Even such people WHO don't have a checking account (walk-in customers) may deposit cash at the NEFT-enabled branches with directions to transfer funds using NEFT.

**2. Real Time Gross Settlement (RTGS):** RTGS is outlined because the continuous (real-time) settlement of funds transfers on an order by order basis (without netting). 'Real Time' suggests that the processing of directions at the time they're received instead of at some later time; 'Gross Settlement' suggests that the settlement of funds transfer directions happens. Considering that the funds settlement takes place within the books of the Reserve Bank of Republic of India, the payments are final and irrevocable. The RTGS system is primarily meant for big value transactions.

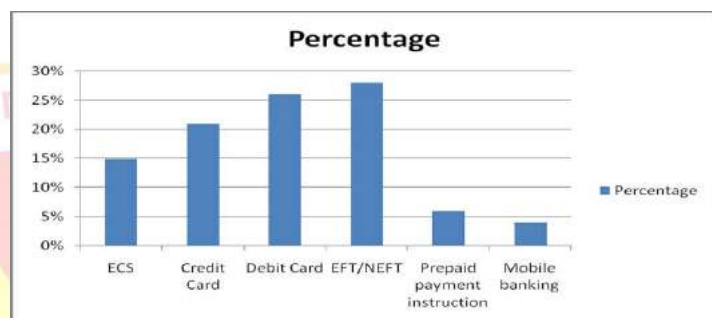
**3. Electronic Clearing System:** ECS is an alternate technique for effecting payment transactions in respect of the utility-bill-payments like phone bills, electricity bills, premium, card payments and loan repayments, etc., which might obviate the

necessity for provision and handling paper instruments and thereby facilitate improved client service by banks / firms / corporations / government departments, etc., aggregation / receiving the payments.

**4. payment Service (IMPS):** IMPS offers an immediate, 24X7, interbank electronic fund transfer service through mobile phones. IMPS is an immediate degree emphatic tool to transfer cash instantly among banks across Republic of India through mobile, web and ATM that isn't solely safe however conjointly economical each in money and non-financial views.

**10. Retail Electronic payments:** The government needs Republic of India to be a cashless economy: the move towards a cashless economy may be a move towards larger answerability towards the flow of cash, reduction in sector and bringing a lot of individuals into the industry. The retail electronic payment area in Republic of India is dominated by inter-bank cash transfer modes like NEFT or National Electronic Fund transfer, Electronic clearing system, and credit and debit cards. Newer modes of payment like paid wallets along with mobile banking are getting in style. Six banks, as well as ICICI Bank, India's largest non-public sector bank, and therefore the banking company of Republic of India, India's largest public sector bank, launched the Interbank Mobile Payments Service, allowing customers to transfer cash between bank accounts, on the premise of mobile cash ID's.

Category	Percentage
Credit Card	21%
Debit Card	26%
EFT/NEFT	28%
Prepaid payment instruction	6%
Mobile banking	4%



### 11. Steps taken by the govt of India:

Government is additionally promoting mobile wallets. Mobile notecase permits users to instantly send cash, pay bill, and recharge mobiles, book film tickets, and send physical and e-gifts each on-line and offline. Recently, the run had issued sure pointers that permit the users to extend their limit to Rs 1, 00,000 supported sure KYC verification. varied incentives offered by government to push digitalization in {india|India|Republic of India|Bharat|Asian country|Asian nation} to form India "Digital India" by that specialize in cashless modes are:

1. On digital transactions up to rupees 2000, Service Tax of V-J Day waived off.
2. Digital purchase of fuel through credit cards, mobile wallets or e-wallets, discount of zero.75%.
3. Free accident insurance value rupees ten large integer on account of on-line price tag consumers.
4. On purchase of recent LIC policies on-line via its website, V-E Day discount is obtainable.
5. Government has conjointly launched UPI (PDF) (Unified Payment Interface), payment system which will be used for immediate mobile transfers between account holders of 2 completely different banks.
6. Government has introduced varied technologies like BHIM (Bharat Interface for Money) app to transact between also like other merchants. BHIM App presently has seventeen million downloads in but three months since its launch.
7. Government is significantly promoting their digital cashless technologies aside from BHIM like UPI & Aadhar Enabled Payment Systems.
8. In addition to government or run, firms also are taking part in combating of cyber crimes because of increasing trend of cashless or digital transactions. Microsoft opened full scale cybersecurity Center known as Cyber security Engagement center (CSEC) in Republic of India.

### 12. Suggestion:

1. Open Bank accounts and guarantee they're operationalized.
2. Abolishment of presidency fees on mastercard transactions; reduction of interchange fee on card transactions; increase in taxes on ATM withdrawals.
3. Tax rebates for shoppers and for merchants for adopting electronic payments.
4. Making Electronic payment infrastructure fully safe and secure in order that incidents of Cybercrimes can be reduced and folks develop religion in electronic payment system.
5. Create a culture of saving and religion within the economic system among the agricultural poor individuals.
6. The depository financial institution of Republic of India can get to come back to terms with some problems, from deciding what digital payments across borders suggests that for its capital controls to however the new modes of payment have an effect on key financial variables like the rate of cash.
7. RBI will got to shed a number of its ideology, a part of that is as a result of it's usually seen itself as the shielder of banking interests instead of overall money development.



8. The regulators conjointly ought to keep a pointy eye on any potential restrictive practices that banks could indulge in to take care of their current dominance over the profitable payments business.

### 13. Future Plans of Digitization:

The future of the Cashless Republic of India appearance pretty promising because the response of the country individuals towards this move of the govt and therefore the support towards it's a transparent indication that the government's move is probably going to succeed. The transparency within the economy can increase through the e-commerce transactions and therefore the digital payment gateways which can increase the GDP of the economy. This will increase the creditability of the country and create an increase in investments. This step of cashless is really going to produce ripples of huge success. For the industrialists, it's a good time to integrate the cashless practices are going to be benefitting within the close to future. Let's fix the issues ending caused to you and be the a part of a more robust, developed, digitally equipped and Cashless Republic of India along the globe is rapidly moving towards digitalization, and there's no denying its presence in the majority fields of our lives. whether or not it's looking, education, banking, groceries, bill payments, tax filing or any legal documentation; you'll do all of it online! you'll use your Smartphone, portable computer or desktop to hold out these on-line transactions. Even cash has gone digital, with a lot of and a lot of individuals preferring to use digital money payment ways instead of carrying dough around. So, let's learn a bit a lot of about digital cash and its completely different aspects.

### 14. Conclusion

The conversion of everything may be a step modification even larger than the invention and adoption of the internet, primarily as a result of its scale and pace of modification. What we have a tendency to describe these days as 'digital' during a few years' time can haven't any would like for the descriptive word. A 'digital camera' is already a mere 'camera' to those that recognize no completely different. within the same means, a 'digital' strategy can become business as usual strategy. this can be why it's thus vital to urge a vantage and learn whereas there's still time. Digital is dynamical the globe, and progress isn't linear. during a world wherever a smartphone isn't any longer just a smartphone, however a possible revolution, we have a tendency to invite organizations to explore what digital advances mean for them and their stakeholders. we have a tendency to support the opinion of executives WHO re-add digital far more as a chance to be a broach than as a risk to protect against. Not each digital initiative can work for each organization, and it's vital to assess capability and capability for change before deploying a digital strategy. In general, though, the a lot of holistic the initiative, the greater the possibility of success. we have a tendency to believe that those that act holistically, and act currently, stand to realize the greatest competitive advantage.

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## Advantages Of Digital Payment System In India

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### Abstract:

*In this paper, systems of payment in India are mentioned. Main focus of this paper is to discuss the different modes of digital payment system and to shown advantages of digital payment system over other payment system in India with the help of working process of different modes of digital payment system.*

**Keywords:** Digital Payment, Cashless India.

### Introduction:

There are two systems of payment in India. First and trivial payment system in India is payment made by hard cash. Individual uses Indian currency (Money) to buy something or to make any payment. Second payment system in India is payment made by digitally or electronically (cash less). The payment made by digitally or electronically is known as digital payment. There is no direct use of hard cash in digital payment. Money debited or credited to individual's bank account or E- wallet digitally or electronically. There are different modes of digital payment system in India. Individual can use electronic clearing (Cheques and Demand Draft), debit cards, credit cards, payment systems such as Immediate Payment Service (IMPS), National Electronic Funds Transfer (NEFT) and Real Time Gross Settlement (RTGS), Unstructured Supplementary Service Data (USSD), United Payments Interface (UPI), Aadhaar Enabled Payment System (AEPS) and E-Wallets (Phonepe, Paytm, Google pay, Mobikwik, Freecharge PayUmoney, Oxygen wallet etc.) in India. S. Singh [5], S. Khan, S. Jain [3], L. Klapper [4], A. Brahma, R. Dutta [1], K. S. Vally and K. H. Divya [7], T. S. Sujith, C. D. Julie [6] have worked on cashless or digital payment system in India.

### Working process of different modes of digital payment system

In this section, the working process of different modes of digital payment system is mentioned. Different methods / modes of digital payment system can be found at Indian government's website cashless India [2]. Following are the some methods / modes of digital payment system in India.

**Cheque:** The cheque is known and oldest mode of digital payment system in India. Individual issues a cheque for the particular amount to beneficiary. The cheque gets deposited in the beneficiary bank. The bank processes a payment through an electronic clearing system and amount mentioned in the cheque is debited from individual's bank account and is credited to beneficiary's bank account. Sometimes cheque payments get dishonoured due to individual's signature mismatch or insufficient fund in bank account of individual.

**Demand Draft:** Demand draft is also known and oldest mode of digital payment system in India. Working of demand draft is similar to cheque but it is safest option than cheque. Demand draft (DD) never gets dishonoured as it is signed by the banker. Beneficiary needs to go to bank to deposit cheque and demand draft. Time required for the clearance of cheque or DD is more than online transaction – NEFT or RTGS.

**Neft /Rtgs:** NEFT/RTGS stands for National Electronic Funds Transfer (NEFT) and Real Time Gross Settlement (RTGS) respectively. NEFT/RTGS is another mode of digital payment system in India. If individual wants to use this mode of digital payment system, individual needs to add beneficiary's bank account details in fund transfer option of individual's online bank portal. NEFT/RTGS can be done from anywhere using internet facility on computer or mobile. Online transfer using NEFT or RTGS is comparatively faster than cheque or DD as it just takes time to add beneficiary's bank account details.

**IMPS:** IMPS stands for Immediate Payment Service. Working of IMPS is similar to that of NEFT/RTGS. Payment through IMPS is faster than NEFT/RTGS. Payment can be done at any time and from anywhere with help of IMPS.

**Debit / ATM card:** Individual gets Debit / ATM card from individual's bank on demand. Debit card is linked to individual's bank account. Individual can use his bank account balance to debit card, he cannot use excess amount than his bank account balance. Individual can use debit card to recharge E-Wallet, online payment, online shopping and shop at merchant subject to availability of swipe card facility (PoS i.e. a point of sale) at merchant. Debit card can be used to transfer fund from individual's bank account to beneficiary's bank account through ATM. It saves the hassles of standing in a queue and helps one go cashless in comfort.

**Credit Card:** Working of credit card is same as the Debit / ATM card. There is only one difference between Credit card is that credit card has some credit limit depends on the individual's credit. It may happen that at some time credit card limit of individual is Rs. 50000/- and his bank account balance is less than Rs. 50000/- So with the help of credit card individual can shop, pay utility bills or pay any other payments up to Rs. 50000/-

**UPI:** Unified Payments Interface (UPI) is a payment system launched by National Payments Corporation of India after demonetization in India. This system is regulated by Reserve Bank of India. Individual can do fund transfer between two bank accounts on the mobile platform instantly with help of UPI. Individual's bank accounts details linked to his mobile



number. Individual needs to download bank UPI app of bank then Register by creating your Virtual Payment Address (VPA) ex: 9921187147@upi. Individual needs to generate UPI pin through debit card. So individual can send money without bank details of payee, one just need VPA of payee. UPI is modified version of IMPS that needs bank details.

**USSD:**USSD Stands for Unstructured Supplementary Service Data based mobile banking. Working of USSD is similar to UPI. With the help of USSD individual can make payment through mobile on GSM network, USSD does not needs internet.

**AEPS:** AEPS stands for The Aadhaar Enabled Payment System. In this mode of payment system individual's 12-digit unique Aadhaar identification number and fingerprints are used to transfer money from individual's bank account to beneficiary's bank Account at MICRO ATM / Bank's customer services centre.

**Mobile Wallet / E-Wallets:** Individual needs to install E-Wallet on his mobile. One needs to create wallet account using mobile number. E-Wallet can be used to purchase any products, pay utility bills or to book bus / railway tickets. After registering for E-Wallet one needs to link one's credit card or debit card with one's E-Wallet account. One can use E-Wallet for fund transfer or online shopping. There are many E-Wallets in India (Phonepe, Paytm, Google pay, Mobikwik, Freecharge PayUmoney, Oxygen wallet etc.). It is necessary that individual and beneficiary must have same E-wallet.

**QR Code:** QR code is again a different mode of digital payment system. Individual needs to scan the QR code of the merchant and do the payments. The black square holds the information about the items whereby scanning the code information gets transmits automatically through the smart phone and payments get done. Almost all mobile wallet companies use QR code. Bharat QR code has been launched by the government. It is simple over other mode of digital payment system.

### Advantages of digital payment system

In this section, advantages of digital payment system in India are discussed. Following are the some advantages of digital payment system in India.

- 1) **No Time bound:** With help of IMPS, payment or fund transfer can be done at any time. Utility bill Payment / online shopping, fund transfer can be done at any time with help of UPI, E-Wallet, ATM card / credit card. So there is no time bound for digital payment system.
- 2) **Saves time:** Individual does not need to go in bank for cash money, fund transfer or payment. There is no need to stand in queue for money. So, digital payment system saves time.
- 3) **No geographical (distance) boundaries:** Individual can do utility bill payment / fund transfer although he is not present physically at that place. Individual can do online shopping, can book train ticket without going to railway station. Individual can do fund transfer to his friends, love ones from any place. So, there are no geographical barriers for digital payment system.
- 4) **Transaction is legal and transparent:**In digital payment system every transaction gets recorded and there is a proof of every payment. So, one cannot hide payment done to him. So, one has to pay Income tax on the profit if applicable. It helps in the development of nation's economy.
- 5) **No need to carry hard cash:** In digital payment system all payments are done electronically. So, one does not need to carry hard cash and there is no fear of lost of money.
- 6) **Exact payment:** With help of digital payment system one can make exact payment by entering the specific amount in the payment option. So, there is no problem of less or more payment to merchant or payee. There will be no problem of fractional money in digital payment system.
- 7) **No extra charges:** There are no extra charges for doing payment by UPI, NEFT/RTGS.
- 8) **Saves paper and reduces currency production cost:** Hard cash money is made from paper. In digital payment system all payments are done electronically. So, there is no need of hard cash money and it saves paper and reduces currency production cost.
- 9) **Secure:** Digital payment system is made secure by banks and E-wallets. Digital payment system is secure because individual not only has online banking USER ID and PASSWORD but also it has TRANSACTION PASSWORD. Individual has PIN for UPI, E-wallets, USSD, ATM cards and Credit cards. ONE TIME PASSWORD for each transaction on linked mobile is necessary. In case individual's mobile is lost, one can use find device app on another mobile to find his mobile or to message to a person who has stolen his mobile. There is facility to deactivate ATM card / credit card. In AEPS fingerprints of individual is used and fingerprints of two persons are not identical. Hence AEPS is secure.
- 10) **No need of internet:** With the help of USSD one can do payment without internet. So, there is no need of internet while doing payment digitally.
- 11) **Profit to merchant:** Digital payments provide merchant with a credit history and can thus improve merchant's access to credit. Digital payments can increase an entrepreneur's profitability by making financial transactions with customers, suppliers, and the government more convenient, safer, and cheaper. Paying wages digitally benefits employees and is safer and more cost-effective for employers.

### Conclusion

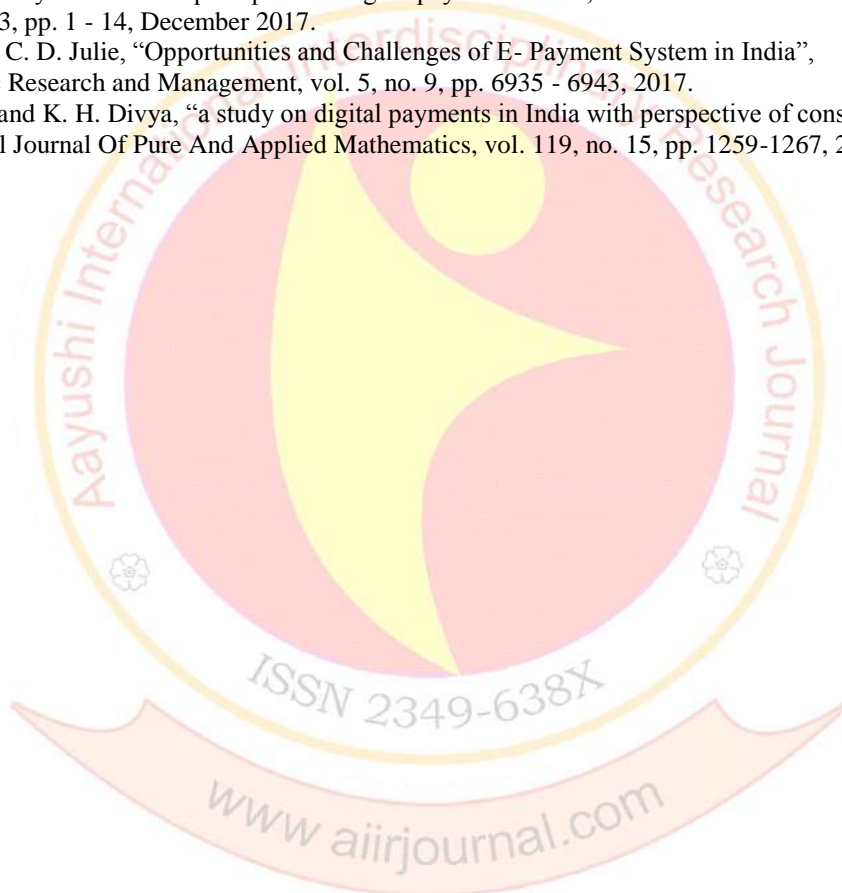
Digital payment system saves time, saves paper and reduces currency production cost. Digital payment system is secure, easy to use. Instead of standing in bank / ATM queue individual can use digital payment



system for the transaction. Digital payment methods are more convenient and is more secure compared to making transactions involving cash withdrawal. In digital payment system every transaction is legal and transparent and every transaction can be traced. Hence it removes black money. Digital payment system will be helpful to economic growth of India. It's time to go digitally.

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## Study Of The Impact Of Cashless Transaction On Peoples Day To Day Life

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### Introduction

The present research paper deals with the study of the impact of cashless transaction on people's day to day life. The word cashless transaction means stopping the people to use money through hands and making them to use it through electronic media or credit cards, bank transfers, checks etc. One can pay unlimited amount from credit/debit card to any bank account. Going cashless not only eases one's life but also helps authenticate and formalize the transactions that are done. This helps to curb corruption and the flow of black money which results in an increase of economic growth. The expenditure incurred in printing and transportation of currency notes is reduced. In this research paper, researcher discussed about the Research method, Sampling Tools for Data collection, Statistical tools, Data analysis and, interpretation etc. researcher mentioned here some major findings and conclusions also. Researcher prepared questionnaire for the present research to collect the data which is interpreted and mentioned in the form of conclusions.

### Objectives of the study

1. To find out different modes of cashless transactions
2. To find out which modes of cashless transactions follow more.
3. To know the opinion of the shopkeepers about the use of cashless transactions.
4. To know advantages and limitations while using the cashless transactions
5. To study frequency and extent of the use of cashless transactions.

### Need and importance of the study

1. The present study is useful and important to find out which modes of cashless transaction follow more.
2. The present study suggests the opinion of the shopkeepers about use and misuse of cashless transaction.
3. The present study is needful to know advantages and limitations of cashless transaction while using it
4. This research is useful for the getting knowledge about whether the customers well aware about using cashless transaction in day today life.

### Scope and limitation of the study

- 1] Present study is limited to shopkeepers and customers only.
- 2] In present study the customers and shopkeepers who use the cashless transaction have been taken into consideration for this study.

### Research methodology

**A Research method** Researcher used survey method for the present research according to achieve the objectives of the research.

**B Sampling** For the present research, researcher selected the 40 customers and shopkeepers from Malshiras Taluka with the help of purposive sampling for questionnaire.

**C Tools for Data collection** Researcher used questionnaire for the present research to collect the data. Questionnaire was prepared according to the objectives of the research.

**D Statistical tools** Researcher collected the data and analyzed it with the help of mean and percentage as statistical tools for interpretation.

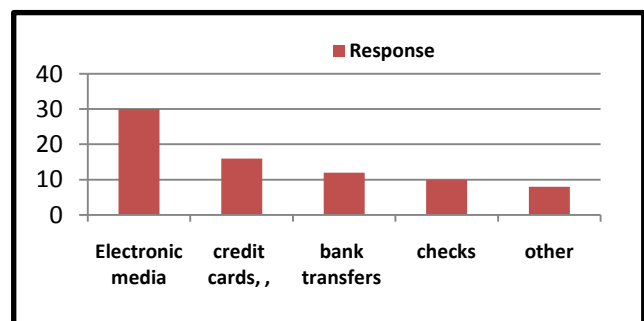
### Data analysis and interpretation

After the analysis researcher interpreted the data and drawn the conclusions which are given below.

**Table no. 01**

**Different modes of cashless transactions using by the customers**

Sr. no.	Modes	Response	percentage
01	Electronic media	30	75
02	credit cards, ,	16	40
03	bank transfers	12	30
04	checks	10	25
05	other	08	20



**Graph No. 01**

Customers are well known about the different modes of cashless transactions which they are using.

**Table no. 02 To find out which mode customer follow more.**

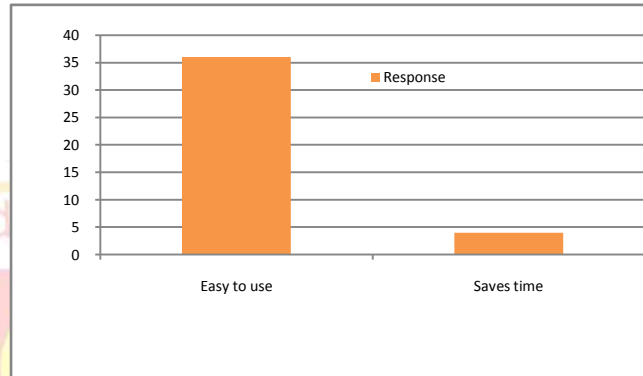
Sr. no.	Mode	Response	percentage
01	Electronic media	28	70
02	credit cards , ,	10	25
03	bank transfers	02	05
04	checks	00	00
05	other	00	00

According to the survey, it is clear that many customers' uses Electronic media for cashless transaction in their day today customers follow more.

**Table no. 03**

**Opinion of the customers about the use of modes**

Sr. no.	Opinion about cashless transaction	Response	percentage
01	Easy to use	36	90
02	Saves time	04	10

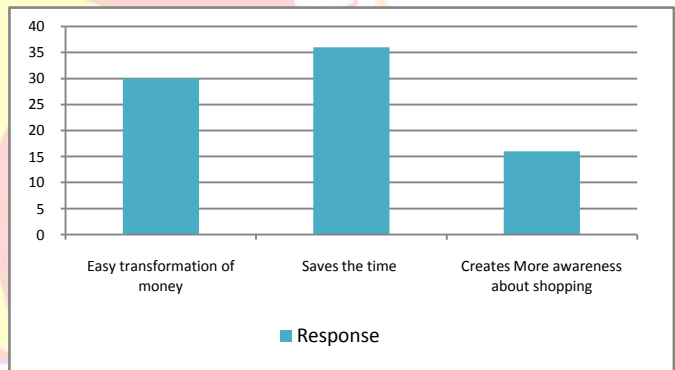


**Graph No. 03** According to the above information, it is very clear that use of cashless transaction is easy to use.

**Table no. 04**

**Advantages of Cashless transaction**

Sr. no.	Cashless Advantages transaction	Response	percentage
01	Easy transformation of money	30	75
02	Saves the time	36	90
03	Creates More awareness about shopping	16	40



**Graph No. 04** According to the above analysis, many respondents are agree with that due to cashless transaction, it is useful to **Saves the time**

**Table no. 05**

**Drawbacks of the cashless transaction while using it.**

Sr. no.	Drawbacks of cashless transaction	Response	percentage
01	Waste of time	12	30
02	Ignores quality	14	35
03	Affecting on health	16	40
04	Bargaining problems	26	65
05	Spreading rumors about quality	30	75

According to the above analysis, many respondents agree with that due to cashless transaction it causes of Spreading rumors about the shopping things.

**Table no. 06**

**Frequency and extent of the use of cashless transaction**

Sr. no.	Response	Response	percentage
01	Regularly	34	85
02	Not regularly	06	15

According to the above analysis, many respondents agree with that they use cashless transaction regularly.



**Table no. 07**  
**Do you use electronic media only for cashless transaction?**

Sr. no.	Response	Response	percentage
01	Yes	36	90
02	Sometime	02	05
03	No	02	05

According to the above analysis, many respondents agree with that they use electronic media for cashless transaction.

### Major Research Findings

1. According to the shopkeepers point of view the cashless policy will increase employment, reduce cash related robbery thereby reducing risk of carrying cash.
2. Respondent also stated that Cashless policy will also reduce cash related corruption and attract more foreign investors to the country.
3. According to the responses, cashless policy will also reduce cash related corruption.
4. It is clear from the research that Cashless transaction system will attract more foreign investors to the country.
5. Customers are well known about the different modes of cashless transactions which they are using
6. According to the survey, it is clear that many customers' uses Electronic media for cashless transaction in their day today customers follow more
7. According to the above information, it is very clear that use of cashless transaction is easy to use
8. According to the above analysis, many respondents are agree with that due to cashless transaction, it is useful to Saves the time
9. According to the above analysis, many respondents agree with that due to cashless transaction **it** causes of Spreading rumors about the shopping things.
10. According to the above analysis, many respondents agree with that they use cashless transaction regularly.
11. According to the above analysis, many respondents agree with that they use electronic media for cashless transaction

### Conclusion

Indian banks are also encouraging people to go cashless by using online banking and mobile apps services. Financial technology firms are seeing the rupee ban as a start of a digital payment revolution in the country. And India still has a long way to go to before it can become a major cashless economy. According to Government of India the cashless policy will increase employment, reduce cash related robbery thereby reducing risk of carrying cash. Cashless policy will also reduce cash related corruption and attract more foreign investors to the country

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## Impact of Digital Payment System on Indian Economy

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### Abstract :

Digital India campaign launched on 2<sup>nd</sup> July 2015 by our Honourable Prime Minister Shri Narendra Modi. The role of digital India is 'faceless, paperless, cashless.' This paper is an attempt to study the recent trend in various modes of digital payment like NFS inter bank, ATM, cash withdraw IMPS, AEPS UPI, BHIM (UPI) and NETC in last five years. In this study it is found that in last five years (2015 to 2019) and especially during the year 2017-18 upto July 2017 there is remarkable growth in digital payment system in volume and value both.

**Key words :** Digital payment system, demonetization, NACH, IMPS, BBPS, UPI, BHIM, NETC, smart phone, 3G and 4G, internet, mobile banking, digital technology, merchants, globalization, etc.

### Introduction :

The Indian payment system is rapidly transiting to more and more IT based systems. In the retail sector we have very high volumes of money transactions. The digital India programme is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy. 'Faceless, paperless, cashless' is one of the professed role of digital India as part of promoting cashless transactions and converting India into less-cash society various modes of digital payments are available for exam. Banking cards, USD, AEPS, UPI, Mobile wallet, Banks per paid cards, point of sale, internet banking, mobile banking, micro ATMs, etc.

Payment and settlement systems in India are payment and settlement system in India for financial transactions. They are covered by the payment and settlement systems. Act 2007 (PSS Act) Legislated in December 2007 and requested by the reserve bank at India and the board for regulation and supervision of payment and settlement systems.

India has multiple payments and settlements system, both gross and net settlement system. For gross settlement India has a real time gross settlement (RTGS) system called by the same name and net settlement system includes Electronic Clearing Services (ECS credit) etc.

### Objectives :

1. To understand the concept of digital payment system in India.
2. To discuss different problems present in digital payment system.
3. To study the challenges of digital payment system in India.
4. To suggest the certain measures for the digital payment methods.

### Research Methodology :

The study is based on secondary data from various published sources books, journals, news paper, govt. Reports, publications and internet web sites, data collection is compiled and analysis for the purpose of study.

### Definitions :

Digital payments are technically defined as any payments made using digital instrument. In digital payment, the payer and the payee, both use electronic modes to send and receive money. No hard cash is involved in digital payments. All the transaction in digital payments are completed online. It is an instant and convenient way to make payments. This process is automatic and neither you nor the shopkeeper is required to visit the bank. It saves you from long queues of ATM and banks.

### Digital Payments Apps :

#### 1) UPI Apps :

UPI means Unified Payment Interface. Its works through the mobile you can either use mobile apps or USSD technology. In this method the fund gets transferred between the two accounts immediately. The system works 24X7 all days as of now there is no charge for this payment.

To use the UPI method you have to download the one of the UPI apps. There are source of UPI apps, such as, SBI pay, Google Pay, Phone Pay, Paytm, BHIM, etc.

You have to also set an UPI PIN for the linked bank account. This PIN is required for making a payment. UPI apps are a faster solution to send money using VPA or even IFSC and account number. But they have some limitations also

## 2) AEPS (Aadhar Enabled Payment Service) :

Customer need only for Aadhar number to pay to any merchant. AEPS allows bank to bank transactions. Its means the money you pay will be deducted from your account and credited to the payees account directly. You need to link your Aadhar number to your bank account to use AEPS. You can use AEPS with the help of POS (Point of Sale) machine. You can withdraw or deposit cash send money to another Aadhar linked account with it.

The good thing about AEPS is that it doesn't need your signature, bank account details or any password. It uses your fingerprint as a password. It is the most secure digital payment mode.

## 3) Cards :

Cards are provided by bank to their account holder. These have been the most used digital payment made till now. Many of use cards for transferring funds and making digital payment debit card, credit cards and prepaid cards are the main types of cards. You can also use Rupay debit card for digital payments.

## 4) QR Code :

You must have seen the QR code in the shops. This payment method is also based on the UPI. The money is immediately transferred from one account to another. To make payment through the QR code you must have the UPI apps. The app scans the QR code the fetch the details of the merchant. Once you have the name of the merchant, you can make payment immediately. Thus in this method you pay to a person without knowing the account number. UPI ID or mobile number.

## 5) USSD :

It is a mobile banking based digital payment mode. This method is also based on UPI system. But this method does not require a smart phone or internet connection. You can easily use it with any normal feature phone. USSD banking is as easy as checking your mobile balance.

You can use this service for many financial and non-financial operations such as checking balance, sending money, etc.

## 6) E-Wallets :

E-wallet or mobile wallet is the digital version of your physical wallet with more functionality. You can keep your mobile in an E-wallet and use it when needed use the E-wallet to recharge your phone pay at various places and send money to your friends. It you have a smart phone and a stable internet connection, you can use E-wallets to make payments.

These E-wallet also give additional cash back offers, some of men used E-wallet are state bank buddy, ICICI pockets, free charge, paytm, phonepe, etc.

## Digital Payment Report in India 2019 :

Digital payments in India are witnessing thriving growth with a compound annual growth rate (CAGR) of 12.7 percent in the number of non-cash transaction, global advisory KPMG said. A KPMG report said that the mobile payment revolution in the country has led to a boom in the number of merchants adopting digital payments with close to 1.5 million digital payment acceptance locations in 2016-17. Beside the number of merchants accepting digital payments mode has increased to over 10 millions in a short span of two to three years.

The global digital payments market is expected to touch \$10.7 trillion by 2026. The mobile wallet market is expected to continue its expansion at a CAGR of nearly 52.2 percent by volume during 2019-23, it added another factor that has led to the next wave in mobile payment is the unified payment interface (UPI) based real time payments. The volume of UPI transaction have increased at a CAGR of 246 percent during the period from 2016-17 to 2018-19.

The reserve bank of India has forecast an outcome of 50 percent increase in mobile based payment transaction as per its '2021 vision document'. This shift can be attributed to driving factors such as robust payment infrastructure, evolution of farm factors, availability of structure data, shift in consumer behaviour and the governments vision of transforming India into a cashless economy.

According to the report, while feature phones were limited to USSD, the advent of smart phones and internet has opened up a host of form factors and access to payment technologies.

## Advantages and Disadvantages of Digital Payments :

Electronic payment allows your customers to make cashless payments for goods and services through cards, mobile phones or the internet. It presents a number of advantages including cost and time saving, increased sales and reduced transaction costs. But it is vulnerable to internet fraud and could potentially increase business expenses.



### **Advantages :**

#### **1) Increased speed and convenience :**

E-payment is very convenient compared to traditional payment methods such as cash or check. Since you can pay for goods or services online at any time of day or night, from any part of the world your customers don't have to spend time in a line, waiting for their turn to transact. E-payment also eliminates the security risks that come with handling cash money.

#### **2) Increased sales :**

As internet banking and shopping become wide spread, the number of people making cash payment is decreasing. According to bank rate more than two-thirds of consumers carry less than \$50 a day meaning electronic alternatives are increasingly becoming the preferred payment option.

#### **3) Reduced Transaction Costs :**

While there are no additional charges for making cash payment, trips to the store typically cost money and checks also need postage. On the other hand there are usually no fees or very small ones to swipe your card or pay online in the long run, e-payments could save both individuals and business hundreds to thousands of dollars in transaction fees.

### **Disadvantages :**

#### **1) Security Concerns :**

Although stringent measures such as symmetric encryption are in place to make e-payment safe and secure, it is still vulnerable to hacking, fraudsters, for instance, use phishing attacks to trick unsuspecting users into providing the login details of their e-wallets, which they capture and use to access the victims personal and financial information, inadequate authentication also ails e-payment systems, without superior identity verification measures like biometrics and facial recognition, anyone can use another person's card and e-wallet and get away without being caught.

#### **2) Disputed Transaction :**

If someone uses your company's electronic money without your authorization, you would identify the unfamiliar charge and file a claim with your bank, online payment processor or credit card company, without sufficient information about the person who performed the transaction, throughout, it can be difficult to win the claim and receive a refund.

#### **3) Increased Business Costs :**

E-payments come with an increased need to protect sensitive financial information stored in a business computer system from unauthorized access. Enterprises with in-house e-payment systems must incur additional costs in procuring, installing and maintaining sophisticated payment security technologies.

The Indian digital payment industry is also expected to reach around \$283 billion by that same year in terms of value of transaction, an 80% increase implementation of government initiatives, such as the Goods and Service Tax (GST), financial inclusion, better digital infrastructure and new payment system such as Aadhar enable payments are also nurturing the upward trend of digital payments.

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## Financial Literacy and Its Impact on Digital Payment System

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### Abstract:

After 1990's India adopting the policy of liberalisation, privatisation and globalisation there is rapid growth in Indian economy. This policy result that expansion of financial market and it gives way to overabundance of financial product in banking, investment and loan product. There is lot of financial services provided by the financial institution. But lacks of financial literacy prevent individuals from making right choice regarding financial decisions. If we want to earn, save and invest money form right alternative then we must have knowledge of finance, financial services and so on. The objective of the study is to study the level of financial literacy and impact of financial illiteracy on digital payment system.  
**Keyword:** finance, financial literacy, digital payment system, impact of financial illiteracy on digital payment system.

### Introduction:

"If you don't understand the language of money, and you don't have a bank account, then you're just an economic slave." – John Hope Bryant, CEO of Operation HOPE

Financial literacy is the education and understanding of various financial areas. It is ability to manage finance matters in an efficient manner. It includes the knowledge of making appropriate decision about personal finance such as, investing, insurance, real estate, paying for college, budging and tax planning. Financial literacy helps individuals become self-sufficient so that they can achieve financial stability.

It is the presence of monetary services that allows a rustic to enhance its condition whereby there's a lot of production altogether the sectors resulting in economic process.

The advantage of economic development is mirrored on the individuals within the kind of economic prosperity whereby the individual enjoys higher commonplace of living. It's here the monetary services alter a personal to amass or acquire numerous client product through rent purchase. Within the method, there square measure variety of economic establishments that additionally earns profits. The presence of those monetary places promote investment, production, saving etc. thus financial skill becomes important for financial services.

Financial skill is extremely vital as a result of life is all regarding cash, i.e., paying of your bill, paying vacation; paying on kid education etc. everything is within the sort of cash. Most of the individuals not perceive a way to save cash or invest money because of lack of financial skill. Financial skill is that the ability to know however cash works.

Financial literacy is that the education and understanding of varied financial areas as well as topics associated with managing personal finance, cash and finance. Financial literacy may be classified in to a few classes i.e. creating cash, managing cash and investment cash. The most steps to achieving financial literacy embrace learning the abilities to make a budget, the flexibility to trace defrayal, learning the techniques to pay off debt and effectively designing for retirement. These steps also can embrace guidance from a financial professional. Education regarding the subject involves understanding how cash works, making and achieving financial goals and managing internal and external monetary challenges.

### Need of financial literacy:

Financial literacy is currently one in every of the highest priorities for many nations. It's a lot of important for developing nations like India, wherever the bulk notices financial literacy on the far side comprehension. Financial literacy, in keeping with its literal definition, is the ability to use skills and information to require effective and familiar cash management choices. For a country like India, it plays a much bigger role, because it is taken into account a vital adjunct for the promotion of financial inclusion and ultimately financial stability.

As per a worldwide survey by commonplace & Poor's financial Services LLC (S&P) solely 25th of adults or less measure financially literate in South Asian countries. For an average Indian, financial literacy is however to become a priority. India is home to 17.5% of the world's population and nearly 76 of its adult population don't perceive even the essential financial ideas. If we have a tendency to do the comparison with different nation like North American country, financial literacy promotion was started in 1908 by American depository financial institution Movement by the American depository financial institution Movement. In 1957, financial education was created mandatory by the state of Nevada, and other states followed. Australia provides financial literacy education through tailored programs, whereas Asian countries like Indonesia and Singapore

have productive precedents in financial literacy drives. So, India is much behind developed nations in financial literacy efforts.

In addition, there square measure bound incorrect beliefs related to financial literacy - the foremost common being the myth that one who is 'literate' or 'rich' is 'financially literate' too. Lack of basic financial understanding results in unproductive investment choices. the requirement of the hour is for a forceful overhaul of approach to savings and investments by Indian households.

The digitalisation of financial product and services, and also the resultant ought to strengthen digital financial skill has become a vital element of the worldwide political agenda. This steering aims to spot and promote effective initiatives that enhance digital and monetary acquirement in light of the distinctive characteristics, advantages, and risks of digital financial services and channels.

Empirical proof points to the actual fact that digital efforts like video clips, short films and interactive quizzes on financial education have had a so much larger impact than the traditional medium. Digital fluency is predicted to extend with the government's initiatives like Digital India.

The recent mammoth exercise of demonetization should facilitate bring more individuals to the organized sector and thereby opening up prospects for monetary inclusion and skill. Currently, solely thirty fifth of Indian has bank accounts, against sixty three in China.

The launch of digital wallets, universal payments interface (UPI), and new age commercial and payment banks have made-up new ways that for a less cash economy. There's a large scope with solely a pair of Indians using mobiles for payments, against 11 November in Nigeria. The push to extend usage of mobiles for payments is important, as India is already the world's second biggest smartphone market with over 220 million smartphone users. Mobile internet users in India total 350 million and expected to grow fifty million per annum until 2020. These numbers produce huge prospects from going digital and make new opportunities to interact and share financial information with customers.

#### **Digital payment System:**

The Government of India has been taking several live to promote and encourage digital payments within the country. As a part of the 'digital India campaign the government aims to make a digitally empowered' economy that's 'faceless, paperless, cashless'. There square measure varied sorts and modes of digital payment apps, unified payment interface [UPI] service, Unstructured Supplementary Service data [USSD] , bank prepaid card, Mobile banking etc.

Digital Payment methods are usually simple to form, a lot of convenient and different to traditional ways of payment and speed up transaction cycles. Post monetisation, individuals slowly started embrace digital payments and even little time merchants and shop owner started accepting payment

In other words, digital payment occurs when goods or services are purchased through the use of various electronic medium. There is no use of cash or cheques in this type of payment method.

#### **Types of Digital Payment Methods in India;**

1. Banking cards
2. Aadhar Enabled Payment System [AEPS]
3. USSD
4. UPI
5. Mobile Wallets
6. Bank pre-paid card
7. Point of Sale [POS]
8. Internet Banking
9. Mobile banking
10. Bharat Interface for Money [BHIM] app

#### **Objective Of The Study**

1. To understand the digital financial system
2. To understand how digital financial literacy is affected on digital payment system
3. To understand the requirement of financial literacy.

#### **Research Methodology:**

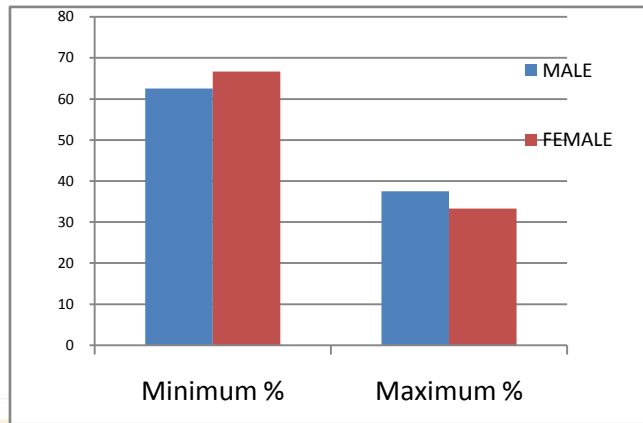
The present study is based on primary data and secondary data. The information relating to the effect of financial literacy on digital payment system is based on study through the survey with the help of questionnaire. The total sample size is 100. These respondents are chosen on sampling basis. In order to understand the effect of financial literacy on digital payment system,



**Data Analysis And Interpretation:**

**Q.10] To what extend is you aware of digital payment system?**

Awareness of Digital Payment System			
No. of Respondent	Gender	Minimum %	Maximum %
45	MALE	62.5	37.5
15	FEMALE	66.67	33.33



**Interpretation:** From the above chart it represents that most of the respondents are not aware of most of the digital payment system mode and there is need to give education about digital finance and its uses.

**Conclusion:**

Digital payment system have more secures features; it helps to reduce cost of managing. But while following this system people faces some problems at present. To solve this problem Government take efforts in creating awareness building trust, providing cyber security framework and necessary infrastructure will make it possible for faster acceptance among the public to adapt towards digital payment systems.

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## Digital Payment Methods and Problems

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Digital India is a campaign launched by the Government of India in order to ensure the Government's services are made available to citizens electronically by improved online infrastructure and by increasing Internet connectivity or by making the country digitally empowered in the field of technology. The initiative includes plans to connect rural areas with high-speed internet networks. Digital India consists of three core components: the development of secure and stable digital infrastructure, delivering government services digitally, and universal digital literacy. Digital India was launched by the Prime Minister of India Narendra Modi on 1 July 2015 with an objective of connecting rural areas with high-speed Internet networks and improving digital literacy. The vision of Digital India programme is inclusive growth in areas of electronic services, products, manufacturing and job opportunities. It is centered on three key areas – digital infrastructure as a utility to every citizen, governance and services on demand, and digital empowerment of citizens.

Digital Payment is one part of this campaign. Digital payments are technically defined as any payments made using digital instruments. In digital payment, the payer and the payee, both use electronic modes to send and receive money. Digital transactions are defined as transactions in which the customer authorizes the transfer of money through electronic means, and the funds flow directly from one account to another. These accounts could be held in banks or with providers. Digital Payment methods are used in India as follows in recent time.

**Banking Cards :** Cards are among the most widely used payment methods. The wide variety of cards available – including credit, debit and prepaid . Banking cards offer consumers more security, convenience, and control than any other payment method. The main advantage of debit/credit or prepaid banking cards is that they can be used to make other types of digital payments. These cards provide two factor authentication for secure payments one is secure PIN and second is OTP. Some of the most reputed and well-known card payment systems are RuPay, Visa, Master Card, among others. Banking cards can be used for online purchases, in digital payment apps, PoS machines, online transactions, etc.

**Internet Banking :** Internet banking, also known as online banking, e-banking or virtual banking, is an electronic payment system that enables customers of a bank to conduct a range of financial transactions through the bank's official website. Internet banking refers to the process of carrying out banking transactions online. These may include many services such as transferring funds, opening a new fixed or recurring deposit, closing an account, etc. Internet banking is usually used to make online fund transfers via NEFT, RTGS or IMPS. Banks offer customers all types of banking services through their website and a customer can log into his account by using a username and password. Unlike visiting a physical bank, there are no time restrictions for internet banking services and they can be availed at any time and on all 365 days in a year. There is a wide scope for internet banking services

**National Electronic Fund Transfer (NEFT) :** NEFT is a nation-wide payment system facilitating one-to-one funds transfer. Under this Scheme, individuals, firms and corporates can electronically transfer funds from any bank branch to any individual, firm or corporate having an account with any other bank branch in the country participating in the Scheme. Individuals, firms or corporates maintaining accounts with a bank branch can transfer funds using NEFT.

**Real Time Gross Settlement (RTGS) :** RTGS is defined as the continuous settlement of fund transfers on individually on an order by order basis 'Real Time' means the processing of instructions at the time they are received rather than at some later time; 'Gross Settlement' means the settlement of funds transfer instructions occurs individually Considering that the funds settlement takes place in the books of the Reserve Bank of India, the payments are final and irrevocable. The RTGS system is primarily meant for large value transactions.

**Immediate Money Payment Service (IMPS) :** IMPS offers an instant, 24X7, interbank electronic fund transfer service through mobile phones. IMPS is an emphatic tool to transfer money instantly within banks across India through mobile, internet and ATM which is not only safe but also economical both in financial and non-financial perspectives.

**Mobile Banking:** Mobile banking is referred to the process of carrying out financial transactions/banking transactions through a smartphone. The scope of mobile banking is only expanding with the introduction of many mobile wallets, digital payment apps and other services like the UPI. Many banks

have their own apps and customers can download the same to carry out banking transactions at the click of a button.

**Bharat Interface for Money (BHIM) :** The BHIM app allows users to make payments using the UPI application. This also works in collaboration with UPI and transactions can be carried out using a VPA. One can link his/her bank account with the BHIM interface easily. It is also possible to link multiple bank accounts. The BHIM app can be used by anyone who has a mobile number, debit card and a valid bank account. Money can be sent to different bank accounts, virtual addresses or to an Aadhaar number. There are also many banks that have collaborated with the NPCI and BHIM to allow customers to use this interface.

**Unified Payments Interface (UPI) :** UPI is a type of interoperable payment system through which any customer holding any bank account can send and receive money through a UPI-based app. The service allows a user to link more than one bank account on a UPI app on their smartphone to seamlessly initiate fund transfers and make collect requests on a 24/7 basis and on all 365 days a year. The main advantage of UPI is that it enables users to transfer money without a bank account or IFSC code. To use the service one should have a valid bank account and a registered mobile number, which is linked to the same bank account. There are no transaction charges for using UPI. Through this, a customer can send and receive money and make balance enquiries.

**Unstructured Supplementary Service Data(USSD) :** USSD is Another type of digital payment method, \*99#, can be used to carry out mobile transactions without downloading any app. \*99#, service has been launched to take the banking services to every common man across the country. Banking customers can avail this service by dialling \*99#, a “Common number across all Telecom Service Providers (TSPs)” on their mobile phone and transact through an interactive menu displayed on the mobile screen. These types of payments can also be made with no mobile data facility. This facility is backed by the USSD along with the National Payments Corporation of India (NPCI). The main aim of this type of digital payment service is to create an environment of inclusion among the underserved sections of society and integrate them into mainstream banking. This service can be used to initiate fund transfers, get a look at bank statements and make balance queries. Another advantage of this type of payment system is that it is also available in Hindi.

**Mobile Wallets:** mobile wallet is a way to carry cash in digital format. A mobile wallet is a type of virtual wallet service that can be used by downloading an app. The digital or mobile wallet stores bank account or bank card information or bank account information in an encoded format to allow secure payments. One can also add money to a mobile wallet and use the same to make payments and purchase goods and services. Many banks in the country have launched e-wallet services and apart from banks, there are also many private players. Some of the mobile wallet apps in the market are Google pay, Phone-pay, Amazon-pay, Paytm, Airtel-money, Jio-money, etc. The various services offered by mobile wallets include sending and receiving money, making payments to merchants, online purchases, etc.

**Aadhaar Enabled Payment System ( AEPS) :** AEPS can be used for all banking transactions such as balance enquiry, cash withdrawal, cash deposit, payment transactions, Aadhaar to Aadhaar fund transfers, etc. All transactions are carried out through a banking correspondent based on Aadhaar verification. There is no need to physically visit a branch, provide debit or credit cards, or even make a signature on a document. This service can only be availed if your Aadhaar number is registered with the bank where you hold an account. This is another initiative taken by the NPCI to promote digital payments in the country.

**Micro ATM :** The micro platform will enable function through low cost devices (micro ATMs) that will be connected to banks across the country. Micro ATM is a device that is used by a million Business Correspondents to deliver basic banking services. The platform will enable Business Correspondents to conduct instant transactions. This would enable a person to instantly deposit or withdraw funds regardless of the bank associated with a particular BC. This device will be based on a mobile phone connection and would be made available at every BC. Customers would just have to get their identity authenticated and withdraw or put money into their bank accounts.

**Electronic Clearing System(ECS) :** ECS is an alternative method for effecting payment transactions in respect of the utility-bill-payments such as telephone bills, electricity bills, insurance premier, card payments and loan repayments, etc., which would obviate the need for issuing and handling paper instruments and thereby facilitate improved customer service by banks

### **Benefits of Digital payments**

**Save Time & more convenient:** Perhaps, one of the biggest advantages of cashless payments is that it speeds up the payment process and there is no need to fill in lengthy information. There is no need to stand in a line to withdraw money from an ATM or carry cards in the wallet. Also, with the move to digital, banking services will be available to customers **on a 24/7 basis and on all days of a year, including bank holidays.**



**Economical and less transaction fee:** There are many payment apps and mobile wallets that do not charge any kind of service fee or processing fee for the service provided. The UPI interface is one such example, where services can be utilized by the customer free of cost. Various digital payments systems are bringing down costs.

**Reduced theft risk:** It's simple to block a digital wallet that has been compromised whereas it is almost impossible to retrieve physical cash that has been stolen from you

**Waivers, discounts and cashbacks:** There are many rewards and discounts offered to customers using digital payment apps and mobile wallets. There are attractive cash back offers given by many digital payment banks. This comes as boon to customers and also acts a motivational factor to go cashless.

**Transparency in record of transactions:** One of the other benefits of going digital is that all transaction records can be maintained **Transparently**. Customers can track each and every transaction that is made, no matter how small the transaction amount this.

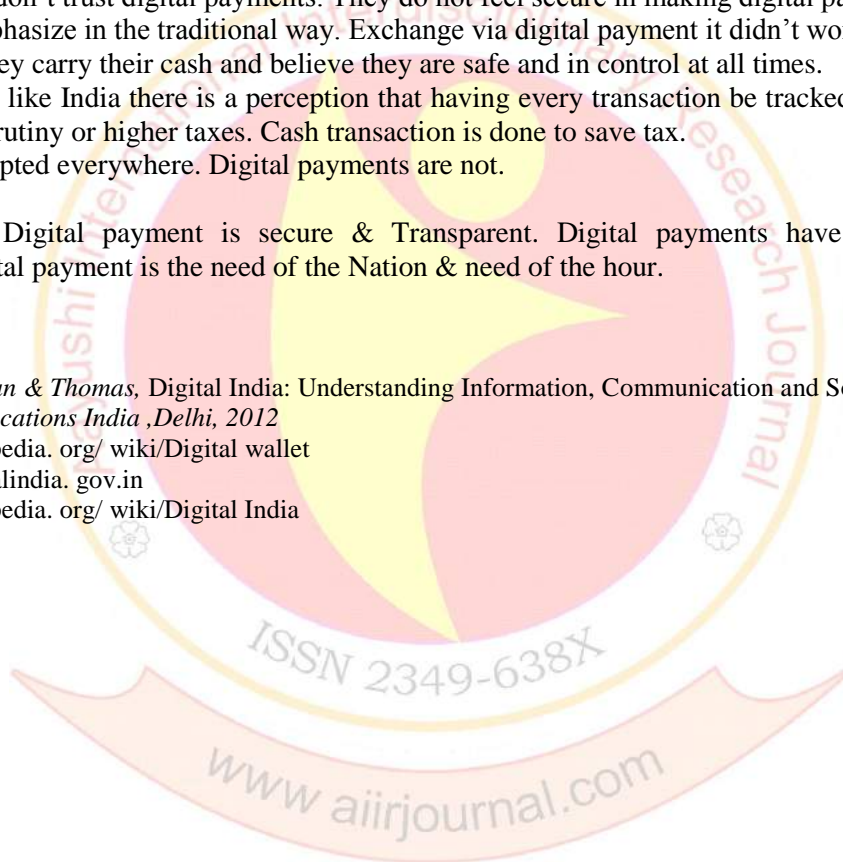
Digital payments will revolutionize the field of technology. There are many benefits to digital payments however On the other hand there are many problems to consider. The main problems are as follows.

- 1) No more internet coverage and infrastructure in rural and remote areas.
- 2) People still don't trust digital payments. They do not feel secure in making digital payments.
- 3) Peoples emphasize in the traditional way. Exchange via digital payment it didn't work out today. Dutifully they carry their cash and believe they are safe and in control at all times.
- 4) In a country like India there is a perception that having every transaction be tracked could invite trouble via more scrutiny or higher taxes. Cash transaction is done to save tax.
- 5) Cash is accepted everywhere. Digital payments are not.

However, Digital payment is secure & Transparent. Digital payments have the power to stop corruption. So digital payment is the need of the Nation & need of the hour.

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## Challenges of Electronic Payment Systems

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### Introduction:

Electronic payment system is a mode of payments over an electronic network such as the internet. In other words we can say that e-payment is a method in which a person can make Online Payments for his purchase of goods and services without physical transfer of cash and cheques, irrespective of time and location. Electronic payment system is the basis of on-line payments and on-line payment system development is a higher form of electronic payments. It makes electronic payments at any time through the internet directly to manage the e-business environment.

### Definition:

The Payment and Settlement Act, 2007 has defined Digital Payments. As per this any “electronic funds transfer” means any transfer of funds which is initiated by a person by way of instruction, authorization or order to a bank to debit or credit an account maintained with that bank through electronic means and includes point of sale transfers; automated teller machine transactions, direct deposits or withdrawal of funds, transfers initiated by telephone, internet and, card payment.

### Categories Of Electronic Payment Systems

Today, there exist a wide variety of electronic payment systems - most of them incompatible with each other. The broad categories of electronic payment systems are :

- Electronic cash system
- Electronic cheque system
- Smart card-based electronic payment system
- Online credit card payment system

### Challenges Regarding Electronic Payment System

#### 1 Lack of Usability

Electronic payment system requires large amount of information from end users or make transactions more difficult by using complex elaborated websites interfaces. For example credit card payments through a website are not easiest way to pay as this system requires large amount of personal data and contact details in web form.

#### 2 Lack of Security

Online payment systems for the internet are an easy target for stealing money and personal information. Customers have to provide credit card and payment account details and other personal information online. This data is sometimes transmitted in an un-secured way, (Kolkata and Whinston, 1997). Providing these details by mail or over the telephone also entails security risks (Guttman, 2003, Laudon and Traver, 2002).

#### 3 Lack of Trust

Electronic payments have a long history of fraud, misuse and low reliability as well as it is new system without established positive reputation. Potential customers often mention this risk as the key reason why they do not trust a payment services and therefore do not make internet purchases (Lietaer, 2002).

#### 4 Lack of Awareness

Making online payment is not an easy task. Even educated people also face problems in making online payments. Therefore, they always prefer traditional way of shopping instead of online shopping. Sometimes there is a technical problem in server customers tried to do online payments but they fails to do. As a result they avoid it.

#### 5 Online Payments are not Feasible in Rural Areas

The population of rural areas is not very literate and they are also not able to operate computers. As they are unaware about technological innovations, they are not interested in online payments. So the online payment systems are not feasible for villagers.

#### 6 Highly Expensive and Time Consuming

Electronic payment system are highly expensive because it includes set up cost, machine cost, management cost etc and this mode of payment will take more time than the physical mode of payment.

### 7 Issues with e-Cash

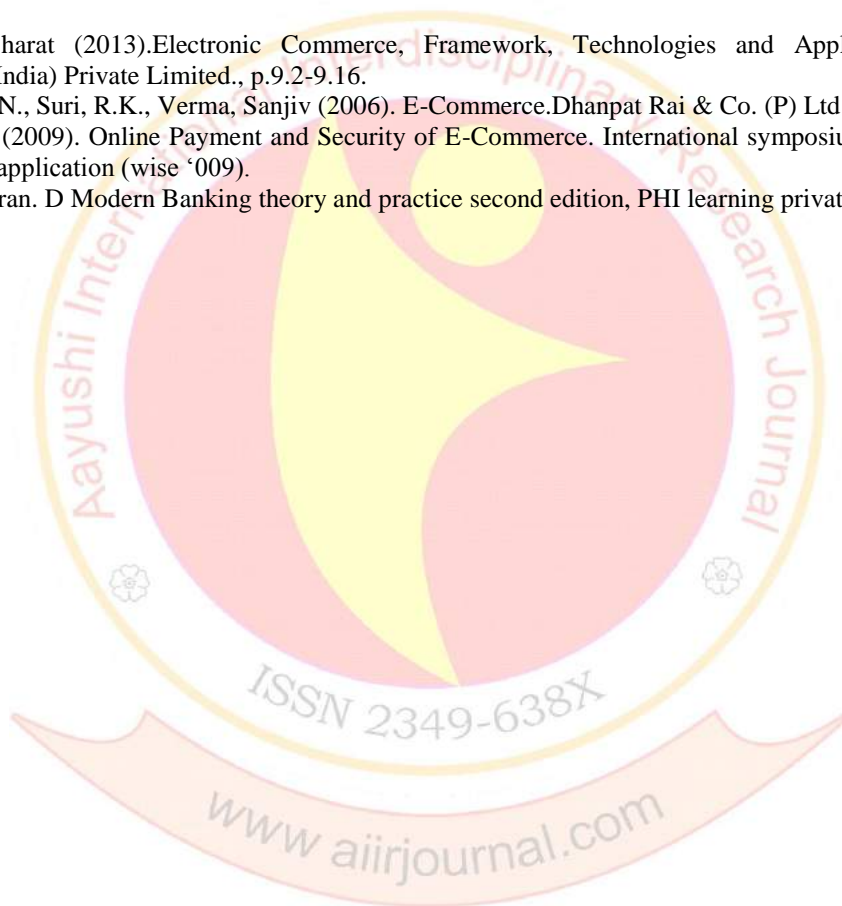
The main problem of e-cash is that it is not universally accepted because it is necessary that the commercial establishment accept it as payment method. Another problem is that when we makes payment by using e-cash, the client and the salesman have accounts in the same bank which issue e-cash. The payment is not valid in other banks.

### 8 Users Perception Regarding Acceptance of Electronic Payment Systems

User's acceptance is a pivotal factor determining the success or failure of any information system project. (Davis, 1993), Many studies on information technology report that users attitudes and human factors are important aspects affecting the success of any information system (Davis, 1989, Burkhardt, 1994, Rice&Adyn , 1991). According to Dillion and Morris (1996) users acceptance is "the demonstrable willingness within a user group to employ information technology for the tasks it is designed to support". Electronic payment systems are not an exception of it. It means these are not successful without acceptance of users. Electronic payment system is an innovative way for online payments. Issues are not accepting easily because of lack of security in changing business-environment. Online payment system requires improvement of information technology. The failure of electronic payment system is depend on the factor that it neglects the needs of users and the market.

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## Digital Payment System Advantages And Disadvantages

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### Abstract –

*The need for improving the trends of digital payments model in rural India is very important. Considering the benefits like transparency in transactions, scope for curtailing parallel economy and improving the ease of business, it is very essential that the transformation towards digital payments, even in the rural economy is empowered. Some of the revolutionary developments in the recent past like launch of many digital wallets like - Paytm, Mobiwik, Free Charge etc. and government launching many UPI (united payment interface) solutions and BHIM app for smooth transition to digital payments, there are significant developments taking place. Stats from the market research also depict considerable rise in digital transactions post de-monetisation period. In terms of challenges, certain key factors like limited options for digital transactions based on feature phones, issues of awareness towards digital transactions, constraints of PoS transactions etc are some of the intrinsic issues that impact the digital transactions. Despite the fact that the social trends are being very positive in rural segments for embracing the digital payments, still there are considerable challenges too in succeeding the paradigm shift. The futuristic steps like enabling digital payment transactions based on Aadhar numbers could be a game changers if handled effectively*

### Introduction:

The urban areas are working their way in leading a digital life through a network of connectedness of wireless network. Almost each and every house hold has the availability of a Wi-Fi network. Through the digitization process, Set-top box was also introduced for television, which provides HD quality visuals for the common public. The audience can choose the number of channels they want to watch which gives the advantage of not paying for channels they don't watch. Digital classrooms was also introduced by which students can learn better through the smart visual media class. India has increased in digitization so much that shopping can be easily done online through a number of websites like Amazon, Myntra, Snapdeal, Voonik, Ebay etc. Anything can be bought or sold online. Matrimonial sites are also introduced through which each and everyone can find a suitable bride or groom for themselves.

On November 10, 2016, the prime minister of India announced that 500 and 1000 rupee notes will not be valid from here after and new 2000 and 500 rupee notes will be issued in some days. This was done to fight back corruption. During this process of demonetization, new apps were introduced like Paytm etc which can pay money online through mobile. Paytm has the feature of scanning a QR code through which payment can be done to a taxi or in shops. Public started liking this way of payment because it was far more better than standing in long queues of ATM in order to get the new 500 and 2000 rupee notes.

It was thought processing that through digitization, corruption can be depleted. Owning of payment apps like Paytm by each and every person will not allow them to own illegal or black money. This form of demonetization will not only fight corruption but also will increase digitization in India. Thus, this mode of development is very useful and advantageous for a developing country and it will help the country in making its mark in the world. It will also provide better opportunities for people and can increase the countries overall growth. It is to be hoped that digital India will be a prosperous one.

### What is the cashless Payment?

- Cashless payment is a way of payment which is made through digital modes. In digital payments, payer and payee both use digital modes to send and receive money. It is also called electronic payment.
- No hard cash is involved in digital payments. All the transactions in digital payments are completed online. It is an instant and convenient way to make payments.
- This process is automatic and neither you nor the shopkeeper is required to visit the bank. It saves you from long queues of ATMs and banks.

Today there are many ways of the cashless payment. More and more people are adopting these methods as for the convenience and record. In this post I would discuss the top 5 ways of cashless payment.

- 1) **UPI Apps** : UPI or unified payment interface works through the mobile. You can either use Mobile apps or USSD technology. In this method the fund gets transferred between the two accounts immediately. The system works 24 x7 all days. As of now there is no charge for this payment.

To use the UPI payment method, you have to download the one of the UPI apps. There are scores of UPI apps, such as Phonepe, Google Pay, SBI Pay, BHIM etc.

In the beginning, you have to go through the registration process. In this process your bank account gets linked using your mobile number. You have to also set an UPI PIN for the linked bank account. This PIN is required for making a payment. UPI apps are a faster solution to send money using VPA or even IFSC and account number. But they have some limitations also.

## 2) QR Code :

You must have seen the QR code in the shops. This payment method is also based on the UPI. The money is immediately transferred from one account to another. To make payment through the QR code you must have the UPI App. The app scans the QR code to fetch the details of the merchant.

Once you have the name of the merchant, you can make payment immediately. Thus in this method, you pay to a person without knowing the account number, UPI ID or mobile number. You have to enter the UPI PIN to complete the transaction.

## 3) AEPS :

AEPS is an Aadhar based digital payment mode. The term AEPS stands for Aadhar Enabled Payment Service. Customer needs only his or her Aadhar number to pay to any merchant. AEPS allows bank to bank transactions. It means the money you pay will be deducted from your account and credited to the payee's account directly.

You need to link your Aadhar number to your bank account to use AEPS. You can use AEPS with the help of PoS (Point of sale) machines. You can withdraw or deposit cash, send money to another Aadhar linked account with it.

The good thing about AEPS is that it doesn't need your signature, bank account details or any password. It uses your fingerprint as a password. No one can forge your fingerprints, thus it is the most secure digital payment mode.

## 4) USSD:

USSD banking or \*99# Banking is a mobile banking based digital payment mode. This method is also based on the UPI System. But this method, does not require a smartphone or internet connection. You can easily use it with any normal feature phone. USSD banking is as easy as checking your mobile balance.

You can use this service for many financial and non-financial operations such as checking balance, sending money, changing UPI PIN etc.

The \*99# code works as a bridge between your telecom operator's server and your bank's server. It uses your registered mobile number to connect with your bank account. Hence, dial \*99# with your registered number only. USSD banking has a transaction limit of Rs. 5000 per day per customer. RBI has also set a maximum charge of Rs. 2.5 per operation.

## 5) Cards:

Cards are provided by banks to their account holders. These have been the most used digital payment modes till now. Many of us use cards for transferring funds and making digital payments. Credit cards, debit cards and prepaid cards are the main types of cards. You can also use Rupay debit card for digital payments.

**Credit cards** are issued by banks and some other entities authorized by RBI. These cards give you the ability to withdraw or use extra money. Credit cards are used for domestic as well as international payments.

**Debit cards** are issued by the bank where you have your account. You can use these cards for the money in your account. The payments you make with these cards debit from your account and credit immediately to the payee's account. You can use these cards to make payments to one bank account to another.

**Prepaid cards** are another type of cards which you use to pay digitally. You must have to recharge these cards before using just like prepaid SIM cards.

Cards are one of the best modes when you pay at portals or E-commerce sites. But if we talk about paying to merchants it is not the most suitable way. It charges 0.75% – 2.0% on transactions. Also, you cannot use cards to pay if the merchant does not have a PoS (swipe) machine.

## 6. E-Wallets:

E-wallet or mobile wallet is the digital version of your physical wallet with more functionality. You can keep your money in an E-wallet and use it when needed. Use the E-wallets to recharge your phone, pay at various places and send money to your friends. If you have a smartphone and a stable internet connection, you can use E-wallets to make payments. These E-Wallets also give additional cashback offers. Some of the most used E-wallets are State bank buddy, ICICI Pockets, Freecharge, Paytm, phonepe etc.

E-Wallets are an easy and faster way to make payments but have some limitations. These apps are good if you send money to a wallet to another. But if you want to send money to a bank account e-Wallets are not suitable. Also, you have to be extra careful with these apps. These apps do not ask for any PIN or password

when you perform a transaction using your wallet money. If you do not lock your phone, anyone can use the money in your wallet. I suggest you must lock your phone if you want to use E-Wallet apps.

### Advantages of Digital Payment:

- **Easy and convenient:**  
Digital payments are easy and convenient . You do not need to take loads of cash with you. All you need is your mobile phone or Aadhaar number or a card to pay. UPI apps and E-Wallets made digital payments easier.
- **Pay or send money from anywhere**  
With digital payment modes, you can pay from anywhere anytime. Suppose your close friend's mother fell ill at night. He called you at midnight and asked some money. Don't worry, you can send money to your friend using digital payment modes such as UPI apps, USSD or E-Wallets.
- **Written record**  
You often forget to note down your cash spendings. Or even if you note, it takes a lot of time. But you do not need to note your spendings every time with digital payments. These are automatically recorded in your passbook or inside your E-Wallet app. This helps to maintain your record, track your spendings and budget planning.
- **Less Risk**  
Digital payments have less risk if you use them wisely. If you lose your mobile phone or debit/credit card or Aadhar card you don't have to worry a lot. No one can use your money without MPIN, PIN or your fingerprint in the case of Aadhar. But it is advised that you should get your card blocked if you lost it. Also call the helpline of your E-wallet to suspend the wallet account to prevent anyone from using your wallet money.
- **Drawbacks of Digital Payment:**  
Every coin has two sides so as the digital payments. Despite many advantages, digital payments have a few drawbacks also, **difficult for a non-technical person**. As most of the digital payment modes are based on mobile phone, the internet and cards. These modes are somewhat difficult for non-technical persons such as farmers, workers etc.
- **The risk of data theft**  
There is a big risk of data theft associated with the digital payment. Hackers can hack the servers of the bank or the E-Wallet you are using and easily get your personal information. They can use this information to steal money from your account.
- **Overspending:**  
You keep limited cash in your physical wallet. Hence, you think twice before buying anything. But if you use digital payment modes, you have all your money with you always. This can result in overspending. Cashless payments are more convenient than cash payments. You do not need to carry a lot of cash with you all the time. You can make digital payments in seconds.  
The change is not a concern with digital payments when you can pay the exact amount. You will also have all your payments recorded automatically. We all love simplicity and ease. Hence, we can say that Digital payments is the future of fund transfer and money transactions.
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- 5) [www.homeandgardenidece.com](http://www.homeandgardenidece.com)



## Cashless Transaction: Challenges And Remedies In India

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### Abstract:

*Cashless transaction in India is an effort to move towards a cashless economy by minimizing the use of physical cash. The main objective of the study is to present the current status of India in usage of digital currency in comparison to other developed countries and find the challenges and opportunities which are associated with the cashless transaction in India. Data is gathered by using secondary data collection method and then graphical representation is being used. The findings of the study revealed that the introduction of cashless economy in India can be seen as a step in the right direction of economy growth and development.*

*Keywords: Digital payment, Rural and Urban India, Digital Transaction.*

### Introduction:

Indian economy is one of the fast growing economies of the world. Despite of global turbulences of economic conditions, Indian economy has been focusing on development. In the recent past, there are significant developments that have taken place in the Indian financial system, which has led to huge transformations, trends and changes in the business dynamics. Though the government of India has been focusing on the digital transactions initiatives since last few years, the actual impact of digital payments has taken place in India in significant manner post the demonetization period.

### Objectives of the study:

1. To identify the different modes of cashless transaction.
2. To examine the various challenges in cashless transaction.
3. To suggest various remedial measure to overcome challenges in cashless transaction.

### Methodology of the study:

This study has been undertaken on the basis of secondary data, the data are collected through journals, articles, books, internet and news paper etc.

### Financial Digital Literacy and Awareness:

#### What are Digital Payments?

Digital Payments is nothing but the transfer of money between the two Bank Accounts or Mobile Wallets in Digitalized form. There is no involvement of physical cash transactions. The Bank Accounts may be between any same Banks or other Banks or mobile wallets between the same service providers or the different providers. In Digital Payments, Payer and Payee both uses digital mode to send and receive money in real-time.

#### Mode of Cashless Transaction:

##### 1. Mobile Banking:

Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct financial transactions remotely using a mobile device such as a Smartphone or tablet. Mobile banking is usually available on a 24-hour basis.

##### 2. Online Banking:

Online banking, also known as internet banking, it is an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website.

##### 3. Credit Card or Debit Card:

Credit card or debit card is another mode of cashless payment. The uses of credit card and debit card is increasing continuously because of multiple uses. Advantages of debit cards is being safer than carrying cash, worldwide functionality due to Visa and MasterCard merchant acceptance, not having to worry about paying a credit card bill or going into debt, the opportunity for anyone over the age of 18 to apply and be accepted without regard to credit quality, and the option to directly deposit paychecks and government benefits onto the card for free.

##### 4. RTGS/NEFT:

National Electronic Fund Transfer (NEFT) and Real Time Gross Settlement (RTGS) allow individuals, companies and firms to transfer funds from one bank to another. We can check the RBI website for a list of NEFT and RTGS-enabled branches of bank. These facilities can only be used for transferring money within the country.

##### 5. Cheques:

Cheque is one of the popular modes of cashless payment. In this method one issue a cheque for the specific amount to anyone else. The person deposits the cheque into the concern bank. Within two day bank get cleared the amount.

The maximum validity of a cheque is three month from the date of issue. The entire transaction done through cheque gets recorded and there is a proof of payment.

#### 6. Demand Draft:

A demand draft is a negotiable instrument similar to a bill of exchange. A bank issues a demand draft to a client (drawer), directing another bank (drawee) or one of its own branches to pay a certain sum to the specified party (payee). A demand draft can also be compared to a cheque.

#### 7. Mobile Wallet:

Mobile wallet is a virtual wallet that stores payment card information on a mobile device. Mobile wallets are a convenient way for a user to make in-store payments and can be used at merchants listed with the mobile wallet service provider.

#### 8. Unified Payment Interface:

UPI is a single window mobile payment system launched by the National Payments Corporation of India (NPCI). The system is designed to provide a simple, secure and convenient "single interface" to enable sending and receiving of money using Smartphone through a "single identifier" which can be a virtual address like an email ID, mobile number or Aadhaar number (like the Social Security Number). It eliminates the need to enter bank details or other sensitive information each time a customer initiates a transaction.

#### 9. E- Coupons:

These electronic coupons are offered by various online mega stores. They are very helpful in taking discounts on purchase done through online shopping. We only need to enter the e-code and get the discount automatically. They do not require any printing or clipping. They carry unique identification code which can be accessed through the internet at particular sites. Some of the coupons which are available online are nearby coupons, shopping site coupons, etc.

#### 10. Gift Card:

The next cashless payment method is a gift card. Gift card is a readymade card and can be purchased from a merchant or from the bank. The gift card is loaded with a fix cash amount you can purchase any item from the specific vendor by using a gift card.

#### 11. Aadhaar Enabled Payment System:

Aadhaar Enabled Payment System (AEPS) is one of the best cashless payment methods. AEPS is like Micro ATM it uses smartphone and a finger-print scanner for the transaction. In order to use this facility, it is mandatory to link your Aadhaar card to your bank account.



#### Challenges of Cashless Transaction in India:

Some of the challenge which stand in the way of India becoming a cashless transaction there are. However, in a country of 1.3 billion people, all are not perfect. Going cashless must be an exponential curve, slow initial buildup then fast paced in later stages, not a digital step signal. That could be counterintuitive to the whole process.

##### 1. Cyber Security:

In October 2016 the details of over 30 lakh debit cards was feared to have been exposed at ATMs. It was believed that the card and PIN details might have been leaked due to which customers were advised to challenge the PIN of their ATM-cum-debit cards. Stringent steps issuing new cards were also taken so these are cyber-crimes is very dangerous to use the cashless transaction.

##### 2. Network Connectivity:

Since the day demonetization was announced, people are trying to use more of card transactions to save that dreaded trip to the bank and to save the last penny of the hard cash in hand. So many people have faced trouble standing in line to pay for a transaction at a shop when the card machines have stopped working due to an overload on the network. Connectivity issues must be resolved before dreaming about a cashless society.

##### 3. Internet Cost:

The Internet cost in India is still substantially high. There is no Wi-Fi at public places and if people do not get their monthly data packs recharged, there is no way they can be connected to make online payments. In order to convince

people to do cashless transactions, the cost of the internet should be lowered and free Wi-Fi should also be provided at public places.

#### 4. Charges on Cards Online Transactions:

Heard of convenience charges of course we would have it we do online transactions. These are additional charges that are levied by the vendors when they offer an online payment facility but when the government is forcing us to go cashless should not this compulsory seen on online transaction be taken off. So charges of cards are main problem of cashless transaction.

#### 5. Non-Tech-Survey:

The new generation is glued to their phones and gadgets, computer literacy among the people in the over 50 age group is still now so not many people are comfortable using computers are mobile phones and depend on their children when it comes to using computers are mobile phones and depend on their children when it to educate people on how to use phones for transactions.

### Remedial Measure to Improve Cashless Transaction:

Government is promoting Mobile wallets, Mobile wallet allows were to instantly send money pay bills recharge mobile book movie tickets send physical and e gifts both online and offline these are the helps to the Cashless Economy. And licensing of payment banks is one of the best suggestions to promoting the cashless transaction.

#### 1. Enhancing Online Transactions:

Efforts should be made both by the government, bank and the public to encourage online transaction, thereby promoting digital cashless society. Earlier, the income tax regulations had imposed a rule of scrutiny for transactions above Rs.2 lakh through credit cards in a year and the customers were reluctant to show electronic payments.

#### 2. Financial Security:

Financial security over the digital payment channels is imperative for pushing the cashless economy idea. When recently, the data of lakhs of debit cards was rather easily stolen by attackers, the ability of Indian financial institutions to safeguard electronic currency and exchanges came into question.

#### 3. Learning from other Cashless Economies:

India can take into considerations the model of those economies which have already moved towards being cashless economies. Uruguay has put in place incentives for merchants to prefer digital payments. India may need to think about doing so too. Sweden is another example.

#### 4. Mobile Wallet:

Credits system supports various payment methods, from cards – credit cards, prepaid cards and international debit cards from any issuer – to alternatives like bank transfer, direct debit, phone credit, payment accounts or electronic money. The platform's Mobile Wallet feature brings together a range of payment methods for consumers to choose the most suitable one for the product or service that they are buying.

#### 5. Mobile POS:

The latest solution for enabling new business models in the acquiring chain. Mobile POS exploits synergies between an ordinary smart phone or tablet and a PIN pad that reads payment cards and processes transactions in line with the card networks' standards.

### Conclusion:

To conclude an important growth of cash less transactions has been the inducement to digital economy. It has boost to financial Inclusion efforts. There has been a distinct increase in proper saving flows. There has been a sharp increase in the number of accounts. This has given a boost of banking sector.

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## Modern Payment System for MSRTC

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### Abstract:

*The Digital Payment System (DPS) could make easy to pay ticket fare by using Credit and Debit (ATM) Cards, Mobile Phone, or even Aadhaar Number or finger impression. It may helps to passenger, to travel without money anytime, anywhere. Here, it comes to know the need of DPS while travelling through ST i.e. State Transport or MSRTC. The Maharashtra State Road Transportation Corporation (MSRTC) is playing an important role in public transportation (in the territory of Maharashtra and other state's cities which are near to Maharashtra's boundary). The present research study highlighted on awareness and utility of the DPS in respect of MSRTC through the perception of ST passengers i.e. respondents of the study.*

**Key Words:** Digital India, Digital Payment System, Maharashtra State Road Transportation Corporation, etc.

### Introduction

India is being converted into a digitally empowered society and knowledge economy through Government of India's Digital India Programme. E-governance initiatives in India took a broader dimension in the mid 1990s for wider sectoral applications with emphasis on citizen-centric services. The major ICT initiatives of the Government included, inter alia, some major projects such as railway computerization, land record computerization, etc. which focused mainly on the development of information systems. Later on, many states started ambitious individual e-governance projects aimed at providing electronic services to citizens.

Today, India becomes the most respectful country in the world. For India, 21st century brings the new horizon of development in the form of Electronic and Information Technology. In this modern world, there are so many countries which are performing the role of developers. Among them, India is not far behind. India is taking the initiative of development by adopting the information technology in routine work. It can be depicted by Digital India.

The Digital Payment System (DPS) is one of the most important parts of Digital India Programme. If we want to develop rapidly, then it becomes crucial to adopt DPS in our daily life and we are marching towards it. The report drafted by Facebook and the Boston Consulting Group (BCG) presents that, with the ongoing digital drive in India, the number of users opting for online banking is expected to double to reach 150 million mark by 2020, from the current 45 million active urban online banking users in India. Further, it can be depicted that, until we are not using DPS in retail sector, it cannot become digitally developed country. For that purpose, India has taken the initiative through National Payment Corporation of India (NPCI).

National Payments Corporation of India (NPCI) is an umbrella organization for all retail payments system in India. It was set up with the guidance and support of the Reserve Bank of India (RBI) and Indian Banks' Association (IBA) under the provisions of the Payment and Settlement Systems Act, 2007, for creating a robust Payment & Settlement Infrastructure in India. The core objective is to consolidate and integrate multiple systems with varying service levels into nation-wide uniform and standard business process for all retail payment systems. The other objective was to facilitate an affordable payment mechanism to benefit the common man across the country and help financial inclusion. It is centered on bringing innovations in the retail payment systems through the use of technology for achieving greater efficiency in operations and widening the reach of payment systems.

Considering the inherent relation of the citizen with the road passenger transport business, the Central Government has made a Road Transport Corporation Act 1950 for the purpose of overall development of the nation / citizens, and for the purpose of establishing a separate Road Transport Corporation in every state for the commuters' traffic business. In view of this, Maharashtra Government has created Maharashtra State Road Transport Corporation (MSRTC) for the purpose of creation of a network of sources, affordable, speedy and efficient road passenger traffic service for the citizens. The MSRTC is established by State Government of Maharashtra as per the provision in Section 3 of RTC Act 1950. The MSRTC is operating its services by the approved scheme of Road Transport Published vide Notification MVA 3173/30303-XIIA dated 29.11.1973 in the official gazette.

To create an efficient freight facility, a massive mechanism has been created for the central office, 31 departmental offices, 3 central workshops, 250 fire stations, 3 teaching centers, 9 tire rehabilitation centers, 568 bus stations, 3639 passenger shelters and 104000 staff members. To provide efficient turn-down facility, the

Government of Maharashtra has adopted the policy of connecting every village with road, based on this corporation has adopted the policy to provide Bus on every road.

Now, we can understand that, the MSRTC is playing an important role in public transportation (in the territory of Maharashtra and other state's cities which are near to Maharashtra's boundary). The Digital Payment System could make easy to pay ticket fare by using Credit and Debit (ATM) Cards, Mobile Phone, or even Aadhaar Number or finger impression. It may helps to passenger, to travel without money anytime, anywhere. Here, it comes to know the need of DPS while travelling through ST i.e. State Transport or MSRTC.

### Review of Literature

For the present study pilot review of literature has been taken, to understand the various facets of MSRTC. The study undertaken by Karne, M. and Venkatesh, A. (2003) entitled, "Analysis of Productivity and efficiency in MSRTC", examined the issue of splitting MSRTC into smaller regions to find out whether it would actually help in its financial recovery as well as examined the possibility of improvement in financial profitability by means of enhanced input productivity. Singh, S.K. and Venkates, A. (2004) analyzed the level as well as growth of productivity and economic profitability of Swargate depot of MSRTC using its monthly data from April, 1995 to March, 2001. They found that productivity of the depot has declined by around 15% over the sample period. Although, on an average, there is a marginal increase in output prices in comparison to input factor prices, productivity decline has resulted into a significant fall of around 12% in its economic profitability over the sample period. Pardeshi, Rajendrasingh (2015) in there study tried to analyse the performance of MSRTC in Ahmednagar district of Maharashtra (India). It shows that, MSRTC in Ahmednagar district was not able to capitalize it as 40-42% seating capacity of buses was unutilized (Vacant). Further, researchers have suggested the use of ICT for improvement of Performance of MSRTC in Ahmednagar district. The Reviews are talking about the efficiency, productivity, economic profitability as well as the performance of MSRTC. But, in respect of digital payment system and MSRTC, researcher unable to get reviews. Hence, the present study made an attempt to know the perception of people about the digital payment system in respect of Msrtc.

### 3.Scope and Limitations of the Study

The present study has focused on the Maharashtra State Road Development Corporation (MSRTC) and Digital Payment System (DPS), whereas due to the time limitation, the study has covered the area of three talukas of Beed district.

### 4.The objectives of the Study

The study has been conducted in the view of following objectives:

- i. To know the awareness of people about Digital India Programme.
- ii. To identify the usefulness of DPS in respect of MSRTC.

### Data Collection and Methodology

The present research study highlights the need of DPS for MSRTC. For that, researchers have undertaken the survey in selected bus stands (Beed district's Kaij and Osmanabad district's Kalamb taluka). The sample for the study is 50 (25 from each taluka) passengers of ST (respondents) which have been selected by purposive sampling method. By undertaking the interview, the data/ responses have been collected from respondents.

### Data Analysis and Interpretation

Considering the objectives of the study, the researcher has collected the responses from respondents and the same has been presented in tabular form as follows:

#### 6.1Awareness about Digital India Programme

The Digital India programme is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy. If, we want to use DPS in routine transaction we must be digitally empowered. Thus, researcher collected data from respondents about the awareness of Digital India Programme (DIP) and presented in table 6.1.

**Table 6.1 Awareness about Digital India Programme**

Sr. No.	Name of Bus Stand	Aware	Known Percentage	Unaware	Unknown Percentage
1	Kaij	19	38	6	12
2	Kalamb	22	44	3	6
	Total	41	82	9	18

Source: Primary Data

The table 6.1 revealed that, 82 percent of respondents are aware about the DIP whereas 18 percent respondents are unaware. Majority, 22 respondents are from Kalamb taluka which shows that, as compare to Kaij more respondents from Kalamb are well known about the DIP.

### Usefulness of Digital Payment System (DPS) for MSRTC

Ministry of Electronics and Information Technology (MeitY), Government of India envisages Paperless, Cashless and Faceless services across the country, especially in rural and remote parts of India. MSRTC is playing a vital role in public transport system. Here, researcher is keen to know opinion about the usefulness of DPS for MSRTC from the respondents and same has been recorded in table 6.2.

**Table 6.2 Usefulness of Digital Payment System for MSRTC**

Sr. No.	Name of Bus Stand	Useful	Known Percentage	Unknown	Unknown Percentage
1	Kaij	15	30	10	20
2	Kalamb	20	40	5	10
	Total	35	70	15	30

Source: Primary Data

The table 6.2 represents, 70 percent of respondents are opined that DPS is useful for MSRTC, whereas 15 percent respondents are talking that, it is not useful for MSRTC. Highest numbers of respondents supporting to DPS for MSRTC are from Kalamb taluka while, 10 (20 percent) respondents from Kaij taluka opined that, it is not useful for MSRTC.

### Conclusion

The majority ST passengers (respondents) are aware about the Digital India Programme. Further, maximum numbers of respondents are talking that, Digital Payment System is useful for Maharashtra State Road Transport Corporation.

In addition to this respondents from Kalamb taluka are well aware about Digital India Programme and positively responded about the utility of DPS for MSRTC compared to Kaij taluka.

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## Digital Payment Systems an Overview

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### Abstract:-

*In thesis research paper to view various types of cash to cashless transaction and there problems and also to focus difference types of problems regarding cash to cashless transactions such as technological problems and electricity educational etc and also to focus objectives and scopes of cash to cashless transactions and In this study I have taken some overview regarding advantages and disadvantages of cash to cashless transaction when a was collect data regarding cash to cashless transaction at that time same people and some responded don't response to cash to cashless transaction but all the people be response to cashless transaction then improve the GDP and to collect the difference types of tax therefore cashless transaction is a very essential in the present day.*

*Key: - Internet, Banking, Insurance, Digital Payment System.*

### Introduction:-

Cash to cashless transaction is the most importance think but in our large business man and Indian same marchand alike to use of cashless transaction and cash less transaction do not found therefore our Indian customer unlike to cash to cashless transactions these is a reality suppose India customers to take and purchased a particular product at that time he want give many through the payment online but same marchand and small business man do not use cashless transaction these is reality in the cashless transactions does not need to carry him money according there need to take product and paid money there for in the cash to cashless transaction there various advantages and various disadvantages. all the types of business he get their profit and loss hurry up, and also he is very easy to pay his income tax, and also find out his profit and loss regarding his financial year Therefore cash to cashless transaction is very essential to development our country cash to cashless transaction use a very easy and very systematically but new customers cash to cashless transaction is a very complicated because suppose uneducated customer and employees he use a very complicated and another think during the cashless transactions go to power, and also electricity problems machine problems new technology problems there are many problems available regarding use of cash to cashless transactions, but such types of problems and barriers is very easy in the present situation there are many tools available to help such types of barriers bur in the modern age cash to cashless transactions is very essential, as well as the year of 2020 nearly increase cash to cashless transaction 500 billion in India will happen online payment digital transaction and digital payment system according to 10 time the level currently report by Google India

Cashless transaction it means all types of transaction doing online through the Debit card, credit card, ATM, such as in the present situation we are leaving in the globalization age, and in the globalization age there are came number of technology such as debit card, credit card, Internet etc. if we use such types of tools regarding any types of transaction then we can deducted time and cost and in the every transaction will be very systematically. There for in the present situation we are must to accept of new technology suppose we use such types of tools then get number of advantages. Another thing India is largest country and in India there is Large according to corruptions such types of corruptions on the control them we are need to impalement cash to cashless transaction then proper stop of various types of corruptions if we are stop difference types of cash to cashless transaction then we use such types of application fist we use cheqe regarding any transaction use only cheque other thing when we want purchase and sale a particulars product at that time use to debit card and credit card and also we go to purpose of sale and purchased a particulars product at that time do not carry money. There for in the present situation use of cashless transaction is most importance as well as there are many applications available in India regarding cashless transaction such as ATM, Debit Card, Credit Card, Internet, Net Banking, M. Banking, Demat account, etc. In this research paper I have analysis to various types' online payment method and modes of cash to cashless transaction and I have observed about the tax when the absolutely implemented cash to cashless transaction that time to collected large according to tax therefore in the present dyes cash to cashless transaction is very important. In thesis study to analysis difference type of online payment systems and method, as well as to focus several types of advantages and disadvantages of cash to cashless transaction and also to focus problems regarding cash to cashless transaction economy, when I was collecting data form difference types of responded at that time there opinion about cash to cashless transaction some positive and some negative.

through criteria all the transaction do it online and also there are get various types of advantages to the buys and sellers their time and cost deducted and also their business expansion,.

**Cashless transactions economy:-**

Cash to cashless transaction it included to all types of transaction do not for cash, all the transaction only doing on online such as ATM card, Debit Card. Credit Card. Internet, M. Banking all the transaction be use these types of application. Means cash to cashless transaction economy all payment doing on online. Suppose we use online payment methods at that time to get various types of advantage to customer and buyer, and also to deducted time and cost to both factors, as well as to paid proper and Wright income tax, and any person do not avoid income tax, and therefore in the Indian economy to find out various types of crime, burglars, economic crime such of factor proper to control through the cash to cashless transaction and proper in India to expansion of cash to cashless transaction therefore to develop our country that’s why to use cash to cashless transaction is very essential regarding these image cash to cashless transaction.

**What are the transactions or service charge for NEFT transaction**

Amount up to Rs.10,000	Rs. 2.50+ service Tax
Amount above Rs. 10,000 and upto Rs. 1 lakh	Rs. 5+service Tax
Amount above Rs. 1 lakh and upto Rs. 2 lakh	Rs. 15+service Tax
Amount above Rs. 2 lakh and upto Rs. 5 lakh	Rs. 25+service Tax
Amount above Rs. 5 lakh and upto Rs. 10 lakh	Rs. 25+service Tax

**Used of Digital Payment Systems in India (on Dec. 29 2016)**

D. P.S.	Volume (in m)	Value (Rs Cr.)
UPI	0.1	40
Mobile Banking	2.2	4790
Plastic Cards	8.8	1490
RTGS	0.4	468150
NEFT	6.5	65310
IMPS	1.8	1580
USSD	0.09	0.72

Source RBI

**Objectives of the Study:-**

1. What is the cashless transaction
2. To now importance and impact of cashless transaction in Indian economy.
3. To analysis & assume of cashless transaction in future.
4. To find out various barriers about the cashless transaction.

**Importance and Limitation of the study:-**

There are various types of advantages and disadvantages of cash and cashless transactions, similarly same advantage and disadvantages of cash and cashless transactions as follows.

**Importance of the Study:-**

1. No need individual cash carry him or her to purpose a particular purchase and sale
2. Will increase the tax base and add to tax revenues regarding various components.
3. Discount on purchase, sales
4. Discount rail ticket, bus highway
5. Maximum risk on the cashless transaction.
6. Paid accurate income tax.
7. Regarding Insurance premium
8. Mobile phone and cell phone
9. Increase GDP
10. To deducted time and cost.

**Limitation of the study:-**

1. Maximum time
2. Maximum risk
3. High corruptions
4. Low mobile phone and cell phone
5. Risk in insurance premium

6. Income tax
7. Moral and ethics
8. Electricity problems
9. Uneducated people regarding cash to cashless transaction
10. Don't proper communication

**Models of cashless transaction in India:-**

1. Pint to sale
2. Debit card
3. Credit card
4. Mobile, Internet. Banking and financial Institution
5. Tax
6. Various types of sales and discount
7. Computer
8. Dimat
9. Online Transfer- NEFT or RTGS
10. Cheques
11. Demand Draft
12. E-Wallets

**Hypothesis:-**

1. To find out various types of barriers corruption in the cash to cashless transaction
2. Moral and ethics regarding Income tax
3. To find out various problems regarding online payment
4. To maximum increase cash to cashless transaction

**Research Methodology:-**

At the First stage in the primary data was collected from the responded through the questionnaire and personal interview. And second stage was collected from the published source. The secondary data has been published government report, website and varies other publication and also frame personal discussion with the people of varies government department manager's worker and society.

**Conclusion:-**

In thesis research paper to view various types of cash to cashless transaction and there problems and also to focus difference types of problems regarding cash to cashless transactions such as technological problems and electricity educational etc and also to focus objectives and scopes of cash to cashless transactions and In this study I have taken some overview regarding advantages and disadvantages of cash to cashless transaction when a was collect data regarding cash to cashless transaction at that time same people and some responded don't response to cash to cashless transaction but all the people be response to cashless transaction then improve the GDP and to collect the difference types of tax therefore cashless transaction is a very essential in the present day.

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## The Types Of Digital Payments And Its Benefits

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### Abstract :-

Government of India aim to create a Digitally empowered economy that is cashless. In Digital Payment method there is no use of cash or cheques. There are various types and modes of digital payments. These are Banking Cards, USSD, AEPS, UPI, Mobile Wallets, Bank Pre-Paid Cards, Internet Banking, Mobile Banking, BHIM etc. The benefits of this facility is to provide customers the flexibility to make payments from any where and at anytime.

### Introduction :-

As part of the 'Digital India' Campaign the Government of India aim to create a Digitally empowered economy that is 'faceless, Paperless, Cashless. There are various types and modes of digital payments.

Digital Payment methods are often easy to make more convenient and provide customers the flexibility to make payment from anywhere and at anytime.

### Digital Payment :-

Digital payments occurs when goods or services are purchased through the use of various electronic mediums. There is no use of cash or cheques in this type of payment method.

### Cashless Economy :-

In cashless economy all transaction are carried out using different types of payment methods.

### Objectives :-

- 1) To study the types of Digital payment Methods.
- 2) To Study the Benefits of Digital Payment methods.

### Types of Digital Payment Methods in India.

#### 1) Banking Cards :-

This type is the most widely used payment methods. The main advantage of debit/ credit or prepaid banking cards is that they can be used to make other types of digital payments. For example, customers can store card information in digital payment apps of mobile wallets to make cashless payment. Some of the most reputed card payment system are Visa, Rupay and Master Card.

#### 2) USSD :-

\*99# can be used to carry out mobile transactions without downloading any app. The main aim of this type of digital payment service is to create an environment of inclusion among the underserved sections of society and integrate them into mainstream banking. This service can be used to imitate fund transfers, get a look at bank statements and make balance queries.

#### 3) AEPS :-

Expanded as Aadhar Enabled payment system, can be used for all banking transactions such as balance enquiry, cash withdrawal, cash deposit, payment transactions, Aadhaar to Aadhaar fund transfer etc.

#### 4) UPI :-

UPI is a type of interoperable payment system through which any customer holding any bank account can send and receive money through a UPI – based app. The main advantage of UPI is that it enables users to transfer money without a bank account or IFSC code.

#### 5) Mobile Wallets :-

A Mobile wallets is a type of virtual wallet service that can be used by downloading on app. One can also add money to a mobile wallet and use the same to make payments and purchase goods and services. Some of the mobile wallets apps in the market are pay tem, Mobikwik, Free charges etc.

#### 6) Bank Pre-paid Cards :-

A Prepaid card is a type of payment instruments on to which you load money to make purchases. The type of card may not be linked to the bank account of the customer. However a debit card issued by the bank is linked with the bank account of the customer.

### 7) Internet Banking :-

This types refers to the process of carrying out banking transactions online. These may include many services such as transferring funds, opening a new fixed or recurring deposit, closing and account etc. Internet banking is usually used to make online fund transfers via NEFT, RTGS or IMPS.

### 8) Mobile Banking :-

Mobile banking is referred to the process of carrying out financial transactions/ banking transactions through smart phone.

### 9) Bharat Interface for Money (BHIM) App :-

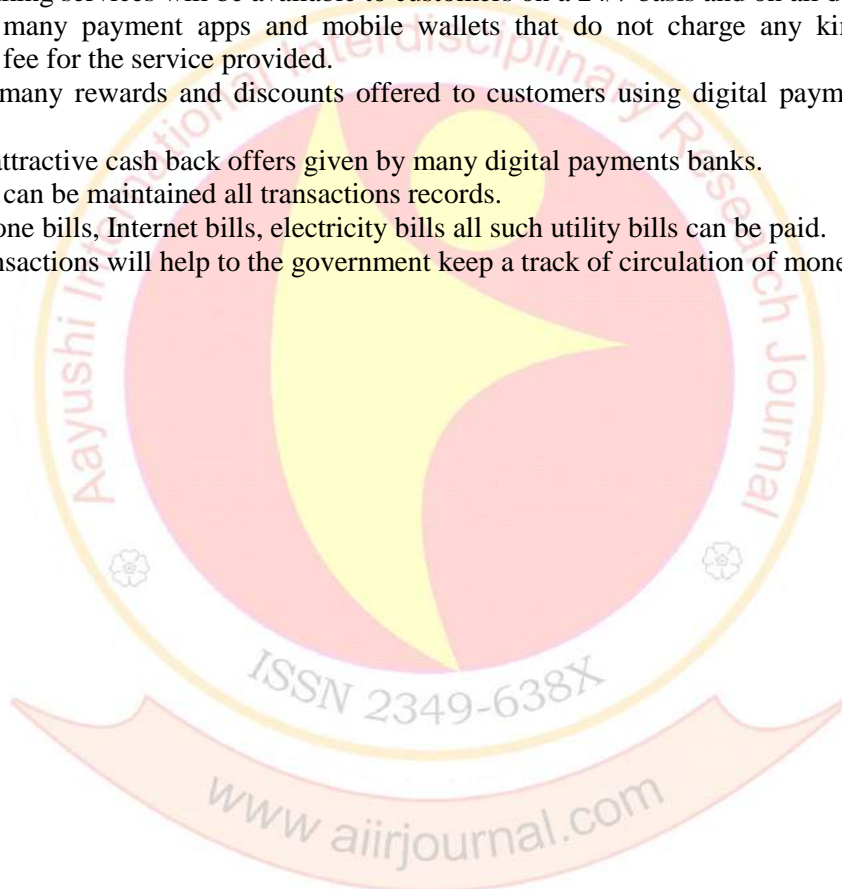
The BHIM app allows users to make payments using the UPI application. The BHIM app can be used by anyone who has a mobile number, debit card and valid bank account money can be sent to different bank accounts, virtual address or to an Aadhaar Number.

### Benefits of Digital Payments :-

- 1) There is no need to stand in a line to withdraw money from an ATM or carry cards in the wallet.
- 2) Digital banking services will be available to customers on a 24/7 basis and on all days of a year.
- 3) There are many payment apps and mobile wallets that do not charge any kind of service fee or processing fee for the service provided.
- 4) There are many rewards and discounts offered to customers using digital payment apps and mobile wallets.
- 5) There are attractive cash back offers given by many digital payments banks.
- 6) Customers can be maintained all transactions records.
- 7) Mobile phone bills, Internet bills, electricity bills all such utility bills can be paid.
- 8) Digital transactions will help to the government keep a track of circulation of money.

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## Digital Payment System and Agricultural Industrial and Service Sector

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Digital Payments started to pick up pace with the growth of e-commerce companies followed by emergence of digital wallet companies. To lure the consumers, the digital wallets doled out lucrative offers and cash backs to get consumers on board using the payment channel. Thanks to the easy of use , attractive offers and increased smart phone penetration, the digital wallet companies did find their way to the consumers phone as well as are pocket,

To expand their reach to digital wallets started encouraging customers to use them for offline points of sale (POS) transaction too like at shopping malls supermarkets, grossery stores, restaurants and gas/ petrol stationary these POS transition are expected to become a majority contributor to the digital payments platform in the coming years.

The other important pillaroly the digital payments story are the online ticketing , travel and event companies like IRCTC (Railways), Make my Trip , Yatra, Ibibo, Clear trip (Airlines and hotels), rebus (Buses) , and book my show (Movie and event ticketing), . they have got consumer to transact online.

### **The potential**

The digital payment industry is gaining momentum and is projected to grow at an exponential rate 81 percent of existing digital payment users prefer the medium over other non- cash payment methods like.

Cheques or demand drafts. Online shopping, payments of utility bills (like electricity, mobile bills, water bills) and movie tickets are three things that an Indian user primarily pays for through digital platform

According to a report by Google and Boston consulting Group (BCG) the Indian digital payments industry is estimated to touch 500 \$ billion by 2020. Contributing 15 percent to the country's GDP

An interesting angle to indiries digital payment story is that is going to be dominated by micro transition (Transaction of value lower than Rs 100) in fact 50 percent of person to merchant transition are be under Rs. 100s , says the google BCG Report. Alternative digital payment like digital wallets, UPI, Payment banks Bhavat QR Are expected to grow fierily and estimated to double their contribution to 30 percent in the digital payments industry

### **Mobile Digital Wallets :**

The digital payment industry growth will be led by the digital / mobile wallets according the the capgemini's world payment report , mobile wallet will wires a compound annual growth rate (CAGR) of 148 percent over the neat five yeas and will be \$ 4.4 billion by 2022 the digital wallets are also supposed to outshine UPI

### **Key Drivers**

The Exponential Growth of the digital payment sector is drive by multiple factors including convienenceto pay, the ever growing smart phone penetration rise of non banking payment institutions (payments bank, digital wallets, etc.) progressive regulatory policies and increasing consumer readiness to the digital payments platform

The convenience to pay along with the availability of lucrative offers, are the key factors that have been driving the growth of digital payments in India. This coupled with the increasing Smartphone preparation is proving to belay boon for digital payments sector. India currently has third largest internet user in the world with 300 million users. 50 percent of these uers are connected to internet through mobile only this is trillion Mobile only internet users are paying a key role in the growth story of digital payments

Another key driver of digital payments is Positive policy formwork changes and government indicative like launch of new payments system like UPI, Adhar Linked Electronic payments and improvement of the digital infrastructure.

### **Compression with Global Market**

When it comes to the ecosystem of digital payments, India is pegged to brave the most evolved system compared to 25 other countries which were surveyed by FIS, a US- based banking technology company . this included UK, China and Japan, The parameters that FIS used to measure the digital payments in these 25 countries include around the clock availability of the services and immediacy of payments

### **The role of digital payments**

In sustainable agriculture and ford serenity (Key finding)



1. Expanding digital payments and lauding responsible digital payments ecosystems are fundamental to creating a sustainable agricultural sector and addressing poverty and hunger
2. Investing in agricultural productivity and capacity by enabling more digital payments is likely to have outsized returns.
3. The disadvantages of cash are magnified for people in rural and remote communication
4. There is wide gender gap in agricultural opportunities, which digital payments can help to address.
5. Digital payments have been slow catch on with small holder farmer in poor rural communities
6. In order to replace cash digital payments must offer a greater value proposition and operate within a far broader digital payments ecosystem

### Key barriers

There are three principal barriers to improving agricultural sector efficiency which can be addressed by digital payments.

- Cash based value chains and inefficient markets.  
Agricultural value chain entails numerous transitions between all types of stakeholder farmers input sellers (creditor, local, buyers global agribusiness and other. The high volume of transition creates a multiple for any efficiencies such as cash payments.
- Lack of Non Payments Financial Services Suitable for Small holders  
Digital payments facilitate access to financial services for small holder farmers by lowering transition cost, providing flexibility and improving the customer experience. This is critical to building a business case of financial service providers in rural areas.
- 3 inefficient delivery of social program and remittance .  
Digital payment can help improve the efficiency of social program and delivered by reducing costs and leakage for government transfer earned at the rural poor and can increase access to private support by lowering the cost of remittance

**Digital Payments And service Sector :** Digital payments : a growing trend with focus on customer

### Experience :

Until a few years ago the digital payment market was the cornerstone of technological innovation driven by traditional financial institutions then the OTT's arrived – over the top (Paypal, Amazon, Apple, Alibaba, Wechat, Google and now also Facebook) and the fintech, entered a new league in the sector so as to disrupt it in no time a true disruption innovation that makes leverage on a single very clear element the customer experience .

### New opportunities in the digital field

The arrival of the PSD2 the legislation that officially came into force in January this year has undoubtedly contributed to the market transformation in fact, this legislation has introduced some significant changes first of all the concept (and model of open banking, an ecosystem) that sees the user at the center for the benefit of a new multi channel customer experience

### The Consumer must be free to

Choose payment services in offering that can not only banking an opening towards third parties “ who can manage and after digital payments services even if they are not financial institutions, as we know digitech did not miss this huge opportunity

So this is all about digital payments system and agricultural industrial and service sectors.

### Ref :

- Digital payment industry in India IB (Website)

## Indian Banking system after Globalization

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*It is recognised that the existing banking structure in India is elaborate and has been serving the credit and banking services' needs of the economy. However, since 1991, the Indian economy has undergone significant transformation in terms of its size and composition. The economic structure has diversified substantially and the economy has been opening up in its quest to further integrate with the global economy. If the real economy is dynamic, the banking system needs to be flexible and competitive in the emerging milieu.*

*Viewed from this perspective, there is a need and scope for further growth in the size and strength of the existing banking structure to cope with the multiple objectives and demands made on it by various constituents of the economy.*

### Report on Trend and Progress of Banking in India

Indian Banking is one of the most powerful system in global perspective. Indian banking play a vital role in governments planning and policy design. In the global scenario every factors chaining owns working method for live sustain to development process. Indian economy is agrarian economy , science 1947 we try to develop in to our primary sector is agriculture with the help of our central bank “ Reserve Bank” and its system.

#### History of Banking :-

In ancient India there is evidence of loans from the Vedic period (beginning 1750 BC). Later during the Maurya dynasty (321 to 185 BC), an instrument called adesha was in use, which was an order on a banker desiring him to pay the money of the note to a third person, which corresponds to the definition of a bill of exchange as we understand it today. During the Buddhist period, there was considerable use of these instruments. Merchants in large towns gave letters of credit to one another.

During the First World War (1914–1918) through the end of the Second World War (1939–1945), and two years thereafter until the independence of India were challenging for Indian banking. The years of the First World War were turbulent, and it took its toll with banks simply collapsing despite the Indian economy gaining indirect boost due to war-related economic activities. At least 94 banks in India failed between 1913 and 1918 as indicated in the following table:

Years	Number of banks that failed	Authorised capital (Rs. Lakhs)	Paid-up Capital (Rs. Lakhs)
1913	12	274	35
1914	42	710	109
1915	11	56	5
1916	13	231	4
1917	9	76	25
1918	7	209	1

#### Government Policy :-

The Government of India issued an ordinance ('Banking Companies (Acquisition and Transfer of Undertakings) Ordinance, 1969') and nationalized the 14 largest commercial banks with effect from the midnight of 19 July 1969 and 6 more commercial banks followed in 1980.

By 2010, banking in India was generally fairly mature in terms of supply, product range and reach-even though reach in rural India still remains a challenge for the private sector and foreign banks. In terms of quality of assets and capital adequacy, Indian banks are considered to have clean, strong and transparent balance sheets relative to other banks in comparable economies in its region. The Reserve Bank of India is an autonomous body, with minimal pressure from the government.

#### Recent Trends in Indian Banking Sector

The Banking sector has been immensely benefited from the implementation of superior technology during the recent past, almost in every nation in the world

IT plays an important role in the banking sector as it would not only ensure smooth passage of interrelated transactions over the electric medium but will also facilitate complex financial product innovation

and product development. The application of IT and e-banking is becoming the order of the day with the banking system heading towards virtual banking.

Banks, who strongly rely on the merits of 'relationship was banking' as a time tested way of targeting & servicing clients, have readily embraced CRM, with sharp focus on customer centricity, facilitated by the availability of superior technology. CRM, therefore, has become a new mantra in service management, both relationship & information wise.

Offers financial stability in the banking sector in India.

#### **Major challenges faced by banks**

- Increased competition from domestic and international markets;
- Transaction costs of carrying non-performing assets and substandard assets in its books;
- Frequent changes in key policy rates and reserve requirements by the RBI;
- Maintaining sufficient liquidity.

#### **The main reasons why the banks are heavily regulated are as follows:**

1. To protect the safety of the public's savings.
2. To control the supply of money and credit in order to achieve a nation's broad economic goal.
3. To ensure equal opportunity and fairness in the public's access to credit and other vital financial services.
4. To promote public confidence in the financial system, so that savings are made speedily and efficiently.
5. To avoid concentrations of financial power in the hands of a few individuals and institutions.
6. Provide the Government with credit, tax revenues and other services.
7. To help sectors of the economy that they have special credit needs for eg. Housing, small business and agricultural loans etc.

#### **Following are the innovative services offered by the industry in the recent past:**

##### **Electronic Payment Services - E Cheques**

Nowadays we are hearing about e-governance, e-mail, e-commerce, e-tail etc. In the same manner, a new technology is being developed in US for introduction of e-cheque, which will eventually replace the conventional paper cheque. India, as harbinger to the introduction of e-cheque, the Negotiable Instruments Act has already been amended to include; Truncated cheque and E-cheque instruments.

##### **Real Time Gross Settlement (RTGS)**

Real Time Gross Settlement system, introduced in India since March 2004, is a system through which electronics instructions can be given by banks to transfer funds from their account to the account of another bank. The RTGS system is maintained and operated by the RBI and provides a means of efficient and faster funds transfer among banks facilitating their financial operations. As the name suggests, funds transfer between banks takes place on a 'Real Time' basis. Therefore, money can reach the beneficiary instantaneously and the beneficiary's bank has the responsibility to credit the beneficiary's account within two hours.

##### **Electronic Funds Transfer (EFT)**

Electronic Funds Transfer (EFT) is a system whereby anyone who wants to make payment to another person/company etc. can approach his bank and make cash payment or give instructions/authorization to transfer funds directly from his own account to the bank account of the receiver/beneficiary. Complete details such as the receiver's name, bank account number, account type (savings or current account), bank name, city, branch name etc. should be furnished to the bank at the time of requesting for such transfers so that the amount reaches the beneficiaries' account correctly and faster. RBI is the service provider of EFT.

##### **Electronic Clearing Service (ECS)**

Electronic Clearing Service is a retail payment system that can be used to make bulk payments/receipts of a similar nature especially where each individual payment is of a repetitive nature and of relatively smaller amount. This facility is meant for companies and government departments to make/receive large volumes of payments rather than for funds transfers by individuals.

##### **Automatic Teller Machine (ATM)**

Automatic Teller Machine is the most popular devise in India, which enables the customers to withdraw their money 24 hours a day 7 days a week. It is a devise that allows customer who has an ATM card to perform routine banking transactions without interacting with a human teller. In addition to cash withdrawal, ATMs can be used for payment of utility bills, funds transfer between accounts, deposit of cheques and cash into accounts, balance enquiry etc.



### Point of Sale Terminal

Point of Sale Terminal is a computer terminal that is linked online to the computerized customer information files in a bank and magnetically encoded plastic transaction card that identifies the customer to the computer. During a transaction, the customer's account is debited and the retailer's account is credited by the computer for the amount of purchase.

### Tele Banking

Tele Banking facilitates the customer to do entire non-cash related banking on telephone. Under this device Automatic Voice Recorder is used for simpler queries and transactions. For complicated queries and transactions, manned phone terminals are used.

### Electronic Data Interchange (EDI)

Electronic Data Interchange is the electronic exchange of business documents like purchase order, invoices, shipping notices, receiving advices etc. in a standard, computer processed, universally accepted format between trading partners. EDI can also be used to transmit financial information and payments in electronic form.

### Internet Banking is very useful to modern world but sometime it is a create big problems like as follow

1. Safety situations around ATMs.
2. Abuse of bank cards by fraudsters at ATMs.
3. Danger of giving your card number when buying on-line.
4. E-banking transactions are much cheaper than branch or even phone transactions. This could turn yesterday's competitive advantage - a large branch network - into a comparative disadvantage, allowing e-banks to undercut bricks-and-mortar banks. This is commonly known as the

### “beached dinosaur” theory.

E-banks are easy to set up, so lots of new entrants will arrive. „Old-world“ systems, cultures and structures will not encumber these new entrants. Instead, they will be adaptable and responsive. E-banking gives consumers much more choice. Consumers will be less inclined to remain loyal.

Portal providers are likely to attract the most significant share of banking profits. Indeed banks could become glorified marriage brokers. They would simply bring two parties together e.g. buyer and seller, payer and payee.

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## Digitalization In English Language Teaching-Learning

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### Introduction:-

Language experiences are getting richer and enhanced with the digital world. Use of e-books, audio-books, videos, audio-lingual teaching aids have not only enhanced the quality of learning but also brought them closer to the effective and efficient learning. Digital technology is very useful in English language teaching-learning in modern period. Some digital devices are used in English language classes such as audio-video recorder, video presentation, online dictionaries, internet and personal laptop which are very important. Digital tools provide new and more efficient ways of accessing and managing large quantities of data. English still occupies an important place in educational system. It is the language that continues to dominate the national scene. It is taught compulsorily in most of the state in the country.

Information and Communication Technology (ICT) is a new trend explored in ELT. Teaching-learning has always been an important process in higher education. Quality of education plays a vital role in the development of a nation. Technology has been playing an effective role in modern society.

“An observation of international trends in application ICT in school & Colleges indicates that it is directly related to the development of schools or colleges and the teaching & learning environment”.

Innovations are being brought in education and new skills for practitioners by high quality technology. Rich nations provide adequate technology in their schools and colleges. Institute of educational sciences (IES) (2010) Reported that in 2008, the average public school of USA had 189 Instructional computers and about 98% of them had internet access and number of student per computer with internet access was three.

Info Dev (2012) reported that,

“students are more sophisticated in their use of technology than teachers”.

### Information & Communication Technology (ICT) -

It was limited only to the textual mode of transmission of information with ease and fast. But the information not only in textual form but audio, video or any other media is also to be transmitted to the users. It has opened new avenues like online learning, E-learning, E-caching, E-education, E-journal etc. Mobiles are also the part of ICT which is third generation. It is been used in imparting information fast and cost effective. It provides E-mail facility also as well as one can access at anywhere. It will be cost effective. The ICT brings more rich material in the classrooms and libraries for the teachers & students. It has broken the monotony and provided variety in the teaching – learning situation. It can be used both at school and higher educational levels in the following areas:

1. Teaching.
2. Diagnostic Testing.
3. Remedial Teaching.
4. Evaluation.
5. Online Tutoring.
6. Instructional Material Development.
7. Professional Development

**Use of ICT in Diagnostic Testing :-** The common observation is that the quality of teaching in the class room is on the decline. More & more students are depending on the private tutorial classes. There are students who fail to understand certain concept or retain certain information. This can be assessed by introducing the diagnosis in the process of teaching - learning. The reasons might be large class size, non availability of diagnostic tests in different subjects, lack of training, money and desire on the part of teacher etc. These difficulties can be easily overcome with the help of ICT. The computer based the Diagnostic Test work is well. It helps to the teachers as well as the students in identifying gap area of each and every student. This can be put on the website of the school or college and the student can access it from home also.

**Use of ICT in Remedial Teaching :-** The next step is to organize Remedial Teaching program. It can be done by the teacher if some common mistake can be identified. It may not be feasible to organize Remedial program for individual student. At this point, the ICT can be used for giving individual Remedial program. It may be online or offline.

**Use of ICT in Evaluation:-** At present the paper pencil tests are conducted for evaluating the academic performance of students. These stages are conducted in the group setting. The content coverage is poor and student cannot use them at their own these stages are evaluated by the teacher. They may not give feedback immediately to each and every student. The ICT can be made used in the evaluation. One such attempt has been made by sansanwan and Dahiya (2006) who developed the computer based test. This test can be used individual student to evaluate his learning. Such tests can be uploaded on the website for wider use. Such software can be used for internal assessment.

**Use of ICT in Development Instructional Material:-** At Present there is the shortage of qualified and competent teacher at all levels. Not only this, even the instructional material available in the print form is not of quality. Sometimes the information given in the books is also wrong. The book reading is not very enjoyable and does not help students in understanding the concept and retaining information. The well known teachers should be digitalized and made available to all the users. It will enhance the quality of instructions in the classrooms. The teacher can used them in the classrooms and can organize discussion after it. It will make the teaching effectively, participatory and enjoyable. The competent teachers can developed E-content in their own areas of specialization. This has lot of potentiality to bring quality in teacher education. The ICT can be used in developing instructional material and E-content.

**Use of ICT in Professional Development:-** Teacher will learn new skills, such as web design, new software packages and the use of hardware devices such as digital cameras, video editing etc.

#### **ICT Assisted language use and teaching activities:-**

**ICT and English Teaching:** The third dimension of globalization is inseparable from the trend of English teaching. It is the development and highly intensified use of information and communication technology (ICT). The rapidly growing of ICT is both a contributor and results of economic and social development of the world society. The field of English teaching is affected by it.

**Web Based Learning:-** English can now be learnt not only in the traditional for face to face classes but also in cyberspace or web based classes. At present one can attend a language class in the interest just in second in any time and from anywhere. Web based learning sometimes also called technology based learning or distance learning online education and e-learning is one of the fastest growing areas in education. It is widely accepted that advances in information technology and development in learning science provide opportunities to create well designed, learner centered interactive, affordable efficient, flexible e-learning environments.

**E-Mail :-** It is possibly most commonly used and easiest to use the internet application we can apply in language learning. Teachers and students can integrate e-mail based activities into this curriculum – by getting a single e-mail account. If they have the necessary access equipment and foreign contact, student can also correspond with native speakers of the target language. Another profit is that teachers and student can get learning using e-mail is possible the fact that creating a personal e-mail account (g-mail, yahoo, hot-mail etc) is free. In practice for instance, a teacher can create a topic to write and send if two students via-mail. Receiving the email the student start to write and send it back to the teacher. Receiving the composition the teacher can comment and provide feedback for each work and send it back to the students to write.

**Blogs :-** A blog is a web based space for writing where all the writing and editing of information is publicly available on the internet. On the internet a blog is a personal or professional journal that is frequently update and intended for general public consumption. The essential characteristics of blog are its journal form typically a new entry each day, and its informal style. Many blogs include photo, audio and video information. These features make blogs very well suited to serve as online personal journals for students. Language learners could use a personal blog, linked to a coarse as an electronic portfolio showing development overtime.

**Skype :-** Nowadays every internet messenger service have audio functions and technology equipment such as laptop computers. Also have cameras on them. So student can talk with their instructors and peers far away. In some way, they can also speak with native speakers. Speaking skills can be developed by using this application. In addition, students and teachers do not have to pay for this. They just pay for the internet access.

**Mobile Phones :-** Mobile phones are probable the most families communication technology. We can use in English teaching. With mobile phones, learners can surf on the web and they can at least learn vocabulary from the dictionary that cell phone include learners can search for new words or exercise in English. Learners can also send short message service (SMS) to ask question to their friends or teachers. Teachers can give feedback by using their cell phones their students. Relent mobile phones use wireless Internet to exchange voice messages e-mails and small web pages this enables learners to use their mobile phones to learn English vocabulary and do exercise moreover recording facilities provided in cell phones makes it possible for students



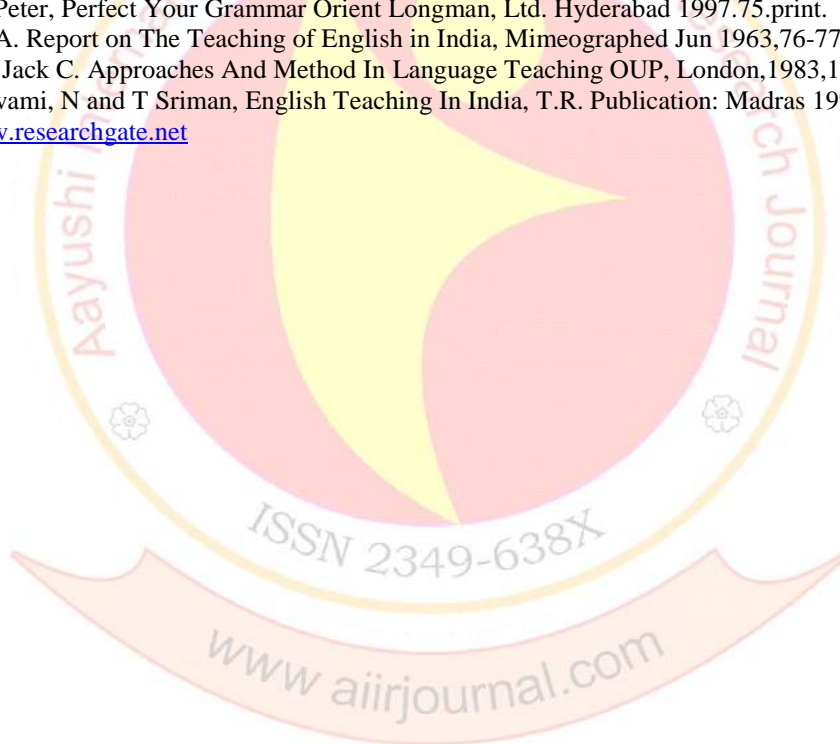
to record their voice and the voice of a native speakers. Playing the voices, the student compares their pronunciation with that of native speaker.

**Conclusion:**

To sum up, we can surely say that the use of technology really helps by various in education. Multimedia is the 'buzz word' today in the field of computers multimedia combines the use of diverse media. It gives students and altogether enriched understanding, visually graphic and life-like experiences. ICT is helpful for motivating students to study English. It has the power to make studying English as an enjoyable experience. We should not miss the bus that is multimedia when the rest of the world is travelling towards virtually reality.

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## आर्थिक साक्षरता आणि भारतीयांची गुंतवणूक प्रवृत्ती

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### शोधसार:

भारतीय लोकांची स्वातंत्र्यानंतरची आणि जागतिकीकरणानंतरची आर्थिक परिस्थिती यामध्ये फार मोठ्या प्रमाणावर फरक पडलेला पहावयास मिळतो. भारतीय लोकांचे उत्पन्न, खर्च आणि बचत करण्याची क्षमता यामध्ये बदल झालेला आहे. म्हणजेच भारतीयांचे उत्पन्न वाढलेले आहे त्याचप्रमाणे त्यांची उपभोग प्रवृत्ती देखील वाढलेली आहे. परंतु वाढलेल्या उत्पन्नाच्या मानाने बचतीची व गुंतणुकीमध्ये जी वाढ होणे अपेक्षित होते त्यात बदल झालेला नाही. भारतीय लोकांची गुंतवणूक वाढलेली असलेली तरी ती नियोजनबद्धरित्या केली जात नाही. त्यांना आर्थिक शिस्तीची गरज भासते ती आर्थिक साक्षरतेमधून मिळते. भारतीय समाजाची साक्षरता वाढलेली असली तरी ते आर्थिक साक्षर फारच कमी आहेत. एका अहवालानुसार फक्त ३ टक्के लोक हे आर्थिक साक्षर आहेत. त्यामुळे भारतीय समाजामध्ये आर्थिक साक्षरता वाढविणे आवश्यक आहे.

प्रस्तुत शोध निबंधामध्ये भारतीय लोकांची गुंतवणूक करण्याची पध्दती आणि आर्थिक साक्षरतेची आवश्यकता यावर थोडक्यात प्रकाश टाकण्याचा प्रयत्न केलेला आहे.

### प्रस्तावना:

भारतीय अर्थव्यवस्था ही विकसनशील व कृषिप्रधान अर्थव्यवस्था म्हणून आजही ओळखली जाते. आपण भारतीय अर्थव्यवस्था २०२० मध्ये महासत्ता होण्याची स्वप्न पहात आहोत. परंतु त्यामध्ये अनेक अडचणी आहेत. भारताने १९९१ नंतर खुल्या अर्थव्यवस्थेचे धोरण स्विकारल्यानंतर भारतीय राष्ट्रीय उत्पन्नामध्ये वाढ झालेली असली तरी आर्थिक विषमता ही मोठ्या प्रमाणात वाढलेली पहावयास मिळते. वाढत्या उत्पन्नाबरोबर जागतिकीकरणानंतर भारतीयांची मानसीकता ही चंगळवादी व उपभोगवादी झालेली आहे हे वास्तव नाकारता येणार नाही. लोकांमध्ये उत्पन्नानुसार खर्च करण्याची आर्थिक शिस्त पहावयास मिळत नाही तर कर्ज काढून सन करण्याची प्रवृत्ती वाढलेलीत दिसून येते. ग्रामीण भागामध्ये शेतकऱ्यांमध्ये आत्महत्या करण्याचे प्रमाण वाढण्यामध्ये हे एक अत्यंत महत्त्वाचे कारण आहे की, ज्या उत्पादक कारणांसाठी आपण कर्ज घेतो त्या कारणांसाठी न वापरता अनुत्पादक व चंगळवादी कारणांसाठी वापरले जाते. त्यामुळे ते परत करण्याची क्षमता रहात नाही. म्हणून जर आपले उत्पन्न, आवश्यक खर्च, बचतीची प्रवृत्ती व त्यातून योग्य व नियोजनपूर्वक गुंतवणूक याबद्दलची जाणीव जागृती भारतीय समाजामध्ये झाली तर निश्चीतच भारत आर्थिक महासत्ता होईल. भारतीयांचे साक्षरतेचे प्रमाण वाढलेले असले तरी आर्थिक साक्षरतेचे प्रमाण अत्यंत अल्प आहे. त्यासाठी आर्थिक साक्षरता वाढणे आवश्यक आहे.

### आर्थिक साक्षरता:

आर्थिक साक्षरता ही आर्थिक विषमतेच्या संदर्भाने आलेली आहे. आर्थिक विषमता या अर्थाने की एकाच कामासाठी वेगवेगळ्या व्यक्तित्ना वेगवेगळा मोबदला दिला जातो. म्हणजेच स्त्री आणि पुरुषांना मिळणारा मोबदला यात तफावत असते. त्याच प्रमाणे त्यांना प्राप्त होणाऱ्या सोयी सवलती या वेगवेगळ्या असतात. त्यामुळे त्यांच्या आर्थिक प्राप्ती व खर्च यामध्ये देखील तफावत पहावयास मिळते. त्यामुळे आपण आपल्या उत्पन्नानुसार खर्च करण्याची सवय स्वतःला लावून घेणे अत्यंत महत्त्वाचे असते. या संदर्भानुसारच आर्थिक साक्षरता ही संकल्पना उदयास आलेली आहे. या संकल्पनेनुसार

१. पैसा कसे कार्य करतो व तो का महत्त्वाचा आहे हे समजून घेण्याची क्षमता.
२. एखादी व्यक्ती पैसा कसा प्राप्त अथवा निर्माण करते व त्याचे कशा प्रकारे विनियोजन करते की जेणेकरून त्याला त्या गुंतवणूकीपासून अधिकची प्राप्ती होते.
३. आर्थिक साक्षरता ही संकल्पना आपली प्राप्ती, आपला खर्च व गुंतवणूक यांसंबंधीचे ज्ञान, कौशल्य आणि निर्णयक्षमता यांच्याशी निगडीत आहे.

आर्थिक साक्षरता या संदर्भाने विविध व्याख्या करण्यात आलेल्या आहेत परंतु त्या एकसारख्या असल्याचे दिसून येत नाहीत त्यापैकी काही व्याख्या पुढीलप्रमाणे आहेत त्यांचा वापर काही संशोधकांनी आपल्या संशोधनामध्ये केलेला आहे.

1. “Financial literacy is a basic knowledge that people need in order to survive in a modern society”. (Kim, 2001)
2. “Financial literacy refers to a person’s ability to understand and make use of financial concepts” (Lisa – 2008)
3. “Financial literacy is the ability to use knowledge and skills to manage financial resources effectively for lifetime financial security”. (Mandell, 2008)

4. “Financial literacy is the ability to make informed judgments and to take effective decisions regarding the use and management of a person’s skills, knowledge, attitude and ultimately their behavior in relation to money”. (ANZ Bank 2011)

वरील व्याख्याचा विचार करता आर्थिक साक्षरतेची संकल्पना स्पष्ट होते.

आर्थिक साक्षरता म्हणजे आपल्याला प्राप्त होणारे उत्पन्न, आपण करीत असलेला खर्च - हा खर्च करणे खर्च योग्य आहे की अयोग्य आहे याबद्दलची जाण, बचत कशी करावी, ती बचत फक्त बचत म्हणून न ठेवता तीचा वापर गुंतवणूक म्हणून केला पाहिजे. ही गुंतवणूक करीत असताना आपली फसवणूक होणार नाही यासाठी त्याबद्दलचे ज्ञान मिळवीणे, आपल्याला समजत नसेल तर दुसऱ्याचा सल्ला घेणे, आपले आर्थिक व्यवहार सुरक्षितपणे करणे जेणे करून आपण फसविले जाणार नाही याची खात्री करणे होय.

#### संशोधनाची उद्दिष्टे:

प्रस्तुत शोध निबंधासाठी संशोधकाने खालील उद्दिष्टे घेतलेली आहेत.

1. आर्थिक साक्षरता ही संकल्पना जाणून घेणे.
2. आर्थिक साक्षरतेचे भारतीय समाजामध्ये किती महत्त्वाची आहे ते पहाणे.
3. गुंतवणूकीमध्ये आर्थिक साक्षरतेचे महत्त्व पहाणे.

#### संशोधन पध्दती:

प्रस्तुत शोध निबंधासाठी संशोधकाने सामग्री संग्रहणाच्या द्वितीयक पध्दतीचा अवलंब केलेला आहे. ही माहिती विविध मासिके, संदर्भ ग्रंथ यामधून प्राप्त केलेली आहे. या प्राप्त माहितीच्या आधारे विश्लेषण करण्यात आलेले आहे.

#### आशय विश्लेषण:

आज भारत जगातील तिसऱ्या क्रमांकाची अर्थव्यवस्था आहेण आपण आर्थिक महासत्ता बनण्याची स्वप्न पहात आहोत. जगातील सर्वात श्रीमंत लोकांच्या पहिल्या शंभरमध्ये आपले काही बांधव आहेत. ही आपल्यासाठी गौरवास्तव बाब आहे. परंतु खरी ही समस्या आहे ती आर्थिक विषमतेची. या बदलत्या आर्थिक परिस्थितीमध्ये गरीब हा गरीबच होत आहे तरी श्रीमंत हा श्रीमंतच होत आहे. भारताच्या एकूण स्थूल राष्ट्रीय उत्पन्नाच्या ६० ते ७० टक्के वाटा हा भारतातल्या ३०-३५ परिवारांचा आहे. ही गोष्ट दूर्लक्षीत करण्यासारखी नाही. मध्यम वर्ग हा सरकारसाठी कर भरण्यात व्यस्त आहे. तो परिस्थितीशी सामना करीत आहे. याचे मुख्य कारण म्हणजे आर्थिक निरक्षरतेमध्ये सापडते.

आपल्या भारतामध्ये सर्वचजण हे उत्तम शिक्षण व नोकरीच्या मागे लागलेले पहावयास मिळतात. ही भारतीय मानसीकता आहे. ती वंशपरंपरेने चालत आलेली आहे अस म्हणणे चुकीचे होणार नाही. कारण वडीलधारी मंडळी ही आपण आपल्या उत्पन्नातून बचत कशी करावी व या बचतीचे स्पांतर फायदेशीर गुंतवणूकीमध्ये कसे करावे याचे शिक्षण देत नाहीत. तर शिक्षण घ्या व नोकरी करा असे मार्गदर्शन करताना दिसून येतात. जागतीक दर्जाचे श्रीमंत व्यक्ती वॉरेन बफे यांचे असे मत आहे की, व्यक्तीने उत्पन्नाच्या एकाच बाबीवर अवलंबून न रहाता उत्पन्नाचे विविध मार्ग शोधले पाहिजेत. तरच आपण जीवनामध्ये यशस्वी होवू शकतो. परंतु आपल्याकडे गुंतवणूकीकडे दूर्लक्ष केले जाते.

#### भारतातील गुंतवणूकीची स्थिती :

बचत ही उत्पन्नातून निर्माण होत असते. बचत हा परिणाम असून गुंतवणूक ही एक क्रिया आहे. बचतीचे स्पांतर गुंतवणूकीमध्ये स्पांतरित करणे महत्त्वाचे असते. गुंतवणूक ही नवीन उत्पन्न प्राप्त करण्याच्या हेतूने केली जात असते. ज्यामुळे भविष्यात आपणास त्यापासून मोठा आर्थिक लाभ होवू शकतो. बचतीमध्ये जोखीम नसते. परंतु त्यापासून मिळणारा मोबदला फारच अल्प असतो. परंतु गुंतवणुकीमध्ये जोखीम असते. परंतु त्यापासून मिळणारा मोबदला हा अत्यंत अधिकचा असतो.

भारतीय लोकांना बचतीची प्रवृत्ती फारच कमी आहे. ही बचत भविष्यकालीन आर्थिक अडचणी सोडविण्यासाठी केली जाते. ही बचत घरातच ठेवली जाते किंवा बँकांमध्ये बचत खाल्यावर ठेवली जाते. पंतप्रधान मोदी यांनी जनधन योजनेअंतत भारतातील ग्रामीण भागातील वास्तवीक बचत ही बँकांमध्ये ठेवण्यासाठी प्रवृत्त केले. यातून सरकारला गुंतवणूक करण्यासाठी त्याचा वापर करता आला. परंतु जोपर्यंत व्यक्तिगत गुंतवणूकीमध्ये वाढ होणार नाही तोपर्यंत भारत महासत्ता होणार नाही.

नुकत्याच एका आंतरराष्ट्रीय संस्थेने भारतात किती अर्थसाक्षरता आहे यावर एक सर्वे केला. त्याचे निष्कर्ष हे अतिशय धक्कादायक आहेत. ते म्हणजे

1. भारतातील ६७ टक्के लोक हे आयुर्विम्यावर जो खर्च करतात त्याला गुंतवणूक म्हणतात.
2. आपले पैसे सोन्यावर खर्च करतात त्याला देखील गुंतवणूक म्हणतात.
3. म्युचअल फंडांमध्ये गुंतवणूक करणारे २२ टक्के भारतीय एस आय पी हे एका योजनेचे नाव आहे असे समजतात. ॲसेट अलोकेशन म्हणजे काय हे ८८ टक्के भारतीयांना माहित नाही.
4. ९२ टक्के लोक हे निवृत्ती नंतरचे जीवन हे आपल्या अपत्यांच्या विश्वासावर जगतात. तर ८ टक्के लोक हे निवृत्तीनंतरच्या जीवनासाठी तरतुद करतात. ६१ टक्के लोकांनी निवृत्ती नंतरचे जीवन जगण्यासाठी विमा पॉलीसीची निवड केलेली आहे. ज्याचा परतावा हा फक्त ४.५ टक्के किंवा त्यापेक्षा ही कमी आहे.
5. ०.०४२ टक्के इतकेच लोक आर्थिक नियोजन करणारे आहेत. ही अत्यंत दूर्दैवी बाब म्हणावी लागेल.
6. भारतात फक्त ५ टक्के लोक हे आरोग्य विमा घेतात. जपानमध्ये ९२ टक्के लोकांकडे आरोग्य विमा असून जर त्यांच्याकडे हा विमा नसेल तर उपचार करता येत नाहीत. इतर प्रगत राष्ट्रांमध्ये हे प्रमाण ७१ टक्के इतके आहे.



७. टॅक्स फ्री हा बॉन्ड घेतल्याने ८० सी अंतर्गत करंमधून सूट मिळते असे माननारे ७६ टक्के लोक आहेत.
८. भारतीय आयुर्विमा महामंडळ ही भारतातील सर्वात मोठी विमा कंपनी असून ८५ लाख करोड इतक्या मोठ्या रकमेचे नियोजन करते. शेअर बाजारात गुंतवणूक करणारी सर्वात मोठी संस्थागत गुंतवणूकदार आहे. परंतु वास्तव असे आहे की जे विम्यामध्ये गुंतवणूक करतात त्यांना फक्त ४.५ टक्के एवढा परतावा मिळतो.
९. भारतामध्ये विमा घेणाऱ्यांचे प्रमाण हे ३६ टक्के आहे. त्यापैकी ७ टक्के लोक हे मुदतीचा विमा घेणारे आहेत.
१०. भारतातील म्युचुअल फंड इंडस्ट्री ही चांगली पारदर्शक असून व सेबी ही उत्तम नियंत्रक असली तर भारतातील फक्त ३ टक्के लोकच यात गुंतवणूक करतात. यामध्ये असणारा परतावा १५.६८ टक्के आहे.
११. भारतीय शेअर बाजारातील परतावा हा जवळपास १७ ते १८ टक्क्यांपेक्षा जास्त आहे. परंतु यामध्ये फक्त ४ टक्के भारतीयच गुंतवणूक करतात. भारतातील लोकांपेक्षा परदेशी गुंतवणूकदार येथे जास्त प्रमाणात गुंतवणूक करतात.
१२. भारतीय लोक हे शेअर बाजारात गुंतवणूक करणे म्हणजे सद्दा खेळणे समजतात.

आजच्या आर्थिक जगात गुंतवणुकीची अनेक साधने, माध्यम आपल्याजवळ उपलब्ध आहेत. या गुंतवणुकीच्या अनेक संधी उपलब्ध असल्या तरी त्या एक प्रकारे आपल्या समोर समस्या निर्माण करीत आहेत. ३०-३५ वर्षापूर्वी अतिशय मर्यादित अशी गुंतवणुकीची साधने उपलब्ध होती. जे माध्यम पूर्वी वडिलांनी वापरले तीच माध्यम मुलांकडून वापरली जात आहेत. सोने आणि जमीन यामध्ये गुंतवणुक करणे त्यांना सोयीस्कर वाटते. परंतु आजची परिस्थिती ही वेगळी आहे. सध्याच्या गुंतवणुकीमध्ये नफा हा अधिक प्रमाणात प्राप्त होतो.

परंतु जस जसे नवीन पर्याय उपलब्ध झाले आहेत. त्या सोबतच खोटेपणा, फसव्या, ग्राहकांना लुबाडणाऱ्या अनेक कंपनी व लोकांनी यामध्ये शिरकाव केलेला आहे. अधिकच्या जादा नफा प्राप्त करण्याच्या हव्यासापोटी लोक यामध्ये गुंतवणूक करतात. परंतु आयुष्यभराची मिळकत गमवाल्यानंतर त्यांना त्याची जाण होते म्हणून याठिकाणी गुंतवणूक करीत असताना आर्थिक साक्षरता अधिक महत्त्वाची ठरते.

स्वामी समर्थानी या संदर्भात अस म्हटले आहे की,  
प्रकटावे परंतु अभ्यासुनी प्रकटावे, प्रकटुनी नासणे बरे नव्हे ।।

रामदास स्वामींनी त्या काळात देखील आर्थिक साक्षरतेची गरज व्यक्त केली होती. हे वरील वाक्यावस्न लक्षात येते. आजच्या या स्पर्धेच्या युगात यशस्वा व्हायचे असेल तर फक्त एकाच व्यवसायाच्या उत्पन्नावर अवलंबून न रहाता. त्यापासून मिळालेल्या उत्पन्नातून विविध ठिकाणी गुंतवणूक केली तरच आपल्या उत्पन्नामध्ये वाढ होणार आहे. त्यासाठी व्यक्तींनी अनावश्यक खर्च टाळून गुंतवणूक केली पाहिजे.

गुंतवणूकीच्या माध्यमातून आपल्याला मोठा फायदा मिळत असला तरी आपली अल्प, मध्यम व दिर्घ मुदतीची ध्येय प्राप्त करण्यासाठी बचत आणि गुंतवणूक दोघांचीही महत्त्वाची भूमिका महत्त्वाची आहे. अल्पकाळासाठी बचत व दिर्घकाळासाठी गुंतवणूक ही बाब कटाक्षाने लक्षात ठेवणे गरजेचे आहे. अनेक व्यक्ती सुरक्षिततेच्या प्रभावाखाली या निर्णयाकडे गांभीर्याने पहात नाहीत. माहितीच्या अभावी निर्णय चुकला तर भिती मनात असतेच. परंतु सुरक्षिततेच्या बाजूने निर्णय घेतला तर दिर्घकाळामध्ये त्याच्यामध्ये किती फरक पडणार आहे याचाही विचार करावा लागतो. उदा. सुरक्षितता म्हणून आपण आपली बचत बँकेमध्ये बचत खात्यावर ठेवतो परंतु त्यापासून आपल्याला प्राप्त होणारा परतावा हा फक्त ४ टक्के एवढाच आहे. जर हेच आपण शेअर बाजारात गुंतविले तर त्यापासून प्राप्त होणारा परतावा हा दिर्घकाळामध्ये ४० टक्क्यांच्या जवळपास आहे. म्हणून आपण आपली गुंतवणूक ही नेमकी कुठे करावी हा निर्णय अत्यंत विचारपूर्वक घेतला पाहिजे. जर आपणास त्याबद्दलची माहिती नसेल तर एखाद्या तज्ञांचा सल्ला घेणे कधीही हितकारकच ठरते. आज आपण पहातो की, कितीतरी लोकांनी सामान्य नागरीकांना जादा परताव्याचे आमिष दाखवून म्हणजेच कमी कालावधी दाम दुप्पट रक्कम देतो म्हणून फसवणूक केल्याचे अनेक घटना निदर्शनास येत असतात. या ठिकाणी गुंतवणूक करताना घेतलेला निर्णय हा सदसदविवेक बुध्दीला धरून घेतलेला नसतो. म्हणून या ठिकाणी आपणास आर्थिक साक्षरतेची गरज भासते.

थोडक्यात आपल्या वित्तीय ध्येय धोरणानुसार प्रत्येकाचे बचत आणि गुंतवणूकीचे महत्त्व जाणून घेवून त्यानुसार कृती करणे लाभदायक ठरते. आपल्या उत्पन्नाच्या किती प्रमाणात बचत किंवा गुंतवणूक करावी हे जाणून घेवून कृती करावी. बचतीसाठी कोणत्याही सल्ल्याची आवश्यकता नसते. परंतु गुंतवणूकीसाठी मात्र आर्थिक सल्लागाराच्या सल्ल्याची आवश्यकता भासते किंवा त्याबद्दलचे पूर्ण ज्ञान घेवूनच गुंतवणूक करणे योग्य ठरते.

सध्या स्टार्ट-अपचे युग आहे. दररोज नव नवीन व्हेंचर येत असतात. भारतीय स्टार्ट अप हे क्षेत्र सध्या सर्वात मोठ्या व झपाट्याने विस्तारणाऱ्या मार्केटपैकी एक आहे. त्यामुळे भारतीय बाजाराची व्याप्ती वाढताना दिसते आहे. नॅसकॉमच्या स्टार्ट-अप २०१७ च्या अहवालानुसार २०१६-२०१७ मध्ये भारतात नव्या अंदाजे १,००० स्टार्ट अपची सुस्वात झाली. स्टार्टअपसाठी जगातील तिसऱ्या क्रमांकाचा मोठा देश असे स्थान भारताने मिळविले आहे.

एकीकडे व्यवसायाच्या अधिकाधिक संधीमुळे भारतीय बाजारपेठ भरभराटीला येत, नवनवे पर्याय वाढत असल्याचे स्पष्टपणे दिसते. तर दुसरीकडे उद्योग जगतात आघाडीच्या स्थानी रहाण्यासाठी प्रचंड स्पर्धा व चढाओढ आहे. अनेक लहान व मोठे गुंतवणूकदार गेल्या काही काळात भारतातील बाजाराकडे आकर्षित झालेले आहेत.

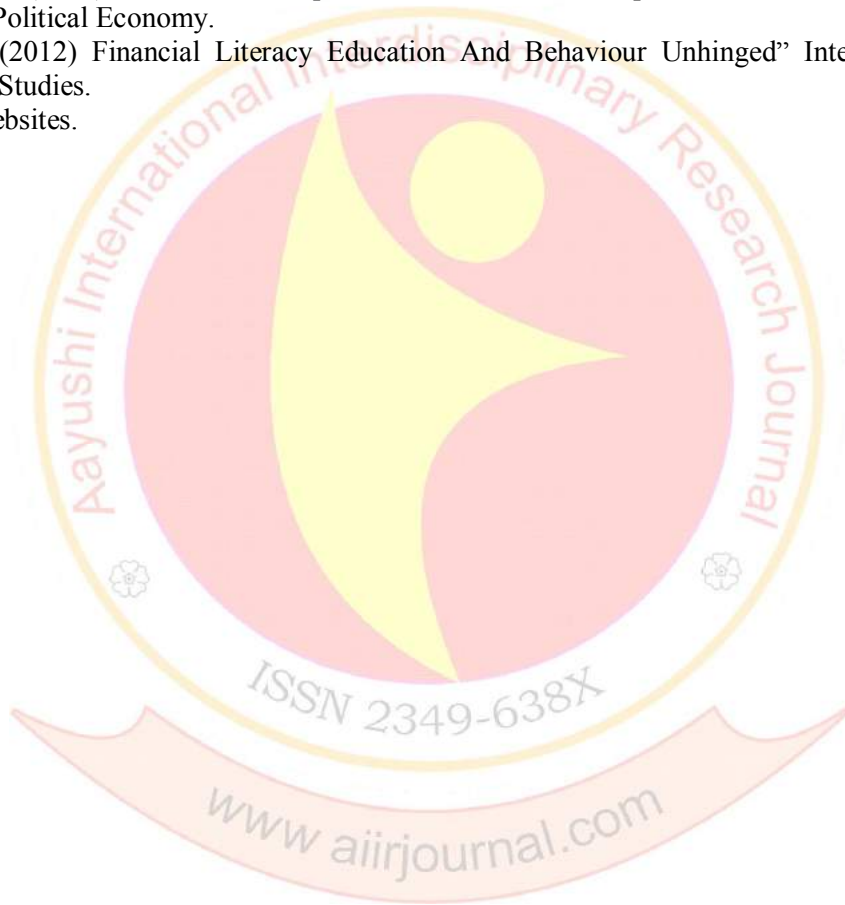
जीएसटीची अंमलबजावणी व स्टार्ट-अप इंडिया अभियानावरील भर या देशातील अलीकडच्या काळातील सुधारणा लक्षात घेता, भारतीय बाजारपेठ उद्योगाच्या दृष्टिने निश्चितच अनुकूल आहे. परंतु स्टार्ट-अप मोठ्या प्रमाणात यशस्वी होण्याचे प्रमाण तुलनेने फारच कमी आहे. मोठे व लहान स्टार्ट-अप सध्या बंद पडत असल्याचे दिसून येते. कारण याठिकाणी ही आर्थिक साक्षरतेचा अभाव दिसून येतो. त्यासाठी योग्य नियोजनाची, माहितीची व तज्ञांच्या सल्ल्याची आवश्यकता भासत असते. हे अभावानेच भारतीय गुंतवणूकदारांमध्ये दिसून येते.

**सारांश :**

जीवनाच्या कोणत्याही टप्प्यावर यशस्वी होण्यासाठी योग्य नियोजनाची आवश्यकता भासते. म्हणजेच जीवनाच्या सुखापासूनच नियोजन आवश्यक असते. शिक्षणाच्या पहिल्या पायरीपासून ते जीवनाच्या शेवटच्या टप्प्यापर्यंत आर्थिक साक्षरता ही अत्यंत महत्त्वाची असते. भारतामध्ये ही आर्थिक साक्षरता अभावानेच पहावयास मिळते. म्हणून शिक्षणाच्या टप्प्यात असतानापासूनच आर्थिक साक्षरतेचे धडे देणे अत्यंत गरजेचे आहे. कारण भारतीय व्यक्तीचा स्वभावच आहे की, ते कोणत्याही प्रकारची जोखीम स्विकारीत नाहीत. जोखीम स्विकारल्याशिवाय यशाची गोड फळे कधीही चाखायला मिळत नाहीत. त्यासाठी आर्थिक साक्षर होणे अत्यंत महत्त्वाचे आहे. यासाठी भारत सरकारकडून, विविध वित्तीय संस्था यांच्याकडून आर्थिक साक्षरतेचे प्रशिक्षण देण्यात येत आहे. त्या प्रशिक्षणाचा लाभ सर्वच भारतीयांनी घेतला व तो अंमलात आणला भारत आर्थिक महासत्ता बनल्याशिवाय रहाणार नाही. परंतु गरज आहे ती आर्थिक साक्षर होण्याची.

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## डिजिटल इंडिया व वित्तीय समावेशन

- ज्योती ललित अधाने

सहाय्यक प्राध्यापक व विभागप्रमुख  
वाणिज्य विभाग,  
पं. जवाहरलाल नेहरू महाविद्यालय,  
शिवाजीनगर, औरंगाबाद

### प्रस्तावना :-

१९९१ नंतर जागतिकीकरण, खाजगीकरण व उदारीकरण धोरणाचा स्वीकार करीत भारतीय अर्थव्यवस्थेची वाटचाल सुरू झाली. भारत हा खेड्यांचा म्हणून ओळखल्या जाणाऱ्या देशांची अर्थव्यवस्था ही मिश्र स्वरूपाची आहे. देशाच्या आर्थिक विकासामध्ये ग्रामीण क्षेत्राला महत्त्वपूर्ण स्थान आहे. आजही एकूण लोकसंख्येपैकी ६५-७०% जनता ही ग्रामीण भागात वास्तव्य करते. आज अनेक कंपन्या ह्या आपला विस्तार करण्यासाठी ग्रामीण बाजारपेठेवर लक्ष केंद्रित करत आहे. त्यासाठी सरकार सातत्याने योजनांच्या माध्यमातून प्रयत्न करताना दिसत आहे. जेणेकरून भारतीय अर्थव्यवस्थेला इतर अर्थव्यवस्थांशी स्पर्धात्मक नियमन व नियंत्रण, स्वायत्तता व खुलेपणा इ. बाबतीत जुळवून घेण्यासाठी आर्थिक सुधारणांचा कार्यक्रम राबविण्यात येत आहे. म्हणजेच भारतीय बाजारपेठेला जागतिक बाजारपेठेत उतरविण्यासाठी उचललेले हे एक पाऊल आहे.

पंतप्रधान नरेंद्र मोदी यांच्या सरकारने १ जुलै २०१५ रोजी डिजिटल भारत करण्यासाठी डिजिटल इंडियाची सुरुवात केली. देशातील प्रत्येक नागरिकाला आवश्यक सुविधा, तसेच प्रशासनात मोठ्या प्रमाणावर सहभाग, शासनाकडून लोकांना मिळणारा प्रतिसाद व डिजिटल साक्षरता वाढवून सक्षम समाज निर्माण करणे हा या अभियानाचा मुख्य हेतू आहे. यासाठी सरकारने ई-गव्हर्नंस, ई-पेमेंट, ई-कॉमर्सच्या माध्यमातून पाऊल उचलले. याचा परिणाम बँकिंग क्षेत्रावर मोठ्या प्रमाणात दिसून आला. यामुळे रोकडरहित व्यवहारांना ई-कॉमर्स, ई-बँकिंगच्या माध्यमातून प्रोत्साहन देण्यात आले.

समाजातील वंचित घटकापर्यंत ह्या सुविधा उपलब्ध करून दिल्याने शिक्षण, दूरस्थ शिक्षण, वित्तीय व्यवस्थापन, सरकारी सेवा सहज उपलब्ध होतील व वित्तीय व्यवहार ऑनलाईन झाल्याने व्यवहारात पारदर्शकता येईल हा यामागचा हेतू जर यामध्ये लोकांचा सहभाग वाढला तर वित्तीय समायोजनाला वेग येऊन बचतीचे प्रमाण वाढेल व अनेकांना व्यवसायाच्या संधी उपलब्ध होतील.

की-वर्ड डिजिटल इंडिया, वित्तीय समावेशन, डिजिटल साक्षरता.

### संशोधन साहित्याचा आढावा :

विविध संशोधकांनी डिजिटल इंडिया विषयी विविध मते मांडली.

- गुप्ता आणि अरोरा यांनी २०१५ मध्ये “डिजिटल इंडिया कार्यक्रमाचा ग्रामीण अर्थव्यवस्थेवर अधिक प्रभाव पडू शकतो असे म्हणाले, तसेच या योजनेमुळे भ्रष्टाचाराचे प्रमाण कमी होण्यास मदत मिळेल व महिला सक्षमीकरण घडून येईल.”
- राणी सूमन यांची २०१६ मध्ये डिजिटल इंडिया विषयीची भूमिका, “डिजिटल इंडिया अभियानामुळे तंत्रज्ञानात सुधारणा होऊन लोकोपयोगी सेवा सहज उपलब्ध होतील.”
- मिधा राहुल आपले मत व्यक्त करताना, “भारताच्या भविष्यकालीन विकासासाठी डिजिटल इंडिया अभियान ही महत्त्वाची योजना आहे. देशातील नागरिकांचे भवितव्य यामुळे उज्वल होऊन त्यांचा सामाजिक स्तर उंचावेल.”
- ‘अर्थपूर्ण’ या नियतकालिकाच्या डिजिटल क्रांती या विशेष अंकात टीमने जे निरीक्षण मांडले ते, “भारतात, रोखीचे व्यवहार फार मोठ्या प्रमाणावर होतात आणि त्यासाठी जी तयारी शासन व रिझर्व्ह बँकेला करावी लागते त्यावर फार मोठा खर्च होतो. डिजिटल इंडियामुळे या खर्चात प्रचंड स्वरूपात बचत होईल.”
- टी.एस. विजयन हे म्हणतात की, “डिजिटल साधनांमुळे विम्याच्या किमती कमी होतील.”

### संशोधन पद्धती :

प्रस्तुत संशोधन लेख हा दुय्यम साधन सामग्रीवर आधारित असून त्यासाठी विविध तज्ज्ञांचे लेख, मासिके, वृत्तपत्रे, इंटरनेटवरील माहितीचा उपयोग.

### संशोधनाची उद्दिष्टे :

- डिजिटल इंडियाची व वित्तीय समावेशनाची संकल्पना समजून घेणे.
- डिजिटल इंडियाच्या अंतर्गत वित्तीय समावेशनात आलेल्या विविध योजनांचा आढावा.

### डिजिटल इंडिया आणि वित्तीय समावेशन :

डिजिटल इंडिया ही भारत सरकारतर्फे सुरू करण्यात आलेली एक मोहीम आहे. जेणेकरून नागरिकांना ऑनलाईन सेवा सुविधा उपलब्ध करून देणे आणि इंटरनेट कनेक्टिव्हिटी वाढवून मोठ्या प्रमाणात डिजिटल साक्षरता वाढवणे होय.

डिजिटल वित्तीय समायोजन म्हणजे समाजातील वंचित घटकापर्यंत डिजिटल तसेच औपचारिक वित्तीय सेवांचा वापर करता येण्याची सोय. देशातील वंचित घटकाला आर्थिक विकासाचे लाभ प्राप्त करून देण्यासाठी आणि अर्थव्यवस्थेत लोकांचा जास्तीत जास्त सहभाग वाढवण्यासाठी सक्षम करणे म्हणजे वित्तीय समावेशन होय.

वित्तीय समावेशनाचा संबंध हा केवळ बँक या सेवा पुरताच मर्यादित नसून तळागाळातील लोकांना विमा सुरक्षा आणि पेंशन संबंधी सेवा उपलब्ध करून देण्याशी आहे.



वित्तीय समावेशनामुळे अनेक अल्प स्वरूपातल्या बचती एकत्रित करता आल्याने अनुत्पादक गुंतवणुकीचे प्रमाण कमी होऊन, भांडवल निर्मितीच्या दरात वाढ होईल. वंचित लोकांना त्यांच्या बँकखात्यावर अनुदान जमा केल्याने भ्रष्टाचाराचे प्रमाण कमी होऊन पारदर्शकता येईल. त्याचबरोबर सहज कर्ज उपलब्ध झाल्याने व्यवसायाची संधी प्राप्त होईल व बेकारीचे प्रमाण कमी होण्यास मदत होईल.

### डिजिटल इंडिया कार्यक्रमाचे प्रमुख तीन विभाग :

- १) सुरक्षित आणि स्थिर पायाभूत सुविधांचा विकास.
- २) सरकारी सेवा डिजिटल पद्धतीने वितरित करणे.
- ३) सार्वत्रिक डिजिटल साक्षरता.

### वित्तीय समावेशनासाठी केलेल्या योजना :

देशातील वंचित लोकांना आर्थिक लाभ प्राप्त करून देण्यासाठी डिजिटल इंडिया कार्यक्रमांतर्गत सुरू केलेल्या योजनांचा आढावा पुढीलप्रमाणे -

#### १) जन धन योजना :

खेड्यांचा देश म्हणून ओळखल्या जाणाऱ्या भारतात आजही वंचित घटकांपर्यंत दळणवळणाची साधने, रस्ते, दवाखाने, मोबाईल, इंटरनेट, वीजपुरवठा तर सोडाच बँकिंगही फारसे विस्तारलेले नाही. अशावेळी पंतप्रधान नरेंद्र मोदी यांनी आपल्या स्वातंत्र्यदिनाच्या पहिल्या भाषणात १५ ऑगस्ट २०१४ रोजी प्रधानमंत्री जनधन योजनेची घोषणा केली. व २८ ऑगस्ट २०१८ ला याचे विमोचन करण्यात आले. ही भारताची आर्थिक क्षेत्राची वित्तीय समावेशन योजना आहे.

देशातील तळागाळातील नागरिकांना बँक सुविधा पोहोचवण्यासाठी ही योजना सुरू करण्यात आली. या योजनेची नोंद ही गिनीज बुक ऑफ वर्ल्ड रेकॉर्डने याची नोंद घेतली. या योजनेअंतर्गत सहा आधारस्तंभ पुढीलप्रमाणे निवडण्यात आले.

- १) बँकिंग सुविधा.
- २) ६ महिन्यांपर्यंत ५००० रु. पर्यंतचे अधिविक्रय सुविधा १ लाख रु. अपघाती विम्याची सुविधा असणारे रूपे कार्ड देणार, रूपे किसान कार्ड.
- ३) वित्तीय साक्षरता कार्यक्रम.
- ४) ओव्हरड्रॉफ्ट खात्यामधील बुडालेल्या कर्जासाठी 'पतहमी निधी'ची उभारणी.
- ५) सूक्ष्म विमा.
- ६) असंघटित क्षेत्रासाठी स्वावलंबनासारख्या 'पेन्शन योजना'.

#### तक्ता : पंतप्रधान जन धन योजना

(दि. ४/१२/२०१९ रोजीची स्थिती)

(आकडेवारी कोटीत)

बँकेचे नाव	ग्रामीण भागातील लाभार्थी	शहरी भागातील लाभार्थी महिला	ग्रामीण भागातील लाभार्थी महिला	एकूण लाभार्थी	एकूण जमा	एकूण रूपे कार्डची संख्या
सार्वजनिक बँक	१६.२०	१३.७९	१५.८२	२९.९९	८५२४०.०९	२४.७४
प्रादेशिक बँक	५.२३	१.९९	३.५८	६.४२	१९५८१.७३	३.८०
खाजगी बँक	०.७०	०.५७	०.६७	१.२५	३०८२.३६	१.१६
एकूण	२२.१३	१५.५५	२०.०७	३७.६६	१०७९०४.१	२९.७

स्रोत : www.pmjdy.go.in

निरीक्षण : एकूणच ग्रामीण भागात ही योजना मोठ्या प्रमाणावर यशस्वी होताना दिसत आहे.

#### २) अटल पेन्शन योजना :

२०१०-११ साली सुरू केलेल्या स्वावलंबन योजनेची जागा ही १ मे २०१५ साली अटल पेन्शन योजनेने घेतली असून ही एक असंघटित क्षेत्रासाठी असलेली योजना आहे. ही योजना १८ ते ४० वयोगटातील व्यक्तीसाठीची योजना आहे.

रोजगारी असलेल्या लोकसंख्येपेक्षा असंघटित क्षेत्रातील कामगारांचा वाटा हा मोठ्या प्रमाणात आहे. याच गटाला लक्ष्य करून या योजनेची सुरुवात केली. लाभार्थ्यांच्या वयावर व क्षमतेवर हप्त्याची रक्कम ही वार्षिक स्वरूपात ४२ रु. पासून ते १४५४ रु. पर्यंत आहे. सुरुवातीला शासन ५ वर्षे या हप्त्यात ५०% रक्कम (किमान १००० रु.) भरणार.

लाभार्थ्यांला पेन्शनचा लाभ हा वय वर्षे ६० नंतर मासिक १००० ते ५००० रु. पर्यंत पेन्शन मिळणार आहे. तसेच वारसदाराला १७ लाख रु. ते ८५ लाख रु. एकरकमी लाभ मिळणार आहे.

#### ३) प्रधानमंत्री सुरक्षा योजना :

भारतातील एकूण लोकसंख्येच्या फक्त २०% इतक्याच लोकांपाशी कोणत्या ना कोणत्या प्रकारचा विमा आहे. तेव्हा जास्तीत जास्त लोकांनी विमा काढावा यासाठी प्रधानमंत्री सुरक्षा योजना ही पंतप्रधान नरेंद्र मोदी यांनी ९ मे २०१५ ला या योजनेचे विमोचन केले. भारतातील सरकारद्वारे पुरस्कृत अपघात विमा योजना आहे.

अपघात विमा न नोंदवलेले सर्व नागरिक या योजनेचे लक्ष्यगट असून १८ ते ७० वयोगटातील सर्व व्यक्ती या योजनेचा लाभ घेऊ शकतात. यासाठी लाभार्थी बँकेत, LIC किंवा कोणत्याही विमा कंपनीत खाते उघडू शकतो.

#### ४) प्रधानमंत्री जीवनज्योत विमा योजना :

देशातील वंचित लोकांना सुरक्षा मिळावी म्हणून नरेंद्र मोदींनी ९ मे २०१५ रोजी १८ ते ५० वर्ष वय असलेल्या नागरिकांसाठी या योजनेचे उद्घाटन केले. लाभार्थ्यांच्या कोणत्याही प्रकारे (नैसर्गिक किंवा अपघाती) मृत्यू झाल्यास २ लाख रु. अर्थसाहाय्य या योजनेमुळे मिळते.

या योजनेसाठी वार्षिक ३३० रु. + (सेवाकर) हप्ता हा बँक खात्यातून आपोआप वर्ग केला जातो. म्हणजेच बँक खाते आवश्यक असते. या योजनेचा लाभ घेण्यासाठी लाभार्थी LIC व कोणत्याही विमा कंपनीत खाते उघडू शकतो.

#### ५) प्रधानमंत्री मुद्रा योजना :

देशातील लघु मध्यम व दीर्घ उद्योगांना चालना मिळावी म्हणून शासन सातत्याने प्रयत्न करीत असते. अशा प्रकारच्या नवीन योजना सुरू करून अर्थव्यवस्था कशी बळकट होईल हा यामागचा हेतू असतो. याप्रकारे ८ एप्रिल २०१५ रोजी पंतप्रधान नरेंद्र मोदी यांनी मायक्रो युनिट्स डेव्हलपमेंट अँड रिफायनान्स एजन्सी मुद्रा योजनेची सुरुवात केली. ज्यामुळे लघुउद्योग, कारखानदार, व्यापारी, नवीन उद्योग सुरू करणाऱ्यांना भाजीवाले, सलून, फेरीवाले, चहाचे दुकानदार यांनाही कर्ज मिळेल.

या योजनेअंतर्गत तीन वर्ग तयार करण्यात आले.

१. शिशू : ५०,००० रु. पर्यंत कर्ज
२. किशोर : ५०,००० ते ५ लाख रु. पर्यंत कर्ज
३. तरुण : ५ लाख ते १० लाख रु. पर्यंत कर्ज

या योजनेअंतर्गत वंचित असलेल्या क्षेत्राला बँक सुविधा व कमी व्याजदरात वित्तपुरवठा करून देणे हा या योजनेचा प्रमुख उद्देश आहे. या योजनेअंतर्गत कर्ज मंजूर झाले की त्वरित कर्जदाराला 'मुद्रा कार्ड' दिले जाते.

तक्ता : प्रधानमंत्री मुद्रा योजना (आकडेवारी कोटीत)

वर्ष	कर्जमंजूरी	कर्जवाटप	कर्जाचे वितरण
२०१५-१६	३४८८०९२४	१३७४४९.२७	१३२९५४.७३
२०१६-१७	३९७०१०४७	१८०५२८.५४	१७५३१२.१३
२०१७-१८	४८१३०५९३	२५३६७७.१०	२४६४३७.४०
२०१८-१९	५९४७०३१८	३२१७२२.७९	३११८११.३८

स्रोत : <https://www.mudra.org.in>

निरीक्षण : प्रधानमंत्री मुद्रा योजनेअंतर्गत कर्ज वितरण करताना २०१५-१६ च्या तुलनेत २०१८-१९ मध्ये ४२.६३% वाढ झालेली दिसून येते.

#### ६) स्टॅन्ड इंडिया :

ही योजना ५ एप्रिल २०१६ पासून सुरू करण्यात आली. या योजनेअंतर्गत अनुसूचित जाती-जमातीतील व महिला उद्योजकांसाठी आहे. त्यांची वयोमर्यादा १८ वर्षांपेक्षा जास्त असावी. या महिलांना ग्रीनफिल्ड उद्योगासाठी १० लाख रु. ते १ कोटी रु. पर्यंत कर्ज दिले जाते. (कर्जासोबत रूपे कार्ड व प्रशिक्षण दिले जाईल.)

#### ७) स्टार्ट अप इंडिया :

ही योजना १६ जानेवारी २०१६ रोजी सुरू करण्यात आली असून स्वतःचा लहान व्यवसाय सुरू करण्यासाठी युवकाला जे आर्थिक साहाय्य लागते ते ही योजना पुरविते. यासाठी लाभार्थ्यांच्या पहिल्या ३ वर्षांकरिता आयकरातून सूट व आर्थिक लाभ करताना २० सूट देण्यात येते. यासाठी व्यवसाय सुरू करणाऱ्यांना वित्त सुविधा व मार्गदर्शन उपलब्ध करून दिले जाते.

#### ८) सौभाग्य योजना :

२५ सप्टेंबर २०१७ ला ग्रामीण भागातील गरीब कुटुंबांना वीज उपलब्ध करून देण्यासाठी या योजनेची सुरुवात केली. आजही देशातील अनेक कुटुंबांना वीजपुरवठा नाही. यासाठी केंद्र शासनाने १६,३२० कोटींची तरतूद केली असून ग्रामीण भागातील १४,०२५ कोटी तर शहरी भागासाठी २२९५ कोटी निश्चित केले आहेत. जे दारिद्र्य रेषेखाली येतात त्यांना विनामूल्य वीजपुरवठा तर इतरांना ५०० रु. मूल्य या योजनेअंतर्गत आकारले जाते.

#### निष्कर्ष :

- १) डिजिटल इंडिया सारख्या प्रभावशाली माध्यमाद्वारे प्रत्यक्ष सहभागाद्वारे लोकांपर्यंत शासनाला पोहोचता येते.
- २) सर्वच गोष्टी ऑनलाईन झाल्यामुळे वेळ, पैसा व श्रमाची बचत होते. तसेच व्यवहारात पारदर्शकता आल्याने भ्रष्टाचाराचे प्रमाण कमी होते.

- ३) ग्रामीण भागातील वित्तीय समावेशनाला गती डिजिटल इंडियामुळे मिळणार आहे.
- ४) योजनेच्या माध्यमातून अधिकाधिक लोकांपर्यंत बँक सुविधा पोहोचणार आहे.
- ५) सूक्ष्म विमा सेवांचा पाया विस्तृत होणार आहे.
- ६) वित्तीय साक्षरता यामुळे वाढणार आहे.
- ७) वित्तीय समावेशनामुळे लहान बचती एकत्र करता आल्याने भांडवल निर्मितीचा दर वाढले. या बचती समाजासाठीच उपयोगी आणता येतील.

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## रोकड विरहित अर्थव्यवस्था : भारताच्या संदर्भात संधी आणि आव्हाने

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### प्रस्तावना-

रोकडविरहित अर्थव्यवस्थेचा प्रयोग जगात सर्वात यशस्वी स्वीडन मध्ये झालेला आहे. रोकडविरहित अर्थव्यवस्था म्हणजे अर्थव्यवस्थेचे डिजिटायजेशन करणे होय. आर्थिक व्यवहारात डिजिटल पद्धतीचा वापर अधिक करणे होय. दैनंदिन व्यवहारात रोख रक्कमेचा कमीत- कमी वापर करणे. तुटवडा करणे किंवा पैशाचा पुरवठा करणे असा होत नाही. तर केवळ डिजिटल व्यवहारांचा जास्तीत- जास्त उपयोग करणे होय. उदा. डेबिट कार्ड, क्रेडिट कार्ड, इंटरनेट बँकिंग, ऑनलाइन शॉपिंग, स्मार्ट फोनद्वारे मोबाईल ॲपचा वापर करणे, एटीएम, इ-वॉलेट, युनिफाईट पेमेंट इंटरफेस – युपीआय इत्यादींचा वापर करून पेमेंट देणे-घेणे होय.

थोडक्यात न्यून रोकड अर्थव्यवस्था निर्माण करून लोकांनी आपले व्यवहार अधिकाधिक डिजिटल पद्धतीने करण्यासाठी व्यवस्था निर्माण करणे म्हणजेच रोखविरहित अर्थव्यवस्था होय.

### संशोधनाची उद्दिष्टे:

- 1) रोकडविरहित अर्थव्यवस्थेची संकल्पना अभ्यासणे.
- 2) रोकडविरहित अर्थव्यवस्थेतील संधीचा शोध घेणे.
- 3) रोकडविरहित अर्थव्यवस्थेमधील आव्हानांचा अभ्यास करणे.
- 4) रोकडविरहित अर्थव्यवस्था निर्माण करण्यासाठी उपाय सुचविणे.

### गृहितके :

1. रोकडविरहित अर्थव्यवस्था विकासाला लाभदायक प्रणाली आहे.
2. डिजिटल आधारभूत संरचना पर्याप्त नसल्याने रोकडविरहित अर्थव्यवस्था प्रस्तापित होत नाही.
3. रोकडविरहित अर्थव्यवस्था निर्माण करण्याच्या प्रक्रियेत सामाजिक, शैक्षणिक आणि राजकीय घटकांचा परिणाम होतो.

### संशोधनपद्धती :

प्रस्तुत संशोधन दुय्यम आधार सामग्रीवर आधारीत आहे. संशोधनासाठी विश्लेषणात्मक संशोधन पद्धतीचा वापर करण्यात आलेला आहे. संबंधीत विषयाच्या अभ्यासासाठी विविध शासकीय प्रकाशने, नियतकालिके, विषयाशी संबंधीत विविध संदर्भ ग्रंथ, संशोधनात्मक लेख, संगणकीय संकेतस्थळे, वर्तमानपत्रे इत्यादींचा वापर करण्यात आलेला आहे.

रोकडविरहित अर्थव्यवस्था निर्माण करण्यासाठीचा एक प्रमुख उपाय म्हणजे चलनाचे निश्चलिकरण करणे होय. भारताने आजपर्यंत तीन वेळा हा प्रयोग केला आहे. १९४६, १९७८ आणि ०८ डिसेंबर २०१६ रोजी भारतीय चलनाचे निश्चलिकरण करण्यात आले आहे. अर्थात १९४६ आणि १९७८ च्या वेळी भारतीय अर्थव्यवस्था अल्पविकसित होती. म्हणजेच उर्जितावस्थेत नव्हती. शिवाय त्यावेळी निश्चलिकरणातील नोटा अधिक मूल्याच्या असल्यामुळे सामान्य लोकांवर त्याचा फार परिणाम झाल्याचे दिसत नाही. परंतु ०८ डिसेंबर २०१६ रोजी ५०० आणि १००० रुपयाच्या नोटांचे करण्यात आलेल्या निश्चलिकरणामुळे सर्वसामान्य भारतीय नागरिकांना याचा खुप त्रास झाला आहे. आपल्या दैनंदिन गरजापूर्ण करण्यासाठी जनतेला चलनाचा तुटवडा जाणवला. अर्थव्यवस्थेत पैशाचा पुरवठा कमी झाला.

थोडक्यात, चलनाच्या निश्चलिकरणाचे प्रमुख उद्देश भ्रष्टाचार कमी करणे, काळा पैसा व समांतर अर्थव्यवस्थेला आळा घालणे. याशिवाय एक महत्वाचा उद्देश म्हणजे कमीत- कमी रोख पैसा वापरणारी अर्थव्यवस्था निर्माण करणे. म्हणजेच कॅशलेस अर्थव्यवस्था होय. कॅश ऐवजी लोकांनी आपले चलनविषयक व्यवहार डिजिटल पद्धतीने करणे होय. त्यातून न्यून रोख रोकड अर्थव्यवस्था निर्माण करणे म्हणजे कॅशलेस अर्थव्यवस्था होय.

### रोकडविरहित अर्थव्यवस्थेतील संधी :

रोकडविरहित अर्थव्यवस्थेमध्ये जास्तीत-जास्त पैसा बँकिंग व्यवस्थेतून येतो. लोकांची वैधानिक रोकड बँकेत सुरक्षित राहते. तसेच पैशाच्या साठेबाजीला नियंत्रणात ठेवता येईल. आणि बँक खात्यांमधील ठेवीत वाढ होते. या बचतीचा उपयोग राष्ट्राच्या विकासासाठी होऊ शकतो. कारण वाढीव बचतीतून बँकांची कर्जपुरवठ्याची क्षमता वाढते. व्याजाचे दर कमी होतील. त्यामुळे कर्जाची मागणी वाढेल. अर्थव्यवस्थेत उत्पादन, रोजगार वाढेल, एकूण मागणीत वाढ होईल. एकूणच अर्थव्यवस्थेत विकासाला पोषक वातावरण तयार होईल. गुंतवणुकीला चालणा मिळेल. त्यातूनच बेकारी, दारिद्र्य कमी होऊन आर्थिक विषमता कमी करता येईल. अर्थव्यवस्थेला सर्वसमावेशक विकासाच्या प्रक्रियेतून पुढे जाण्याचा मार्ग निर्माण होईल.

रोकडविरहित अर्थव्यवस्थेमध्ये बँकिंग व्यवहारात वाढ होते. यामुळे करबुडवेगिरी कमी होऊन करपात्र उत्पन्नात वाढ करण्याची सरकारला संधी प्राप्त होते. करप्राप्त उत्पन्नाची व्याप्ती वाढते. अधिकाधिक लोक कराच्या छायेत येतात. विशेषतः प्रत्यक्ष करमहसुलात वाढ करणे शक्य होईल. यामुळे पुरोगामी कर रचना निर्माण करणे शक्य आहे. यातून करदेय क्षमता नुसार कराची अंमलबजावणी करून सरकारचा कर महसुल वाढेल व विशेषतः लोकांवर कराचा अतिरिक्त बोजा देखील पडणार नाही. तसेच वाढलेल्या कर महसुलातून गरीबी, दारिद्र्य, आर्थिक विषमता निर्मुलनासंबंधी विविध कल्याणकारी योजना राबविता येईल. यामुळे विकासाच्या प्रक्रियेत सर्वांना सहभागी करून घेणे शक्य होईल.

रोकडविरहित अर्थव्यवस्थेमध्ये बाजारात रोख स्वरूपात पैशाचा ओघ कमी राहतो.त्याचा अप्रत्यक्ष परिणाम अर्थव्यवस्थेत पैशाचा पुरवठा कमी असल्यामुळे भाववाढ नियंत्रणात राहते. कारण कॅशलेस व्यवहारात रोख पैशाचा वापर केला जात नाही. विशेषतः संपुर्ण व्यवहार तुलनात्मक दृष्ट्या अधिक पारदर्शक असतात. यामुळे ग्राहकांना अधिक विश्वास बसतो.

इलेक्ट्रॉनिक आणि डिजिटल व्यवहारांमुळे रोख नोटा बाळगाव्या लागत नाही. पैशाची साठवणूक केली जात नाही.पैशाची अर्थव्यवस्थेत गति वाढते. परंतु दहशतवाद, तस्करी, नक्षलवादी यांचा अर्थपुरवठा थांबतो.शिवाय नोटा छापण्याचा खर्च कमी होतो. विशेषतः बनावट उच्चमुल्यांच्या नोटांचा वापर शक्य होत नाही.

भारतामध्ये अनैपचारिक अर्थव्यवस्थेचा आकार तुलनेने मोठा आहे. विकासातील ही एक अडचण आहे. जर अनौचारिक अर्थव्यवस्थेचा आकार लहान करावायाचा असेल तर डिजिटल व्यवहाराला चालणा देणे आवश्यक आहे. अर्थात यासाठी मुलभूत आधारभूत संरचना अगोदर तयार करणे आवश्यक आहे. यामुळे अर्थव्यवस्थेच्या सर्वसमावेशक विकासाला पोषक वातावरण तयार होईल.

वरीलप्रमाणे रोखविरहित अर्थव्यवस्थेमध्ये अनेक संधी आहेत. परंतु संधी सोबतच अनेक आव्हाने देखील आहे.

### रोकडविरहित अर्थव्यवस्थेमधील आव्हाने :

कॅशलेस अर्थव्यवस्था म्हणजे अर्थव्यवस्थेत आर्थिक व्यवहारांसाठी रोख पैसा ऐवजी डिजिटल व्यवस्था वापरणे होय. परंतु यासाठी डिजिटल आधारभूत संरचना निर्माण करणे गरजेचे आहे. भारताची अर्थव्यवस्था विकसनशील आहे. यात बेरोजगारी, दारिद्र्य, आर्थिक विषमता, ग्रामिण लोकसंख्या गरीबी, अनैपचारिक आर्थिक व्यवहार अधिक प्रमाणात आहे. अशा परिस्थितीत कॅशलेस व्यवस्था कितपत प्रभावी ठरेल हा खरा प्रश्न आहे.

आज ही भारतात असंघटित क्षेत्रात सुमारे ६८.८४ टक्के इतकी मोठी लोकसंख्या आहे. यात घरगुती नोकर चाकर, ड्रायव्हर, झाडुवाला, भांडीवाला, भाजीपाला देणारा, किराणा सामान इत्यादी अनेक व्यवहार असंघटित क्षेत्रातुन दिले व घेतले जातात. हा सर्व व्यवहार रोख स्वरूपातच आहे. या क्षेत्रातील बहुसंख्य लोकांचे बँकेत खाती नाही, त्यांच्याजवळ एटीएम नाही. आशा परिस्थितीत हा सर्व व्यवहार कॅशलेस कसा होईल हाच खरा प्रश्न आहे. अर्थात, अलीकडील काळात भारतामध्ये जनधन खाती मोठ्या प्रमाणात उघडण्यात आलेली आहेत, परंतु या खात्यामधील व्यवहार नग्न स्वरूपाचे आहे. खात्यातील ठेवीची स्थिती अतिशय वाईट आहे. डिजिटल वापर जवळपास शून्य आहे. म्हणजेच असंघटित क्षेत्रातील लोकांचे बँकेत खाते काढून हा प्रश्न सुटणारा नाही. त्यासाठी शासनाला जाणीवपूर्वक अधिकचे प्रयत्न करण्याची गरज आहे.

ग्रामीण लोकसंख्येचा विचार कसा यांच्याकडे केवळ २०.८ टक्के एटीएम आहेत आणि विशेषतः ते सरकारी बँकाचे अधिक प्रमाणात आहे. व्यापारी बँकाचे एटीएम ग्रामीण लोकांकडे जवळपास नाहीच.त्यातही या एटीएमचा दैनंदिन वापर अत्यंत नग्न स्वरूपात आहे. ९२ % एटीएम चा वापर केवळ रोखीने पैसा काढण्यासाठीच केला जातो. आजही ग्रामीण भागात इवॉलेट व मोबाईल पेमेंटला अडचणी येतात. विक्रेत्यांकडे स्वाइप मिशन नसते. असली तर ग्राहकांकडे डिजिटल व्यवस्था नसते. दोघांकडे सुविधा असेल तर इंटरनेट, लाईट नसते.आजही ग्रामीण भागात सार्वजनिक वायफाय, चार्जिंग स्टेशन, इंटरनेट सुविधा उपलब्ध नाही. एकूणच वरील सर्व सुविधा निर्माण केल्याशिवाय कॅशलेस व्यवहाराला गती देता येणार नाही.

कॅशलेस व्यवहारात सायबर सुरक्षा हा चिंतेचा विषय आहे. कारण ऑनलाईन पेमेंट मध्ये तपशील गुप्त राहणे आवश्यक आहे. डेबिट-क्रेडिट कार्डची माहिती उघड झाली तर ग्राहकांचे आर्थिक नुकसान होऊ शकते. याची जबाबदारी आजपर्यंत शासनाने घेतलेली नाही. बँके देखील घेत नाही. हे मोठे आव्हान कॅशलेस मध्ये आहे. यामुळे कॅशलेस व्यवहाराची विश्वासहता वाढत नाही. त्यामुळे व्यवहाराचे प्रमाण कमी आहे. थोडक्यात, कॅशलेस अर्थव्यवस्थेसाठी ताबडतोब सायबर सुरक्षा व जबाबदारी निश्चित करणे अत्यंत आवश्यक आहे. सायबर सुरक्षा हे जागतिक मोठे आव्हान शासनापुढे आहे.

आजही भारतीय अर्थव्यवस्था चलनप्रभावी अर्थव्यवस्था म्हणून ओळखली जाते. भारतात फार मोठ्या प्रमाणात रोखीने व्यवहार होतात, यात रोखीने चलन फिरत असते. आजही भारतात जवळपास ७८ टक्के आर्थिक व्यवहार रोखीने होतो. म्हणजेच नो कॅश व्यवहारांचे प्रमाण केवळ २२ टक्के आहे. विशेषतः भारतामध्ये असंघटित क्षेत्रातील लोकसंख्या आपला आर्थिक व्यवहार रोखीनेच करण्यास प्राधान्यक्रम देतांना दिसतो. या सर्व लोकसंख्येला कॅशलेस व्यवहारासाठी तयार करण्याचे खुप मोठे आव्हान आपल्या समोर आहे. त्यासाठी नियोजनबद्ध सर्वसमावेशक प्रयत्नांची गरज आहे.अर्थात या प्रक्रियेत शासनाला महत्वाची भूमिका बजावावी लागेल. व्यवस्था निर्माण करून वेळ प्रसंगी कॅशलेस व्यवहारासाठी सक्ती देखील करावी लागेल.

थोडक्यात, रोकडविरहित अर्थव्यवस्था निर्माण करण्यासाठी मुलभूत आधारभूत संरचना निर्माण करून जनतेला विश्वासात घेणे आवश्यक आहे. अर्थव्यवस्थेत कॅशलेस व्यवहारासाठी अनुकूल वातावरण निर्मितीवर ही लक्ष केंद्रीत करावे लागेल. आर्थिक साक्षरतेसह अधिकाधिक जनतेला डिजिटल व्यवहारात आणावे लागेल. यासाठी सरकारच्या कल्याणकारी योजना डिजिटल व्यवहारात आणाव्यात. शेवटी समृद्ध बँकिंग व्यवस्था आणि लोकांची आर्थिक साक्षरता ही कॅशलेस व्यवहारासाठी पूर्वअट आहे.

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## राष्ट्रीय कृषी बाजार (ई-नाम) प्रणालीचे एक अर्थशास्त्रीय विश्लेषण

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विभाग प्रमुख, शिवाजी महाविद्यालय,  
कन्नड ता.कन्नड, जि. औरंगाबाद.

### सारांश:-

शेतकरी, व्यापारी शेतमाल उत्पादक संघटना आणि कृषी पणन मंडळ हे राष्ट्रीय कृषी बाजार (ई-नाम) प्रणालीचे महत्त्वपूर्ण भागधारक आहेत. राष्ट्रीय कृषी (ई-नाम) प्रणालीमध्ये शेतकरी, व्यापारी व बाजार समित्या यांच्या सहभागी संख्येमध्ये वाढ होत आहे. भागधारकांच्या संख्येत होणाऱ्या वाढी बरोबर शेतकऱ्यांना मिळणाऱ्या लाभाचे प्रमाण वाढत जाणार आहे. ई-नाम प्रणालीमध्ये आरटीजीएस, एनईएफटी, डेबिट-क्रेडिट कार्ड व भिम अॅपचा वाढता वापर डिजिटल अर्थिक व्यवहार होण्यास मदत करणारे आहे.

### प्रस्तावना :-

राष्ट्रीय कृषी बाजार ही शेती व्यवसायाच्या विकासासाठी भारत सरकारच्या कृषी मंत्रालया अंतर्गत सुरु करण्यात आलेली योजना आहे. भारत सरकारच्या २०१४-१५ व २०१५-१६ च्या अंदाजपत्रकामध्ये या योजनेची सुरुवात करण्याचे घोषित करण्यात आले. २ जुलै २०१५ रोजी मंत्रिमंडळाच्या मंजूरीनंतर ११ एप्रिल २०१६ रोजी पथदर्शी स्वरूपात या योजनेची सुरुवात करण्यात आली. ऑगस्ट २०१९ पर्यंत २,२४,४८७ शेतकरी, ७५७० व्यापारी व ६९९१ मध्यस्थानी राष्ट्रीय कृषी बाजार (ई-नाम) योजनेमध्ये नोंदणी केल्याचे आढळून येते.

### राष्ट्रीय कृषी बाजाराचे लाभ:-

राष्ट्रीय कृषी बाजाराचे चार भागधारक आहे. या योजनेमुळे शेतकऱ्यांचा शेतमाल देशभरातून कोणालाही खरेदी करता येईल. (ई-नाम) प्रणालीमुळे व्यापाऱ्यांकडून होणारी कपात कमी होईल तसेच ऑनलाईन शेतकऱ्यांना तात्काळ पैसे उपलब्ध होतील. पारदर्शक व्यवहारांमुळे शेतकऱ्यांना शेतमालाचा चांगला दर मिळत असल्याचे दिसून आले. व्यापारी हा दुसरा प्रमुख घटक असून त्यांना या योजनेमुळे देशातील अधिक विक्रेत्यांकडे पोहोचण्याची संधी उपलब्ध होते. रियल टाईम देशातील कृषी मालाच्या किंमती समजण्यास मदत होते व सहजपणे ऑनलाईन व्यवहार पूर्ण करता येतात. शेतकरी उत्पादक संघटना हा तिसरा प्रमुख घटक असून त्यांना २०१७-१८ च्या केंद्रीय अंदाजपत्रकात त्यांच्या परिसरामध्ये कृषी मालाचा संग्रह वर्गीकरण, प्रतवारी व पॅकिंग सुविधा स्थापित करण्याची तरतुद केल्याचे आढळून येते. या उत्पादक संघटनांना संकलक म्हणून काम करता येते तसेच एकत्रितपणे विक्री करता येते. मालाची आवक व किंमत या संदर्भात शेतकरी उत्पादक संघटनांना रियल टाईम माहिती मिळण्यास मदत होत असल्याचे आढळून आले. कृषी पणन मंडळ हा शेवटचा घटक असून त्यांना (ई-नाम) प्रणालीमुळे व्यापारी व शेतकऱ्यांची संपूर्ण माहिती सहजपणे उपलब्ध झाली असल्याचे दिसून येते. कृषी मालाच्या किंमतीतील कल, आवक, गुणवत्ता माहित होत असल्यामुळे कृषी पणन मंडळाला व्यवहार सहजपणे करता येतो.

### संशोधनाची उद्दिष्टे:-

- १) राष्ट्रीय कृषी बाजार (ई-नाम) प्रणालीची माहिती घेणे.
- २) वेगवेगळ्या राज्यांतील (ई-नाम) प्रणालीमध्ये नोंदणीकृत बाजार समित्यांचे त्या राज्यांतील एकूण बाजार समित्यांशी असलेले प्रमाण शोधणे.
- ३) (ई-नाम) प्रणालीच्या संदर्भात शेतकरी व व्यापारी यांच्या समस्यांचा अभ्यास करणे.

### राष्ट्रीय कृषी बाजार प्रणाली व महाराष्ट्राची सद्यस्थिती :-

देशभरातील कृषी बाजारामध्ये सुधारणा करण्यासाठी तसेच एकसुत्रीपणा आणण्यासाठी सुरु करण्यात आलेल्या राष्ट्रीय कृषी बाजार (ई-नाम) प्रणालीमध्ये महाराष्ट्र राज्याने सहभाग घेतल्याचे आढळून येते. राज्यांतील बाजार समित्यांनी (ई-नाम) प्रणालीमध्ये नोंदणी करण्यासाठी एपीएमसी कायद्यात महाराष्ट्र शासनाने खालील आवश्यक तीन सुधारणा केल्याचे दिसून येते.

- सिंगल ट्रेडिंग परवाना हा संपूर्ण राज्यात वैध आहे.
- राज्यभर बाजारपेठेतील एक रकमी शुल्क आकारणे व
- जास्त किंमत मिळण्यासाठी ई-लिलाव करण्याची तरतुद

महाराष्ट्रातील ६३ बाजार समित्यांनी राष्ट्रीय कृषी बाजार प्रणाली मध्ये नोंदणी केलेली असून नव्याने ६२ बाजार समित्यांचे प्रस्ताव महाराष्ट्र राज्य कृषी पणन मंडळाने या प्रणालीमध्ये समाविष्ट करण्यासाठी पाठविल्याचे दिसून येते.

### तक्ता क्र.१

### ई-नाम प्रणालीमध्ये नोंदणीकृत बाजार समित्यांचे प्रमाण

अ.क्र.	राज्य/केंद्र शासित प्रदेश	ई-नाम प्रणाली मध्ये नोंदणीकृतबाजार समित्या	एकूण नोंदणीकृत बाजार समित्या	ई-नाम प्रणालीमध्ये नोंदणीकृत बाजार समित्यांचे प्रमाण
१	आंध्रप्रदेश	२२	१९१	११.५१%
२	छत्तिसगड	१४	१८७	७.४८%



३	गुजरात	७९	४००	१९.७५%
४	हरयाणा	५४	२८१	१९.२१%
५	हिमाचल प्रदेश	१९	५६	३३.९२%
६	झारखंड	१९	१९०	१०.००%
७	मध्यप्रदेश	५८	५४५	१०.६४%
८	महाराष्ट्र	६०	९०२	०६.६५%
९	ओरिसा	१०	४३६	०२.२९%
१०	पांडूचेरी	०२	०८	२५.००%
११	पंजाब	१९	४३५	०४.३६%
१२	राजस्थान	२५	४५४	०५.५०%
१३	तामिळनाडू	२३	२८३	०८.७२%
१४	तेलंगणा	४७	२६०	१८.०७%
१५	उत्तर प्रदेश	१००	६२३	१६.०५%
१६	उत्तराखंड	१६	६७	२३.८८%
१७	पश्चिम बंगाल	१७	४७५	०३.५७%
१८	चंदीगड	०१	०१	१००%
	एकूण	५८५	५७९४	१०.०९%

आधार :- राष्ट्रीय कृषी बाजार प्रणालीचे संकेतस्थळ व कृषी मंत्रालयाचे अहवाल

वेगवेगळ्या राज्यांमध्ये नोंदणीकृत बाजार समित्या व उपबाजार समित्यांची एकूण संख्या ६६३० असल्याचे दिसून आले. १६ राज्य व ०२ केंद्र शासित प्रदेशांनी ई-नाम प्रणालीमध्ये सहभाग नोंदविल्याचे दिसून येते. या राज्यांतील ५७९४ नोंदणीकृत बाजार समित्यांपैकी ५८५ बाजार समित्यांनी ई-नाम प्रणालीमध्ये नोंदणी केल्याचे दिसून येते. ई-नाम प्रणालीमध्ये सहभागी झालेल्या राज्यातील ई-नाम नोंदणीकृत बाजार समित्यांचे एकूण बाजार समित्यांशी असलेले प्रमाण १०.०९ प्रतिशत असल्याचे दिसून आले. चंदीगड या केंद्रशासित प्रदेशातील एकूण बाजार समितीने ई-नाम प्रणालीमध्ये नोंदणी केल्यामुळे त्यांचे प्रमाण हे १०० प्रतिशत दिसून येते. त्यानंतर हिमाचल प्रदेश (३३.९२ प्रतिशत) व पांडूचेरी (२५ प्रतिशत) यांचा क्रमांक असल्याचे दिसून येते. संख्येच्या दृष्टीकोनातून गुजरात राज्यातील ७९ बाजार समित्यांनी ई-नाम प्रणालीमध्ये नोंदणी केल्याचे आढळून येते व त्यानंतर महाराष्ट्र राज्यातील ६० बाजार समित्यांनी नोंदणी केल्याचे दिसून येते.

निष्कर्ष:-

- १) ई-नाम प्रणालीमध्ये सहभागी राज्याच्या संख्येत वाढ होत आहे.
- २) ई-नाम प्रणालीमध्ये सहभागी बाजार समित्यांच्या संख्येत वाढ होत असल्याचे दिसून आले.
- ३) राज्यातील एकूण बाजार समित्यांनी एकाच वेळी ई-नाम प्रणालीमध्ये नोंदणी न केल्यामुळे ज्या सहभागी झाल्यात त्यातील काही व्यापाऱ्यांचा व्यवसाय कमी झाल्याचे आढळून आले.
- ४) बाजार समित्यांकडून आयोजित ई-नाम प्रणालीच्या प्रशिक्षणाला शेतकरी व व्यापाऱ्यांचा अल्प प्रतिसाद दिसून येतो.
- ५) ई-नाम प्रणालीतील भागधारकांसाठी चांगल्या प्रशिक्षणाची आवश्यकता दिसून आली.

शिफारसी :-

- १) ई-नाम प्रणालीमधील ऑनलाईन व्यवहार शेतकऱ्यांना सहजपणे समजण्यासाठी ग्रामपंचायत स्तरावर प्रशिक्षण आयोजित करण्यात यावे.
- २) सर्व बाजार समित्यांनी नोंदणी करण्यासाठी सर्व समावेशक उपाय योजना करण्यात याव्यात.

संदर्भ:-

- १) <http://www.enam.gov.in> राष्ट्रीय कृषी बाजार प्रणालीचे संकेतस्थळ
- २) <http://www.msamb.com> महाराष्ट्र राज्य कृषी पणन मंडळाचे संकेतस्थळ
- ३) Sixty Second Report , ' Agriculture marketing and Role of weekly Gramin Haats' 2018-19 Ministry of Agriculture and farmers welfare, Department of Agriculture, Cooperation and farmers welfare.
- ४) Financial Express, Dated, August 10, 2019.

## कॅशलेस व्यवहार व ग्रामीण अर्थव्यवस्था

डॉ.प्रमोद बालाजीराव बेरळीकर

सहयोगी प्राध्यापक व अर्थशास्त्र विभागप्रमुख  
व्यंकटेश महाजन महाविद्यालय, उस्मानाबाद

सरकारने ८ नोव्हेंबर २०१६ रोजी पाचशे व हजारच्या नोटा रद्द केल्या. एकुण त्या नोटा होत्या ८५ टक्के इतक्या होत्या. चलनातून रद्द केलेल्या नोटाचा इतिहास पाहिला तर १९४६ मध्ये फारच कमी नोटा चलनातून रद्द केल्या. १९७८ मध्ये एक, पाच व दहा हजार रुपयाच्या नोटा रद्द केल्या. नोटा रद्द किंवा वाढ करण्याचा मुख्य उद्देश काळा पैसा अर्थव्यवस्थेतून बाहेर काढणे हा होता. याशिवाय बनावट नोटांचे उच्चाट करणे, दहशतवाद्यांना मिळणाऱ्या पैशाचा मार्ग बंद करणे तसेच सरकारकडे जमा झालेली रक्कम प्रधानमंत्री गरीब कल्याण योजने अंतर्गत गोरगरीबांना मदत करण्यासाठी वापरणे.

नोटा रद्द करण्याबरोबरच सरकारने २०१६ पासून कार्ड व डिजिटल पेमेंटला प्रोत्साहन दिले. रोखमुक्त अर्थव्यवस्था कशी निर्माण होईल या दृष्टीने रोखी ऐवजी ऑनलाईन व्यवहार, डिजिटल व्यवहार, इंटरनेट बँकींग, कार्ड ने व्यवहार (क्रेडिट व डेबिट कार्ड) स्मार्ट फोन, मोबाईल फोन यावरून व्यवहार, युपीआय व ई वॉलेट वापर करून भारतीय अर्थव्यवस्था रोखमुक्त कशी होईल याकडे लक्ष दिले. शासनाने केलेली नोटबंदीची चळवळ ही कॅशलेस व्यवहाराच्या भल्यासाठीच आहे असे घोषित केले. आजही सन २०१९ च्या आकडेवारीनुसार ग्रामीण भागात ८३.३० कोटी लोकसंख्या वास्तव करते हे प्रमाण एकुण लोकसंख्येच्या ६८.८४ टक्के आहे. तसेच ग्रामीण भागातील अर्थव्यवस्था कृषीशी जोडलेली आहे. आजही एकुण रोजगारापैकी कृषी क्षेत्रातून निर्माण होणाऱ्या रोजगाराचे प्रमाण ५८ टक्के आहे. अशा संपूर्ण ग्रामीण अर्थव्यवस्थेवर कॅशलेस व्यवहार कितीपत साध्य होईल. ग्रामीण अर्थव्यवस्थेत कॅशलेस व्यवहार करत असताना काय परिणाम होतील याचा उहापोह करण्याचा प्रयत्न प्रस्तुत शोध निबंधातून केला आहे.

### शोधनिबंधाची उद्दीष्टे :-

कॅशलेस व्यवहार व ग्रामीण अर्थव्यवस्था या शोधनिबंधाचे उद्दीष्टे पुढीलप्रमाणे आहेत.

- १) कॅशलेस व्यवहाराचे ग्रामीण अर्थव्यवस्थेवरील परिणामाचा अभ्यास करणे.
- २) कॅशलेस व्यवहार करत असताना ग्रामीण अर्थव्यवस्थेतील लोकसंख्येला कोणत्या प्रश्नांना सामोरे जावे लागते याचा अभ्यास करणे.
- ३) ग्रामीण अर्थव्यवस्थेतील गरीबी आणि निरक्षरता याचा कॅशलेस व्यवहारावर काय परिणाम होतो याचा अभ्यास करणे.

### शोधनिबंधाची गृहीतके :-

कॅशलेस व्यवहार व ग्रामीण अर्थव्यवस्था हा शोधनिबंध लिहिताना खालील गृहितके गृहीत धरली आहेत.

- १) ग्रामीण अर्थव्यवस्थेत कॅशलेस व्यवहाराला सुरुवात होत आहे.
- २) सरकारच्या विविध योजनांसाठी कॅशलेस व्यवहार वापरला जात आहे.
- ३) ग्रामीण भागातील इंटरनेट जोडण्या अल्प गरीबी आणि अशिक्षितता या सर्वांमुळे प्लॅस्टिक मनीच्या व्यापक व्यवहारावर मर्यादा येत आहेत.

### संशोधन पध्दती व संशोधनाची साधने :-

कॅशलेस व्यवहार व ग्रामीण अर्थव्यवस्था हा शोधनिबंध लिहिताना विश्लेषणात्मक पध्दतीचा वापर केला आहे. द्वितीयक साधन सामग्रीचा वापर केला आहे. पुस्तके, संदर्भग्रंथ, योजना मासिके, अर्थसंवादाचे विविध अंक, लोकराज्य व वर्तमानपत्रातून प्राप्त झालेली माहिती प्रस्तुत शोध निबंध लिहिण्यासाठी वापरलेली आहे.

### ग्रामीण अर्थव्यवस्थेसमोरील आव्हाने :-

१) **ग्रामीण भागातील बँक शाखा :-** भागातील बँकींग शाखेचा अभ्यास केलातर ग्रामीण भागात पुरेशा बँका शाखा उघडण्याची गरज आहे. भारतात प्रति एक लाख लोकसंख्येमागे अवघा ०.०१ बँक शाखा असून जर्मनीत हे गुणोत्तर २.३ म्हणजे म्हणजे भारताच्या २३० पटीनी जास्त आहे. ग्रामीण भागात डेबिट व क्रेडिट कार्डच्या वापराला प्रोत्साहन देण्यासाठी बँक संस्थेत वाढ होणे आवश्यक आहे.

२) **डिजिटल साक्षरता वाढली पाहिजे :-** भारतात एकुण लोकसंख्येच्या ६८ टक्के लोकसंख्या ग्रामीण भागात राहते. असंघटीत क्षेत्रात आजही रोखीने व्यवहार केला जातो. ग्रामीण भागात जवळजवळ ९५ टक्के व्यवहार हा रोखीने केला जातो. डिजिटल साक्षरतेच्या प्रमाणात वाढ झाली तर लोक रोख व्यवहार कमी करून कॅशलेस व्यवहार करतील.

३) **ग्रामीण भागातील इंटरनेट व मोबाईल सेवा सुविधा :-** डिजिटल व्यवहारात वाढ होण्यासाठी इंटरनेट सेवा सुविधेत वाढ झाली पाहिजे. ग्रामीण भागात इंटरनेट सेवा सुविधा अपुरी आहे. तसेच गरीबी, निरक्षरता या समस्या आहेत. ग्रामीण भागात आजही एटीएमचा वापर प्रामुख्याने रोखीने व्यवहार म्हणजे पैसे काढण्यासाठी होतो. तसेच कार्डच्या माध्यमातून व्यवहार करण्याची संख्या ही शहरी-निमशहरी भागात मोठ्या प्रमाणात आहे. ग्रामीण भागात त्याची खूप कमतरता आहे.

४) **वस्तुविनिमय अर्थ व्यवस्था :-** ग्रामीण भागात साक्षरतेचे प्रमाण अल्प आहे. ग्रामीण भागात असंघटीत क्षेत्रात वस्तुविनिमय पध्दतीनुसार व्यवहार होतात. वस्तुच्या मोबदल्यात वस्तु दिली जाते व घेतली जाते व व्यवहार रोखीने केले जातात. भारताची तुलना इतर देशांशी केल्यास असे दिसून येते की, भारतीय अर्थव्यवस्थेत चलनाचे प्रमाण बहुतेक विकसनशील आणि विकसित राष्ट्रांपेक्षा जास्त आहे.

सन २०१५ मध्ये भारतात जीडीपीच्या १२.३ टक्के चलनाचे प्रमाण होते. स्वीडनमध्ये हे प्रमाण १.७३ टक्के एवढे होते. त्यातही ग्रामीण अर्थव्यवस्थेत वित्तीय साक्षरतेचे प्रमाण खूप कमी. कॅशलेस अर्थव्यवस्था स्वीकारताना या सर्वांचा सामना करावा लागणार आहे.

**५) कॅशलेस साधणारी माहिती नाही :-** भारताची लोकसंख्या सन २०११ च्या जनगणनेनुसार ८३.३० कोटी आहे. हे प्रमाण ६८.८४ टक्के आहे. तसेच खेड्याची संख्या ६ लाख ३८ हजार खेड्यात राहते. आजमितीस ग्रामीण भागात इंटरनेट वापरणाऱ्यांची संख्या केवळ अकरा कोटी आहे. तसेच एन.ई.एफ.टी, आर.टी.जी.एस., ई-वॉलेट्स, युनिव्हर्सल पेमेंट, इंटरफेस, सीएससी (कॉमन सर्व्हिस सेंटर), यु.एस.एस.डी. (अन स्ट्रक्चर्ड सप्लिमेंटरी सर्व्हिस डेटा) हे शब्द त्यांना माहित नाहीत. या साधनाची व व्यवहाराची त्यांना माहिती होणे आवश्यक आहे.

**६) उपकरणाची कमतरता व इंटरनेट कव्हेरेजचा वेग कमी :-** कॅशलेस अर्थव्यवस्था स्वीकारताना पीओएस मशीनद्वारे व्यवहार, मोबाईलधारक व इंटरनेट धारकांची संख्या दिवसेंदिवस वाढत असली तरी देशातील ग्रामीण भागात इंटरनेट कव्हेरेज आणि वेग हा जगाच्या मानाने फारच मागास आहे.

खालील तालिकेत पॉईंट ऑफ सेल (पी.ओ.एस.) मशीनचे २०११-२०१५ मधील एक लाख लोकसंख्येमागे प्रमाण दाखविलेले आहे.

**तक्ता क्रमांक १.१**

**पॉईंट ऑफ सेल (पीओएस) मशीनचे २०११-१५ मधील एक लाख लोकसंख्येमागे प्रमाण**

अ.क्र.	देश	२०११	२०१२	२०१३	२०१४	२०१५
१.	ब्राझिल	१७,८११	२०,५३१	२२,१४६	२४,८६७	२५,२४१
२.	चीन	३५४२	५७७०	७८१४	११,६५०	१६,६०२
३.	भारत	५५०	६९५	८६५	८८९	१,०८०
४.	स्वीडन	२२,१६७	२०,८३७	२०,३८०	२०,३०४	१८,६६०
५.	इंग्लंड	२१,४१९	२५,७३२	२५,८००	२६,३४६	३०,०७८

**संदर्भ :- योजना फेब्रुवारी २०१७ (पृष्ठ - २८)**

वरील तालिकेवरून हे स्पष्ट होते की, भारतात तंत्रज्ञानावर आधारित पायाभूत सुविधांची संख्या खूप कमी असून तिचा वापर कसा करावा याचे ज्ञान ग्रामीण भागात खूप कमी लोकाकडे आहे.

**७) रोजगारावरील खर्च रोखीनेच केला जातो :-** भारतीय अर्थव्यवस्थेत असंघटीत क्षेत्रात रोजगार निर्मितीचे प्रमाण व्यापक आहे. रोजगारावरील खर्च हा रोखीने दिला जातो. धनादेश किंवा कॅशलेस व्यवहाराची इतर साधने वापरली जात नाहीत किंवा ते वापरण्याची सवय नाही. शेतकरी आपला माल रोखीने पैसे घेवून विकतात.

**कॅशलेस व्यवहार व ग्रामीण अर्थव्यवस्थेतील अनुकूल बदल :-**

१) रोख रहीत व्यवहाराकडून कॅशलेस व्यवहाराकडे वाटचाल करत असताना ग्रामीण लोकांना बँकींग व्यवहाराची सवय होत आहे. रोखरहीत व्यवहारामुळे पूर्वी बँकेने येण्यासही घाबरणारे लोक बँकेत खाते उघडत आहेत. सन २०१६ मध्ये शून्य रक्कम असलेली ४५,६३६ जनधन खाती होती. त्यात २६ नोव्हेंबर २०१६ मध्ये वाढ होवून ७२,७४३ वर आली आहेत. याचा अर्थ बँक व्यवसायची सवय लोकांना होत आहे.

२) सरकारी योजनांची अंमलबजावणी बँकमार्फत :- सरकारी योजनांची अंमलबजावणी बँकींग व्यवसायामार्फत केली जात असल्यामुळे ग्रामीण भागातील शेतकरी बँकेत जावून खाते उघडत आहे. विविध प्रकारची अनुदाने पिकविमा रकमेची रक्कम थेट शेतकऱ्याच्या खात्यात जमा होत आहे. त्यामुळे भ्रष्टाचार, लाचलुचपतीचे प्रमाण कमी झाले आहे.

३) प्रधानमंत्री ग्रामीण डिजिटल योजनेमुळे आर्थिक साक्षरतेत वाढ :- केंद्रिय अर्थमंत्र्यांनी २०१६-१७ या अर्थसंकल्पात ग्रामीण भागाच्या विकासासाठी डिजिटल सरकार अभियान सुरू केले आहे. यासाठी एकुण २,३५१ कोटी रुपयाची तरतुद केलेली आहे. या अभियातील अभ्याक्रम युनिफाईड पेमेंट इंटरकॉम (यु.पी.आय.) अन्स्ट्रक्चर्ड सप्लिमेंटरी सर्व्हिस डेटा (यु.एस.एस.डी.) आधार सक्षम देयक प्रणाली (ए.ई.पी.एस.) इत्यादी रोकडरहित व्यवहार प्रणालींचा वापरदेखील शिकविण्यात येणार आहे.

**शोधनिबंधाचे निष्कर्ष :-**

कॅशलेस व्यवहार आणि ग्रामीण अर्थव्यवस्था या शोधनिबंधाचे निष्कर्ष खालीलप्रमाणे आहेत.

- १) ग्रामीण अर्थव्यवस्थेत कॅशलेस व्यवहाराला सुरुवात होत आहे.
- २) सरकारच्या विविध योजनांच्या कॅशलेस व्यवहाराचा प्रभावीपणे वापर होताना दिसून येत आहे.
- ३) ग्रामीण डिजिटल योजनेमुळे ग्रामीण भागात आर्थिक साक्षरतेत वाढत होत आहे.

**संदर्भ ग्रंथ :-**

- १) योजना अंक, फेब्रुवारी २०१८
- २) अर्थ संवाद अंक, जुलै-सप्टेंबर २०१८
- ३) बुलेटिन ऑफ युनिक अँकॅडमी, २ मे २०१७



## रोकडविरहित अर्थव्यवस्था- समस्या आणि उपाय

प्रा. डॉ. अनंत नरवडे  
छत्रपती शिवाजी महाविद्यालय,  
कळंब जि. उस्मानाबाद.

८ नोव्हेंबर २०१६ रोजी रात्री ८ वाजता पंतप्रधान नरेंद्र मोदी यांनी तत्कालीन ५०० व १००० च्या नोटा चलनातून बाद केल्याची घोषणा केली आणि दुसऱ्याच दिवसापासून चलनातील १५ लाख ४१ हजार कोटीच्या नोटा बदलून घेण्यासाठी गरीब, मध्यम, श्रीमंत, तरुण, म्हातारे या सर्वांनी बँकांच्या पुढे लांबच लांब रांगा लावल्या. यातून सामान्य जनतेचे खुप मोठे हाल झाले यामध्ये उद्योजक, व्यापारी, सामान्य शेतकरी, शेतमजुर या सर्वांना नोटबंदीमुळे वेगवेगळ्या समस्यांना तोंड द्यावे लागत आहेत. नोटबंदीचे देशाच्या अर्थव्यवस्थेवर सकारात्मक परिणाम व्हावेत यासाठीच्या प्रयत्नांना शासन स्तरावर गती दिल्यामुळे डिजिटल व्यवहार व कॅशलेस आर्थिक व्यवहार वाढवण्यासाठी प्रयत्न चालू आहेत. या डिजिटल व्यवहारामुळे व रोकडविरहित अर्थव्यवस्थेमुळे अर्थव्यवस्थेत कोणत्या प्रकारच्या सुधारण होत आहेत, कर संकलन कशाप्रकारे वाढत आहे. नोटबंदीमुळे व कॅशलेस पध्दतीमुळे शेती उद्योग यावर झालेल्या परिणामाचा अभ्यास करण्याचा प्रयत्न या शोधनिबंधात केला आहे. तसेच कॅशलेस अर्थव्यवस्थेकडे वाटचाल सुरु झाल्यामुळे काय समस्या निर्माण झाल्या आहेत त्यावर कशा प्रकारे मात करता येईल, याचा उहापोह प्रस्तुत शोध निबंधात करण्याचा प्रयत्न केला आहे.

### शोधनिबंधाची गृहितके

- १) नोटबंदीमुळे डिजिटल व्यवहारांना प्रोत्साहन मिळाले आहे.
- २) डिजिटल व्यवहार वाढावेत यासाठी शासन स्तरावर सातत्याने प्रयत्न केले जात आहेत.
- ३) रोकडविरहीत व्यवहाराचे काही फायदे व काही समस्याही निर्माण होत आहेत.
- ४) रोकडविरहीत व्यवहाराचा छोट्या उद्योगावर प्रतिकूल परिणाम होत आहे.

### शोधनिबंधाची उद्दिष्ट्ये

- १) डिजिटल व्यवहाराबाबत शासनाच्या भूमिकेचा अभ्यास करणे.
- २) रोकडविरहीत व्यवहाराच्या गुण-दोषाची चर्चा करणे.
- ३) रोकडविरहीत व्यवहाराचे अर्थव्यवस्थेवर झालेल्या परिणामाचा अभ्यास करणे.
- ४) रोकड विरहीत व्यवहाराच्या आग्राहामुळे सामान्य जनता बँकिंग व्यवहारांच्या प्रवाहात आली आहे का यांचा शोध घेणे.

### संशोधन पध्दती

सदरील शोधनिबंधाच्या प्रस्तुतीकरणासाठी दृष्यम साधनसामग्रीचा उपयोग करण्यात आला आहे. त्यासाठी विविध शासकिय प्रकाशने, नियतकालीके, मासिके, विषयांशी संबंधीत संदर्भग्रंथ, वर्तमानपत्रे, इंटरनेटवरील उपलब्ध वेगवेगळ्या तंत्रांचे लेख व इतर माहितीचा उपयोग करण्यात आला आहे. प्रस्तुत शोध निबंधात विश्लेषणात्मक संशोधन पध्दतीचा आधार घेण्यात आला आहे.

८ नोव्हेंबर २०१६ रोजी सरकारने ५०० आणि १००० च्या नोटा रद्द केल्या ज्यांचे मुल्य एकूण नोटाच्या ८५% होते. ८५% नोटा बाजारातून बाद झाल्यामुळे रोख नोटांची टंचाई निर्माण झाली. यामुळेच सरकारला डिजिटल व्यवहाराना प्रोत्साहन देणे आवश्यक वाटू लागले. तसे निश्चलणीकरण काही नवीन नाही. जगातल्या अनेक देशात बऱ्याचवेळी निश्चलीकरण झाले आहे. अमेरिकेने १९६९ ला, झेरने १९९० ला, ऑस्ट्रेलियाने १९९६ ला, झिम्बाब्वेने २०१० मध्ये व उत्तर कोरीयानेही २०१० मये निश्चलीकरण केले आहे. भारतातही १९४६ मध्ये निश्चलणीकरण झाले. नंतर १९७८ मध्ये व त्यानंतर २०१६ मध्ये निश्चलीकरण करण्यात आले. व चलनी नोटांच्या टंचाईमुळे रोकडविरहीत अर्थव्यवस्थेचा पुरस्कार करून कॅशलेस व्यवहाराना प्राधान्य दिल्याचे दिसून येते भारतीय अर्थव्यवस्थेतील काळा पैसा उघड करणे देशातील भ्रष्टाचार नियंत्रीत करणे, दहशतवादी आणि अतिरेकी कारवायासाठी शेजारी देशाकडून पुरवण्यात येणाऱ्या बनावट नोटा संपवणे या आणि अशा अनेक उद्देशासाठी सरकारने नोटबंदी केली व त्यामुळेच शासनाला रोकडविरहीत व्यवहाराना प्रोत्साहन देणे आवश्यक वाटू लागले आहे. रोकडविरहीत अर्थव्यवस्था ही काळाची गरज आहे. आपले सर्व आर्थिक व्यवहार कोणत्याही रोख रकमेशिवाय क्रेडिट व डेबीट कार्ड, नेटबँकिंग, युपीआय, युएसएसडी, ईवालेट, वेगवेगळे अॅप व आधार कार्ड च्या सहाय्याने करणे यालाच कॅशलेस व्यवहार म्हणतात. आणि या संपुर्ण व्यवस्थेला कॅशलेस अर्थव्यवस्था म्हणतात.

भारतात अजूनही ८० च्या जवळपास आर्थिक व्यवहार रोख स्वरूपात होतात. मात्र जगातल्या काही देशात जसे स्वीडन, नार्वे, अमेरिका, युरोप, ऑस्ट्रेलिया या देशात रोख व्यवहाचे प्रमाण खुप कमी झाले आहे भारताला जर सर्व क्षेत्रात महासत्ता बनावचे असेल तर आपल्याला अद्यावत तंत्रज्ञानाचा पुरेपुर उपयोग करून रोकडविरहीत अर्थव्यवस्थेचा स्वीकार करणे गरजेचे आहे. कॅशलेस व्यवहाराचा आधिकाधिक वापर विकसीत देश करत आहेत त्यातच डेन्मार्क, नार्वे, स्वीडन हे देश वेगाने रोकडविरहीत अर्थव्यवस्थेकडे जात आहेत. अमेरिकेपेक्षा डेन्मार्क आणि स्वीडन हे देश लवकरच पुर्णपणे रोकडविरहीत होण्याच्या तयारीत आहेत. त्यामुळे भारतालाही रोकडविरहीत अर्थव्यवस्थेकडे जाणे आवश्यकच आहे कारण नोटा छापण्याचे काम दिवसेंदिवस जिकरीचे होत चालले आहे. बरेच देश इतर देशाकडून नोट छापून घेत आहेत. त्या समस्येपेक्षा मोठी समस्या निर्माण होत आहे. म्हणजेच बनावट नोटांची समस्या खुप वाढत चालली आहे. रोकड व्यवहारामुळे भ्रष्टाचार वाढत आहे. मोठ्या प्रमाणावर कर चुकवून काळा पैसा वाढवला जात आहे. आर्थिक विषमता, गुन्हेगारी, भाववाद

या आणि अशा अनेक समस्या भारतीय अर्थव्यवस्थेपुढे निर्माण झाल्या आहेत. त्यामुळे रोकडविरहीत व्यवहाराचा वापर करून अशा बऱ्याच समस्यांवर मात करता येऊ शकेल. त्यासाठी अनेक पर्याय उपलब्ध आहेत त्याचा उपयोग केल्यास पारदर्शकपणे सर्व व्यवहार पार पडू शकतात.

- १) मोबाईल बँकींग व USSD
- २) प्लॅस्टिक मनी (डेबीट, क्रेडिट कार्ड)
- ३) इंटरनेट, बँकींग
- ४) ई- वॉलेट / मोबाईल वॉलेट
- ५) युपीआय
- ६) POS पॉईंट ऑफ सेल
- ७) आधार कार्ड
- ८) भीम अॅप, फोन पे, इ.

या साधनाचा वापर करून रोकडविरहीत व्यवहार आपण चांगल्या पध्दतीने करू शकतोत. आणि जर देशाची संपुर्ण अर्थव्यवस्था कॅशलेश झाली तर त्याचे सकारात्मक परिणाम पुढीलप्रमाणे सांगता येतील.

#### रोकडविरहीत व्यवहाराचे फायदे -

- १) रोकडविरहीत व्यवहारामुळे कोणतीही लाच घेता येत नसल्याने सर्व शासकिय व्यवहार अत्यंत पारदर्शक होऊन संपुर्ण भ्रष्टाचाराला आळा बसेल.
- २) राजकीय व विविध क्षेत्रात सध्या पैशाच्याजीवावर निवडून येणाऱ्या लोकांवर नियंत्रण येऊन कर्तबगार व टॅलेटेड लोक निवडून येतील व आपली संपुर्ण राजकिय व्यवस्था बदलून खऱ्या अर्थाने लोकसहभागाची लोकशाही अस्तित्वात येईल.
- ३) रोकडविरहीत व्यवहार करणे सुलभ आणि सोयीचे असते तसेच ते रोख रक्कम हाताळण्यापेक्षा अधिक सुरक्षित आसते.
- ४) रोकडविरहीत व्यवहाराद्वारे अर्थव्यवस्था अधिक प्रगत व विकसीत होते, रोकडविरहीत व्यवहारामुळे अर्थव्यवस्था पारदर्शक होऊन उत्तरदायीत्व स्थापीत करणे, आर्थिक व्यवहाराचे मुल्यमापन करणे आणि समांतर अर्थव्यवस्थेचे निर्मुलन करणे शक्य होईल.
- ५) चलनाचे व्यवस्थापन आणि चलनी नोटा छपाईचा सरकारी खर्च वाचेल व बनावट नोटा छापण्याचा प्रकार बंद होईल.
- ६) झालेल्या प्रत्येक आर्थिक व्यवहाराची नोंद आयकर विभागाकडे आपोआपच होईल.
- ७) धनादेश वटण्याची वाट पहावी लागणार नाही त्यामुळे व्यवहार जलद पुर्ण होईल तसेच रोख रक्कम व सुट्टे पैसे जवळ बाळगण्याची गरज राहणार नाही.
- ८) राजकिय पक्ष, रियेल इस्टेट ज्वेलर्स इत्यादी ठिकाणी मुरणारा प्रचंड काळा पैसा चलनात येईल व अर्थव्यवस्थेला गती मिळेल.
- ९) जर कॅशलेश अर्थव्यवस्था ५० ते ६० % च्या पुढे गेली तर BTT बँकिंग ट्रान्जेक्शन टॅक्स व जीएसटी सारखे टॅक्स राहून बाकी टॅक्स बंद करता येतील.
- १०) व्यापारी वर्गाला त्यांच्या भौगोलिक कक्षाच्या पलीकडे जाऊन व्यापार करणे शक्य होते त्यामुळे त्यांची ग्राहकसंख्या वाढत व्यापार वृद्धी होते.
- ११) रोकडविरहीत व्यवहारामुळे कोणताही आर्थिक व्यवहार लपवता येणार नाही पर्यायाने करचुकवेगिरीला आळा बसून सरकारचा महसूल वाढेल.
- १२) रोख चलन एका ठिकानाहुन दुसऱ्या ठिकाणी पोहचवण्यात असणारा धोका टाळता येईल (उदा. चोरी, पाकीटमारी)

#### रोकडविरहीत अर्थव्यवस्थेसमोरील समस्या

- १) अचानक झालेल्या निश्चलणीकरणामुळे अर्थव्यवस्थेतील रोकड आचानकपणे खंडीत झाला आहे. त्याचा राष्ट्रीय उत्पन्न औद्योगिक उत्पादन, वस्तु व सेवांची मागणी, रोजगार इ. वर प्रतिकूल परिणाम होऊन मंदी सदृश्य स्थिती निर्माण झाली आहे.
- २) एक संशोधनानुसार रोकडविरहीत अर्थव्यवस्थेमुळे सिमेंट उद्योगात ३३% व्यवहार कमी झाले आहेत. तर एकटया उत्तर प्रदेश मध्ये जवळपास २५००० छोटे उद्योग बंद झाले आहेत. त्याचबरोबर अॅटोइंडस्ट्री, भांडवली वस्तु उद्योग व पेंट उद्योगावरही कॅशलेश व्यवहाराचा प्रतिकूल परिणाम झाला आहे.
- ३) कॅशलेश व्यवहारासाठी वित्तीय साक्षरता आवश्यक आहे मात्र आजुनही ४० ते ५० कुटूंब बँक व्यवस्थेशी जोडलेले नाहीत ९२००० पेक्षा कमी लोकवस्तीचे चार लाख ९० हजार खेडी अद्यापही बँक सुविधेपासुन वंचीत आहेत.
- ४) ज्याचे पोट रोजच्या मजुरीवर अवलंबून आहे अशा लोकांना बँकव्यवहार परवडणार नाहीत, जमा झालेले पैसे काढण्यासाठी ग्रामीण भागात एटीएम च्या सुविधा नाहीत.
- ५) अणखीन बऱ्याचशा दुर्मिळ भागात इंटरनेटची सुविधा उपलब्ध नाही तेथे रोकडविरहीत व्यवहार कसे शक्य आहेत.
- ६) रोकडविरहीत व्यवहार करण्यासाठी वेगवेगळ्या अॅपच्या माध्यमातून ऑनलाईन पेमेंट करतात मात्र सर्व्हिस टॅक्स, ऑनलाईन ट्रॅन्जेक्शन टॅक्स च्या नावाखाली ग्राहकाकडून चार्जेस आकरले जात आहेत त्यामुळे ग्राहक नाराज होत आहेत.
- ७) ऑनलाईन पेमेंट करण्यासाठी इंटरनेट डेटा आवश्यक आहे. त्याचाही भार ही ग्राहकावर पडतो.
- ८) ऑनलाईन सर्व व्यवहार मोबाईलद्वारे केले जातात मात्र मोबाईल हरवल्यास आर्थिक व्यवहारासाठी मोठी समस्या निर्माण होते.

९) देशात सायबर सिक्क्युरिटी व्यवस्था सुरक्षीत नाही त्यामुळे खात्यातील पैसे चोरीला जाण्याची भिती वाटते.

### उपाययोजना

- १) डिजीटल व्यवहाराना प्रोत्साहन देण्यासाठी या व्यवहारावर चार्ज लाऊ नयेत त्यामुळे ग्राहक नाऊमेद होऊन पुन्हा रोख व्यवहाराकडे वळू शकतो.
- २) डिजीटल व्यवहारात माहितीची सुरक्षीतता असणे आवश्यक आहे अन्यथा ऑनलाईन डेटा वापरून गैरव्यवहार होऊ शकतात.
- ३) सरकारने प्रयत्न करून रोकडविरहीत व्यवहारासाठी आवश्यक तांत्रिक पायाभूत सुविधा उपलब्ध करून द्याव्यात.
- ४) स्मार्टफोन, टॅबलेट अशा इलेक्ट्रॉनिक्स वस्तुवरील करांचे प्रमाण कमी केले पाहिजे ज्यामुळे अशा वस्तुचा खर्च कमी होऊन किमती कमी राहतील ज्यामुळे सामान्य जनता डिजीटल व्यवहाराकडे वळू शकेल.
- ५) चांगले ई-कॉमर्स धोरण राबवून रोकडविरहीत व्यवहारासाठी ग्राहकांना पूर्ण संरक्षण दिले पाहिजे.
- ६) ऑनलाईन व्यवहारात होणारी ग्राहकाची फसवणुक रोखण्यासाठी सायबर सिक्क्युरिटी व्यवस्था सशक्त बनवली पाहिजे.
- ७) डिजीटल व्यवहार वाढवण्यासाठी वित्तीय साक्षरता आणि संदेशवहनाच्या साधनाची माहिती आसणारी जनता निर्माण करणे गरजेचे आहे.
- ८) ग्रामीण भारतात अजुनही बँकांच्या शाखा, एटीएम च्या सुविधा उपलब्ध नाहीत. त्याच्या सुविधा वाढवण्याकडे शासनाने लक्ष दिले पाहिजे.
- ९) विदेशी बँकातील काळा पैसा वापस मिळवून कर बुडवेगीरी करण्यावर नियंत्रण ठेवले पाहिजे. ज्यामुळे सरकारी महसूल वाढेल.

### निष्कर्ष -

नोटबंदीच्या निर्णयामुळे निर्माण झालेल्या चलन टंचाईवर मात करण्यासाठी रोकडविरहीत व्यवहारानां प्रोत्साहन दिले गेले. जगातील बऱ्याच देशांचे आर्थिक व्यवहार रोकडविरहीत होत आहेत. त्यामुळे आपल्याला जगाबरोबर चालणे आवश्यक आहे. देशाच्या शहरी भागात रोकडविरहीत व्यवहाराची आमलबजावणी मोठ्या प्रमाणावर सुरु झाली आहे. मात्र यांच्या प्रसार ग्रामीण भागात पुरेशा प्रमाणात होत नाही किंवा रोकडविरहीत व्यवहारासाठी आवश्यक तंत्रज्ञानाची ग्रामीण भागात टंचाई आहे. रोकडविरहीत व्यवहार करण्यासाठी शासन स्तरावर पुर्व तयारी न झाल्यामुळे म्हणजेच आवश्यक तंत्रज्ञान व साधनसामग्री उपलब्ध न झाल्यामुळे बऱ्याच समस्या निर्माण झाल्याचे दिसून येते. त्यामुळे शासनाच्या डिजीटल व्यवहाराच्या संकल्पनेला अडथळा निर्माण होत आहे. जर रोकडविरहीत व्यवहाराचे प्रमाण वाढवण्यास आपण यशस्वी झाले तर देशातला भ्रष्टाचार नियंत्रण होऊ शकतो, रोखीच्या व्यवहारांमुळे निर्माण झालेला काळा पैसा कमी होऊ शकतो. तसेच दहशतवादी कारवाया, अतिरेकी हल्ले कमी करता येतील, गुन्हेगारी, भाववाढ आर्थिक विषमता अशा अनेक समस्यांवर आपल्याला मात करता येईल. मात्र एका बाजूला रोकडविरहीत अर्थव्यवस्थेसाठी डिजीटल पेमेंटला प्रोत्साहन दिले जात आहे व दुसऱ्या बाजूला वेगवेगळे चार्जेस लाऊन ग्राहकांची पिळवणुक केली जात आहे हे थांबले पाहिजे. डिजीटल व्यवहाराचे फायदे सामान्य जनतेला पटवून देणे गरजेचे आहे. तसेच डिजीटल व्यवहार करताना होणारी फसवणुक टाळण्यासाठी त्यांना या व्यवहाराची सविस्तर माहिती दिली जाणे आवश्यक आहे. ज्यामुळे कॅशलेश अर्थव्यवस्था ही संकल्पना यशस्वी होईल असे मला वाटते.

### संदर्भ सुची

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- ५) लोकराज्य - डिसेंबर २०१८
- ६) वर्तमानपत्रे
- ७) इंटरनेटवरील उपलब्ध माहिती



## भारतातील रोकडविरहीत व्यवहार : एक आव्हान

संशोधक विद्यार्थी गोविंद रामराव काळे,  
डॉ. बा.आं. मराठवाडा विद्यापीठ, औरंगाबाद

प्रा. डॉ. दिपक एम. भारती  
प्राध्यापक,  
कला, वाणिज्य व विज्ञान महाविद्यालय,  
किल्ले धारूर

### प्रस्तावना :

भारतीय अर्थव्यवस्थेत आजही ६०% व्यवहार नगदी स्वरूपात होतात.भारत हा खेडयांचा देश आहे म्हणून अर्थव्यवस्थेला ग्रामीण अर्थव्यवस्था असेही संबोधतात.खेडयात पूर्णता व्यवहार नगदी होतात.भारतातील जवळजवळ ६९% लोकसंख्या ग्रामीण भागात राहते, त्यांचा GDP मध्ये ३७% वाटा आहे.अशा ग्रामीण भागात रोकडरहीत व्यवहार वाढवण्यासाठी ग्रामीण अर्थव्यवस्थेकडे लक्ष देणे अगत्याचे ठरते.

आजही भारतात लोकांचे नगदी व्यवहारासाठी आकर्षण आहे तसेच लोकांना नगदी बचत करण्याची प्रवृत्ती आहे. अशा व्यवहारामुळे काळा पैसा जन्म घेतो. रोकडविरहीत व्यवहार जास्त झाला तर करात वाढ घडून येते.नगदी व्यवहार करप्रणालीपासून बाहेर ठेवण्यास व्यक्तीस साहय करित असतो म्हणून रोकडरहीत अर्थव्यवस्था निर्माण करणे महत्वाचे आहे. नगदी व्यवहारावर लक्ष ठेवणे खूप अवघड असते. ८ नोव्हेंबर २०१६ रोजी संध्याकाळी ५०० व १०००रूपयाच्या नोटा चलनातून बाद केल्या.ज्यामध्ये १५ लाख ४४ हजार कोटी रूपये किंमतीच्या नोटा रद्द झाल्या,त्यापैकी १५ लाख २८ हजार कोटीच्या म्हणजे ९९ टक्के नोटा बँकेत जमा झाल्या.नोटबंदीज जरी अयशस्वी झाली तरी नोटबंदीमुळे रोकडरहीत व्यवहाराला चालना मिळाली. त्यामुळे भ्रष्टाचार कमी झाला, कर भरणाऱ्यांची संख्या वाढली.एकूण चलनाच्या ८६% चलन अवैध ठरल्याने रोख व्यवहाराऐवजी डिजिटल साधनाचा वापर वाढला.

### संशोधनाची उद्दिष्ट्ये :

१. रोकडरहीत व्यवहार म्हणजे काय ? हे अभ्यासणे.
२. भारत व जगातील इतर देशांची स्थिती अभ्यासणे.
३. रोखरहित अर्थव्यवस्थेचे फायदे अभ्यासणे.
४. रोकडरहित अर्थव्यवस्थेसमोरील आव्हाने अभ्यासणे

### तथ्य संकलन :

संशोधनासाठी द्वितीयक साधन सामुग्रीचा वापर केला असून त्यात अनेक साधनाचा वापर केला आहे. उदा.संदर्भ ग्रंथ, वर्तमान पत्र, मासिके, संकेतस्थळे इत्यादी.

### रोकडरहित अर्थव्यवस्था म्हणजे काय?

रोकडरहीत अर्थव्यवस्था म्हणजे सर्व आर्थिक देवान घेवाण कोणत्याही रोख रक्कमेशिवाय करणे.या पैशाची देवाण घेवाण फक्त कार्ड, चेक, डी.डी., नेट बँकिंग, फोन बँकिंग , ई-वॉलेट इत्यादी गोष्टीने करणे होय तसेच सर्व आर्थिक व्यवहार कोणत्याही रोख रक्कमेशिवाय करणे होय.

### भारत व जगातील रोकडरहीत अर्थव्यवस्था

भारत व जगातील इतर अर्थव्यवस्थांचा अभ्यास केल्यास रोखरहीत व्यवहारात बरीच विसंगती दिसून येते.कॅसलेस व्यवहाराचे प्रमाण

देश	कॅसलेस व्यवहार टक्केवारी
सिंगापूर	६१%
नेदरलँड	६०%
फ्रान्स	५९%
स्विडन	५९%
कॅनडा	५७%
बेल्जीअम	५६%
यू. के.	५२%
यु.एस.ए.	४५%
चीन	१०%
भारत	२%

**Source: Master card Adviors Measuring Progress toward a cashless Society.**

वरील तक्त्यात दशीवल्याप्रमाणे सिंगापूर या देशात ६१% आर्थिक व्यवहार रोखरहीत होतात. तसेच नेदरलँड, फ्रान्स, स्विडन, कॅनडा, बेल्जीयम या देशातील रोखरहीत व्यवहारसचे प्रमाण अनुक्रमे ६०%, ५९%, ५९%, ५७%, ५६% इतके दिसून येते.शेवटी भारतात रोखरहीत

व्यवहाराचे प्रमाण केवळ २% ऐवढे आहे. याचा अर्थ उत्तर देशाच्या तुलनेत भारतात डिजिटल साधणाचा वापर कमी होतो. २०१३ मध्ये डिजिटल व्यवहारात जगात भारताचा ३४ वा क्रमांक होता सध्या २८ व्या क्रमांकावर आला आहे , कॅशलेस व्यवहारात वाढ होणे महत्वाचे आहे.

#### रोखरहीत अर्थव्यवस्थेचे फायदे :

०१. नोटा छापण्याचा खर्च कमी होईल .
०२. काळ्या पैशाला पायबंद बसेल.
०३. कर चुकवेगिरीला आळा घालता येईल.
०४. बनावट नोटांची समस्या संपुष्टात येईल.
०५. भ्रष्टाचाराला आळा घालता येईल.
०६. रियल इस्टेटच्या किंमती कमी होतील.
०७. पैसा व वेळेची बचत होईल.
०८. कराचे दर कमी होतील.
०९. सामाजिक कल्याणात वाढ होईल.
- १० .दहशत वादयांना रोख स्वरूपात दिला जाणारा निधी थांबेल.

**रोखरहीत भारत आणि आव्हाने :** भारत रोकडरहीत अर्थव्यवस्था होण्यात अनेक आव्हाने आहेत त्यातील प्रमुख आव्हाने

**साक्षरतेचा अभाव :** भारतातील आजही २५% जनता निरक्षर आहे. पुरुषाच्या तुलनेत स्त्री साक्षरतेचे प्रमाण कमी आहे.३५% स्त्रीया आजही निरक्षर आहेत. अशा परिस्थितीत कॅशलेस व्यवहार शक्य नाही.

**व्यक्तिगत गुप्ततेचा भंग :** काही व्यवहार गुप्त ठेवण्याचा व्यक्तीचा कल असतो.पण कॅशलेस व्यवहार ही गुप्तता ठेवू शकत नाहीत अशी भिती वापरकर्त्याला असते.

**सायबर गुन्हेगारी :** देशामध्ये सायबर सुरक्षेची आजही चांगली व्यवस्था नाही. परस्पर पैसे खात्यावरून जातात त्यामुळे व्यक्ती ऑनलाईन व्यवहार करण्यास तयार नसतो.

**वित्तीय समावेशनाचा अभाव :** भारतात आजही बहुतांश लोकांकडे स्वताचे बँक खाते नाही. त्यामुळे असे व्यक्ती रोखरहीत व्यवहार करू शकत नाहीत.

**इंटरनेट सुविधांचा अभाव :** भारत हा खेड्यांचा देश आहे जवळजवळ ८०% लोकसंख्या ग्रामीण भागात राहते. इंटरनेट सुविधा शहरी भागातच उपलब्ध आहे,त्यामुळे ग्रामीण भागातील लोक रोकडविरहीत व्यवहार करू शकत नाहीत.

**रोख व्यवहारांना प्राधान्य :** जवळजवळ ९०% पैसा जास्त व्यवहार रोख स्वरूपातच करण्यावर येथील लोकांचा भर आहे, हे एक आव्हान आहे.

सर्वसामान्य लोकांच्या खिशातील पैसा डिजिटल व्यवहारामुळे बँका, खाजगी कंपन्यांना प्राप्त होउन आर्थिक असमानता निर्माण होईल.

#### निष्कर्ष :

भारतीय अर्थव्यवस्थेत रोकडरहीत व्यवस्था निर्माण करण्यासाठी शासन स्तरावून प्रयत्न केले जात आहेत मात्र ते अपुरे आहेत. रोखरहीत व्यवहारासाठी प्रचार प्रसाराबरोबरच, रोखरहीत साधणे वाढवून त्याचा वापरही वाढवणे महत्वाचे आहे. सध्यास्थितीला रोखरहीत व्यवहार हळूहळू वाढत आहेत. यासाठी सर्व स्तरावून प्रयत्न होणे अगत्याचे आहे.

#### संदर्भ :

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## भारतातील ई-कॉमर्स - आर्थिक व्यवहार व विनिमय

प्रा. डॉ. ए.टी. शेवाळे

अर्थशास्त्र विभाग प्रमुख,

महात्मा बसवेश्वर कला व वाणिज्य महाविद्यालय, लातूर

### प्रस्तावना:

ई-प्रशासनाची निर्मिती केली जात असताना प्रामुख्याने चार मुद्द्यांचा विचार करण्यात आला आहे. कोणत्याही राष्ट्रात ई-प्रशासनाचे नेमके फायदे कुणाकुणाला व्हायला हवेत, हे निश्चित करण्यात आले. अर्थात, प्रत्येक राष्ट्रात जनता हाच केंद्रबिंदू होता. मात्र, जनतेला हा लाभ दिला जात असताना त्यासोबत पूरक क्षेत्रातही याचा वापर तेवढ्याच प्रमाणात पूर्ण क्षमतेने व्हायला हवा, ही भावना जगातील प्रत्येक राष्ट्रांमध्ये चांगल्या प्रकारे रुजली होती. म्हणूनच ई-प्रशासनाचा लाभ होऊ शकेल, अशी चार क्षेत्रे निश्चित करण्यात आली. यात १) सरकार, २) नागरिक, ३) उद्योग व व्यापार, ४) माहिती-संवाद या क्षेत्रांचा प्रामुख्याने समावेश करण्यात आला. यामध्ये नागरिक व व्यावसाय, व्यापार व उद्योगांचा अत्यंत जवळचा संबंध येतो परंतु यामध्ये ई-प्रशासनामुळे मोठ्याप्रमाणात बदल होत आहे. यात ई-कॉमर्स, ऑनलाईन आर्थिक व्यवहार तसेच प्लासिक करंसीचा अधिक वापर करण्यात येत आहे.

### संशोधनाचे उद्दिष्टे:

१. ई-प्रशासनातील आर्थिक व्यवहारातील महत्त्व लक्षात घेणे.
२. माहिती तंत्रज्ञान किंवा ई-कॉमर्सचे महत्त्व समजून घेणे.
३. भारतातील ई-कॉमर्सचा संक्षिप्त आढावा घेणे.
४. ई-खरेदी-विक्री व वस्तुविनिमय पध्दतीचा अभ्यास करणे.

### संशोधनाची गृहितकृते:

१. ई-प्रशासनातील आर्थिक व्यवहाराचे साधन ई-कॉमर्स आहे.
२. भारतातील ई-कॉमर्सचे महत्त्व वाढून त्याची स्थिती सुधारत आहे.
३. ई-कॉमर्समध्ये आर्थिक व्यवहार हे पारदर्शकपणे होतात.

### आर्थिक व्यवहार (ट्रान्झॅक्शन) :

तंत्रज्ञानाची व्याप्ती आणि क्षमता वाढत असताना त्याचा लाभ थेट ग्राहकांना अर्थात जनतेला व्हावा हा उद्देश या टप्प्यात ठेवण्यात आला होता. कोणत्याही कार्यालयात न जाता संबंधित योजनांसंबंधीचे व्यवहार ऑनलाईन करण्यावर यात भर देण्यात आला. यात व्यवहारांच्या सुरक्षिततेच्या दृष्टीने काही नियमही ठरवण्यात आले. उदा. कायदेशील सेवा वितरणासाठी डिजिटल स्वाक्षऱ्या यासाठी बंधनकारक करण्यात आल्या. यात ऑनलाईन सेवेसाठी सर्व पायाभूत यंत्रणा सज्ज झाल्यानंतर सरकार आणि संबंधित घटकांचा थेट संवाद अपेक्षित आहे. जनता, उद्योग-व्यापार आणि सरकारी संस्थांचा थेट संबंध यामुळे प्रस्थापित होऊ शकेल, अशी सुविधा उपलब्ध करून देणे हे उद्दिष्ट निश्चित करण्यात आले. याशिवाय विविध बिलांची आणि दंडांची देयके भरण्याची सोय, परवान्यांचे नूतनीकरण, मंजूरी, कर भरण्यासाठी ऑनलाईन सेवा देणे अपेक्षित आहे. सरकारही समाजातील घटकांना द्यावयाचे आर्थिक लाभ थेट त्यांच्या बँक खात्यावर देऊ शकेल. असे गार्टनरने संपूर्ण आर्थिक व्यवहार ऑनलाईन करण्यावर भर दिला आहे.

### ट्रान्सफॉर्मेशन (हस्तांतरण) :

खऱ्या अर्थाने ई-गव्हर्नन्सचे उद्दिष्ट पूर्ण करावयाचे आहे. त्यानुसार समाजातील सर्व लाभार्थीपर्यंत विविध योजनांचे आणि ई-प्रशासनांतर्गत देण्यात आलेल्या ऑनलाईन सोयी-सुविधांचे लाभ पोहचविण्याचे उद्दिष्ट ठेवण्यात आले आहे. यासाठी देशभरात प्रत्येक ठिकाणी या सेवांचे लाभ मिळावेत या हेतूने संबंधित कार्यालयात खस सुविधा पुरवून यात पारदर्शकता राखणे हे उद्दिष्ट ठेवण्यात आले.

अशा प्रकारे गार्टनरने सुचविलेल्या ई-प्रशासनासाठी पूरक पध्दतीनुसार आज जगभरातील ई-प्रशासन कार्यरत आहे. काळानुरूप या रचनेमध्ये आता अनेक बदल झाले असले तरी मूळ गाभा मात्र तोच कायम ठेवण्यात आला असल्याचे दिसून येते. त्यामुळे साहजिकच नागरिकांच्या सरकारकडून असलेल्या अपेक्षा पूर्ण होण्यास मदत तर झालीच शिवाय सरकारी यंत्रणांचेही कामकाज अधिक सोयीचे आणि पारदर्शक झाले आहे.

### ईलेक्ट्रॉनिक कॉमर्स :-

माहिती तंत्रज्ञानातील शेवटचे साधन म्हणजे ई-कॉमर्स होय. समाजात व्यापार पध्दत तेवढीच जुनी आहे जेवढी की, पृथ्वीवरील मानवसभ्यता मानवी समाज, परंतु आज समाज परीवर्तन मोठ्या प्रमाणात झाल्यामुळे व्यापार पध्दतीमध्ये बदल झाले. ग्राहकांना आज दुकानात जायला वेळ नाही किंवा तेथे जाऊन वस्तु पहायला देखील वेळ नाही. अशा व्यस्त जीवनामध्ये सहज घरबसल्या व्यापार करणे, खरेदी करणे, ई - कॉमर्स या संकल्पनेमुळे शक्य झाले आहे. ई - कॉमर्सच्या माध्यमातून करोडो रुपयांचा व्यवहार आज ऑनलाईन होत आहे.

### भारतातील ई - कॉमर्स :-

ई - कॉमर्स म्हणजे ऑनलाईन व्यापार होय. म्हणजेच ईलेक्ट्रॉनिक माध्यमांचा आधार घेऊन केलेला व्यापार होय. या सेवेअंतर्गत सुई पासून ते हेलीकॉप्टर पर्यंत खरेदी - विक्रीसाठीच्या वेबसाईट उपलब्ध आहेत. ई - मेलच्या आधारावरच ई - कॉमर्सची संकल्पना प्रसिध्दीस



आलेली आहे. ई - कॉमर्स अंतर्गतच ई - बँकींग आणि ई - मार्केटींगचाही समावेश होतो. ई - कॉमर्स अंतर्गत असणाऱ्या वेबसाईट्स चोवीस तास उपलब्ध असतात. ई - कॉमर्समुळे जागतिक स्तरावरील वस्तुंचा दर्जा व व्यापारही वाढलेला आहे. ३६५ दिवस व २४ तास व्यापार निवडीचे व्यापक स्वातंत्र्य ई - कॉमर्समुळे सहज सोपे व कमी खर्चिक बनले आहे. जगभरात अनेक देशात ई-कॉमर्स संकल्पना रूढ होत आहे.

भारतातील सॉफ्टवेअर संबंधी माहिती तंत्रज्ञानांतर्गतची सर्वोच्च प्रसिध्द संस्था 'नॅसकॉम'नी ई - कॉमर्स क्षेत्रात भारताची क्षमता वाढविण्यासाठी भारतीय शासनासोबत मिळून कार्य करण्याची सुरुवात केली आहे. या दोघांच्या सहयोगातून कांही विशिष्ट क्षेत्राचा व्यापक प्रमाणात विकास व्हावा असा उद्देश आहे. १९९९ साली भारतात पहिल्या ई - कॉमर्स कंपनीची स्थापना झाली. वॅथीस्वटन यांनी इंडिया प्लाना तेव्हा ३० लाखाहून कमी इंटरनेटधारक होते. यापैकी केवळ २० हजार लोक ऑनलाईन शॉपिंग करत. मात्र आज भारत जगातील ई-कॉमर्सच्या अंतर्गत सर्वाधिक झपाट्याने वाढत असलेल्या देशांपैकी एक आहे. इंटरनेट ॲन्ड्राईड मोबाईल असोसिएशनच्या मते, २००५ मध्ये सुरु करण्यात आलेली ही कंपनी ई-मेल इंडिया प्रत्येक मिनिटाला सहा वस्तुंची विक्री करते. तर फिल्यकार्ड २० वस्तू विकते. फिल्यकार्ड ही भारतातील सर्वात मोठी ऑनलाईन रिटेलर तर स्नॅपडिल दुसऱ्या स्थानी आहे. भारतात २०१४ मध्ये सुमारे १ कोटी ऑनलाईन खरेदीदार होते. २०१४ मध्ये भारतात १४ हजार कोटी ऑनलाईन व्यापार झाला. २०१३ च्या तुलनेत २०१४ मध्ये इंटरनेट वापरकर्त्यांमध्ये १४ टक्के वाढ नोंदविली गेली आहे. इंटरनेट वापरकर्त्यांमध्ये सुमारे चार कोटी ग्राहकांसह महाराष्ट्र देशात अव्वल स्थानी आहे.

ई - कॉमर्सचा प्रभाव भारतीय डाक विभागावर झाला आहे. जगात सर्वात मोठे वितरण जाळे असलेला भारतीय डाक विभागही ई - कॉमर्स बाजारात सज्ज आहे. देशभरात १.५५ लाख टपाल कार्यालये आहेत. ई - कॉमर्सची सुरुवात या विभागाने केल्यानंतर डाक विभागाच्या उलाढालित कित्येक पटीने वाढ झाल्याचे नोंदविले आहे. २०१३-२०१४ या आर्थिक वर्षात तोटा नोंदविणाऱ्या पोस्ट विभागाला ई-कॉमर्समुळे मोठा लाभ झाला आहे. देशात ई-कॉमर्सच्या माध्यमातून होणाऱ्या व्यवहारांची संख्या वेगाने वाढत असून यामध्ये भारतीय टपाल खात्याने अधिक सक्रिय होण्याची गरज असल्याचे मत माहिती तंत्रज्ञान मंत्री शंकरप्रसाद यांनी व्यक्त केले.

२०१४ मध्ये ई-कॉमर्सचा व्यापार वाढल्यानंतर २०१५ मध्ये ई-कॉमर्सच्या माध्यमातून ४५ टक्के वाढ अपेक्षित असल्याचा अंदाज एका आंतरराष्ट्रीय सर्वेक्षण कंपनीने व्यक्त केला. यावाढीच्या पार्श्वभूमीवर एकूण महसूल ७.६९ अब्ज अमेरिकी डॉलर वर पोहचेल असा अंदाज वर्तविण्यात आला आहे. २०२० पर्यंत हा व्यवहार ७६ अब्ज डॉलर पर्यंत जाईल अशी अपेक्षा व्यक्त केली आहे. म्हणजेच ई-कॉमर्समुळे अर्थव्यवस्थेलाही फायदा झाला आहे.

अशाप्रकारे माहिती तंत्रज्ञानाचा वापर करण्यासाठी वरील साधने अत्यंत महत्त्वपूर्ण आहेत. ती केवळ वैज्ञानिक दृष्टीकोनातून कार्य करतात असे नाही, तर सामाजिक दृष्टीकोनातून महत्त्वाची आहेत.

### इंटरनेटवरील वस्तुविनिमय व्यापाराचे वाढते महत्त्व :-

आज इंटरनेटचा प्रसार व प्रचार वाढल्यामुळे व्यापार करण्याचे इंटरनेट उत्तम माध्यम बनले आहे. जागतिक मंदीचा मुकाबला करण्यासाठी इंटरनेटच्या मदतीने व्यावसायिकात वस्तुविनिमयाचा कल वाढला आहे. वस्तुविनिमय सर्वात जुनी पध्दत आहे. पैशाऐवजी यात वस्तुंच्या मोबदल्यात वस्तुंचा व्यवहार केला जातो. भारताच्या विदेशी व्यापाराबाबत अलीकडेच करण्यात आलेल्या पहाणी नुसार पुन्हा ही जुनी पध्दत प्रचलित होत आहे जागतिक मंदीमुळे वस्तुविनिमय व्यवसायात तेजी आली आहे.

आजच्या इंटरनेट अर्थव्यवस्थेत वस्तुविनिमय व्यवहाराला बी टू बी पोर्टलमार्फत प्रोत्साहन दिले जात आहे. नेट - ४ बार्टर या सारख्या इतर पोर्टलही कंपन्यांना वस्तू आणि सेवांच्या मोबदल्यात वस्तुंचा व्यापार करण्याची सुविधा देत आहेत. इंटरनेटमुळे उद्योग क्षेत्रात स्त्री-पुरुष समानता वाढतेय. पुरुषी वर्चस्वाखाली असलेल्या उद्योगक्षेत्रात स्वतःचे स्थान निर्माण करण्यासाठी भारतीय महिला उद्योजक इंटरनेटचा प्रभावी वापर करत असल्याचे प्रतिपादन ई - कॉमर्स सेवा पुरविणारे जगातील सर्वात मोठे संकेतस्थळ असलेल्या 'अलिबाबा डॉट कॉमनी' त्यांच्या अहवालात स्पष्ट केले आहे. ई-कॉमर्सला वेळेची मर्यादा नाही. चोवीस तासही सुविधा उपलब्ध आहे. या अहवालात चीनस्थित बी-टू-बी या संकेतस्थळावरील माहिती वापरण्यात आली. उद्योगवाढीसाठी आवश्यक संधी शोधणे कच्चा माल विकत घेणे, विक्रीच्या संधी शोधणे, यासाठी इंटरनेट अत्यंत उपयोगी ठरत आहे. मुख्य म्हणजे ऑनलाईन व्यवहार असल्याने स्त्री - पुरुष दिसत नाहीत व त्यामुळे वास्तवात होणारे भेदाभेद टाळता येत आहेत. यामुळेच उद्योगामध्ये महिलांचा सहभाग दरवर्षी ७१ टक्क्याने वाढत आहे. जागतिक आर्थिक मंचाने प्रसिध्द केलेल्या 'ग्लोबल जेंडर गॅप रिपोर्ट २०११' या अहवालात आर्थिक बाबींमध्ये महिलांचा सहभाग व संधी या संबंधीची यादी दिली होती. इंटरनेटमुळे उद्योजकांना अपेक्षा पूर्ण करण्यासाठी अमर्याद अवकाश मिळाला आहे. प्रापंचिक कामे सांभाळून महिलांना उद्योगात खटपट करायची असल्याने इंटरनेट त्यांना हवा तसा वेळ देऊ शकते. असे अलिबाबा डॉट कॉम चे भारतातील महाव्यवस्थापक संदीप देशपांडे यांनी सांगितले. इंटरनेट सन २०१६ पर्यंत भारताच्या वाढीचा दर अन्य राष्ट्रांच्या तुलनेत मोठ्या प्रमाणावर वाढण्याची शक्यता असल्यामुळे याच कालावधीत भारताची इंटरनेट अर्थव्यवस्था १०.८ महापदय रुपयांपर्यंत पोहोचेल असा अंदाज 'बोस्टन कन्सल्टिंग ग्रुप' ने व्यक्त केला आहे. २०१० मध्ये भारतात इंटरनेटमार्फत होणाऱ्या आर्थिक व्यवहाराची आकडेवारी ३.२ महापदय रुपयांच्या घरात होती आणि त्या वर्षाच्या सकल राष्ट्रीय उत्पन्नात हा वाटा ४.१ टक्के एवढा होता तसेच 'जी - २०' गटातील राष्ट्रांची इंटरनेट अर्थव्यवस्था पुढील चार वर्षात ४.२ महापदय अमेरिकी डॉलरपर्यंत पोहोचेल असा अंदाज आहे. या राष्ट्रांच्या गटात भारताचा दुसरा क्रमांक असून भारताची इंटरनेट अर्थव्यवस्था २३ टक्क्यांच्या घरात जाण्याचा अंदाज आहे. अन्य विकसित राष्ट्रांचा हाच दर १७.८ टक्के आहे. विशेष म्हणजे सध्या इंटरनेट हा प्रत्येकाच्या जीवनाचा अविभाज्य घटक ठरत असल्यामुळे त्या माध्यमातून होणारे आर्थिक व्यवहार ही त्याच गतीने वाढत आहेत. भविष्यात इंटरनेट हे माध्यम खाणकाम आणि अन्य सेवांच्या तुलनेत अधिक मोठे ठरून भारतातील सर्वात मोठा असा आठवा उद्योग ठरण्याची शक्यता आहे.

अन्य देशांमध्ये सकल राष्ट्रीय उत्पादनाचे निकष ठरविताना इंटरनेटमार्फत केल्या जाणाऱ्या व्यवहारामध्ये ग्राहकोपयोगी उत्पादकांचा जास्तीत जास्त समावेश असतो. परंतु भारतातील परिस्थिती मात्र कांहीशी वेगळी आहे. भारतात 'आयटी' सेवांच्या निर्यातीमध्ये इंटरनेटच्या अर्थव्यवस्थेचा मोठा वाटा आहे. भारतात इंटरनेटच्या माध्यमातून सुमारे ५९ टक्के सेवा परदेशी पुरविल्या जातात. तर ग्राहकोपयोगी उत्पादकांची टक्केवारी केवळ ४१ टक्के आहे.

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## भारतातील डिजिटलायझेशन आणि डिजिटल पेमेंट सिस्टिम :- एक अभ्यास

प्राचार्य डॉ. हरिदास फेरे

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### प्रस्तावना :-

आज आधुनिक युगात जग हे डिजिटल वर्ल्ड बनत आहे. जगातील विविध देशामध्ये सर्वच क्षेत्रात अतिशय वेगाने डिजिटलायझेशन होत आहे. जगातील डिजिटल क्रांतीला चौथी औद्योगिक क्रांती मानली जाते. संपूर्ण जगामध्ये मनुष्याच्या सामाजिक, आर्थिक व तंत्रज्ञान विषयक विकासाची गुरुकिल्ली म्हणजे डिजिटल क्रांती होय. या क्रांतीमुळे मानवी जीवनात आमूलाग्र बदल झाला आहे. डिजिटल क्रांतीमुळे विकासाची गती व संधी मध्ये प्रचंड बदल झाला आहे. माहितीची स्थित्यांतरे वेगाने होत आहेत. विचाराचे आदान-प्रदान, संदेश वहन, नेट बँकिंग, ऑनलाईन खरेदी-विक्री, ई-तिकीट, इ. बाजार, ऑनलाईन नोंदणी, मल्टीमिडिया व सामाजिकीकरण आदी बाबतीत अतिशय वेगाने बदल होताना दिसत आहे.

डिजिटल तंत्रज्ञानामुळे नवीन पर्याय, संधी, सोयी, कमी किंमती, कमी व्याज दर, कमी श्रम, अचूकता, गतिशीलता हे सर्व सहज आणि सुलभपणे शक्य झाले आहे. डिजिटल तंत्रज्ञान, विस्तारीत इंटरनेटचे जाळे आणि मोबाईल व्यवहारामुळे उत्पादक, वितरक आणि ग्राहकांचे जीवनमान बदलून गेले आहे. या संधीचा ओघ कायम ठेवण्यासाठी लोकांनी डिजिटल तंत्रज्ञानाशी एकरूप होणे आवश्यक आहे.

सर्वच क्षेत्रातील घटकांची उत्पादकता आणि कार्यक्षमता यांचा आलेख सतत उंचावत ठेवणे, ग्राहकांना नवनवीन उत्पादने आणि सेवा पुरविणे हे डिजिटलायझेशनचे ध्येय आहे. डिजिटल सेवांशी जोडले जाण्याची सुविधा प्रामुख्याने दुरसंचार कंपन्यांच्या जाळ्याद्वारे पुरवली जाते. म्हणून दुरसंचार क्षेत्र हेच डिजिटल क्रांतीच्या वाढीला चालना देणारे महत्त्वाचे क्षेत्र आहे.

भारतीय डाटा सुरक्षा परिषद, केंद्रीय इलेक्ट्रॉनिक्स व औद्योगिक मंत्रालय आणि गुगल इंडिया मिळून डिजिटल पेमेंटस अभियानासाठी काम करतात. डिजिटल पेमेंटचा उद्देश कॅशलेस व्यवहारामध्ये वाढ करणे व लोकांना डिजिटल व्यवहाराबाबत साक्षर बनविणे आहे.

### डिजिटलायझेशनचा अर्थ :-

डिजिटलायझेशन शब्दाचा मराठी अर्थ Digit म्हणजे अंक, दशांशचिन्ह, तसेच नोट असा आहे. या अर्थाने डिजिटलायझेशन म्हणजे बोटांकीकरण होय. अंकाचा, अक्षराचा वापर करून लिहिणे, संपर्क करणे, समिकरण सोडविणे, चित्रात्मक संदेश पोहचविणे, माहिती संकलीत व संग्रहीत करणे, प्रसारित करणे, माहितीचे संख्यात्मक विश्लेषण करणे म्हणजे डिजिटलायझेशन होय.

डिजिटल इंडिया हा भारत सरकारचा एक उपक्रम आहे. डिजिटल इंडिया म्हणजे सरकारी विभाग आणि भारतीय जनतेला एकमेकांच्या जवळ आणण्याचा एक डिजिटल मार्ग आहे. ज्याच्या मार्फत विविध सरकारी विभागांना थेट देशाच्या जनतेशी उच्च गती इंटरनेट नेटवर्कच्या माध्यमाद्वारे जोडणे व मानवी हस्तक्षेप विरहीत, पेपरलेस पध्दतीने सर्व व्यवहार करणे होय.

### शोध निबंधाची उद्दिष्ट्ये :-

1. भारतातील डिजिटलायझेशनचा अभ्यास करणे.
2. भारतातील डिजिटल पेमेंट सिस्टिमचा अभ्यास करणे.
3. भारतातील डिजिटलायझेशन समोरील आव्हानांचा अभ्यास करणे.

### भारतातील डिजिटलायझेशन :-

भारत सरकारने देशातील लोकांना डिजिटल साक्षर बनविण्यासाठी व त्याचा शासन – प्रशासनातील सहभाग वाढवून व्यवहार अधिक पारदर्शी, गतिमान व लोकाभिमुख करण्याच्या उद्देशाने पंतप्रधान नरेंद्र मोदी यांनी १ जुलै २०१५ रोजी देशात डिजिटल इंडिया अभियानाची सुरुवात केली. या अभियाना बाबत जनजागृती करण्यासाठी देशातील ३६ राज्यात आणि ६०० जिल्ह्यात विविध कार्यक्रम घेण्यात आले. तसेच विद्यापीठ अनुदान आयोग, सर्व महाविद्यालय व उच्च शिक्षण संस्थाद्वारे डिजिटल इंडिया सप्ताह साजरा केला.

डिजिटलायझेशनच्या युगात सन २०१७ मध्ये भारत जगात सर्वात जास्त इंटरनेट डेटा वापरणारा देश ठरला आहे. भारतात ५० कोटी पेक्षा जास्त इंटरनेट युजर्स आहेत. २०२१ पर्यंत ही संख्या ८२.९ कोटी पर्यंत वाढण्याचा अंदाज आहे. भारतातील टेलीकॉम क्षेत्रातील रिलायन्स जिओच्या आगमनामुळे जगात मोबाईल डेटा वापरण्यात भारत १५५ व्या स्थानावरून पहिल्या क्रमांकावर आला आहे. देशातील १०० कोटी लोक मोबाईल वापरतात. तर २०० दशलक्ष लोक मिडियांचा आणि डिजिटल सुविधांचा व मोबाईल बँकिंगचा वापर करत आहेत.

भारतात २.५ लाख खेडी ब्रॉडबॅन्ड सुविधेने जोडली आहेत. २.५ लाख शाळा व सर्व महाविद्यालय वायफाय सुविधेने जोडली आहेत. नागरीकांसाठी सार्वजनिक ठिकाणी वायफाय सुविधा उपलब्ध करून दिल्या आहेत. १.७ कोटी आयटी व टेलिकम्युनिकेशनच्या सरकारी नौकरीच्या संधी व अप्रत्यक्ष ८.४ कोटी सरकारी सुविधा उपलब्ध झाल्या आहेत. भारत आंतरराष्ट्रीय पातळीवर इंटरनेटद्वारे आरोग्य, शिक्षण, बँकिंग, विमा आदी सुविधा पुरवत आहे.

### भारतातील डिजिटल पेमेंट सिस्टिम :-

जगातील विविध देशातील डिजिटल तंत्रज्ञानाचा अभ्यास करून भारताने देशातील स्रोतांचा व संसाधनाचा प्रभावी वापर करण्यासाठी जनधन, आधार आणि मोबाईल (जाम) या त्रिसूत्रिका वापराने भारताने डिजिटल क्रांतीच्या दिशेने एक महत्त्वाचे पाऊल टाकले आहे. सुमारे ३१



कोटी नवीन बँक खाती जनधन योजने अंतर्गत काढली आहेत. भारतात बँक खाते असलेल्या प्रौढांचे प्रमाण २०१४ ला ५३ टक्के होते. ते २०१७ ला ८० टक्के एवढे वाढले आहे. तसेच भारतात मोबाईल वापरणारांची संख्या १०० कोटी एवढी आहे. तर आधारकार्ड असणाऱ्यांची संख्या १.१३ कोटी एवढी आहे. या त्रिसूत्रीचा वापर करून भारतात डिजिटल पेमेंट सिस्टिमचा प्रभावी वापर केला जात आहे.

संगणक, लॅपटॉप, पॅड, मोबाईल, टेलिफोन टेलिव्हिजन, बिझनेस प्रोसेस, औटसोर्सिंग, पॅन कार्ड, क्रेडिट कार्ड, डिबीट कार्ड, आधार कार्ड, किसान कार्ड, मतदान यंत्र, ऑनलाईन बिझनेस, ई-मार्केटिंग हे सर्व व्यवहार डिजिटलायझेशनचे सध्याचे दृश्य व इंटरनेटच्या सहाय्याने वापरात आलेले प्रकार आहेत.

भारत सरकारने संपूर्ण देशात नागरीकांनी वित्तीय व्यवहारासाठी डिजिटल पेमेंटच्या विविध पध्दती हाताळल्यात म्हणून भिम अॅप, युपीआय, आयपीटी, बीबीपीएस, गुगल पे, फोन पे, तेज, दिशा, डिजी लॉकर, पेटीएम, एसबीआय बडी आदी. डिजिटल पेमेंटचे ॲप्लिकेशन किंवा ॲपमुळे भारतात सन २०१७-१८ या वर्षामध्ये अब्जावधी रुपयाची १० लाखाहून अधिक डिजिटल देयक व्यवहार झाले.

आज देशात डिजिटल तंत्रज्ञानाचा वापर स्मार्ट कार्ड, रेशन कार्ड, आरोग्य कार्ड, सॉपिंग कार्ड, पॅन कार्ड, ई-तिकीट, ई-बाजार, मल्टीमेडीया, परवाना पत्र, नोंदणी, कर वसुली, बील भरणा, व्यापाराचे व्यवस्थापन, शासन व प्रशासनाचे व्यवस्थापन, पायाभूत सुविधा पुरवण्यासाठी, अर्थसंकल्प तयार करण्यासाठी ग्राहकांचे सक्षमीकरण करण्यासाठी व समाज जीवनाचे राहणीमान उंचावण्यासाठी सर्वत्र सर्रास होत आहे. त्याच बरोबर सामाजिक माध्यमाचे ट्विटर, फेसबुक, व्हॉट्सअप, टेलिग्राम, वेबसाईट, ई-मेल इ. डिजिटलायझेशनचीच उदाहरणे आहेत.

### डिजिटलायझेशन समोरील आव्हाने :-

- १) भारत खंडप्राय व विशाल लोकसंख्येचा देश आहे. देशामध्ये अध्याप काही भागात पायाभूत सुविधा पोहचलेल्या नाहीत. त्यामध्ये वीज, इंटरनेट, शिक्षण, तंत्रज्ञान यांचा मोठा अभाव दिसून येतो. त्यामुळे डिजिटलायझेशनच्या विस्तारावर मर्यादा येत आहेत.
- २) डिजिटलायझेशनचा दृश्य परिणाम प्रत्यक्ष-अप्रत्यक्षरित्या व्यक्तीच्या स्वातंत्र्यावर, निवडीवर, निर्णय प्रक्रियेवर होताना दिसून येत आहे.
- ३) डिजिटलायझेशनमुळे व्यक्ती संबंधीची सामाजिक, आर्थिक, शैक्षणिक, व्यवसायिक, आवडी-निवडी विषयीची माहिती सार्वजनिक किंवा उघड होत आहे याची मोठी भीती लोकांच्या मनामध्ये आहे.
- ४) डिजिटलायझेशन व्यक्तीच्या खाजगी हक्कावर अतिक्रमण करत आहे. त्याचा परिणाम सरकार व्यक्तीच्या खाजगी जीवनात प्रवेश करते. व्यक्तीच्या खाजगी माहितीवर सर्व प्रकारचे व्यवसायिक अतिक्रमण करतात. ही माहिती नफा मिळवण्याचे साधन बनते.
- ५) डिजिटलायझेशनमध्ये खाजगी माहिती, राष्ट्रीय सुरक्षेची माहिती व अन्य महत्त्वाची माहिती सुरक्षित राहत नाही. गुन्हेगारी प्रवृत्तीचे लोक आशा माहितीचा गैर हेतूसाठी वापर करू शकतात.
- ६) डिजिटल तंत्रज्ञानाच्या सहाय्याने व्यक्तिगत, राष्ट्रीय माहितीचे बाजारीकरण केले जाऊ शकते. तसेच व्यक्तीच्या मागणी व उपभोग रचनेवर प्रभाव टाकला जाऊ शकतो.
- ७) देशातील निरक्षरता, दारिद्र्य, आर्थिक विषमता, पारंपारिक दृष्टिकोन, संगणकाचे व तंत्रज्ञानाच्या ज्ञानाचा अभाव ही डिजिटलायझेशन समोरील आव्हाने आहेत.

### शोध निबंधाची निष्कर्ष :-

- १) डिजिटल तंत्रज्ञानाद्वारे देशातील सुगम व दुर्गम भागातील भारतीयांना ब्रॉड बँड आणि जलदगती इंटरनेट उपलब्ध करून त्याद्वारे जोडण्याचे सरकारचे उद्दिष्ट्ये आहे. त्यामुळे प्रत्येक नागरिकांना ई-प्रशासन सेवा देण्याबरोबरच सामाजिक लाभा व आर्थिक समावेशकता साध्य होईल.
- २) आज जगातील ४० टक्के लोक इंटरनेटचा वापर करीत आहेत. तर भारतात ही संख्या ५० कोटी पेक्षा जास्त आहे. म्हणजे अद्याप इंटरनेटची सुविधा सर्वापर्यंत पोहचलेली नाही. त्यासाठी सामुहीक प्रयत्न करावे लागतील. तसेच सर्वांच्या सहभागाने अभिनव डिजिटल तंत्रज्ञानाची व्यवस्था अधिक व्यापक, सक्षम व गतिमान करावी लागेल.
- ३) डिजिटलायझेशनमुळे नवीन पर्याय, संधी, सोयी, कमी किंमती, कमी व्याजदर, श्रम बचत, पारदर्शकता, अचूकता, गतिशीलता हे सर्व सहज आणि सुलभपणे उत्पादक; वितरक व ग्राहकांना शक्य झाले आहे.
- ४) डिजिटलायझेशनच्या युगात सरकार, नियमक मंडळे, उत्पादक, उद्योजक, वितरक यांनी ग्राहकांच्या मनात डिजिटल तंत्रज्ञानाविषयी विश्वास निर्माण करून त्यांच्या हक्काचे रक्षण करणे आवश्यक आहे. यातच आर्थिक वाढीची बीजे आहेत.
- ५) लोकशाही व्यवस्थेत नागरिकांचे स्वातंत्र्य हे सर्व श्रेष्ठ मूल्य असते. या स्वातंत्र्याचा एक महत्त्वाचा घटक म्हणजे खाजगीपणा, कौटुंबिक संबंध, आरोग्य, आवडी-निवडी, मतदान, खरेदी-विक्री, अभिव्यक्ती, आर्थिक निवड अशा अनेक स्वरूपाचे स्वातंत्र्य या पवित्र स्वातंत्र्याचे संरक्षण राष्ट्राच्या सीमा संरक्षणा इतकेच महत्त्वाचे असते.

डिजिटलायझेशनच्या प्रक्रियेत नागरिकांच्या या हक्काचे संरक्षण लोकशाहीचा आत्मा टिकविण्यासाठी आवश्यक आहे.

### संदर्भ ग्रंथ सूची :-

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- ४) डॉ.पाटील जे.एफ. — डिजिटलायझेशन आणि व्यक्ती स्वातंत्र्य, दै.पुढारी, दि.९ जाने. २०१९.
- ५) <http://cashlessindia.gov.in>
- ६) <https://digitalindiapayments.com>

## रोकडरहित अर्थव्यवस्था व रोकडरहित व्यवहाराचे विविध पर्याय

प्रा.डॉ. माधवराव नरसिंगराव बिरादार

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### प्रास्ताविक

प्राचीन काळी वस्तु विनिमय पद्धती होती. वस्तु विनिमय पद्धतीमध्ये येणाऱ्या अडचणींमुळे माणवाने पैशाचा शोध लावला. पैशाचा शोध केव्हा लागला, हे नक्की सांगता येणार नाही. परंतु पैसा अस्तीत्वात आल्यापासून विनिमय व्यवहार रोख पैशाद्वारे केले जातात, म्हणजे कोणतीही वस्तु किंवा सेवा खरेदी करतांना रोख रक्कम हीच सर्वात महत्वाचे आणि प्रमुख पद्धती आहेत. भारतात मोठ्या प्रमाणावर रोख पैशाचा म्हणजेच नोटाद्वारे व्यवहार होतात. ही पद्धत बऱ्याच वर्षांपासून सुरु आहे. छापील नोटांच्या व्यवहारात भारत आघाडीवर आहे. प्राईसवॉटर कपूर या संस्थेच्या 2015 च्या अहवालानुसार आपल्या देशातील व्यवहाराचे मूल्य विचारात घेतले तर अर्थव्यवस्थेमध्ये 98 टक्के व्यवहार रोख चलनाच्या स्वरूपात होतात आणि आकारमानाचा विचार केला तर ते प्रमाण 68 टक्के आहे. आपल्या देशाशी तुलना करता येईल अशा चिन, ब्राझिल, दक्षिण आफ्रिका या व ईतर अर्थव्यवस्थेच्या तुलनेत हे प्रमाण खूपच जास्त आहे. काही अर्थतज्ञांच्या मते रोख चलनाच्या स्वरूपात होणारे व्यवहार आर्थिक समावेशकतेच्या संकल्पनेसाठी मारक आहे. इतक्या मोठ्या प्रमाणावर रोख रकमेद्वारे होणाऱ्या व्यवहारामुळे निर्माण झालेले सर्वात मोठे आव्हान म्हणजे रोख रकमेची हाताळणी करण्यासाठी किंवा निर्मितीसाठी खर्च होणारा पैसा आणि संसाधने होय. शिवाय नोटा निष्काळजीपणाने हाताळल्या जात असल्यामुळे त्या मलिन होतात तसेच बनावट नोटा हुडकून काढणे पुष्कळदा त्रासदायक होते. कागदी नोटा अनामिकाच्या हाती पडणारे चलन आहे. त्यावर नाव किंवा इतिहास चिकटलेला नसतो. गुन्हे रोखविनाही होतात पण जादा रोख रक्कम ही काळ्या पैशाला उत्तेजन देते. त्यात करचुकवेगिरी वाढते. रोखीमुळे पैसा कुठे गेला हे कळत नाही. त्यामुळे लाचखोरी, भ्रष्टाचार सोपा होतो. दहशतवादाला अर्थपूरवठा व खोट्या नोटांची डोकेदुखी वाढते. एकूणच रोखीच्या व्यवहारात कटकटी वाढत चालल्या आहेत.

जगातील अनेक देशात रोकडरहित (Cashless) अर्थव्यवस्था स्वीकारण्यात आली असून भारत ही त्या दिशेने पावले टाकत आहे. जून 2016 मध्ये भारतीय रिझर्व्ह बँकेने "पेमेंट अँड सेटलमेंट सिस्टिम इन इंडिया व्हिजन 2018" नावाचा अहवाल प्रसिद्ध केला. या अहवालात रोकडरहित अर्थव्यवस्थेच्या दिशेने वाटचाल करण्यासाठी मध्यम व दीर्घ कालावधीच्या उपाययोजनाचा आराखडा सादर करण्यात आला. इलेक्ट्रॉनिक आणि डिजिटल व्यवहारांना प्रोत्साहन देणे, टॅक्स बेस वाढविणे, काळा पैसा कमी करणे आणि निवडणुक तसेच दहशतवादाला होणारा अवैध पतपुरवठा रोखणे ही ध्येय या अहवालात नमूद करण्यात आली आहेत. मा.प्रधानमंत्री श्री नरेंद्र मोदी यांनीही 27 नोव्हेंबर 2016 च्या 'मन की बात' या कार्यक्रमात रोखमुक्त समाजाची कल्पना मांडली होती. त्यामुळे गेल्या काही दिवसापासून भारतीय अर्थव्यवस्था चलनाकडून कॅशलेसकडे मार्गक्रमण करीत असल्याचे दिसत आहे. रोकडरहित म्हणजेच कॅशलेस व्यवस्थेसाठी सरकारने लोकांना उत्तेजन दिले आहे व डिजिटल व्यवहाराकडे लक्ष वेधले आहे. लहानलहान व्यवसायिकांनीही आर्थिक व्यवहारासाठी ओपीएस मशीन, पेटीएम, बडी, इंटरनेट बँकिंग या अद्यावत बँकिंगशी संबंधित प्रणालीचा वापर सुरु करून आपल्या व्यवसायाला गतिमान करण्याबरोबरच कॅशलेस अर्थव्यवस्था संकल्पनेचा पया अधिक मजबूत करण्यास हातभार लावलेला आहे.

### रोकडरहित अर्थव्यवस्थेचा आशय :-

एखाद्या वस्तुचे मूल्य अथवा सेवेचा मोबदला, देयकाचा भरणा डेबीटकार्ड अथवा इंटरनेटच्या आधारे बँकिंग प्रणालीचा वापर करून अथवा मोबाईल वरील विविध ॲप्सच्या माध्यमातून करणे, त्यासाठी कोणत्याही प्रकारे रोख कागदीचलन वापरले नाही तर तो व्यवहार रोकडरहित म्हणता येईल.

दुसऱ्या शब्दात रोकडरहित अर्थव्यवस्था म्हणजे अशी अर्थव्यवस्था की, जेथे जास्तीत जास्त आर्थिक व्यवहार डिजिटल माध्यमाद्वारे पार पाडले जातात म्हणजेच धनादेश, डी.डी. क्रेडीटकार्ड, डेबीटकार्ड, आरटीजीएस, नेफ्ट द्वारे पार पाडल्या जातात अशा अर्थव्यवस्थेला रोकडरहित अर्थव्यवस्था म्हणतात.

संपुर्णपणे रोकडरहित अर्थव्यवस्था असणारा एकही देश आज जगात नाही. कॅशलेस व्यवहाराचा अधिकाधिक वापर करणाऱ्यामध्ये प्रगत राष्ट्रांचा समावेश असला तरी मुख्यतः डेन्मार्क, स्वीडन, नार्वे, हे देश वेगाने रोकडरहित अर्थव्यवस्थेकडे वाटचाल करत आहेत. अमेरिकेत आज देशील सुमारे 45 टक्के व्यवहार रोख रक्कमेत केले जातात. डेन्मार्क आणि स्वीडन संपुर्णतः कॅशलेस होण्याची शक्यता असली तरी त्यासाठी असून किमान पाच ते दहा वर्षे लागतील असा अर्थतज्ञांचा दावा आहे. भारतात रोकडरहित अर्थव्यवस्थेमध्ये फारशी प्रगती नसली तरी सर्व व्यवहारांच्या एकूण 5 टक्के व्यवहार डिजिटल पद्धतीने होत आहेत. भारतीय लोकांना रोख रक्कम स्वतःजवळ बाळगणे व रोख रक्कमेत व्यवहार करणे हे अधिक सुरक्षित वाटते. स्वतः जवळ रोख रक्कम नसेल तर मानसिक दृष्ट्या तो अस्वस्थ होऊन व्यक्तीत असुरक्षिततेची भावना निर्माण होते. त्यामुळे रोकडरहित व्यवहाराचे प्रमाण कमी असल्याचे दिसून येते, असे असले तरी तरुण वर्ग मोठ्या प्रमाणावर कागदी चलनाच्या माध्यमाकडून इलेक्ट्रॉनिक साधनाकडे विशेषतः पेमेंट कार्ड्सकडे वळत आहे.

### रोकडरहित (कॅशलेस) व्यवहार करण्याचे विविध पर्याय :-

**प्लॅस्टीक मनी (डेबीट कार्ड, क्रेडीट कार्ड)** प्लॅस्टीक मनी म्हणजे अशा प्रकारचे चलन जे प्लॅस्टीक कार्डच्या रूपात बनवला आहे व हे छापील नोटाच्या ऐवजी वापरले जाते. प्लॅस्टीक मनीचे आपण रुप पाहतो ते रुप म्हणजेच क्रेडीट कार्ड, डेबीट कार्ड होय. छापील नोटाच्या नंतर

चलनामध्ये बदल घडवून आणला तो ते थेट प्लॅस्टीक मनीच. यामुळे मोठी रोख रक्कम घेवून फिरण्याची तितकी गरज नाही. भारतात हे पर्याय बऱ्याच वर्षांपासून उपलब्ध झाले असून अलीकडे याचा मोठ्या प्रमाणात वापर केला जात आहे.

#### बीट कार्ड :-

ह्या प्रकारच्या कार्डसना अपण Prepaid कार्डस म्हणु शकतो. कारण डेबीट कार्ड वापरण्यासाठी बँक खात्यामध्ये रक्कम जमा केलेली असावी लागते. हे कार्ड बँक खात्यामध्ये शिल्लक रक्कम असेपर्यंत वापरता येते. डेबीट कार्ड द्वारे विक्रेत्याकडे व्यवहार करताना कार्ड वापरल्यावर खातेधारकाच्या बँक खात्यामधुन विक्रेत्याच्या खात्यात थेट रक्कम जमा होते.

#### क्रेडीट कार्ड :-

ह्या प्रकारच्या कार्डसना आपण Post Paid कार्डस म्हणु शकतो. कारण ह्यामध्ये आपण आधी व्यवहार करुन नंतर महिना अखेरीला पैसे बँकेत भरतो. यासाठी बँक खात्री करुन खातेदारांना एक मर्यादा घातलेले क्रेडीट कार्ड देते ज्याद्वारे तो कधीही मर्यादेपर्यंत खरेदी करु शकतो. खरेदीवेळी बँक खातेधारकाच्या वतीने पैसे जमा करते व नंतर महिना अखेरीस बँक बिल पाठविते ज्यानुसार खातेधारक ती रक्कम बँकेमध्ये जमा करतो.

#### इंटरनेट बँकिंग :-

या पर्यायामध्ये आधी बँकेकडे अर्ज द्यावा लागतो त्यानंतर बँक खातेधारकाला यूजर आयडी व पासवर्ड देते. याला 'ऑनलाईन बँक खाते' असेही म्हणता येईल. आयडी पासवर्ड घेवून तुम्ही तुमच्या बँकेच्या इंटरनेटच्या ऑनलाईन व्यवहारासाठी तयार. खरेदी करताना इंटरनेट बँकिंग पर्याय निवडायचा, आपली बँक निवडायची, यूजर आयडी, पासवर्ड टाकायचा, तुमच्या फोनवर आलेला OTP तेथे टाकायचा की झाली खरेदी. हा पर्याय सर्व पर्यायामध्ये नक्कीच सर्वात सुरक्षीत आहे. तुमच्या खात्यामधुन कोणताही व्यवहार झाला की, एक ई-मेल आणि एक SMS सुद्धा येतो. तुम्ही ऑनलाईन / ऑफलाईन केलेल्या सर्व व्यवहाराची नोंद या वेबसाईटवर कधीही पाहू शकतो. ती स्टेटमेंट प्रिंट करु शकता यालाच नेटबँकिंग सुद्धा म्हणतात.

#### ई-वॉलेट / मोबाईल वॉलेट :-

ई-वॉलेट म्हणजे इलेक्ट्रॉनिक कार्डाचा तो एक प्रकार असून संगणक किंवा स्मार्टफोनने ऑनलाईन व्यवहार करण्यासाठी वापरले जाते. ई-वॉलेट बँक खातेधारकाच्या खात्याशी जोडावे लागते आणि त्यानंतर खात्यावरून पैसे खर्च करता येतात. सोप्या भाषेत सांगायचे तर हे मोबाईलमध्ये असलेले आभासी पॉकेट आहे. जे व्यवहारासाठी खऱ्याखुऱ्या पाकीटाची जागा घेऊ पाहतय. या मोबाईल वॉलेटमध्ये आपण ठराविक रक्कम साठवू शकतो आणि ते कुठेही व्यवहारासाठी वापरता येते. ऑनलाईन व्यवहार (खरेदी) रिचार्ज / पैसे पाठविणे इत्यादी तसेच ऑफलाईन ठिकाणी जसे की, किराणा विक्रेते, रिक्षा, टॅक्सीचालक, दैनंदिन विक्रेते (भाजी, पेपर इ.), थियटर कॉउंटर यांना पैसे देण्यासाठी सहज करता येतो. या वॉलेटमध्ये तुम्ही तुमच्या बँकखात्यामधुन डेबीटकार्ड/क्रेडीटकार्ड/नेटबँकिंग द्वारे पैसे भरायचे आणि ते पैसे नंतर वरील प्रमाणे ठिकाणी Send Money / Receive Money असे पर्याय वापरु शकता, हा पर्याय पूर्ण सुरक्षित केलेले असून तुमच्या वॉलेट यूजर आयडी, पासवर्ड यांना सुरक्षित केलेले असून तुमच्या वॉलेटमधुन कोणताही व्यवहार झाला की, एक ई-मेल आणि एक SMS सुद्धा येतो. सध्या बरेच मोबाईल वॉलेट उपलब्ध आहेत. पेटीएम, फ्री चार्ज, मोबीकवीक, ऑक्सीजन इत्यादी.

#### युपीआय (United Payment Interface) :-

युपीआय ही एक अशी व्यवस्था आहे की, ज्यामध्ये अनेक बँकांच्या अनेक खात्यांना एकच मोबाईल अप्लिकेशनद्वारे आणून सोयीस्कर पैसे पाठविणे, रक्कम भरणे, खरेदी एकाच ठिकाणी एकाच अॅपमध्ये उपलब्ध होते. या पद्धतीमध्ये लॉगीन यूजरआडी, पासवर्ड, बँकखात्याचा क्रमांक, IFSC यापैकी कशाचीही गरज नाही. युपीआय मध्ये केवळ यूजर नेमचा वापर होतो. ज्याद्वारे व्यवहार थेट बँकेमधुन पार पडतात. या युजरनेमला VPA (व्हर्च्युअल प्रायवेट अड्रेस) म्हणतात. यामुळे पैसे पाठविण्याकरिता केवळ या नावाचाच वापर करुन काही क्षणात पैसे पाठविता येतात. युपीआय आणि मोबाईल वॉलेट या दोन वेगवेगळ्या गोष्टी असून युपीआय मध्ये मोबाईल वॉलेट प्रमाणे रक्कम भरावी लागत नाही. यासाठी थेट बँक खात्यामधुनच व्यवहार केला जातो. हे वापरण्यासाठी तुमचा फोन तुमच्या बँक खात्याला मोबाईल / नेटबँकिंगमार्फत जोडलेला असावा लागतो. त्यानंतर तुम्ही तुमच्या बँकेचे अधिकृत अॅप फोनमध्ये डाऊनलोड करा. तोच मोबाईल क्रमांक युपीआयशी जोडा आणि व्यवहारासाठी हे अॅप वापरा. याला ऑफ लाईन पर्यायसुद्धा उपलब्ध आहे. हा पर्याय तुमच्या फोनवरून \*#99# डायल करुन वापरता येईल.

#### मोबाईल बँकिंग :-

मोबाईल बँकिंग हा व्यवहार करण्याचा नवा मार्ग असून यामुळे रोख रक्कम जवळ बाळगावी किंवा साध्या कामासाठी बँकेमध्ये फेऱ्या मारण्याची गरज नाही. आता ही सुविधा जवळपास प्रत्येक प्रमुख बँकेमध्ये उपलब्ध असून मोबाईल अॅपद्वारे SMS किंवा USSD द्वारे सुद्धा बँकिंगसाठी पर्याय उपलब्ध आहेत. हा फोन बेसीक फोन / इंटरनेट नसलेल्या फोन्ससाठी तयार करण्यात आला असून प्रथम तुमचा फोन क्रमांक बँकेमध्ये तुमच्या खात्याला जोडावा लागतो. त्यानंतर तुम्हाला MMID कोडची माहिती SMS द्वारे पाठवून सहज पैसे पाठविता येतात.

**SMS द्वारे :-** यासाठी बँकेच्या निर्देशानुसार काही ठराविक संज्ञा दिलेल्या असतात जे की, <mobile No> <MMID> <Amount> <User ID> <MPIN> ही एसबीआयची संज्ञा आहे.

**UDSS द्वारे :-** युपीआय साठी ऑफलाईन पद्ध म्हणजे UDSS द्वारे व्यवहार सरकारद्वारा सर्व बँकांना सूचना देवून \*#99# एकच क्रमांक निश्चित करण्यात आला असून याद्वारे खात्यातील शिल्लक तपासणे पैसे पाठविणे हे व्यवहार करता येतात.

#### आधार कार्ड बँकिंग :-

Adhar Enabled Payment System (AEPS) ही एक अशी पेमेंट सेवा आहे ज्याद्वारेआधारचा वापर करुन संबंधीत आधार एनेबल बँक खात्यामध्ये प्राथमिक बँक व्यवहार करता येतो. या प्रकारच्या व्यवस्थेमध्ये आधी कार्डधारकाला आधार कार्ड बँक खात्याला संलग्न



करावा लागतो. त्यानंतर ज्या ठिकाणी पैसे द्यायचे आहेत तेथे तूमचा आधार टाका व तूमच्या बोटाचे फिंगरप्रिंट द्या लगेच व्यवहार पार पडेल. म्हणजे आधारकार्डवरील क्रमांक आणि बायोमेट्रिक पद्धतीने बोटाचे स्कॅन याद्वारे पैसे ट्रान्सफर, शिल्लक पैसे काढणे इत्यादी व्यवहार करता येतात ही व्यवस्था सध्यातील खूपम कमी ठिकाणी आहे.

### रोकडरहित अर्थव्यवस्थेचे फायदे :-

- 1) रोकडरहित व्यवहार करणे सूलभ व सोयीचे असते तसेच ते रोख रक्कम हाताळण्यापेक्षा अधिक सुरक्षीतही असते आणि जोखीम कमी होऊन चोऱ्या, दरोडा, लुटपाट यांचे प्रमाण कमी होईल.
- 2) कागदी चलन छापण्याची आवश्यकता कमी झाल्यामुळे कागदाच्या मागणीत घट होते. परिणामतः कमी झाडे कापली जातात आणि त्यामुळे सहाजिकच पर्यावरण संरक्षणात आणि संवर्धनात मोठा हातभार लावता येतो.
- 3) डिजिटल व्यवहारामुळे सर्व आर्थिक व्यवहार अत्यंत कमी वेळात कुठेही न जाता पार पाडता येतात. त्यामुळे पैशाची व वेळेची बचत होऊन ग्राहकांच्या समाधानात वाढ होते.
- 4) रोकडरहित व्यवहाराद्वारे अर्थव्यवस्था अधिक प्रगत व विकसित होते आणि रक्कम प्रदान प्रणाली आधुनिक करता येते तसेच रोकडरहित व्यवहारामुळे अर्थव्यवस्थेत अधिक पारदर्शकता आणि उत्तरदायित्व स्थापित करणे आणि समांतर व बेकायदेशीर अर्थव्यवस्थेचे निर्मूलन करणे शक्य होते.
- 5) व्यापारी वर्गाला त्यांच्या भौगोलिक कक्षांच्या पलीकडे जाऊन व्यापार करणे शक्य होते. त्याच्या व्यवसायातील ग्राहकांची संख्या वाढवता येते आणि त्याद्वारे व्यवसायाची वृद्धी करता येते.
- 6) डिजिटल साधनाची आर्थिक व्यवहार केल्यास त्याची सर्व बँका व वित्तिय संस्थाकडे नोंद होते. त्यामुळे कर चोरीचे प्रमाण कमी होऊन ते नगण्य राहिल.
- 7) रोख आर्थिक व्यवहारामुळे अर्थव्यवस्थेच्या प्रत्येक क्षेत्रात मोठ्या प्रमाणात भ्रष्टाचार वाढला आहे. रोकडरहित अर्थव्यवस्थेमुळे भ्रष्टाचारमूक्त समाजव्यवस्थेची निर्मिती होईल.
- 8) बनावटी चलनामुळे देशात आतंकवाद, दहशतवाद व नक्षलवाद यांना खतपाणी मिळते. रोकडरहित अर्थव्यवस्थेमुळे बनावटी चलनाची समस्या आपोआप संपुष्टात येते.
- 9) आर्थिक व्यवहार ऑनलाईन झाले तर सरकारला आणि लोकांना कर भरण्याची आणि चुकवणाऱ्याची माहिती ऑनलाईन बघता येते आणि कर वाचण्याचा प्रयत्न करणाऱ्यांना लगाम बसतो.
- 10) ज्या ठिकाणी बँकिंगच्या सुविधा नाहीत अशा ठिकाणी ई-पेमेंट किंवा मोबाईल बँकिंगच्या माध्यमातून सहज व्यवहार करता येतात. तसेच कल्याणकारी योजनांचा निधी लाभार्थ्यांच्या खात्यात सहज पोहचवता येणार आहे.

### रोकडरहित अर्थव्यवस्थेचे तोटे

- 1) सायबर गुन्हे हे रोकडरहित अर्थव्यवस्थेसमोर मोठे आव्हान आहे. बँक खाते हॅक होणे, खात्यातील रक्कम परस्पर काढून घेणे अशा सायबर क्राईम फसवणुकीत वाढ होण्याची शक्यता आहे.
- 2) भारतात निरक्षरता व अज्ञान मोठ्या प्रमाणात असल्यामुळे डिजिटल साधनांचा वापर अनेकांना करता येणार नाही. त्यांना तांत्रिक व्यवहाराचे प्रशिक्षण देणे हे एक मोठे आव्हान आहे.
- 3) आपल्या देशात सर्व ठिकाणी इंटरनेटचे जाळे शक्य नसल्यामुळे आणि रोकडरहित अर्थव्यवस्थेत आर्थिक व्यवहार अंमलात आणण्यासाठी इंटरनेटचे जाळे सर्वदूर असणे आवश्यक आहे. अरोखीने व्यवहार करण्यासाठी लागणारी सुविधा भारतात उपलब्ध नाही
- 4) बरेचदा वेगवेगळ्या बँकखात्यातील पिन नंबर व पासवर्ड वेगवेगळे असल्याने ते लक्षात राहत नाही. त्यामुळे आर्थिक व्यवहारात अडचणी निर्माण होतात. .

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## कॅशलेश अर्थव्यवस्था आव्हाने आणि उपाय

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अर्थशास्त्र विभाग

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अर्थशास्त्र विभाग प्रमुख

### गोषवारा -

वित्तीय समायोजन करण्यासाठी सरकारने बँकिंग क्षेत्रात अनेक नवनविन संकल्पना धोरणाचा स्विकार केला आहे मानवी शारिरात रक्त पुरवठा करण्याचे कार्यान्वयन होतं तितकेच महत्त्व समाजातील शेवटच्या घटकपर्यंत {सिमांत घटक} वित्तीय सुविधा पुरविण्याचे कार्य बँकांच्या माध्यमातून होते. बँकिंग क्षेत्रात होणारे घोट्याचे भ्रष्टाचार देशात निर्माण होणारी काळ्या पैशाची समांतर अर्थव्यवस्था यामुळे होणारे विघातक परिणामास पायबंद घालण्यासाठी सरकारने उचललेले अलिकडील पाऊल म्हणजे नोटा बंदी यामुळे पर्यायी उपाय म्हणून कॅशलेश अर्थव्यवस्थेचा वाढत जाणार आग्रह यात इंटरनेट बँकिंग मोबाईल बँकिंग इ वॉलेट विविध अॅप. UPI चा वापरासंबंधी चर्चा जोर धरू लागली आहे. म्हणजेच व्यवहारात कमीत कमी रोख व्यवहाराचा वापर व्हावा हा हेतु आहे. जेणे करून भ्रष्टाचार व अधिक गुन्हेगारीला आळा घालता येईल व अर्थ साक्षरता वाढिस लागेल.

**बीज शब्द** - कॅशलेश, मोबाईल बँकिंग, काळा पैसा, अर्थसाक्षरता, इ.वॉलेट, नोटा बंदी

### प्रस्तावना -

भारतीय अर्थव्यवस्थेत वाढत जाणारा भ्रष्टाचार काळा पैसा, नकली नोटा आतंकवादी विघातक कार्य इ.चे समुच्च उच्चाटन करण्यासाठी सरकारने वेगाने हालचाली सुरू केल्या २०१६ मध्ये सरकारद्वारे नोटाबंदीचा निर्णय घेण्यात आला म्हणजेच १०००, ५०० रू जुन्या नोटा चलनातून बाद करण्यात आले. परंतु भारतीय अर्थ व्यवस्थेत आजही मोठ्या प्रमाणात नीरक्षरता, छोटे व्यापारी, लघु उद्योग, शेती व शेतीवर आधारित असणाऱ्या लोकांचे प्रमाण अधिक असल्याने एका बाजूला चलीनी नोटा नासल्याने व्यवहारासाठी रोखतेची कमतरता निर्माण झाली. अनेक समस्या निर्माण झाल्या यातून मार्ग काढण्यासाठी कॅशलेश व्यवहाराची चर्चा जोर धरू लागली. अर्थतज्ञांच्या मते रोख रक्कमेतील काळा पैसा ७% आहे. तो वाढत जाऊ नये करचुकवेगीराला लगाम लागावा. यासाठी कॅशलेश व्यवहार करणे अत्यंत आवश्यक आहे. आणि हा उपाय दिर्घकालीन उपाय म्हणून प्रभावी ठरण्याची शक्यता अधिक आहे.

### कॅशलेश व्यवहाराची गरज

#### Cash to GDP Ratio in Selected Countries (%) 2016

Country	Percentage
Sweden	1.73
South Africa	2.39
Uk	3.72
Brazil	3.82
Canada	4.08
Russia	10.56
India	10.86

#### Financial Inclusion In India % 2016

Type	Percentage
With Financial In Institution Account	52.8
Has Debit Card	22.1
Atm Withdrawal	33.1
Debit Card (Make payment)	10.7
Credit Card (Make Payment)	3.4
Used Internet To Pay Bill Or Purchases	1.2
Saved Of Financial Institution	14.4
Barrowed From A Financial Instituitian	6.4

सर्वोच्च न्यायालयाचे माजी न्यायमुर्ती श्री एम.बी.शाह यांच्या अध्यक्षतेखाली काळ्या पैशाच्या समस्ये बाबत २०१४ मध्ये एका विशेष शोध गटाची स्थापना करण्यात आली यांच्या अहवालानुसार काळापैसा थांबवण्यासाठी तीन लाख व त्यावरील किंमतीच्या रोख व्यवहारावर व व्यक्तितगत पातळीवर स्वतःजवळ १५ लाख रुपये व त्यापेक्षा जास्त रक्कम बाळगण्यास निबंध घातले पाहिजेत.

देशात आजही ८०% व्यवहार रोखीने होतात त्यामुळे भ्रष्टाचार व काळापैसा यास वाव मिळतो यास आळा घालण्यासाठी कॅशलेश पद्धतीचा अवलंब उपयुक्त ठरतो जागतिकीकरणानंतर अर्थव्यवस्थेचे चित्र मोठ्या प्रमाणात बदललेले दिसते इंटरनेट, व मॉल संस्कृतीचा विकास इ पाटयाने होत आहे अशा ठिकाणचे अधिकांश व्यवहार डेबिट, क्रेडिट कार्ड याद्वारे होत तसेच नोटाबंदीनंतर चलन टंचाई मुळे व्यापारी वर्गात हे व्यवहार वाढले आहे. कॅशलेश व्यवहार हा आर्थिक व्यवहारातील प्रगतशील व्यवहार आहे आणि हे अलिकडील प्रगत तंत्रज्ञानामुळे सहज शक्य आहे प्रगतशील देशात हे व्यवहार अधिक प्रमाणात होताना दिसतात एवढेच नाहीतर मोठ्या शहरातही प्रमाण अधिक आहे.

थोडक्यात सरकार धोरणामुळे अर्थव्यवस्थेत रोखते संदर्भात आणि बँकिंग व्यवसायात अनेक अनिष्ट गोष्टी घडल्या त्या काही एका राजीती घडलेल्या नाहीत यातून बाहेर पडण्यासाठी आणि बाजारपेठेचा विस्तार आणि व्यवहार प्रामाणिकपणे, पारदर्शकपणे करून देशाला एका उंचीवर नेण्यासाठी स्वच्छ व्यवहार करण्याची सवय अंगीकारली पाहिजे.

**कॅशलेश व्यवहारासाठी नवे पर्याय** १) फ्लॅस्टिक मनी (डेबिट कार्ड, क्रेडिट कार्ड, ) २) इंटरनेट बँकिंग ३) इ- वॉलेट/मोबाईल वॉलेट ४) UPI ५) मोबाईल बँकिंग व USSD 6) POS ( Point of sale) 7) आधार कार्ड द्वारे

### वरील पर्याय/सोयी उपलब्ध आहेत याचा वापर केल्यास

१. छपील नोटामुळे होणारे गैरव्यवहार टाळले जातील.
२. चलन छपाईचा खर्च वाचेल
३. बनावट नोटांची समस्या नष्ट होईल.
४. रोख रक्कम जवळ बाळगण्याची गरज नाही.
५. सुरक्षित व्यवहार - गरजेनुरूप अनेक पर्याय.

### कॅशलेस व्यवहार आढाने

RBI च्या २०१४-१५ च्या अहवालानुसार देशातील ६.५ लाख गावांपैकी जवळपास ४.९० लाख गावात बँकिंग सुविधा नसल्याचे दिसून येते अशा स्थितीत बँकिंग सुविधा मिळणे का ठण आहे.

१. - २०१५ मध्ये जवळपास २३३ मिलीयन लोकांचे बँक खाती नव्हती
२. - ४० ते ४५ % कुटुंब अजूनही बँक व्यवहाराशी जोडले नाहीत
३. याबरोबर २००० पेक्षा कमी लोकसंख्या असलेली ४ लाख ९० हजार खेडी बँकिंग सुविधेपासून वंचित आहेत.
४. सायबर गुन्हेगारी वाढेल.
५. - गरीब मोलमजूरी करणाऱ्यांना अनेक अडचणी येतात.
६. - इंटरनेटची सुविधा उपलब्ध असणे गरजेचे आहे भारतात सर्वत्र इंटरनेट उपलब्ध नाही.
७. दुकानधाराकडे इंटरनेट व कॅशलेस व्यवहाराचा सूविधा अपूरी आहे.
८. सर्वात महत्वाचे कॅशलेस व्यवहारासाठी साक्षर असणे गरजेचे आहे शिवाय अर्थसाक्षरता अत्यंत महत्वाची आहे डेबिट कार्ड किंवा क्रेडिट कार्डचा वापर भारतातील मोजक्यांच लोकांना करता येतो.
९. अनेक गावात आजही विज पोहचले नाही त्याठिकाणी इंटरनेट अशक्य आहे.
१०. गोरगरीब दिन दुबळे लोक कॅशलेस व्यवहार करू शकत नाहीत त्यांच्याकडे क्रेडिट, डेबिट कार्ड नाही ते कसे व्यवहार करतील.
११. Online/Mobile वर Account बनवीने पासवर्ड लक्षात ठेवणे व ते हाताळणे तीतके सोपे नाही.
१२. गरिबांसाठी न परवडणारे कारण कॅशलेस व्यवहारासाठी, मोबाईल संगणक आणि इंटरनेटची गरज लागते.

### निष्कर्ष

१. कॅशलेस व्यवहारासाठी भारतात सर्वभागात बँकाची निर्मिती होणे गरजेचे आहे
२. साधारणतः १०,०००० लोकामागे एक बँक आहे ती किमान ३ हजार लोकामागे एक असणे गरजेचे आहे.
३. किमान ४ ते ५ कि.मी.वर एक बँक असावे
४. आजही देशात ६७७ जिल्हापैकी २५३ जिल्हात १०० पेक्षाही कमी बँका आहेत फार अपुरे आहे बँकांचे जाळे पसरणे आवश्यक .
५. साक्षरतेचे प्रमाण खुप कमी व दारिद्र्याचे प्रमाण भारतात अधिक आहे.
६. प्रगत व आश्रमिक व्यवहाराच्या तुलनेत कॅशलेस व्यवहार सोयीचा आहे त्याच्या जास्तीत जास्त वापर करणे आवश्यक आहे.

### समारोप

जागतिक अर्थव्यवस्थेतील वरचेवर होत असलेले बदल त्या बदलानुरूप प्रत्येक देशाला आपल्या व्यवहारात बदल करणे कमप्राप्त ठरते भारतासारख्या उदयनमूख देशात आर्थिक व्यवहारातील घोटाळे, भ्रष्टाचार काळा पैसा याचे प्राबल्य अधिक आहे परिणाम देशात सामाजिक, शैक्षणिक, व आर्थिक विषमता वाढिस लागते आर्थिक व्यवहारातील पारदर्शकता हे देशाच्या विकासासाठी गुरूकील्ली ठरते कॅशलेस व्यवहारासाठी भारतासमोर अनेक आव्हाने असले तरी कॅशलेस व्यवहार अंगिकारणे अशक्य आहे असे म्हणता येणार नाही किंबहुना त्याची गरज आहे बँकिंग सुविधा ग्रामीण भागापर्यंत वाढवून आणि लोकांमध्ये अर्थसाक्षरता निर्माण केल्यास येणाऱ्या काळात जागतिक पटलावर भारताचे चित्र प्रेरणादायक दिसणार आहे. या बरोबरच लोकांनी स्वतःकॅशलेस व्यवहारासाठी प्रामाणिकपणे आग्रही, प्रयत्नवादी असावे. असे झाल्यास अर्थव्यवस्थेस लागलेल्या भ्रष्टाचार रुपी वाळवी पासून मुक्त होने अशक्य नाही.

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## डिजिटल पेमेंट सिस्टिमचा भारतीय अर्थव्यवस्थेवरील परिणाम

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### प्रस्तावना:-

भारतीय अर्थव्यवस्था सध्या डिजिटल क्रांतीच्या उंबरठ्यावर उभी आहे. तसे पाहता डिजिटल सक्षमीकरण ही आता केवळ एक घोषणाच राहिली नाही. नाविण्यापूर्ण तंत्रज्ञानाचा वापर करत प्रशासन अधिक सोपे, जलद, लवचिक आणि प्रभावी करत भारतात परिवर्तन घडवून आणण्याचे आणि प्रशासनात सुधारणा घडवून आणण्याचे ते एक सकारात्मक धोरण आहे. भारत सरकारच्या इलेक्ट्रॉनिक्स आणि माहिती तंत्रज्ञान मंत्रालयाच्या एका अहवालानुसार भारताच्या ट्रीलीयन डॉलर डिजिटल संधीमुळे २०१४-१७ या कालावधीत डिजिटलीकरणाला स्वीकार करणाऱ्या जगातील १७ देशांमध्ये भारत हा सर्वाधिक वेगाने विकसीत करणाऱ्या दुसऱ्या क्रमांकाचा देश ठरला आहे.

भारत सेवाप्रधान अर्थव्यवस्थेकडून नाविण्यापूर्ण अर्थव्यवस्थेच्या दिशेने वाटचाल करत असताना डिजिटल भारतामध्ये समान आणि शाश्वत विकासाचा आदर्श निर्माण केला जात आहे. नाविण्य आणि तंत्रज्ञानाचा वापर करून पारदर्शक,सक्षम आणि योग्य त्या प्रणालीद्वारे १.३ अब्ज नागरिकांच्या आशा आणि त्यांच्या गरजांची योग्य ती सांगड घालणे शक्य होणार आहे.

भारताचा डिजिटल पेमेंटच्या क्षेत्रात प्रवेश काहीसा उशीरा झाला असला तरी कार्ड आणि नेटबँकींगचे युग भारताने मागे टाकले आहे. UPI च्या माध्यमातून भारताने डिजिटल पेमेंट व्यवस्थेचा चेहरा- मोहराच बदलून टाकला. या क्षेत्रात खाजगी कंपन्यांचाही मोठा सहभाग असून त्याद्वारे प्राप्त होणाऱ्या अनोख्या पेमेंट व्यवस्थेमुळे अर्थव्यवस्थेतून रोख व्यवहारांचे प्रमाण हळुहळू कमी होत आहे. तसेच नागरिकांच्या गरजा पूर्ण करण्यासाठी उपयुक्त ठरणाऱ्या रोखीवर आधारित कर्जपुरवठा पत मानांकन, विमा संबंधित नव्या उद्योगासाठी पोषक असे वातावरण तयार होत आहे. गेल्या दोन वर्षांमध्ये BHIM/UIP आणि Government e-market place च्या माध्यमातून व्यवहार करणाऱ्या व्यक्तींची संख्या ७० लाखावरून ७९९६ लाखापर्यंत वाढली आहे. यांचा अर्थ डिजिटल पेमेंट सिस्टिमचा भारतीय अर्थव्यवस्थेवर खुप जलद गतीने सकारात्मक परिणाम घडून येत आहे.

### \* शोनिबंधाची उद्दिष्ट्ये:-

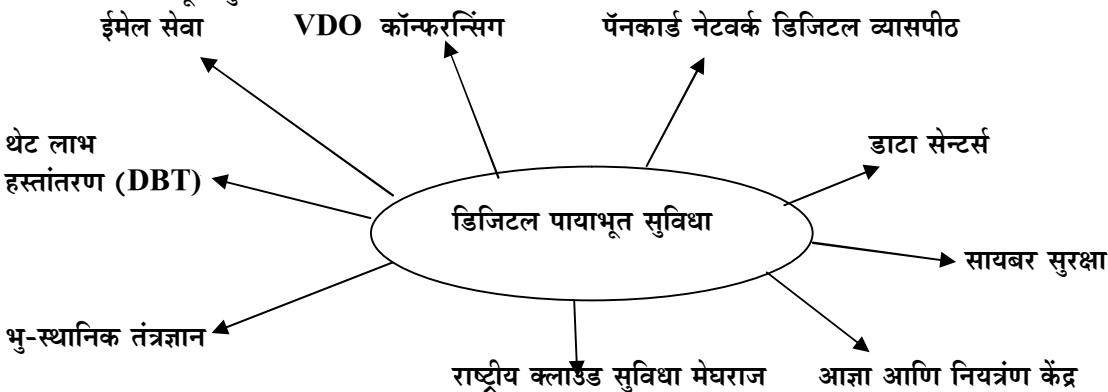
- १) डिजिटल पेमेंट सिस्टिम पध्दतीबद्दल माहिती जाणून घेणे.
- २) डिजिटल पेमेंट सिस्टिमचा अर्थ व भारतातील स्थिती लक्षात घेणे.
- ३) डिजिटल पेमेंट सिस्टिममध्ये अंतर्भाव होणाऱ्या घटकावर प्रकाश टाकणे.
- ४) डिजिटल पेमेंट सिस्टिमचे भारतीय अर्थव्यवस्थेवरील परिणाम जाणून घेणे.

### \* डिजिटल पेमेंट सिस्टिम म्हणजे काय.?

साधारणतः आपणास असे म्हणता येईल की, रोख साधनाऐवजी इलेक्ट्रॉनिक साधनाच्या माध्यमातून आर्थिक देवाण-घेवाणीचे व्यवहार पूर्ण करणे म्हणजे डिजिटल पेमेंट सिस्टिम होय.

भारतात डिजिटल पेमेंट सिस्टिमची सुरुवात प्रामुख्याने NPCI (National payment corporation of India) ने २००४ मध्ये मनमोहन सिंग सरकाराने केली. या सिस्टिम अंतर्गत UPI, USSD, BHIM आणि E- WALLET या साधनाचा अंतर्भाव करण्यात आला. मोबाईल आणि संगणकाच्या माध्यमातून या साधनाचा वापर केला जातो.

### \* डिजिटल पायाभूत सुविधा:-



### डिजिटल पेमेंट सिस्टिमचे फायदे:-

आधुनिक काळात डिजिटल पेमेंट सिस्टिम हा मानवी जीवनाचा अविभाज्य भाग बनला आहे. माहिती तंत्रज्ञानाचे क्षेत्र झपाट्याने विस्तारित होत असल्याने सद्यःस्थितीत सर्वच क्षेत्रात संगणक व माबाईलद्वारे ऑनलाईन सेवा उपलब्ध झालेल्या आहेत. डिजिटल पेमेंट सिस्टिमुळे ग्राहकांना कार्यक्षम व तत्पर सेवा पुरविता येतात. अत्याधुनिक माहिती व देखरेख व्यवस्था निर्मिती तसेच कार्यक्षम अंतर्गत नियंत्रणाची उभारणी करता येते माहितीचे योग्य ते जतन करता येते. खर्चातही बचत होते. इंटरनेटच्या प्रसारामुळे ग्राहकांना आता बँकेत जाण्याची गरज पडत नाही. घरात बसून किंवा प्रवासात असताना देखील पासबुक नोंदी अद्ययावत करता येतात. इंटरनेट व संगणकामुळे बँकिंग सेवा वर्षातील चौवीस तास उपलब्ध होत आहेत.

### डिजिटल पेमेंट सिस्टिमचे भारतीय अर्थव्यवस्थेवरील परिणाम:-

- 1) भारतीय अर्थव्यवस्था ही विविध आर्थिक व्यवहारावर निर्भर असते. डिजिटल पेमेंट सिस्टिमचा अवलंब केल्यामुळे बँकाच्या व्यवहारात कित्येक पटीने वाढ होवून बँकाच्या कार्यात पारदर्शकता वाढली.
- 2) डिजिटल पेमेंट सिस्टिममुळे भारतात २४ तास सेवा उपलब्ध होण्यास मदत झाली. पूर्वी बँकेच्या वेळामध्येच हे व्यवहार पार पाडले जात होते. आता केंव्हाही पैसे आपण पाठवू शकतो किंवा आर्थिक व्यवहार करू शकतो.
- 3) डिजिटल पेमेंट सिस्टिमचा वापर झाल्यामुळे रोखीची तरलता कमी झाली. तसेच व्यक्तीला रोख रक्कम जवळ बाळगण्याचे धोके कमी झाले. पाहिजे तेव्हा पैसे आपण काढून आपल्या गरजांची पूर्तता करता येते.
- 4) भारतीय अर्थव्यवस्था ही जलद गतिने वाढत असताना डिजिटल सिस्टिम सारख्या सुविधा उपलब्ध झाल्यामुळे व्यापारामध्ये वृद्धी झाली. कोणताही व्यापार करत असताना डिजिटलचा वापर करून अर्थीक विकास साध्य करून घेणे सोईचे झाले.
- 5) विविध सेवा- सुविधामध्ये वाढ झाली. कारण कोणत्याही सेवा ह्या क्षणार्धात पुर्ण करण्यासाठी जलद गतिने कार्य पुर्ण होण्यास मदत झाली.
- 6) डिजिटल पेमेंट सिस्टिमचा वापर झाल्यामुळे केंद्र व राज्य सरकारच्या कर संकलनात वाढ झाली. यामुळे कर संरचनेत सुलभता येण्यात मदत झाली.
- 7) डिजिटल पेमेंट सिस्टिमचा भारतात उपयोग झाल्यामुळे अनेक बँकाची क्षमता वाढली. बँका- बँकामधील आर्थिक व्यवहार सुलभ होत असल्यामुळे ग्राहकांना विविध सेवा-सुविधा उपलब्ध झाल्यामुळे बँकाच्या कामकाजाचा ताण कमी झाला.
- 8) भारतीय अर्थव्यवस्थेसमोर काळ्या पैशा सारख्या संकटावर मत करण्यासाठी ही सिस्टिम अनेक दृष्टीने उपयोगात आणली गेली. काळ्यापैशावर अंकुश बसला.
- 9) डिजिटल पेमेंट सिस्टिमचा उपयोग मोठ्या प्रमाणात केला जात असल्यामुळे वित्तीय साक्षरतेच्या प्रमाणात वाढ झाली.
- 10) लोकांची बचत व गुंतवणूक करण्याची प्रवृत्ती वाढली. तसेच राष्ट्रीय पातळीवर वृद्धी होण्यास मदत झाली.

### समारोप:-

भारतात माहिती आणि तंत्रज्ञानाच्या क्षेत्रात मोठ्या प्रमाणात प्रगती झाली आहे. सर्वच क्षेत्रात संगणक आणि संगणकीय जाळे याचा उपयोग केला जात आहे. संपूर्ण जग वल्ड वाईड वेबमुळे अतिशय जवळ आले आहे. आज सर्वच क्षेत्रात डिजिटल पेमेंट सिस्टिमचा वापर मोठ्या प्रमाणात केला जात आहे. इंटरनेटवरून वस्तूची खरेदी आणि इंटरनेटवरून बँकिंगचे व्यवहार या बाबी आता लोकप्रिय झालेल्या आहेत. ग्राहकांच्या प्रोत्साहनामुळे इलेक्ट्रॉनिक व्यापार अतिशय लोकप्रिय होत आहे. इलेक्ट्रॉनिक बँकींग चेक, क्रेडिट कार्ड, डेबिट कार्ड, स्मार्टकार्ड, ए.टी.एम. टेली-बँकिंग इत्यादी डिजिटल चलनाचा वापर करून बँकेच्या अधिकाधिक सेवा ग्राहकांपर्यंत पोहंचविण्याचा प्रयत्न केला जात आहे. थोडक्यात डिजिटल पेमेंट सिस्टिमचा वापर केल्यामुळे भारतीय अर्थव्यवस्थेवर अनेक अनुकूल परिणाम घडून येत आहेत.

### संदर्भग्रंथ सुची:-

- 1) योजना, विकास समर्पित मासिक , केन्द्रीय सदन, बेलापूर नवी मुंबई----- जुलै २०१९.
- 2) डॉ. कच्छवे, डॉ. घाडगे, प्रा.बालाजी कांबळे, भारतीय बँकिंग व्यवसाय श्रद्ध प्रकाशन, सोलापूर.
- 3) प्रा.एस.एम. कोलते, भारतीय बँकिंग प्रणाली, प्रशांत पब्लिकेशन्स, जळगाव.
- 4) डॉ. सावळे , डॉ.एल.एच.पाटल बँकिंग अरुणा प्रकाशन, लातूर
- 5) इंटरनेट वेबसाईट

## डिजीटल ग्रंथालय, साहित्य सादरीकरण व शोधप्रक्रिया : एक अभ्यास

प्रा. एम. एस. बिडवे

ग्रंथपाल

संभाजी कॉलेज, मुरुड ता. जि. लातूर

### सार

विसाव्या शतकाच्या अखेरीस नव्या तंत्रज्ञानाने मानवी जीवनात प्रवेश केला आहे. हे तंत्रज्ञान आता आपणास चांगलेच परिचित झाले आहे. ते माहिती तंत्रज्ञान या नावाने माहिती तंत्रज्ञानाचा झपाट्याने झालेला विकास सर्वच क्षेत्रात लक्षणीय सुधारणा करणारा ठरला आहे. यामध्ये ग्रंथालय आणि माहितीशास्त्र ही मागे राहिलेले नाही.

सदर शोध निबंधामधून डिजीटल ग्रंथालयाची संकल्पना व्याख्या, डिजीटल ग्रंथालय साहित्य सादरीकरण व शोधप्रक्रियेबाबत माहिती देण्याचा प्रयत्न केलेला असून शेवटी AACR - II प्रमाणे संदर्भ सुची दिलेली आहे

**शोधसंज्ञा**— डिजीटल ग्रंथालय, साहित्य सादरीकरण, शोध प्रक्रिया विषयमथळे, शब्दसमुह, मेटाडेटा.

### प्रस्तावना—

पूर्वीपासून साहित्याचे जतन करण्यासाठी वेगवेगळ्या प्रकारचे मार्ग आवलंबीले आहेत मुद्रणकलेचा शोध लागल्यापासून काही काळापर्यंत हे साहित्य कडीकुलपात ठेवून त्याचे जतन केले जात असे संशोधनामुळे मुद्रणकलेचा जसजसा विकास होत गेला तसतसे इतर विषयातील संशोधन आणि त्यावरील साहित्य यात प्रचंड वाढ होत गेली. याचाच परिणाम म्हणून ग्रंथालये आस्तित्वात आली, ग्रंथालय वाचनसाहित्याचे जतन संरक्षण व प्रसारण यासाठी शास्त्रीय पध्दतीने अभ्यास करण्यासाठी ग्रंथालय व माहितीशास्त्राचा उदय झाला.

मुद्रण आणि प्रकाशन तंत्रज्ञानाची प्रगती वाढीचा वेग पहाता असे वाटले होते की भविष्यातील ग्रंथालये ही पुस्तकाशिवाय असतील का ? मग ती कशी असतील ! 1970 च्या दशकात लॅकॅस्टरने पेपरलेस लायब्ररीचे भाकीत केले होते. परंतु त्यानीच ते मागे घेतले कारण ग्रंथ संदर्भ व नियतकालीके असे छापील साहित्याचे प्रकाशन व त्याच किंवा त्यापेक्षा जास्त वेगाने होत आहे त्याचप्रमाणे इतर स्वरूपात प्रकाशित होणा—या साहित्याचा व त्याच्या निर्मातीचा वेगही वाढत आहे. ग्रंथालयातील साहित्य संग्रहाचे स्वरूप त्यामुळे बदलले आहे. पूर्ण छापील नाही किंवा छापील साहित्य नाही असेही नाही या दोन्ही मधील अवस्था आहे मग त्यास संकरीत ग्रंथालय किंवा विविध माध्यमांनीयुक्त असे ग्रंथालय म्हणावे अशी स्थिती प्राप्त झाल्याचे दिसते

### 1.1.1. डिजीटल ग्रंथालय संकल्पना—

डिजीटल ग्रंथालय नकी कशास म्हणावे याबाबत मतांतरे आहेत त्यासाठी पुढील परिभाषीक संज्ञाचा उल्लेख केला जातो अंकीय ग्रंथालयाची संकल्पना 1995 साली Association of Research Libraries (ARL) ने खालील प्रमाणे मांडली आहे. डिजीटल ग्रंथालय ही काही एक वस्तू नाही तर त्यास विविध अंगे आहेत. डिजीटल ग्रंथालयात अनेक विविध माहितीस्रोत एकमेकांशी जोडण्यासाठी प्रगत संगणक व दळणवळण माहितीतंत्रज्ञानाची आवश्यकता असते.

माहितीस्रोत जोडणा—या जोडण्या पारदर्शी असतात डिजीटल ग्रंथालये माहिती सेवाचा लाभ सर्वकष स्वरूपात असतो डिजीटल ग्रंथालय या संकल्पनेमध्ये माहिती ही डिजीटल स्वरूपात साठवलेली असते आणि ती अंकीय माध्यमाद्वारे जाळयामार्फत उपभोगत्यांना वापरता येईल तसेच अंकीय ग्रंथालयाचा माहिती स्रोत एकाच ठिकाणी आसण्याची आवश्यकता नाही डिजीटल ग्रंथालय परिपूर्ण स्वयंचलीत स्वरूपाचे असून त्यातील संपदाही केवळ अंकिय स्वरूपात आहे

### १.१.२ डिजीटल ग्रंथालयाची व्याख्या—

#### 1. Birning ( 1994)

यांच्या मते “ मल्टिमिडीया अंकीय स्वरूपातील माहितीच्या जगभर वेगाने विस्तारीत आसलेल्या माहिती प्रत्यक्ष व अप्रत्यक्ष शोधण्याची सुविधा पुरविणा—या संरचेली डिजीटल ग्रंथालय म्हणतात.”

#### 2.आर्मस डब्लू (१९९५) :

यांच्या “ मते अंकिय ग्रंथालयाच्या ठिकाणी साहित्य संग्रह हा अंकिय स्वरूपात साठवलेला असतो व नेटवर्कच्या माध्यमातून तो वापरता येतो असे ग्रंथालया वापरण्यासाठी संग्रह वमाहितीसेवांचे व्यवस्थापन केलेले असते.”



### १.१.३.डिजीटल ग्रंथालय व साहित्य सादरीकरण

डिजीटल ग्रंथालयात साहित्य संग्रहित करत असताना संग्रहात कुठल्या स्वरूपातील साहित्य आहेत त्याचा आराखडा कसा आहे आणि ती कशी दिसतात या गोष्टींना महत्व आहे.

#### १.निश्चीत आराखडा असलेले साहित्य

ग्रंथाचे सादरीकरण ज्याप्रमाणे केलेले असते त्या त्याचप्रमाणे डिजीटल ग्रंथालयात साहित्याचे सादरीकरण केल्यास ते उपयुक्त होते उदा. मुखपृष्ठ, ग्रंथशिर्षक, अनुक्रमणिका या क्रमाने मांडण्याची सुविधा निर्माण करता येते त्यात प्रत्येक प्रकारणाच्या शिर्षकास क्लिक केल्यावर त्या प्रकरणाची पाने क्रमाक्रमाने वाचता येतात आपण ग्रंथ वाचताना कुठे आहोत याची आठवण देणा— या खुणा या पध्दतीने प्रत्यक्ष ग्रंथ वाचल्याचे समाधान वाचकास मिळू शकते

#### २.निश्चीत आराखडा नसलेले साहित्य

वरीलप्रमाणे कुठेही वाचताना वेगळेपणा न ठेवता साहित्य क्रमाने उपलब्ध करून देणे पहिल्या पानानंतर पुढील पमांचे क्रमांक बदलले की ते पान वाचण्यासाठी सादर केले जाते अशा पध्दतीत ग्रंथ वाचताना ख—या ग्रंथाचा आभास मुळीच होत नाही व अशी पध्दत फारशी उपयोगी पडत नाही.

#### ३.पानाची प्रतिमा

पानाची प्रतिमा घेऊन टपावर वरवरची ओ. सी. आ. प्रक्रिया करून साहित्य प्रकार सादर करण्याची जड पध्दत असते परंतू मजकुरातील चुकासह सादरीकरण केल्याने त्याबाबतची शोधप्रक्रिया प्रभावी होऊ शकत नाही

#### ४.पानाची प्रतिमा व त्यातून विशीष्ट मजकुर निवडणे

पानाची प्रतिमा होऊन त्यावर वरवरची ओ.सी. आ. प्रक्रिया करून साहित्यप्रकार सादर करण्याची पध्दत असते परंतू मजकुरातील चुकासह सादरीकरण केल्याने त्याबाबतची शोधप्रक्रिया प्रभावी होवू शकत नाही.

#### ५.ध्वनीमुद्रीत किंवा फोटो प्रकार साहित्याचे सादरीकरण

ग्रंथालयसंग्रहीत ध्वनिमुद्रीका तसेच फोटोचे डिजीटलायझेशन करून त्याबाबत वर्णनात्मक माहिती देवून प्रत्यक्ष ध्वनीमुद्रीका व फोटो सादर करण्याची पध्दती वापरली जाते संवादात्मक कार्यक्रमांचे डिजिटाइज्ड सादरीकरण केले जाते

#### ६.व्हिडीओ

ध्वनिमुद्रीका व फोटोग्राफप्रमाणे वेब ब्राउझरच्या माध्यमाने Plug-Ins ची सोय असते विविध स्वरूपातील व्हिडीओ फिल्म डिजीटल ग्रंथालयाच्या माध्यमातून सादरकेला जातात.

#### ७.संगीत

शास्त्रशुध्द पध्दतीने संगीत ऐकणे त्याचे नोटेशन पाहावे व नवीन संगीताची निर्मीती करणे अशा सर्व प्रक्रिया डिजीटल ग्रंथालयामार्फत करणे शक्य होते.

#### ८.परदेशी भाषेतील साहित्यप्रकार

यापूर्वी इतर भाषेतील साहित्य हाताळताना वेब ब्राउझरकडे त्या भाषेचे फॉन्टस डाउनलोड करणे जरूरीचे असायचे पण आजकाल जवळजवळ सर्व भाषांची लिपी हाताळणारे ब्राउझर उपलब्ध आहेत. त्याच्या आधारे सामान्यपणे कुठल्याही भाषेतील ग्रंथाचे हुबेहुब सादरीकरण करणे शक्य झाले आहे.

#### ९. मेटाडेटा सादरीकरण

पारंपरीक ग्रंथालयात ज्या पध्दतीने साहित्याची सुचीबध्द व इतर सर्व माहिती वेगळी संग्रहीत करण्याची पध्दत आहे त्यास मेटाडेटा संग्रह करणे म्हणतात. साहित्य सादर करतानाही वाचकांना मेटाडेटाच्यासह साहित्य सादर केल्यास त्यांचा उपयोग होतो उदा. लेखक शिर्षक, सार, संदर्भसूची अनुक्रमणिका मुखपृष्ठ प्रतिमा इ

#### १.१.४. डिजीटल ग्रंथालयाची शोधप्रक्रिया

पारंपारीक ग्रंथालयात साहित्य सुचीबध्द माहितीच्या अधारे शोधले जाते ग्रंथ शोधल्यावरग्रंथालयामधील सुचीतून माहिती शोधने वाचक आपल्या पध्दतीने करतो डिजीटल ग्रंथालयात मुख्यसाहित्य व त्यासबंधी सुचीबध्द माहिती एकत्रीतसंग्रहीत असल्याने शोधप्रक्रियेस खूप वाव असतो. या शोधप्रक्रियेस संगणकाची जोड असल्याने शोधप्रयत्न निश्चीत यशस्वी होतो या शोधप्रक्रियेस पुढील शोधपध्दतीचा वापर केला जातो.

### १.बुकियन अलजेब्रा शोध पध्दत

या पध्दतीत And OR व Not आणि किंवा व नाही या तीन ऑपरेटरचा वापर केला जातो वाचकास येणा—या शोधास योग्य तो ऑपरेटर निवडून शोधप्रक्रिया पूर्ण करता येते

### २.शब्दसमुहाच्या अधारे शोध

एकापेक्षा अनेक शब्दसमुह एकत्र संग्रहित डिजीटल मजकुरातून माहिती शोधण्याची पध्दत उपलब्ध असते त्यामुळे विशिष्ट शब्दसमुह ज्या ठिकाणी एकत्रीत आढळेल तो मजकुर शोधला जातो.

### ३. वरवरचा शोध

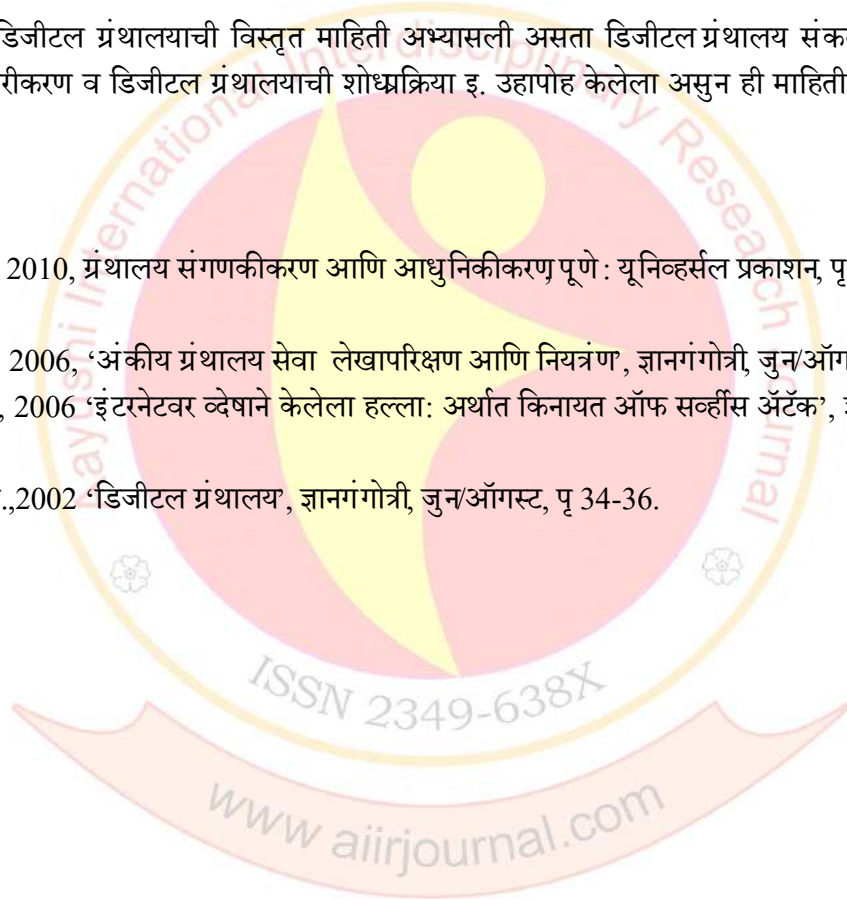
डिजीटल ग्रंथालयातील संग्रहित माहितीतून ठराविक मुदयाच्या आधारे माहिती शोधता येते उदा वर्तमानपत्राची नेमक्या दिवसाची तारखेची आवृत्ती कुठल्याही भाषातील अनुवर्णाप्रमाणे भौगोलीकमाहिती घटकाप्रमाणे विषयमथळे शब्दसमुह संक्षिप्त स्वरूपे इ. विविध पध्दतीने ढोबळमानाने माहिती शोधण्याच्या नेमक्या पध्दती वापरल्या जातात.

### सारांश

अशाप्रकारे डिजीटल ग्रंथालयाची विस्तृत माहिती अभ्यासली असता डिजीटल ग्रंथालय संकल्पाना व्याख्या डिजीटल ग्रंथालय साहित्य सादरीकरण व डिजीटल ग्रंथालयाची शोधप्रक्रिया इ. उहापोह केलेला असून ही माहिती निश्चित उपयोगी पडणार यात शंका नाही.

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## डिजिटल साक्षरता आणि भारतीय अर्थव्यवस्था

श्रीमती प्रा. डॉ. मिनाश्री भास्कर जाधव

अर्थशास्त्र विभाग प्रमुख

शि.म. ज्ञानदेव मोहेकर महाविद्यालय,  
कळंब, ता. कळंब, जि. उस्मानाबाद

### गोषवारा :

डिजिटल अर्थव्यवस्थेच्या संवर्धनासाठी अत्यावश्यक घटकांपैकी एक म्हणजे सुरक्षित डिजिटल व्यवहार हा आहे. रोकडविरहित अर्थव्यवस्था याचा अर्थ जास्तीत-जास्त व्यवहारात रोख रकमेचा कमीत कमी वापर असा होतो. दुसऱ्या शब्दात सांगायचे झाल्यास रोख रकमेचा पुरवठा कमी असा होत नाही, तर डिजिटल व्यवहारांचा जास्तीत-जास्त उपयोग, जसे की डेबिट कार्ड, क्रेडिट कार्ड, इंटरनेट बँकिंग आणि मोबाईल फोनवरील ॲपद्वारे केलेले व्यवहार असा आहे.

भारतासारख्या विकसनशील देशात कोणतीही वस्तू किंवा सेवा खरेदी करताना रोख रक्कम हीच सर्वात महत्वाची आणि प्रमुख पद्धती आहे. मात्र अमेरिका आणि युरोपसह बहुतेक सर्व विकसित देशात वस्तु व सेवा खरेदी करताना डिजिटल व्यवहार हीच मुख्य पद्धती वापरली जाते. भारत हा कृषीप्रधान देश म्हणून ओळखला जातो. तसेच भारत हा खेड्यांचा देश म्हणूनही ओळखला जातो. 2011 च्या जनगणनेनुसार देशात 6 लाख 40 हजार 867 इतकी खेडी आहेत. देशातल एकूण लोकसंख्येच्या 68.84 टक्के इतकी लोकसंख्या ग्रामीण भागात वास्तव्य करते. ग्रामीण भागात अजूनही आवश्यक सोयी सुविधा पोहचल्या नाहीत. अनेक खेड्यांमध्ये अजूनही पूर्णवेळ विजेची सोय नाही. नेट वापराचे प्रमाण 27 टक्के आहे. जे की इतर राष्ट्रांच्या तुलनेत कमी आहे. भारतात स्मार्ट फोन वापराचे प्रमाण आजही 17 टक्के इतकेच आहे.

काळा पैसा, विदेशातून येणाऱ्या नकली नोटांचा प्रसार व वापर, भ्रष्टाचार, दहशतवाद रोखण्यासाठी भारत सरकारने एक महत्वाचा व ऐतिहासिक निर्णय घेतला. तो म्हणजे 8 नोव्हेंबर 2016 रोजी मध्यरात्री पाचशे व हजार रूपयांच्या नोटा व्यवहारातून बंद करण्यात आल्या. त्यामुळे भारतीय अर्थव्यवस्थेवर त्याचे चांगले वाईट परिणाम आपल्याला पहायला मिळाले. याचा आढावा प्रस्तुत संशोधन अभ्यासात घेण्यात आला आहे.

### प्रस्तावना :

भारतीय अर्थव्यवस्था ही जगातील सर्वात वेगाने वाढणारी अर्थव्यवस्था आहे. चलन निश्चलनीकरणाच्या प्रक्रियेत अर्थव्यवस्थेचे अधिकाधिक डिजिटलीकरण होत आहे. हेच चलन निश्चलनीकरणाचे उद्दिष्ट आहे. क्रयशक्तीचा विचार करता आपली जगातील तिसऱ्या क्रमांकाची अर्थव्यवस्था आहे. अर्थव्यवस्थेच्या आकाराचा विचार करता आपली सातव्या क्रमांकाची अर्थव्यवस्था आहे. त्यामुळे या निश्चलनीकरणाच्या प्रक्रियेत रोखीने व नोंद नसलेल्या व्यवहारांना चाप बसेल व सरकारचा महसूल वाढेल. याउलट निश्चलनीकरणामुळे भारतीय अर्थव्यवस्थेला तोटेही सहन करावे लागणार आहेत. त्यामध्ये सर्वात मोठा फटका ग्रामीण अर्थव्यवस्थेला बसलेला दिसून येतो. चलन निश्चलनीकरणामुळे भारतीय अर्थव्यवस्थेत अचानकपणे घडवून आणलेला बदल अल्प रोखीच्या अर्थव्यवस्थेकडे मार्गस्थ करण्यात आला आहे. सध्याच्या विमुद्रीकरणामुळे अर्थव्यवस्थेतील रोखता अचानकपणे खंडीत झाल्याने राष्ट्रीय उत्पन्न, औद्योगिक उत्पादन, वस्तु व सेवा बाबतची मागणी, रोजगार, इत्यादीमध्ये घट झाल्याचे दिसून आले. विमुद्रीकरणासंबंधीचे निर्णय घेण्यापूर्वीच विकास, उत्पन्न, गुंतवणूक, बचत, उत्पादन, रोजगार, मागणी, इ. संदर्भात प्रामुख्याने ग्रामीण अर्थव्यवस्था विचारात घेणे आवश्यक आहे. निश्चलीकरणामुळे लोकांची पैसे खर्च करण्याची शैली, जीवनशैली यात बदल होणार असून प्रामाणिक राहण्यासाठी प्रोत्साहन देण्याचा सरकारचा प्रयत्न आहे. त्याचबरोबर हळूहळू कॅशलेस समाज निर्माण करण्याचाही सरकारचा प्रयत्न आहे. काळ्या पैशाविरोधात आणखी कठोर पावले उचलत सरकारने बँकेत अडीच लाख रूपयांपेक्षा अधिक रोख रक्कम भरताना या उत्पन्नाचा स्रोत बेकायदेशीर आढळल्यास प्राप्तीकरासह आणखी 200 टक्के कर दंड म्हणून आकारण्यात येणार आहे.

### निश्चलनीकरण म्हणजे काय ?

‘निश्चलनीकरण म्हणजे वस्तूची देवाण-घेवाण रोख रकमेशिवाय करणे होय.’ निश्चलनीकरणामध्ये पैशाची देवाण-घेवाण फक्त कार्ड, चेक, डीडी, नेटबँकिंग, फोन बँकिंग, ई-वॉलेट इत्यादी गोष्टींनी व्यवहार करणे. कारण पैसा ही वस्तू नाही किंवा पैसा ही साठवून ठेवण्याची गोष्ट नसून तो एक विनियोग किंवा हस्तांतर करण्याचे एक साधन आहे. निश्चलनीकरणाच्या प्रक्रियेतून अर्थव्यवस्थेचे अधिकाधिक डिजिटलीकरण होत आहे. हेच निश्चलनीकरणाचे उद्दिष्ट आहे. सरकारचा हेतू काळा पैसा बाहेर काढणे हा आहे. पण त्याचबरोबर लोकांनी स्मार्टफोनचा वापर करावा त्यामुळे रोकडरहित अर्थव्यवस्थेची वाट सुकर केली जाईल असा विश्वास केंद्रीय उद्योग व वाणिज्यमंत्री निर्मला सीतारामन यांनी व्यक्त केला. या युगात अद्यावत टेक्नॉलॉजीच्या सहाय्याने ही अशक्य गोष्ट शक्य झाली आहे. या निश्चलनीकरण प्रक्रियेमुळे अनावश्यक खर्चाला चाप लागल्यामुळे व नोटा टंचाईमुळे नजीकच्या काळात लोकांची खर्च करण्याची प्रवृत्ती कमी झाली आहे. अर्थव्यवस्थेत मागणी घटल्याने किंमती कमी होतील. याचा परिणाम महागाई कमी होऊन आर.बी.आय. ला अपेक्षीत असलेल्या पट्ट्यात राहील. त्यामुळे येत्या काळात आर.बी.आय. ला व्याज दरात मोठ्या प्रमाणात कपात करणे भाग आहे.



### संशोधन अभ्यासाची उद्दीष्टे :

1. डिजिटल पेमेंट संकल्पनेचा समग्र पातळीवर अभ्यास करणे.
2. डिजिटल साक्षरतेच्या माध्यमातून इलेक्ट्रॉनिक देय पद्धती समजून घेणे.
3. डिजिटल पेमेंटचे फायदे काय होतात ते समजून घेणे.
4. डिजिटल पेमेंट बाबत जनतेचा दृष्टीकोन जाणून घेणे.
5. डिजिटल पेमेंटच्या संदर्भात जाहिरातीच्या माध्यमातून जागृती निर्माण करणे.

### संशोधन पद्धती :

प्रस्तूत संशोधन अहवालामध्ये वेगवेगळी तथ्य संकलीत करत असताना व त्या तथ्याचे निर्वाचन आणि विश्लेषण वैज्ञानिक पद्धतीने करून निष्कर्ष काढावे लागतात. उपरोक्त संशोधन अधिकाधिक वस्तुनिष्ठ बनविण्यासाठी संशोधकाने येथे वर्णनात्मक व विश्लेषणात्मक संशोधन पद्धतीचा वापर केला आहे.

### डिजिटल पेमेंट सिस्टीमचा भारतीय अर्थव्यवस्थेवरील परिणाम :

भारतीय अर्थव्यवस्था ही जगातील वेगाने वाढणारी अर्थव्यवस्था आहे. निश्चलनीकरणामुळे रोखीने व नोंद नसलेल्या व्यवहारांना चाप बसेल व सरकारचा महसूल वाढेल. तसेच निश्चलनीकरणामुळे भारतीय अर्थव्यवस्थेवर काही चांगले वाईट परिणाम झाले आहेत किंवा निश्चलनीकरणाचे काही फायदे व तोटे पुढीलप्रमाणे.

### फायदे :

निश्चलनीकरणाचा भारतीय अर्थव्यवस्थेचा चांगलाच फायदा होईल. कारण ग्राहकांची क्रयशक्ती मंदावल्यामुळे नजीकच्या काळात अर्थव्यवस्था आकुंचली तरी भविष्यात अर्थव्यवस्थेला नक्कीच फायदा होणार आहे. निश्चलनीकरणामुळे अर्थव्यवस्थेवरील भ्रष्टाचाराला संपूर्णपणे आळा बसेल. निश्चलनीकरणामुळे नोटा छापण्यासाठी लागणाऱ्या करोडो रूपयांची बचत होईल. देशातील आतंकवादी आणि नक्षलवादी यांना चाप बसेल. काळा पैसा तयारच होणार नाही.

राजकीय पक्ष, रिअल इस्टेट, ज्वेलर्स व इतर व्यवसायामध्ये गुंतणारा पैसा पूर्णपणे थांबला जाईल. निश्चलनीकरणामुळे अर्थव्यवस्थेत जास्तीत-जास्त करप्रणाली सुटसुटीत होऊन बँकिंगसारखे पर्याय उपलब्ध होतील. काळ्या पैशासाठी असणारे सर्व अवैध धंदे बंद होतील.

निवडणुका पैशाच्या जीवावर न होता खऱ्याखऱ्या बौद्धिक क्षमतेवर होतील. रोखीने व नोंद नसलेल्या व्यवहारांना चाप बसेल. निश्चलनीकरणाने मंदावलेल्या मागणीचा 'सुखद' परिणाम किरकोळ महागाई दर 4 टक्के खाली येईल. 8 नोव्हेंबरपासून लागू झालेल्या निश्चलनीकरणामुळे यंदा हा दर अधिक प्रमाणात खाली आला आहे. पंतप्रधान नरेंद्र मोदी यांनी 500 व 1000 रूपयांच्या नोटांवर बंदी घातल्यामुळे भारतीय अर्थव्यवस्थेला सुमारे 300 कोटी रूपयांचा फटका होण्याची शक्यता आहे.

### तोटे :

निश्चलनीकरणाचे फायदे ज्याप्रमाणे भारतीय अर्थव्यवस्थेला होणार आहेत. त्याचप्रमाणे काही तोटे भारतीय अर्थव्यवस्थेला सहन करावे लागतील. निश्चलनीकरणाचे तोटे पुढीलप्रमाणे सांगता येतील.

निश्चलनीकरणाचा फटका देशातील सेवा क्षेत्राला बसला असून नोव्हेंबरमधली या क्षेत्राची वाढ गेल्या तीन वर्षांच्या तळात विसावली आहे. निव्केई इंडिया सेवा खरेदी व्यवस्थापक निर्देशांक हा देशातील सेवा क्षेत्रातील हा देशातील सेवा क्षेत्रातील कामगिरी तपासतो. मासिक तुलनेत नोंदला जाणारा हा निर्देशांक ऑक्टोबर मधील 54.5 वरून थेट 46.7 टक्के पर्यंत खाली आला. 50 टक्के खालील हा निर्देशांक सेवा क्षेत्राबाबत चिंता व्यक्त करणारा आहे.

निश्चलनीकरणाने चालू आर्थिक वर्षात देशाच्या आर्थिक विकासावर विपरीत परिणाम होईल. 2016-17 मध्ये देशाचे सकल राष्ट्रीय उत्पादन 7 टक्के असेल, असे आंतरराष्ट्रीय बँकेने अंदाजले आहे. 8 नोव्हेंबरपासून देशात लागू झालेल्या निश्चलनीकरणाचा देशाच्या अर्थव्यवस्थेवर अल्प कालावधीसाठी विपरीत परिणाम जाणवेल असे आशियाई विकास बँकेने म्हटले आहे. रोकडवरील व्यवहारावर अधिकतर अवलंबून असलेल्या देशातील लघु व मध्यम उद्योगांवर निश्चलनीकरणाचा विपरीत परिणाम अधिक जाणवेल असे आंतरराष्ट्रीय बँकेने म्हटले आहे. निश्चलनीकरणाचा सर्वात मोठा फटका ग्रामीण भागातील आठवडी बाजारावर झालेला आहे. कारण प्रत्येक व्यापारी शेतकरी हा रोखीने व्यवहार करतो. तो मशीन वापरू शकत नाही. निश्चलनीकरणामुळे फायदा कमी व तोटा जास्त झालेला आहे. पुढील 6 महिन्यात नोटबंदीमुळे अर्थव्यवस्थेत कमीत-कमी 3 लाख कोटींचे नुकसान होणार आहे.

### निष्कर्ष :

1. देशामध्ये आतापर्यंत कॅशलेस व्यवहार 3 टक्के होता तो जरी सरकारने प्रयत्न करून 15 टक्के पर्यंत वाढविला तरी पुढील 10 महिन्यांपर्यंत शेतकऱ्यांचे, मजूर वर्गाचे, लहान दुकानदारांचे खूप नुकसान होणार आहे.
2. सरकारने केलेल्या निश्चलनीकरणामुळे काळा पैसा रोखणे, खोट्या नोटा काढणे हे उद्देश फेल झाल्याचे दिसून येत आहे.
3. डिसेंबर नंतरही काळा पैसा तयार होतच राहील असा अंदाज आहे.
4. सरकारच्या खोट्या नोटा संपतील हा दावा फेल ठरेल.
5. सरकारने लोकांना आवश्यक सुविधा देऊन भ्रष्टाचार विरुद्ध संपादन केला तर भारतीय लोक कॅशलेस व्यवस्थेशिवायही खुशीने टॅक्स देतील.
6. निश्चलनीकरणामुळे सध्याच्या काळात अर्थव्यवस्थेचा वेग कमी झाला असला तरी भविष्यात अर्थव्यवस्थेचा फायदा होईल.

7. काळ्या पैशासंबंधी असणारे सर्व अवैध धंदे बंद होण्याच्या मार्गावर आहेत.
8. निश्चलनीकरणामुळे काही प्रमाणात का होईना भ्रष्टाचार कमी होतील.

**सारांश :**

निश्चलनीकरणाचे भारतीय अर्थव्यवस्थेवर चांगले-वाईट परिणाम दिसून आलेले आहेत. मोठ्या नोटा अंशतः रद्द केल्या गेल्याच्या निमित्ताने अर्थकारणावर देशभर जो जागर सुरू झाला आहे. तो सर्व भारतीय नागरिकांना खरे आर्थिक स्वातंत्र्य मिळाल्याशिवाय म्हणजे एक रक्तविहीन अर्थक्रांती झाल्याशिवाय आता थांबणार नाही. हा निर्णय यशस्वी होऊन देश पुढे जावा.

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## काळया पैशाला लगाम : रोखरहित अर्थव्यवस्था

### राहुल शिवाजी तिगोटे

संशोधक विद्यार्थी, अर्थशास्त्र विभाग,  
डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ,  
औरंगाबाद.

### डॉ. दीपक भुसारे

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पैठण, ता. पैठण, जि. औरंगाबाद.

### प्रस्तावना :

जगातील सर्वात मोठी लोकशाही भारत आहे, असा उल्लेख केला जातो. याचा आपणास अभिमान आहे. पण आपण आपल्या राष्ट्राच्या सदृढ विकासासाठी बांधिल आहोत का? असा प्रश्न निर्माण होतो. कारण काळा पैसा रोखण्यासाठी व अर्थव्यवस्थेचा सर्वांगीण विकास करण्यासाठी काही प्रयत्न करतो का? देशात आज रोखरहित व्यवहार करणे गरजेचे आहे. डेबिट कार्ड, क्रेडिट कार्ड, यु.पी.आय., ई-वॉलेट आदी सुविधांचा जास्तीत जास्त वापर करण्याची मानसिक तयारी आणि ज्ञान आज भारतीय लोकांस पूर्णपणे नाही. खरे तर काळा पैसा रोखण्यासाठी रोखरहित व्यवहार करणे अत्यंत आवश्यक आहे.

### विषयाची निवड :

देशातील अवैध मार्गाने होणारे व्यवहार रोखून त्यातून निर्माण होणाऱ्या काळया पैशावर कसा लगाम लावता येईल यासाठी आधुनिक तंत्रज्ञानाचा कसा वापर करता येईल या गोष्टींचा अभ्यास करण्यासाठी प्रस्तुत विषयाची निवड केली आहे.

### उद्दिष्टे :

१. रोकडमुक्त अर्थव्यवस्थेमुळे अवैध मार्गाने निर्माण होणारा पैसा थांबेल का हे पाहणे.
२. देशात रोकडमुक्त अर्थव्यवस्थेसाठी प्रयत्न होतात का ते पाहणे.

### गृहीतके :

१. नोटबंदीनंतर रोखरहित व्यवहारात वाढ झाली.
२. रोखरहित व्यवहारासाठी सरकारने प्रयत्न केले.

### पार्श्वभूमी :

भारतामध्ये मोबाईल व संगणक धारकांची संख्या दिवसेंदिवस वाढ चालली आहे. तरी इंटरनेट सुविधा व त्यांचा पुरेपूर फायदा यामध्ये आजसुद्धा आपण जगाच्या तुलनेत खूप मागे आहोत. आज सुद्धा आपण रोख व्यवहार करण्यावर जास्त भर देतो. इंटरनेटच्या माध्यमातून आपली फसवणूक होऊ शकते ही भीती आजही आपल्या मनात आहे. तेवढी मानसिकता आजही आपली नाही एक सर्वेक्षणामधून असे लक्षात आले आहे की, ६८ टक्के भारतीयांना रोखीने व्यवहार करण्याची सवय आहे. तसेच ५५ टक्के लोकांना या सुविधा किचकट वाटतात व २९ टक्के लोकांना रोखीने व्यवहार करणे नको वाटते. तर २७ टक्के लोकांना या व्यवहारांमध्ये फसण्याची भीती वाटते. १६ टक्के लोकांना या सुविधेची माहिती नसते.

भारतामध्ये या सर्व अडचणी रोखरहित व्यवहारासाठी आहेत तर या निवारणासाठी सरकार, बँका, खासगी संस्था, स्वतंत्र स्तरावर प्रयत्न करताना दिसतात. या प्रयत्नास यश आल्यास रोखीने व्यवहार कमी होतील. रोखरहित व्यवहारांची गरज ५०० / १००० च्या नोटा बंद केल्याने जास्त जाणवली कारण देशातील एकूण चलनापैकी ८४ टक्के चलन रद्द झाले होते. लोकांनी खूप धावपळ झाली व नेट बँकिंगचे महत्त्व सर्वांच्या लक्षात आले. आपल्या हातामध्ये पैसा नसला तरी आपण आपल्या गरजा बँकिंग क्षेत्रातल्या आधुनिक साधनांद्वारे भागवू शकतो. खर्च करू शकतो याचे अनेक पर्याय लोकांसमोर आले ते खालीलप्रमाणे –

### इंटरनेट बँकिंग :

मोबाईल बँकिंग, इंटरनेट बँकिंग हा रोखरहित व्यवहार करण्याचा प्रथम पर्याय आहे. यामुळे आपण एका खात्यातून दुसऱ्या खात्यात पैसे पाठवू शकतो. यासाठी बँकेने तीन पर्याय उपलब्ध करून दिले आहेत. त्यामध्ये 'NEFT, RTGS, IMPS' या सुविधांचा समावेश होतो. यामध्ये IMPS च्या माध्यमातून आपण २ लाखांपर्यंतची रक्कम पाठवू शकतो. त्यासाठी ५ रूपये ते १५ रूपये ते १५ रूपये शुल्क आहे. 'NEFT व RTGS, बँकांच्या कामकाजाच्या वेळेस व्यवहार करणे शक्य होते. त्यामध्ये सुरक्षेचे उपाय म्हणून इंटरनेट बँकिंगचा वापर करताना आपण ज्या मोबाईल किंवा संगणकावरून व्यवहार करत आहोत. त्यामध्ये अँटीव्हायरस असावा लागतो. तर संगणकावरून व्यवहार करत असताना ती लॅनशी जोडलेला नसावा. कारण लॅनमधून व्हायरस पसरू शकतो. त्यामुळे बँकिंग व्यवहार केल्या जाणाऱ्या संगणकावर स्वतंत्र इंटरनेट असावे त्याचबरोबर व्यवहार पूर्ण झाल्यावर या संगणकातील किंवा मोबाईलमधील कॅश डेटा लगेच डिलीट करावा तसेच त्यासाठी आभासी की-बोर्डचा वापर करावा.

### प्लॅस्टिक मनी :

प्लॅस्टिक मनीची ओळख इंटरनेट बँकिंग व मोबाईल बँकिंग यापेक्षा सोपा पर्याय म्हणून आहे. यामध्ये कार्ड, क्रेडिट कार्ड, ए.टी.एम. कार्ड, प्रीपेड कार्डचा समावेश होतो. आजकाल नोकरदार लोकांकडे डेबिट कार्ड असते. यामुळे रोखरहित व्यवहारामध्ये सर्वाधिक व्यवहार डेबीट कार्डच्या माध्यमातून होऊ लागले आहेत. हे व्यवहार खूप सोपे आहेत. कार्ड स्वाईप केल्यानंतर आपणास पीन क्रमांक



टाकावा लागतो. नंतर आपण आपल्या बँक खात्यातील पैसे थेट विक्रेत्याच्या खात्यात जमा करू शकतो. क्रेडिट कार्डच्या बाबतीत याच प्रमाणे आपण व्यवहार करू शकतो. यामुळे आपल्या सर्व व्यवहारांची नोंद होते व कर चुकवेगिरीला आळा बसतो. म्हणजेच काळा पैसा तयार होण्यावर निर्बंध येतात.

### UPI : Unified Payment Interface :

मोबाईल फोनचा वापर करून बँक खात्यातून पैसे पाठवण्याचे सर्वात सोपे साधन म्हणून UPI कडे पाहिले जाते. यामध्ये विक्रेत्यास थेट पैसे देता येतात. ऑफलाईन व ऑनलाईन असे दोन्ही पर्याय उपलब्ध आहेत. या सुविधेमध्ये आपणास डेबिट कार्ड नंबर किंवा आयएफएससी कोड किंवा नेट बँकिंग, ई-वॉलेटचा पासवर्ड आदि गोष्टी लक्षात ठेवण्याची गरज नसते. ही सुविधा वापरण्यासाठी बँकेत खाते आणि मोबाईल नंतर नोंदणीकृत असणे आवश्यक आहे. हे अॅप वापरण्यासाठी बँकेतून ग्राहकास त्याच्या मोबाईलमध्ये UPI आधारित अॅप डाऊनलोड करावे लागते. या अॅपमधून व्यवहार पूर्ण करण्यासाठी तुम्ही आभासी वापरकर्ता क्रमांक तयार करू शकता किंवा तुमच्या बँकेचा आयएफएससी कोड वापरू शकता. हे अॅप इतर अॅपच्या तुलनेत सुरक्षित मानले जाते. याची क्षमता एका वेळेस एक लाख एवढी आहे. यावरून केलेल्या सर्व व्यवहारांची नोंद होते व कर चुकवेगिरीला आळा बसतो.

### मोबाईल वॉलेटस :

मोबाईल वॉलेटस हे अत्यंत कमी वेळेत व्यवहार पूर्ण करते. पूर्वी केवळ ऑनलाईन वापरली जाणारी ही सुविधा आत मोठ्या प्रमाणावर अनेक ठिकाणी उपलब्ध झाली आहे. या सुविधेत क्रेडीट व डेबिट कार्ड याप्रमाणे स्वीप करण्याची गरज नसते. सेवा पुराणाच्या कंपनीच्या अॅपमध्ये एकदा नोंदणी केली की त्यानंतर पुढील व्यवहार अगदी सरळ व एका क्षणात करणे सोपे होते. आज बाजारामध्ये पेटिएम, फ्रीचार्ज, ऑक्सिजन, चिल्लर, मोबिक्वीक यांसारख्या कंपन्या आणि वॉलेट उपलब्ध करून देत आहेत. या सर्व साधनांकडून कोणत्याही प्रकारच्या करण्यात येणाऱ्या व्यवहारांची नोंद ठेवली जाते व त्यातून कर चुकवेगिरीला आळा बसतो.

### निष्कर्ष :-

१. रोखरहित व्यवहार करण्यासाठी अडचणी असल्या तरी साधने सुद्धा उपलब्ध झाली आहेत. फक्त त्याचा वापर जबाबदारीने करावा.
२. रोखरहित व्यवहार करताना सुरक्षिततेला सर्वाधिक प्राधान्य देऊन लोकांमध्ये विश्वास निर्माण करणे गरजेचे आहे.

### समारोप :

वरील सर्व साधनांच्या अभ्यासावरून असे लक्षात येते की, प्रत्येक व्यवहाराची जर नोंद झाली तर त्या व्यवहाराचे स्वरूप लक्षात येईल व त्यानुसार त्या व्यवहारावर कर लावता येईल. मोठ्या रकमांच्या व्यवहारावर लक्ष ठेवता येईल. रोखरहित व्यवहार केल्याने देशातील प्रत्येक व्यवहाराचा संबंध बँकेशी म्हणजेच पर्यायाने सरकारशी येईल व त्यामुळे आर्थिक पारदर्शकता निर्माण होऊन भ्रष्टाचार व काळा पैसा याला मोठ्या प्रमाणावर लगाम बसेल. हे सर्व घडून आणण्यासाठी अगोदर ही साधने वापरताना येणारे धोके टाळून लोकांच्या मनात याविषयी विश्वास निर्माण करणे गरजेचे आहे. तरच हे रोखरहित व्यवहाराचे स्वप्न साकार होईल.

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## निश्चिलनीकरण आणि रोकडविरहित अर्थव्यवस्था

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### प्रस्तावणा र

नोटबंदीने सर्व अर्थव्यवस्थेला रोख पैसे न वापरण्यास उत्तेजन मिळाले आहे. डिजिटल अर्थव्यवस्था असण्याबाबत कुणाचेच दुमत नाही, पण त्यासाठी पायाभूत सुविधांची गरज आहे. ग्रामिण भागात केवळ २०.८ टक्के एटीएम आहेत व ते सरकारी बँकांचे आहेत ८.५ टक्के एटीएम हे खासगी बँकांचे आहेत. ग्रामिण भागात एटीएमची संख्या कमी आहे. इ-वॉलेट व मोबाईल पेमेंटला स्मार्टफोन लागतो पण बऱ्याच लोकांकडे ते नाहीत. वेगवान इंटरनेट जोड आवश्यक असतो ती सुविधाही फारशी नाही. सार्वजनिक वायफाय, मोबाईल चार्जिंग स्टेशन सुविधा कमी आहेत. सायबर सुरक्षा हा चिंतेचा मुद्दा आहे. कारण यातील तपशील गुप्त राहणे आवश्यक असते. छोटे दुकानदार जेव्हा स्वाइप कार्ड स्वीकारतात, तेव्हा त्यांना जोखीम मुक्ततेची हमी असली पाहिजे. कार्डाची नक्कल झाली तर कष्टाचा पैसा जाऊ शकतो. ऑक्टोबर २०१६ मध्ये तीस लाख डेबिट कार्डची माहिती एटीएममधून फुटली व ग्राहकांना सांकेतांक (पिननंबर) बदलण्यास सांगण्यात आले. त्यानंतर महिनाभराने नोटबंदी झाली व कार्डाचा वापर वाढला. व्यवस्थेवर ताण वाढला. कार्ड मशीन काम करेनासे झाले व लोकांना तासन तास रांगेत उभे रहावे लागले. काळा पैसा, भ्रष्टाचार व दहशतवादाला आळा घालणे हा नोटाबंदीचा हेतू असल्याचे सरकारने सांगितले पण लोकशाही पध्दतीत राजकीय पक्षांना मिळणारा निधी हा भ्रष्टाचाराचा एक मोठा मार्ग आहे. उच्च स्तरीय भ्रष्टाचारात पैशाचा समावेश असतोच असे नाही. त्यामुळे राजकीय पक्षांच्या निधीत पारदर्शकता आणणे. आवश्यक आहे. पायाभूत सुविधा असणे आवश्यक आहे. धोरणात्मक उणिवा टाळल्या पाहिजेत. लोकांच्या अडचणी सरकारने समजून घेतल्या पाहिजेत तरच कॅशलेसचे उद्दिष्ट समस्या व जोखमीविना साध्य होईल.

भारताचे पंतप्रधान नरेंद्र मोदी यांनी ८ नोव्हेंबर २०१६ रोजी रात्री ८.३० वा. भारताच्या चलनाचे विमुद्रीकरण निर्णय जाहिर केला की, रात्री १२ नंतर ५०० व १००० च्या नोटा चलनातून बाद केल्या जातील. ३० डिसेंबर २०१६ पर्यंतच पोस्ट खात्यात / किंवा बँक खात्यात हे चलन भरता येईल. व त्याऐवजी पर्यायी चलन प्राप्त करता येईल. त्यानंतर या नोटा (चलनातून बाद झालेल्या नोटा) दिनांक ३१ मार्च २०१७ पर्यंत लेख प्रतिज्ञापत्र भरून रिझर्व्ह बँकेत जमा करता येतील. लवकरच ५०० रु. च्या व २००० च्या नवीन नोटा भारताच्या चलनात व व्यवहारात येतील या नोटा विशेष प्रकारच्या असतील. नोटा बँकेत अथवा पोस्टात बदलण्यासाठी किंवा जमा करण्यासाठी आधार कार्ड / पॅन कार्ड आवश्यक करण्यात आलेले आहे. सी.एन.जी गॅस, पेट्रोल पंप, हॉस्पिटल आणि धातूक बाजारात दिनांक ११ नोव्हेंबर २०१६ पर्यंत जुन्या ५०० व १००० रु. च्या नोटा स्विकारल्या जातील. दिनांक ८ नोव्हेंबर २०१६ च्या मध्यरात्रीपासून, (००.०० तास) भारतातील सर्व बँकांचे एटीएम बंद राहतील. ते दिनांक ९ व १० नोव्हेंबरला देखील बंद राहतील.

या द्वारे खोटा चलनाला पण रोध बसणार आहे. काळ्या पैशावर, भ्रष्टाचारावर तसेच मोठ्या प्रमाणात असणाऱ्या बनावट नोटांच्या परीचलनावर याद्वारे आळा बसू शकेल. त्या सोबतच हत्यारांच्या स्मगलिंग करीताच्या निधिवर, हेरगिरीवर आणि दहशतवादावरही नियंत्रण येईल असा भारत सरकारचा दावा आहे. यामुळे भारतातील अनेकांना आपली बेहिशोबी संपत्ती नाईलाजाने बँकेत जमा करावी लागली, त्यांची मोठीच पंचायत झाली. सर्वप्रथम म्हणजे नोट बंदी या मोहिमेचे चुकीचे नाव आहे. दुसरा प्रचलीत शब्द म्हणजे निश्चिलनीकरण असा शब्दप्रयोग करावा.

### निश्चिलनीकरण

निश्चिलनीकरण म्हणजे अशी कृती की ज्याद्वारे एखाद्या देशाचे सरकार एक किंवा एकापेक्षा अधिक चलनाचे वैध स्वरूप काढून घेते. निश्चिलनीकरणाच्या प्रक्रियेत सर्वच चलनी नोटा काढून घेणे, व ज्या नोटा काढून घेतल्या जाणार आहेत त्यांच्या नेमक्या तेवढ्याच मूल्याच्या नव्या चलनील नोटा बाजारात आणणे अथवा सर्व जुन्या चलनी नोटांच्या बदल्यात संपूर्णपणे नवीन चलनी नोटा बाजारात आणणे यांचा समावेश आहे. भ्रष्ट मार्गाने जमा केलेला काळा पैसा उघड करण्याच्या हेतूने सहसा निश्चिलनीकरणाची ही प्रक्रिया राबवली जाते. जॉन इटवेल. पालग्रेव्हच्या राजकीय अर्थशास्त्रज्ञाने निश्चिलनीकरण म्हणजे एखाद्या नाण्याचा उपयोग सरकारने थांबवणे आणि अधिकृतपणे ते चलनातून काढून घेणे अशी व्याख्या केली आहे. एन. बी. घोडके, एनसायक्लोपिडिक डिक्शनरी ऑफ इकॉनॉमीने चलनी नोटांच्या प्रमाणात निश्चिलनीकरण म्हणजे चलनी नोटांचे चलनातून घाऊक काढून घेणे असे म्हटले आहे. थॉर्प अँड थॉर्प ( २०१०) यांनी काळ्या बाजारातील तसेच बेहिशोबी पैशावर हल्ला चढवण्यासाठी चलनाचे बाजारातून काढून घेणे म्हणजे निश्चिलनीकरण असे मत व्यक्त केले आहे. केवळ भारतातच नव्हे तर अनेक देशानी उदाहरणार्थ अमेरिकेने १९६९ मध्ये, झैरेने १९९० मध्ये, ऑस्ट्रेलियाने १९९६ मध्ये, डिम्बाब्बेने २०१० मध्ये तर उत्तर कोरियाने २०१० मध्ये निश्चिलनीकरणाचा पर्याय वापरला आहे. परंतु अमेरिका व ऑस्ट्रेलिया या प्रयत्नाला यश मिळाले तर अविक्सित आफ्रिकन देशांमध्ये हे प्रयत्न अपयशी ठरले.

### भारतामधील निश्चिलनीकरण

५०० व १००० रुपयांच्या नोटांवर बंदी घालण्याची भारतातील हि आतापर्यंतची तीसरी वेळ आहे. ८ नोव्हेंबर २०१६ रोजी भारताचे पंतप्रधान नरेंद्र मोदींनी दिलेल्या धक्क्यातून अनेकजण आजुन सावरलेले नाहीत. यापूर्वी दोन वेळा नोटांचे डिमॉनिटायझेशन करण्यात आले होते. सर्वात प्रथम १९४६ साली १०००, ५००० आणि १०,००० रुपयांच्या नोटा रद्द करण्यात आल्या होत्या. त्यानंतर सुमारे वर्षा-दिड वर्षाने भारताला स्वातंत्र्य मिळाले होते. तत्पुर्वी १९३८ मध्ये रिझर्व्ह बँक ऑफ इंडियाने सर्वात मोठे चलन १०,००० रु. ची नोट छापली होती. विशेष म्हणजे या तीन्ही नोटा पुन्हा १९५४ मध्ये व्यवहारात आणल्या गेल्या. १९७० च्या दशकात केंद्र सरकारने काळ्या पैशाची एकूण रक्कम ठरविण्यासाठी, त्याची व्याप्ती समजण्यासाठी वांचु

समितीची नेमणूक केली. वांचु समितीने १९७१ मधील आपल्या काळयापैशावरील अहवालात काळा पैसा म्हणजे देशाच्या अर्थव्यवस्थेला जडलेला कर्करोग आहे. त्याला वेळीच आळा घातला नाही तर निश्चितच अर्थव्यवस्थेचा संपूर्ण नाश करतो, असे वर्णन केले आहे.

समिती अहवालात काळा पैसा म्हणजे केवळ बेहिशोबी चलनच सूचित करत नाही तर असा पैसा जो साठेबाजी करून किंवा उघड व्यापारी प्रवाहांच्या बाहेरून चलनात असतो शिवाय सोने, दागिने आणि मुल्यवान धातू यात गोपनीयरीत्या केलेली गुंतवणूक आहे. तसेच हिशोबवहयामध्ये दाखवलेल्यापेक्षा जास्त किंमतीच्या जमिन आणि इमारतीच्या मालमत्ता आहे, असा विचार मांडला आहे. या समितीने उच्च मूल्यांच्या चलनी नोटा काढून घेण्याची सूचना केली होती. त्यानंतर १९७७ साली जनता पक्षाचे सरकार सत्तेवर आले. त्यावेळचे पंतप्रधान मोरारजी देसाई यांनी बनावट नोटा व काळा पैसा शोधण्याचा चंगच बांधला. दी हाय डिनोमिनेशन बँक नोटस (डिमॉनीटायझेशन) अँक्ट संमत करण्यात आला. या कायद्या अंतर्गत २६ जानेवारी १९७८ साली १०००, ५००० व १०,००० रुपयांच्या नोटा दुसऱ्यांदा रद्द करण्यात आल्या. त्यावेळी आय. जी. पटेल हे रिझर्व्ह बँकेचे गव्हर्नर होते. तीसऱ्या वेळी म्हणजे ८ नोव्हेंबर २०१६ रोजी पंतप्रधान नरेंद्र मोदी यांनी नोट बंदीचा निर्णय जाहिर केला. त्यांच्या या निर्णयाला आर बी आय चे गव्हर्नर उर्जात पटेल यांनी पाठींबा दिला आहे. इतकेच नव्हे तर हा अत्यंत धाडसी निर्णय असल्याची पुस्तीहि त्यांनी जोडली आहे.

रद्द केलेल्या नोटा देशाच्या चलनात ८६ टक्के म्हणजे एकूण देशांतर्गत उत्पन्नाच्या १२.२ टक्के होत्या त्या चलनेतून बाद झाल्या. त्याची जागा आता नविन नोटांनी घेतली आहे. या निर्णयाचे अनेक महत्त्वाचे परीणाम अपेक्षित आहे. परंतु बरेच अर्थतज्ञ या निर्णयाच्या यशस्वीतेबाबत शंका व्यक्त करतांना दितस आहे. येणारा काळच हा निर्णय किती योग्य किंवा अयोग्य होता हे ठरवेल.

### निश्चलनीकरण करणाचे महत्त्वाचे हेतू.

१. अर्थव्यवस्थेतील काळा पैसा उघड करणे.
२. भ्रष्टाचारावर नियंत्रण.
३. दहशतवादी आणि अतिरेकी कारवायांसाठी देशातील तसेच शेजारी देशातील संघटनाकडून पुरवला जाणारा बनावट नोटांचा डाव हाणून पाडणे.

निश्चलनीकरणाच्या निर्णयाची घोषणा करतांना पंतप्रधानांनी म्हटले की, अनेक वर्षे या देशाला भ्रष्टाचार, काळा पैसा आणि दहशतवाद हे पीडादायक ताप आहे. असे वाटत होते आणि विकासाच्या स्पर्धेत भारताला पुढे जाऊ देत नव्हते. त्यांनी पुढे असेही जाहीर केले की, भ्रष्टाचार आणि काळया पैशाची पकड सोडवण्यासाठी आम्ही असा निर्णय घेतला आहे की, सद्या ज्या ५०० आणि १००० रुपयांच्या नोटा बाजारात आहेत, त्या ८ नोव्हेंबर २०१६ च्या मध्यरात्रीपासून वैध राहणार नाहीत. या सर्वांच्या वर या निर्णयाचा आणखी एक हेतू असा होता की, या प्रयोगातून मिळालेले करपात्र उत्पन्न आर्थिक वाढीला चालना देण्यास तसेच विकासकामांसाठी व गरीबांच्या आर्थिक उन्नतीवर खर्च केले जाईल. शेवटी निश्चलनीकरणाच्या प्रयत्नाचा हेतू स्वच्छ विकास व विकासात समानता साध्य करणे हाच होता.

काळा पैसा हा भ्रष्टाचार, लाच, काळा बाजार, साठेबाजी, शस्त्रतस्करी, दहशतवाद, तस्करी, बंदी घातलेल्या पदार्थांचा अवैध व्यापार, हवालामार्गे मिळवलेले काळे उत्पन्न, गलिच्छ धन, बेहिशोबी उत्पन्न, बनावट नोटा अशा नावांनी ओळखला जातो. हे अयोग्य उत्पन्न आणि पैसा प्राप्तीकराच्या जाळ्यात येत नाही आणि काही थोड्या टक्के भ्रष्ट व गुन्हेगार लोकांनी जमा केलेला हा पैसा भारताची आर्थिक वाढ व विकासाच्या मार्गात धोंड ठरला आहे. थोडक्यात, काळा पैसा हा बेहिशोबी पैसा असून कराच्या जाळ्यातून सुटलेले उत्पन्न आहे जे रोख रक्कम तसेच जमिन, घर, सोने, दागिने आणि इतर मुल्यवान टिकाऊ मालमत्ते गुंतवणुकीच्या स्वरूपातील साठवले जाऊ शकते देशात मोठ्या प्रमाणावरील उच्च आर्थिक विषमता, दारीद्र्य आणि बेराजगारी राहण्यास काळया पैशाचे अस्तित्व हे एक मूलभूत कारण आहे. एनआयपीएफपीनुसार, काळे उत्पन्न म्हणजे एकूण उत्पन्न जे करपात्र तर आहे परंतु कर अधिकाऱ्यांना त्याची माहिती देण्यात अलेली नाही. आजची परिस्थिती-नोटबंदीमुळे गैरसोयीचे दिवस आता सरले आहे. आर्थिक व्यवहार सुरळित झाले आहेत. बँकाकडे आता पुरेसा पैसा आहे व त्यामुळे आर्थिक वाढीत अडथळा येणार नाही. पैसा हा ठेवींच्या स्वरूपातही आहे त्यामुळे कर्जाचे व्याज दर कमी होत आहेत. बाजारात असलेला लाखो करोडोंचा पैसा आता बँकिंग व्यवस्थेत आला आहे. या बेनामी पैशाला आता अधिकृत मालक मिळाले आहेत व त्याचा चांगला वापर करता येईल. बँकिंग व्यवस्था व अर्थव्यवस्थेचा आकार बदलला आहे. माध्यम व दीर्घ मुदतीत देशांतर्गत उत्पन्न बाढेल व त्यात काळा पैसा नसेल. बँकिंग व्यवस्थेत येणारा पैसा व व्यवहारांवर प्रत्यक्ष व अप्रत्यक्ष कर लादण्यास पुरेसा वाव आहे. केंद्र व राज्य सरकारे यांना यातून फायदा होईल तसेच अर्थव्यवस्था ही रोख व डिजिटल अशा दोन्ही पध्दतींच्या व्यवहारावर चालेल.

### रोखविरहित अर्थव्यवस्था

निश्चलनीकरणाने रोख नोटांची टंचाई झाली व सरकारला इलेक्ट्रॉनिक पेमेंटला प्राधान्य द्यावे लागले. निश्चलनीकरणाचा खरा हेतू हा काळा पैसा बाहेर काढणे, दहशतवादाचा अर्थ पुरवठा थांबवणे हा होता. निश्चलनीकरणाने रोखविहीन अर्थव्यवस्था ही गरज बनली. २७ नोव्हेंबर २०१६ च्या 'मनकी बात' कार्यक्रमात पंतप्रधान मोदी यांनी रोखमुक्त समाजाची कल्पना मांडली होती. शंभर टक्के रोखमुक्त समाज अशक्य आहे हे खरे पण आपण कमी रोखीच्या दिशेने वाटचाल करू शकतो. नंतर रोखमुक्त समाजव्यवस्था शक्य आहे.

निश्चलनीकरणाने रोखमुक्त अर्थव्यवस्थेची बीजे पेरली असली तरी २०१४ मध्ये सरकारने जनधन योजना सुरु केली होती. २० एप्रिल २०१६ अखेर २२० दशलक्ष खाती त्यात उघडली गेली. फेब्रुवारी २०१६ मध्ये सरकारने कार्ड व डिजिटल पेमेंटला उत्तेजन दिले. पैसे बाळगण्याच्या नेहमीच्या व्यवस्थेपासून इलेक्ट्रॉनिक व डिजिटल पेमेंट पध्दतीस उत्तेजन मिळाले. काळा पैसा रोखमुक्त अर्थव्यवस्था क्रेडिट व डेबिट कार्डवर चालते. रोखीएवजी ऑनलाईन शापिंगला महत्व आले. रोखमुक्तीची संकल्पना म्हणजे काळा पैसा परत अर्थव्यवस्थेत आणण्याचा मार्ग आहे. डिजिटल व्यवहारात पैसे जवळ बाळगावे लागत नाहीत उलट इ वॅलेटचा वापर केला जातो. बँक खात्यातून रक्कम थेट घेतली जाते. इंटरनेट बँकिंग व युनिफाईड पेमेंट इंटरफेस (युपीआय) यांचाही वापर रोखमुक्तीसाठी केला जात आहे. आगामी काळात क्रेडिट व डेबिट कार्डही कालबाहया होतील. स्मार्टफोन, मोबाईल फोन यावरून पुढील व्यवहार होतील. एटीएममधून पैसे काढण्यासाठी कार्ड लागणार नाही. जागतिक बँकेने जागतिक विकास अहवाल (२०१६) मध्ये म्हटले आहे की, अनेक प्रसंगात डिजिटल तंत्रज्ञानामुळे वाढीला चालना मिळाली असून संधी विस्तारीत झाल्या आहेत तसेच सेवांच्या वितरणात सुधारणा झाली आहे. विकसित अर्थव्यवस्थेत डिजिटल अर्थव्यवस्थेचा आकार मोठा असल्याने विकसनशील देशांच्या तुलनेत तेथे भ्रष्टाचार



कमी होण्याचा हा घटक ठरला आहे. दुसरीकडे, विकसनशील देशांत तो काळा पैसा, मोठ्या आकाराच्या अनौपचारिक अर्थव्यवस्थेचे अस्तित्व आणि दहशतवादी कारवाया चालू राहणे तसेच करबुडवेगिरीचा मुख्य मुद्दा राहिला आहे. त्यामुळे भ्रष्टाचार आणि काळा पैसा या शत्रुच्या तावडीतून सुटण्यासाठी तसेच सामाजिक न्यायासह अधिक पारदर्शक व स्वच्छ आर्थिक वाढ होण्यासाठी रोख रकमेचा कमी वापर हा उपाय सुचवण्यात आला आहे. दुसऱ्या शब्दात रोकडविरहित समाज सरकारवरील नोटा छापण्याचा बोजा तर कमी करेलच परंतु काळा पैसा, भ्रष्टाचार, पाकौटमारी, तुटमार, करबुडवेगिरी यांचे निर्मुलन करून औपचारिक अर्थव्यवस्थेच्या आकारावर मार्यादा आणणार आहे. रोख रकमेचा वापर हा काळ्या पैशाला मदत करणार आहे. कारण रोख रकमेतील व्यवहार ऑडिटमधून सहज सुटू शकतात. त्या उलट बँक डेबिट कार्ड आणि क्रेडिट कार्ड वापरल्याने काळा पैसा व बेहिशोबी व्यवहारांना पायबंद बसणार आहे कारण त्यांना ऑडिटच्या कसोटीतून जावे लागते व म्हणून काळा पैसा निर्मितीला प्रतिबंध केला जातो. दुसऱ्या शब्दांत निश्चलनीकरणामुळे काळा पैसा व त्याचे स्रोत उघड होणार असतांना डिजिटल व्यवहारांमुळे समाजात काळ्या पैशाच्या वाढीला खीळ बसणार आहे. स्वीडन येथे ८९ टक्के व्यवहार नो कॅश पध्दतीने होत असतात, भ्रष्टाचार कमीत कमी असणाऱ्या देशांच्या यादीत स्वीडन तिसऱ्या स्थानावर आहे तर भारतात नो कॅश व्यवहाराचे प्रमाण २२ टक्के असून भारत या यादीत ७६ व्या स्थानावर आहे. या फरकावरून असे सिध्द होते की, रोखविरहित व्यवहार आणि भ्रष्टाचार यांच्यात प्रबळ नकारात्मक सहसंबंध आहे. याचा अर्थ असा की, रोख विरहित व्यवहार जितके जास्त तितका भ्रष्टाचार कमी आणि त्या उलट. रोख विरहित व्यवहारांचा आणखी एक महत्त्वाचा फायदा असा की, चलन कार्यान्वित करताना नोटा छापणे, वाहतुक आणि इतर खर्चाचा बोजा मोठ्या प्रमाणावर कमी होतो. असे गणित आहे की, रिझर्व्ह बँक ऑफ इंडिया आणि कर्माशियल बँका चलनाच्या कार्यान्वयनासाठी वार्षिक २१,००० कोटी रुपये (३.५) अब्ज डॉलर) खर्च करतात.

Table – 1

Status of Cashless and Corruption in a Selected Countries.

Table – 2

Cash to GDP Ratio in Selected Countries ( Percentage)

Countries	% Non-Cash Payment	Corruption Perception Index ( 2015)	Rank in Corruption Perception (index (2015))
Belgium	93	77	15 <sup>th</sup>
France	92	70	23 <sup>rd</sup>
Canada	90	83	9 <sup>th</sup>
UK	89	81	10 <sup>th</sup>
Sweden	89	89	3 <sup>rd</sup>
Australia	86	79	13 <sup>th</sup>
The Netherlands	85	87	5 <sup>th</sup>
USA	80	76	16 <sup>th</sup>
Germany	76	81	10 <sup>th</sup>
South Korea	70	56	37 <sup>th</sup>
India	22***	38	76 <sup>th</sup>

Countries	Percentage
Sweden	1.73
South Africa	2.39
UK	3.72
Brazil	3.82
Canada	4.08
USA	7.9
Signapor	9.55
Russia	10.56
India	10.86

रोकडविरहित अर्थव्यवस्थेसाठी एक अत्यावश्यक गरज म्हणजे आर्थिक समावेशकता ही आहे. आर्थिक समावेशकता याचा अर्थ लोकांना देशातील अर्थव्यवस्थेशी जोडून घेतले पाहिजे आणि ते तिचा भाग झाले पाहिजेत. बँका आणि टपाल कार्यालयामध्ये खाती उघडून लोकांना मुख्य संस्थात्मक आर्थिक व्यवस्थेत आर्थिकदृष्ट्या सामावून घेतले जाईल. जागतिक बँकेची आडकेवारी असे सांगते की, २०१४ पर्यंत भारतातील फक्त ५२.८ टक्के प्रौढांची वित्तीय संस्थामध्ये सहभाग होता. एकूण लोसंख्येपैकी अनुक्रमे केवळ १०.७ , ३.४ आणि १.२ टक्के लोकांनी डेबिट कार्ड, क्रेडिट कार्ड आणि इंटरनेट बँकिंग पध्दतीचा पैसे देण्यासाठी उपयोग केला आहे. याचा अर्थ असा की, भारतात डिजिटल व्यवहार अत्यंत किरकोळ प्रमाणात आहेत. त्यात झपाटयाने वाढ करण्याची आवश्यकता आहे.

Type	Percentage
With Financial Institution Account	52.8
Has debit card	22.1
ATM is the main mode of withdrawal	33.1
Used a debit card to make payment	10.7
Used a credit card to make payment	3.4
Used the internet to pay bill or make purchases	1.2
Saved at financial institution	14.4

Table - 3 Financial inclusion in India (% of adult age> 15,) 2014

### रोखमुक्त अर्थव्यवस्थेचे फायदे

भारतीय अर्थव्यवस्था ही जगातील वेगाने वाढणारी अर्थव्यवस्था आहे पण त्याला काळा पैसा , भ्रष्टाचार , दहशतवाद, बेकायदेशीर मालमत्ता यांचे ग्रहण आहे. यावर लेखा परीक्षण, अंमलबजावणी संस्था काम करीत असतात, डिजिटल व इलेक्ट्रॉनिक व्यवहारात अनेक आर्थिक व्यवहार हे औपचारिक व्यवस्थेतून केले जात असल्याने ते शक्य असते त्यामुळे त्याचे अनेक फायदे आहे. भारतात नवीन रोखमुक्त पध्दती फार थोडे लोक वापरत आहेत त्यांचे प्रमाणे १० ते १५ टक्के आहे. ब्राझील, चीनमध्ये हे प्रमाण ४० टक्के आहे. दरम्यान २०१४ मधील आकडेवारीनुसार भारतात

अर्थव्यवस्थेबाहेरील चलन हे देशांतर्गत उत्पन्नाच्या ११.१ टक्के आहे. हे प्रमाण रशिया, मेक्सिको, ब्राझील या अर्थव्यवस्थेपेक्षा जास्त आहे. त्यामुळे रोखमुक्त बाजारपेठेच्या वापरास मोठा वाव आहे. रोखमुक्त साधनांचा वापर सोपा, विश्वासार्ह, सुरक्षित व किफायतशीर करणे आवश्यक आहे. कर्ज , विमा यात त्यांचा वापर शक्य आहे. डिजिटल पायाभूत सुविधा बँकामध्ये सुरु करणे आवश्यक आहेत. रोखमुक्त समाजाने सरकार व जनतेस अनेक फायदे होतात.

पैसे देण्याची सोयीची पध्दत-कुठल्याही व्यवहारात पैसे अदा करण्याची पध्दत आता रोखविरहित होत आहे. रोखहीन अर्थव्यवस्था कमी उत्पन्न गटापासून सर्वांनाच फायद्याची आहे. त्यामुळे व्यवहार शुल्क कमी होते व रोख पैसे बाळगावे लागत नाहीत.

कमी जोखीम - सायबर सुरक्षेमुळे ऑनलाईन पेमेंट सुरक्षित व जोखीम विरहित आहे. रोख पैसे बाळगण्यात नेहमी जोखीम असते.

नोटा छापण्याच्या खर्चात कपात - रोखविरहीन अर्थव्यवस्थेमुळे नोटा छापण्याचा खर्च वाचतो. २०१५ मध्ये नोटा छापण्यास रिझर्व बँकेला २७ अब्ज रुपये खर्च आला. हा खर्च रोखविरहित अर्थव्यवस्थेने कमी होईल.

गुन्ह्याचे प्रमाण घटेल - इलेक्ट्रॉनिक व डिजिटल व्यवहारांमुळे नोटा बाळगाव्या लागणार नाहीत त्यामुळे इतर गुन्हे तर कमी होतीलच शिवाय अंमली पदार्थ तस्करी, दहशतवादाला अर्थपुरवठा, काळ्या पैशाची साठवणूक हे गुन्हे कमी होतील.

बँकिंग क्षेत्राला लाभ-डिजिटल अर्थव्यवस्थेचा लाभ हा बँकिंग प्रणालीस होणार आहे. जेव्हा लोक डिजिटल पेमेंट करतील तेव्हा रोखीची गरज कमी होईल व बँकांमध्ये मोठ्या प्रमाणात पैसे राहतील. बचतही जास्त होईल.

पारदर्शकता व देखरेख-रोखविरहित व्यवहारांवर सरकार सहज लक्ष ठेवू शकते त्यामुळे करचुकवेगिरी टाळता येईल व महसूल वाढेल.

गेल्या दोन महिन्यात डिजिटल व्यवहार वाढले आहे व स्वाईप मशीनचे प्रमाण वाढले आहे. छोटी दुकाने व रस्त्यावरील पथारीवाले हे सुध्दा स्वाईप मशीन वापरत आहे. त्यामुळे इलेक्ट्रॉनिक व्यवहार वाढणार आहेत, रकमा वेगाने दिल्या घेतल्या जातील. अनेक लोक रोखीकडून मोबाईल वॉलेटकडे वळतील. मोबीविकच्या दाव्यानुसार २०१७ पर्यंत ते १० अब्ज डॉलर्सची उलाढाल करतील व लाखो व्यापारी याचा स्वीकार करतील. यातून पारदर्शकता वाढेल तसेच करचुकवेगिरी कमी होईल. महसूल वाढेल. भारत हा विकसनशील देश आहे त्यात गरिबांची संख्या जास्त आहे त्यामुळे कॅशलेस व्यवहार हे कितपत प्रभावी ठरतील हा प्रश्न आहे. नोटाबंदीचा फटका असंघटित क्षेत्राला बसला आहे व ज्यांची बँक खाती नाहीत त्यांनाही तडाखा बसला. ज्यांची बँकेत खाती नाहीत ते कॅशलेसकडे कसे वळतील हा प्रश्न आहे. देशाने आधी पारदर्शक अर्थव्यवस्था निर्माण करून मग कॅशलेस कडे वळावे हा पर्याय त्या आहे. रोख पैशांच्या व्यवहारांचा शेवट ही कल्पना जरी आततायी वाटत असली तरी ती प्रत्यक्षात येत आहे हे मात्र खरे.

### रोखविरहीनतेसाठी सरकारी उपाययोजना

कॅशलेस म्हणजे रोखविरहीन व्यवस्थेसाठी सरकारने लोकांना उत्तेजन दिले आहे व डिजिटल व्यवहाराकडे लक्ष वेधले आहे. त्यामुळे लोकांना बँका किंवा एटीएमच्या रांगात उभे रहावे लागणार नाही.

समान्यांसाठी नशीबवान ग्राहक योजना व व्यापाऱ्यांसाठी डिजिटल व्यापार योजना या योजनेत डिजिटल व्यवहारांना प्राधान्य देण्यात आले आहे. नशीबवान ग्राहक व डिजिटल व्यापार योजनेत अनेक प्रोत्साहनपर बक्षिसे आहेत. त्यामुळे डिजिटल इंडियाला प्रोत्साहन मिळणार आहे. त्यामुळे देशाचा आर्थिक कणा मजबूत होईल. रुपे कार्ड, यूएसएसडी, युपीआय व आधार पेमेंट सिस्टीम यांचा उपयोग यात होत आहे.

वित्तीय साक्षरता अभियान - यात लोकांना डिजिटल अर्थव्यवस्थेची माहिती दिली जाईल. कॅशलेस व्यवहारांना उत्तेजन दिले जाईल. मनुष्यबळ विकास मंत्रालयाने लोकांना डिजिटल व्यवहारांसाठी प्रोत्साहित केले आहे. खासगी संस्थांनी रोखीत पैसे स्विकारू नयेत असे आवाहन करण्यात आले आहे. दुकाने, कॅटीन, इतर सेवात कॅशलेस व्यवहारांचा आग्रह आहे. विद्यार्थी, शिक्षक यांनी लोकांना या व्यवहाराचे प्रशिक्षण देण्यास सांगितले आहे. मनुष्यबळ मंत्रालयाने त्यासाठी सूचनांकरिता वेबपेज सुरु केले आहे.

भीम अॅप ( भारत इंटरफेस फॉर मनी) ३० डिसेंबर २०१६ रोजी पंतप्रधान मोदी यांनी भीम अॅप हे इ-वॉलेट सुरु केले. त्यामुळे ऑनलाईन व्यवहार सुलभ होणार आहेत. आधार कार्डशी निगडित हे अॅप डिजिटल पेमेंटसाठी उपयुक्त आहे. बँक खात्यातून पैसे थेट हस्तांतरीत करता येतील. हे अॅप युपीआय सक्षम बँक खात्यांशी संबंधित आहे पण त्यात एकच खाते त्याच्याशी जोडता येईल. दोन खाते असलेल्यांना दोनदा युपीआय व्यवहार करावे लागतील.

रुपे कार्ड- रुपे कार्ड हे डेबीट व क्रेडिट कार्डचे भारतीय रुपे आहे व व्हिसा व मास्टर कार्डसारखेच त्याचे स्वरूप आहे. द नॅशनल पेमेंट कार्पोरेशन ऑफ इंडियाने रुपे कार्ड जनधन योजनेत सुरु केले व बँका यात प्रत्येक खातेधारकाला १ लाखाचा अपघात विमा देतात. रुपे कार्ड तीन मार्गाने चालते त्यात एटीएम, पीओएस व ऑनलाईन यांचा समावेश आहे. कोटयावधी लोक रुपे कार्ड वापरतात व अल्प उत्पन्न गटातील लोकांना कॅशलेससाठी ते उपयोगी आहे. आर्थिक सर्वसमावेशकतेसाठी त्याचा उपयोग आहे.

आधार पेमेंट अॅप- २५ डिसेंबर २०१६ रोजी सरकारने आधार कार्ड व खातेक्रमांकाशी जोडले जाते. बायोमॅट्रिक रीडरचा त्यात वापर असून आधार क्रमांक टाकून व्यवहारासाठी बँकेची निवड करता येते. फोन शिवाय यातून पेमेंट करता येते.

### कॅशलेस अर्थव्यवस्थेमध्ये घ्यायची काळजी

१. तुमचा पासवर्ड कोणालाही सांगू नका.
२. तुमचा पासवर्ड कार्डवर किंवा कोठेही लिहून ठेवू नका.
३. तुमच्या अकाउंटची माहिती (युजरनेम/पासवर्ड/OTP/CVV) कोणालाही सांगू नका.
४. तुम्हाला दहा लाखच बक्षीस लागल आहे, बँकमधून बोलत आहोत, आयडी पासवर्ड सांगा वगैरे सांगून फोन करणाऱ्यांना काहिही सांगू नका.
५. असे फोन तुमची फसवणुक करण्यासाठी करण्यात आलेले असतात.

६. ठराविक दिवसानंतर पासवर्ड/पिन बदलत रहा.
७. कार्डचे डिटेल्स कोणत्याही साईटवर सेव्ह करू नका.
८. नेट बँकिंग करतांना Virtual keyboard चा वापर करा.

### सारांश

डिजिटल अर्थव्यवस्थेच्या संवर्धनासाठी अत्यावश्यक घटकापैकी एक म्हणजे सुरक्षित डिजिटल व्यवहार हा आहे. डिजिटल सुरक्षेसाठी पुरेशी व्यवस्था करावी लागेल. डिजिटल गुन्ह्यांना प्रतिबंध करण्यासाठी जोरदार कृती करण्याची गरज असून डिजिटल गुन्ह्यामुळे सामान्य माणसाचा पैसा गेला तर त्याला भरपाई दिली गेली पाहिजे. डिजिटल तपास व इन्शुरन्सची व्यवस्था निर्माण केली पाहिजे. कॅशलेस व्यवहारांच्या दिशेने मार्गक्रमण हा एक मार्ग आहे. इलेक्ट्रॉनिक मशीनच्या वापराला प्रोत्साहन देऊन कॅशलेस अर्थव्यवस्थेकडे आपण प्रगती करू शकू. त्याचबरोबर या माध्यमातून योग्य वातावरण निर्मितीही करू शकू आणि डिजिटल व्यवहाराची सवय समाजाला लावू शकू. शासनाने केलेली नोटाबंदीची चळवळ ही देखील कॅशलेस अर्थव्यवस्थेच्या भल्यासाठीच आहे. असे असतांना देखील या कॅशलेस मोहिमेअंतर्गत खूप अडथळे आहेत मात्र भवितव्य उज्वल देखील आहे. शंभर टक्के कॅशलेस समाज शक्य नाही पण त्या दिशेने प्रयत्न करता येतील. जास्ती जास्त रोखविहीन व्यवस्था आणता येईल. अजूनही समाजात रोखीला महत्त्व आहे. दूरस्थ भागात असंघटित क्षेत्रात व्यवहार रोखविहीन करता येतील. पैसे फिरणे थांबले की, लोक पैसे बाळगणे कमी करतील व डिजिटल अर्थव्यवस्थेने समांतर अर्थव्यवस्था नियंत्रित होईल. हिशेब ठेवणे सोपे जाईल. करपाया वाढेल म्हणजे करदात्यांची संख्या वाढेल. पैसे बाळगावे लागणार नाहीत त्यामुळे दारोडे व लुबाडणूकीचा धोका टळेल, आयटी पायाभूत सुविधा वाढवाव्या लागतील त्यावरील खर्च वाढेल, काळा पैसे कमी होईल. यात सायबर सुरक्षा वाढवणे, ऑनलाईन घोटाळे टाळणे, बँक पध्दतीत आर्थिक सर्वसमावेशकता वाढवणे, तक्रार निवारण व्यवस्था सुधारणे आवश्यक आहे.

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## रोकड विरहित व्यवहारात सरकारने केलेले प्रयत्न

प्रा. डॉ. कार्तिक पोळ,

प्रा. प्रमोद मुळे.

अर्थशास्त्र विभाग

यशवंतराव चव्हाण महाविद्यालय तुळजापूर

### प्रस्तावना –

अलिकडील काळातील भारताच्या विविध क्षेत्रातील विकासाची यशोगाथा उल्लेखनीय म्हणावी लागेल. पायाभूत सुविधा, कृषी, आर्थिक समावेशकता आणि वित्तीय सशक्तीकरण ई. क्षेत्रात सरकारने प्रभाविपणे कामगिरी करून दाखविली आहे. सर्वकंश विकासाच्या दृढ निश्चयामुळे विकासाचे प्रयत्न प्रत्येक क्षेत्र चर्चेत आले आहे. योग्य आर्थिक धोरणे आणि वित्तीय सशक्तीकरणाच्या जीएसटी सारख्या उपाययोजनांमुळे आर्थिक भरभराटीची खात्री बाळगता येण्याची स्थिती निर्माण झाली आहे. काळा पैसा आणि भ्रष्टाचार दूर करण्यासाठी विमुद्रीकरणाचा ऐतिहासिक निर्णय घेण्यात आला. याच प्रमाणे स्वतःहून उत्पन्न जाहिर करण्याची योजना आणि विशेष कृती गटाची स्थापना यासारखे कठोर निर्णयही सरकारने घेतले. देशात गुंतवणुकीसाठी आवश्यक वातावरण तयार व्हावे व आणि देशाचा अर्थ गाडा रूळावर यावा यासाठी सरकारला हे कठोर निर्णय घ्यावे लागले. विमुद्रीकरणाच्या निर्णयामागे डिजिटल अर्थव्यवस्थेस चालना देणे, कमी रोकड वापराची व्यवस्था निर्माण करणे आणि आर्थिक व्यवहारामध्ये पारदर्शकता आणणे हे ही उद्देश्ये होते. त्यासाठी आर्थिक व्यवहार करण्याचे भीम अॅप, पेटीएम, रूपे, डेबीट कार्ड यासारखे डिजिटल मंच उपलब्ध करून देण्यात येवून लोकांना कमी रोकड व्यवहारासाठी प्रोत्साहीत करण्यात आले.

### २ रोख पैशाचा कमीत कमी वापर, रोकड विरहित अर्थव्यवस्थेचा अर्थ –

रोजच्या व्यवहारात रोख रकमेचा कमीत कमी वापर असा होतो. याचा अर्थ रोख रकमेचा तुटवडा किंवा कमी पुरवठा असा नाही तर डिजिटल व्यवहाराचा जास्तीत जास्त उपयोग. उदा. डेबिट कार्ड, क्रेडिट कार्ड, इंटरनेट बँकिंग आणि मोबाईल फोन वरील अॅपद्वारे केलेले व्यवहार असा आहे.

डैनअल एट अल (२००४) नुसार अशी अर्थीक व्यवस्था की ज्यात व्यवहार प्रामुख्याने प्रत्यक्ष रोख रकमेच्या बदल्यात आर्थिक व्यवहार केले जातात. विकसनशिल देशात आर्थिक व्यवहारात रोख रकम हीच सर्वात महत्त्वाची आणि प्रमुख पध्दती आहे. मात्र अमेरिका आणि युरोपसह बहुतेक विकसित देशांत वस्तु व सेवा खरेदी करताना डिजिटल व्यवहार हीच प्रामुख्याने वापरली जाते.

जागतिक विकास अहवाल (२०१६) मध्ये म्हटले आहे की, अनेक प्रसंगात डिजिटल तंत्रज्ञानामुळे आर्थिक वाढीस चालना मिळाली असून संधी विस्तारीत झाल्या आहेत. तसेच सेवांच्या वितरणात सुधारणा झाली आहे. विकसित अर्थव्यवस्थेत डिजिटल अर्थव्यवस्थेचा आकार मोठा असल्याने विकसनशिल देशाच्या तुलनेत तेथे भ्रष्टाचार कमी होण्याचा हा घटक ठरला आहे. दुसरीकडे विकसनशिल देशात तो काळा पैसा, मोठ्या आकाराच्या अनौपचारिक अर्थव्यवस्थेचे अस्तित्व आणि दहशतवाद कारवाया चालू राहणे तसेच करबुडवेगिरीचा मुख्य मुद्दा राहिला आहे. त्यामुळे भ्रष्टाचार आणि काळा पैसा या शत्रूंच्या तावडीतून सुटण्यासाठी तसेच सामाजिक न्यायासह अधिक पारदर्शक व स्वच्छ आर्थिक वाढ होण्यासाठी रोख रकमेचा कमी वापर हा उपाय सुचवण्यात आला आहे.

### ३ रोख विरहितेसाठी सरकारी उपाय योजना –

कॅशलेस म्हणजे रोख विरहित व्यवस्थेसाठी सरकारने लोकांना उत्तेजन दिले आहे. व डिजिटल व्यवहारांकडे लक्ष वेधले आहे. त्यामुळे लोकांना बँका किंवा एटीएमच्या रांगात उभे रहावे लागणार नाही.

१) सामान्यांसाठी नशीबवान ग्राहक योजना व व्यापारांसाठी डिजीधन व्यापार योजना निर्माण केल्या आहेत. या योजनेत डिजिटल व्यवहारांना प्राधान्य देण्यात आले आहे. नशीबवान ग्राहक व डिजीधन व्यापार योजनेत अनेक प्रोत्साहनपर बक्षिसे आहेत. त्यामुळे डिजिटल इंडियाला प्रोत्साहन मिळणार आहे. त्यामुळे देशाचा आर्थिक कणा मजबुत होईल. रूपे कार्ड, यूएसएसडी, युपीआय व आधार पेमेंट सिस्टिम यांचा उपयोग होत आहे.

२) वित्तीय साक्षरता अभियान - यात लोकांना डिजिटल अर्थव्यवस्थेची माहिती दिली जाईल, कॅशलेस व्यवहारांना उत्तेजन दिले जाईल. मनुष्यबळ विकास मंत्रालयाने लोकांना डिजिटल व्यवहारांसाठी प्रोत्साहित केले आहे. खाजगी संस्थांनी रोखीत पैसे स्विकारू नयेत असे आवाहन करण्यात आले. दुकाने, कॅटिन, इतर सेवांत कॅशलेस व्यवहारांचा आग्रह आहे. विद्यार्थी, शिक्षक यांनी लोकांना या व्यवहाराचे प्रशिक्षण देण्यास सांगितले आहे. मनुष्यबळ मंत्रालयाने त्यासाठी सुचनांकरीता वेबपेज सुरू केले आहे.

३) भीम अॅप (भारत इंटर फेस फॉर मनी) ३० डिसेंबर २०१६ रोजी मा. पंतप्रधान नरेंद्र मोदी यांनी भीम अॅप हे इ.वॉलेट सुरू केले. त्यामुळे ऑनलाईन व्यवहार सुलभ होणार आहे. आधार कार्डशी निगडीत हे अॅप डिजिटल पेमेंटसाठी उपयुक्त आहे. बँक खात्यातून पैसे थेट हस्तोतरीत करता येतील हे अॅप युपीआय सक्षम बँक खात्याशी संबंधीत आहे. पण त्यात एकच खाते त्याच्याशी जोडता येईल. दोन खाते असलेल्यांना दोनदा युपीआय व्यवहार करावे लागतील.

४) रूपे कार्ड - रूपे कार्ड हे डेबीट व क्रेडिट कार्डचे भारतीय रूप आहे व व्हीसा व मास्टर कार्ड सारखेच त्याचे स्वरूप आहे. दि नॅशनल पेमेंट कार्पोरेशन ऑफ इंडियाने रूपे कार्ड जनधन योजनेत सुरू केले व बँका यात प्रत्येक खातेधारकाला १ लाखाचा अपघात विमा

देतात. रूपे कार्ड तीन तीन मार्गाने चालते त्यात एटीएम, पीओएस व ऑनलाईन यांचा समावेश आहे. कोटयावधी लोक रूपे कार्ड वापरतात व अल्प उत्पन्न गटातील लोकांना कॅशलेससाठी ते उपयोगी आहे. आर्थिक सर्वसमावेशकतेसाठी त्याचा उपयोग आहे.

- ५) आधार पेमेंट ॲप - २५ डिसेंबर २०१६ रोजी सरकारने आधार संचालित पेमेंट ॲप सुरू केले ते आधार कार्ड व खाते क्रमांकाशी जोडले जाते. बायोमेट्रिक रिडरचा त्यात वापर असून आधार क्रमांक टाकून व्यवहारासाठी बँकेची निवड करता येते. फोन शिवाय यातून पेमेंट करता येते. वरील वेगवेगळ्या योजनेद्वारे सरकारने लोकांना व व्यापाऱ्यांना रोकड विरहित आर्थिक व्यवहारांना चालना देण्यासाठी बक्षिसे देवून प्रयत्न केले आहेत. तर खाजगी क्षेत्रात बँका, मोबाईल कंपन्या मोबाईल, ई वॉलेट, युपीआय, मायक्रो एटीएम, मोबाईल वॉलेट, पेटीएम, पे फोन, तेज ॲप, डिजीटल पेमेंट, आरटीजीएस, एनइएफटी, ई. मार्फत रोकड विरहित आर्थिक व्यवहारांना चालना देण्याचा प्रयत्न करीत आहेत.

#### ४ सारांश –

रोकडविरहित समाज सरकारवरील नोटा छापण्याचा आणि लोकांवरील नोटा बाळगण्याचा बोजा कमीतर करेलच परंतु काळा पैसा, भ्रष्टाचार, पाकीटमारी, लुटमार, करबुडवेगिरी यांचे निर्मुलन करून अनौपचारिक अर्थव्यवस्थेच्या आकारावर मर्यादा आणणार आहे. रोख रकमेचा वापर हा काळ्या पैशाला मदत करणारा आहे. कारण रोख रकमेतील व्यवहार ऑडिटमधून सहज सुटू शकतात. त्याउलट बँक डेबीट कार्ड आणि क्रेडिट कार्ड वापरल्याने काळा पैसा निर्मितीला व बेहिशोबी व्यवहारांना पायबंद बसणार आहे. कारण त्यांना ऑडिटच्या कसोटितून जावे लागते. व म्हणून काळा पैसा निर्मितीला प्रतिबंध केला जातो. दुसऱ्या शब्दात निश्चलनीकरणामुळे काळा पैसा व त्याचे स्रोत उघड होणार असताना डिजीटल व्यवहारांमुळे समाजात काळ्या पैशाच्या वाढीला खीळ बसणार आहे. स्वीडन येथे ८९ टक्के व्यवहार नो कॅश पध्दतीने होत असताना भ्रष्टाचार कमीत कमी असणाऱ्या देशांच्या यादीत स्वीडन तिसऱ्या स्थानावर आहे तर भारतात कॅशलेस व्यवहाराचे प्रमाण २२ टक्के असून भारत या यादीत ७६ व्या स्थानावर आहे. यावरून असे म्हणता येईल की, रोख विरहित व्यवहार जितके जास्त तितका भ्रष्टाचार कमी, आणि त्याउलट रोख विरहित व्यवहार जितके कमी तितका भ्रष्टाचार जास्त. रोख विरहित व्यवहाराचा आणखी एक महत्वाचा फायदा असा की चलन कार्यान्वीत करताना नोटा छापणे, वाहतुक आणि खर्चाचा बोजा मोठ्या प्रमाणावर कमी होते. उदा. - रिझर्व्ह बँक ऑफ इंडिया आणि व्यापारी बँका चलनाच्या कार्यान्वयासाठी वार्षिक २१००० कोटी रू. खर्च करतात. त्यामध्ये बचत होईल. जास्तीत जास्त रोकड विरहित व्यवहार केले तर भ्रष्टाचार कमी होवून देशाच्या विकासात भर पडेल.

#### संदर्भ –

- १) योजना मराठी जानेवारी २०१७
- २) योजना मराठी फेब्रुवारी २०१७
- ३) योजना मराठी मे २०१७
- ४) योजना मराठी डिसेंबर २०१७



## रोख विरहीत व्यवहार : आव्हाने व उपाय

प्रा. आचार्य बालाजी वैजनाथराव  
अर्थशास्त्र विभाग प्रमुख  
महात्मा फुले महाविद्यालय, किनगांव  
ता. अहमदपूर जि. लातूर

### प्रस्तावना :-

अलिकडील काळात एक नव्याने उदयास आलेली आर्थिक व्यवहार पूर्ण करण्याची एक पद्धती म्हणून रोख विरहीत व्यवहाराकडे पाहिले जात आहे. विनिमयाच्या या नव्या पद्धतीमुळे वेळ आणि श्रम दोन्हीची बचत होत आहे. परंतु आज ही या पद्धतीचा वापर म्हणाव्या त्या प्रमाणात होत नाही. कारण ही पद्धती वेळ व श्रम वाचवणारी जरी असली तरी अशिक्षित लोकांना किंवा ग्रामीण भागातील लोकांना ही पद्धती सहज हाताळता येत नाही. अनेकांना तर या पद्धतीवर विश्वास नाही. रोख पैसे हातात आल्याशिवाय पैसा मिळवल्याची जाणीव त्यांना होत नाही.

रोख विरहीत व्यवहार म्हणजे उधारी ऊसणवारी किंवा फुकट तर नव्हेच नव्हे तर कागदी चलनाऐवजी इलेक्ट्रॉनिक पेशाची देवाण-घेवाण होय. म्हणजेच व्यवहार तर होतो पैसे दिलेही जातात आणि घेतलेही जातात मात्र ते डोळ्यांना दिसत नाही. विनिमयाची ही नवीन पद्धत अत्यंत साधी सरळ आणि सोपी आहे. परंतु या व्यवहाराने पूर्ण माहिती वापराचे ज्ञान अनेकांना नसल्यामुळे अशा व्यवहारात अडचणी निर्माण होत आहेत.

भारतामध्ये या पद्धतीचा अधिकाधिक वापर व्हावा यासाठी सरकार सतत प्रयत्नशील आहे. सरकार रोख विरहीत व्यवहार करणाऱ्यांना अनेक सेवा सवलती देत आहे. असे असताना सुद्धा या व्यवहारांमध्ये वाढ होताना दिसत नाही. अत्यंत संथ गतीने व्यवहारामध्ये लोकांचा सहभाग होत आहे. याची कारणे शोधण्याचा प्रयत्न आपण करणार आहोत.

### रोख विरहीत व्यवहार म्हणजे काय ?

- 1) “रोख विरहीत व्यवहार म्हणजे कागदी चलनाऐवजी इलेक्ट्रॉनिक चलनाचा वापर करणे होय.”
- 2) “प्रत्यक्ष रोख पेशाऐवजी इतर मार्गाने आर्थिक व्यवहार पूर्ण करणे म्हणजे रोख विरहीत व्यवहार होय.”

### उद्दिष्टे :

- 1) रोख विरहीत व्यवहार संकल्पनेचा अभ्यास करणे.
- 2) रोख विरहीत व्यवहारातील अडथळे आणि आव्हाने विचारात घेणे.
- 3) रोख विरहीत व्यवहार वाढीसाठी उपाय सुचविणे.

### संशोधन पद्धती :

प्रस्तुत शोधनिबंधसाठी द्वितीयक स्रोतांचा वापर केला आहे. त्यासाठी विविध संदर्भ ग्रंथ, वर्तमानपत्रे, मासिके, साप्ताहिके व वेबसाईट इत्यादींचा वापर केला आहे.

### गृहितके :

- 1) भारतात रोख विरहीत व्यवहार होत आहेत.
- 2) रोख विरहीत व्यवहारासाठी अनेक मार्ग उपलब्ध आहेत.

### रोख विरहीत व्यवहाराचे स्वरूप :

भारतामध्ये रोख विरहीत व्यवहार अनेक मार्गाने केले जातात. ज्यात प्रामुख्याने मोबाईल बँकींग, आर.टी.जी.एस., एन.ई.एफ.टी. यू.पी.आय. ए.टी.एम. कार्ड, भीम अॅप इत्यादी अनेक मार्गाने रोख विरहीत व्यवहार करता येतात. हे व्यवहार करत असताना खबरदारी बाळगावी लागते. कारण अल्पशी चूक मोठे नुकसान करू शकते. जसे की, एखाद्याच्या खात्यावर पैसे पाठवत असताना त्या व्यक्तीचा योग्य खाते क्रमांक टाकावा लागतो. एकाही आकड्यात चूक झाल्यास पैसे इतर व्यक्तीकडे जाऊ शकतात.

सुशिक्षित आणि जाणकार व्यक्ती जितक्या सहजतेने हा व्यवहार हाताळू शकतो तितका अशिक्षित व अजान व्यक्ती हाताळू शकत नाही. तसेच अशा प्रकारचे व्यवहार पूर्ण करण्यासाठी इंटरनेटची आवश्यकता असते. त्याशिवाय व्यवहार पूर्ण करता येत नाही. अनेकदा नेटवर्क समस्येमुळे अशा व्यवहारात अडथळेही निर्माण होतात.

### रोख विरहीत व्यवहारातील आव्हाने/ समस्या :

सरकार रोख विरहीत व्यवहारांना चालना देण्यासाठी अनेक सेवा सवलती देत असतानासुद्धा समाजातील बऱ्याच घटकाने या पद्धतीचा स्वीकार केलेला नाही. त्यासाठी अनेक गोष्टी कारणीभूत आहेत. हा व्यवहार करत असताना सावधगिरी तर बाळगावी लागतेच त्याच बरोबर इंटरनेट सेवा तसेच व्यवहार हाताळण्याचे पूर्ण ज्ञान असावे लागते. या व्यवहारातील काही महत्त्वाची आव्हाने व समस्या पुढीलप्रमाणे सांगता येतील.



- १) ओळख चोरीची भिती.
- २) फोन हरवणे.
- ३) अशिक्षितांसाठी अवघड.
- ४) फिशींग मेल्लेचे जाळे.
- ५) लोकांचा अविश्वास.
- ६) रोख व्यवहाराला प्राधान्य.
- ७) कोड विसरणे.
- ८) फसवणूकीची शक्यता.
- ९) ग्रामीण भागात इंटरनेट नसणे.

#### उपाययोजना :

रोख व्यवहारांना चालना देण्यासाठी या व्यवहारांची पूर्ण माहिती सर्वसामान्यांना करून द्यावी लागेल. ग्रामीण भागातील लोकांना प्रशिक्षण दिले पाहिजे. तसेच असे व्यवहार वाढवण्यासाठी बँकांनीही पुढाकार घेतला पाहिजे. ग्राहकांना व्यवहाराची पूर्ण माहिती देऊन व्यवहाराचे महत्त्व समजावून सांगणे सरकारने काही क्षेत्रात रोख व्यवहारावर बंदी घालावी. रोख विरहीत व्यवहार वाढीसाठी सेवा सवलतीमध्ये वाढ करावी.

भारताच्या ग्रामीण भागात अशिक्षित लोकांची संख्या जास्त असून त्यांच्यासाठी हा व्यवहार अवघड आहे. यावर उपाय म्हणून सरकारने प्रत्येक गावात माहिती केंद्र उभारावे किंवा बँकांच्या माध्यमातून ग्रामीण भागातील लोकांना रोख विरहीत व्यवहाराची माहिती द्यावी. त्याचबरोबर या व्यवहाराविषयी लोकांचा अविश्वास दूर करून विश्वास संपादन करावा. रोखीने व्यवहार किती धोक्याचे आहेत याची जाणीव लोकांना करून दिली पाहिजेत आणि सर्वात महत्त्वाचे म्हणजे ग्रामीण भागात इंटरनेट सेवा उपलब्ध करावी.

- 1) ओळख चोरीवर नियंत्रण.
- 2) सरकारने रोख विरहीत व्यवहारांना प्रोत्साहन द्यावे.
- 3) बँकांनी पुढाकार घेतला पाहिजे.
- 4) ग्रामीण भागात माहिती केंद्र उभारावे.
- 5) ग्रामीण भागात इंटरनेट सेवा पुरवावी.
- 6) लोकांमध्ये जनजागृती करावी.
- 7) ए.टी.एम. सेवा ग्रामीण भागापर्यंत पोचवावी.
- 8) रोख विरहीत व्यवहारासाठी सवलती द्याव्यात.

#### रोख विरहीत व्यवहाराचे फायदे / महत्त्व :

जर देशातील प्रत्येक व्यक्तीने रोख विरहीत व्यवहारांना प्राधान्य दिले तर सरकारच्या कर महसुलात मोठ्या प्रमाणात वाढ होईल. त्याच बरोबर चलन छपाईसाठी येणारा खर्चही कमी करता येईल. वेळ आणि श्रमही वाचवता येतील. पैसे काढण्यासाठी बँकेत रांगेत उभे राहण्याची आवश्यकता असणार नाही. काही मिनिटांमध्ये व्यवहार पूर्ण होतील. सरकार बरोबरच रोख विरहीत व्यवहार सर्वसामान्यांच्याही फायद्याचे आहेत.

- 1) सरकारच्या कर महसुलात वाढ.
- 2) त्वरीत व्यवहार.
- 3) रोख रक्कम बाळगण्याची आवश्यकता नाही.
- 4) कमी जोखीम.
- 5) चलन छपाई खर्च कमी होईल.
- 6) विकासाचा चालना मिळेल.

#### सरकारकडून विविध क्षेत्रासाठी दिल्या जाणाऱ्या सवलती :

रोख विरहीत व्यवहार वाढावेत म्हणून सरकारने काही क्षेत्रांमध्ये सेवा सवलती लागू केल्या आहेत. ज्याचा फायदा सर्वसामान्यांना घेता येईल.

##### 1) इंधन :

ई. वॉलेट, मोबाईल वॉलेट, क्रेडिट किंवा डेबिट कार्डच्या साहाय्याने इंधन खरेदी केल्यास 0.75% सवलत.

##### 2) रेल्वे तिकीट :

जानेवारी 2017 पासून रेल्वे तिकीटासाठी 0.5% सुट

##### 3) महामार्ग टोल :

राष्ट्रीय महामार्गावर आर.एफ.आय.डी. किंवा फास्ट टॅगने टोल भरल्यास 10% सुट.

वरीलप्रमाणे सरकारने अनेक क्षेत्रांमध्ये सवलती लागू केल्या आहेत.

**निष्कर्ष :**

- 1) रोख व्यवहारावर लोकांचा विश्वास बसलेला नाही.
- 2) अनेक लोकांना रोख विरहीत व्यवहार हाताळता येत नाहीत.
- 3) ग्रामीण भागात इंटरनेटची समस्या आहे.
- 4) अशिक्षितासाठी अवघड.
- 5) लोकांचा रोख व्यवहारावर जास्त विश्वास आहे.

**संदर्भ :**

- 1) स्पर्धा परीक्षा मार्गदर्शन - अर्थशास्त्र भाग-1, किरण देसले — दिपस्तंभ प्रकाशन, जळगांव.
- 2) भारतीय अर्थव्यवस्था - रंजन कोळंबे, भगीरथ प्रकाशन, पुणे.



## डिजिटल इंडिया मोहीम : एक आर्थिक क्रांती

डॉ. ए.एच. अत्तार  
शरदचंद्र महाविद्यालय, शिराढोण.

७० वर्षापूर्वी भारत एक प्रजासत्ताक राष्ट्र बनला. तेव्हापासून जागतिक आर्थिक सत्ता बनण्यासाठी भारताची सातत्याने वाटचाल सुरु आहे. भारताच्या प्रत्येक कृतीमुळे देशवासीयांसाठी अनेक संधी निर्माण होतातच परंतु जागतिक पातळीवरही आपल्या कृतीमुळे अनेक शक्यता निर्माण होत आहेत. यामुळे आपल्याला संधी उपलब्ध होतातच पण त्याचबरोबर एका नवीन भारताची कल्पना प्रत्यक्षात उतरवण्याची जबाबदारीही प्राप्त होते. अशा तऱ्हेने भारताचा उदय होत असताना आदर्श नव भारताची कल्पना प्रत्यक्षात उतरवण्याची संधी आपल्याला मिळत आहे. आदर्श भारतात आनंद, समृद्धी, जबाबदार स्वातंत्र्य, सर्वसमावेशक विकास, शांतता आणि एकमेकांप्रती आदरभाव असेल. अशा आदर्श भारताचा जेव्हा परराष्ट्रीय धोरणांवर प्रभाव पडेल तेव्हा त्यामध्ये जागतिक सुस्थिती निर्माण करण्याची शक्यता असेल. जगाचे नेतृत्व स्वीकारून भविष्यकाळ घडविण्याची सुप्त शक्ती भारतात आहे. म्हणून सध्याच्या जागतिक वातावरणात सर्वसमावेशक जागतिक व्यवस्थेची दृष्टी निर्माण करण्यासाठी भारताकडे सर्वांचे लक्ष लागले आहे. अशा व्यापक दृष्टी नंतर ही संकल्पना प्रत्यक्षात उतरवण्याचे कार्यही भारताकडून अपेक्षित आहे. त्यासाठी देशाचे आर्थिक धोरण तितकेच महत्त्वपूर्ण आहे. यासाठीच भारत सरकार आर्थिक विश्वात मोठे पाऊल टाकले आहे. ते म्हणजे डिजिटल इंडिया होय.

देशाची अर्थव्यवस्था अधिकाधिक डिजिटल करण्यासाठी भारत सरकारने महत्वाकांक्षी डिजिटल इंडिया कार्यक्रम हाती घेतला. अर्थव्यवस्था डिजिटल होण्याने, म्हणजेच रोजच्या जगण्यातले अनेक व्यवहार आधुनिक तंत्रज्ञानाच्या मदतीने ऑनलाईन झाल्यास त्याचे अनेक फायदे आहेत. जसे की, केल्या जाणाऱ्या प्रत्येक व्यवहाराची नोंद ठेवता येते. त्यामुळे बेनामी किंवा अवैध व्यवहार होण्यास मदत होईल. दोन व्यक्तीं मध्ये डिजिटल पध्दतीने व्यवहार झाल्यास त्या दोघांकडे त्या व्यवहाराचा पुरावा सहज आणि शाश्वतरित्या उपलब्ध असेल. सर्व प्रक्रिया ऑनलाईन होत असल्याने व्यवहार पूर्ण होण्यासाठी लागणारा वेळ कमी होईल. याशिवाय डिजिटल व्यवहारामुळे सरकारला आपल्या योजना अधिक प्रभावीपणे राबवता येत आहेत, हे तर आता प्रत्यक्षात अनुभवायला मिळत आहे. हे व्यवहार डिजिटल पध्दतीने केले जात असतांना सतत नवनवा डेटा म्हणजे माहिती तयार होत जाते. उदा. एखाद्या व्यक्तीने ऑनलाईन फुड डिलेव्हरी अॅपवरून एखादा खाद्य पदार्थ मागवला तर त्या व्यक्तीस या हॉटेल मधला हा पदार्थ आवडतो ही माहिती मिळते. पेटीएम सारख्या पेमेंट अॅपवरून एखादी व्यक्ती ठिकठिकाणी पैसे भरत असेल तर ती व्यक्ती काय खाते, कशाने प्रवास करते, कोणती कपडे घालते, तिचे आरोग्य कसे आहे, तिचा मासीक खर्च किती, ही सर्व अप्रत्यक्षपणे मिळालेली माहिती किंवा डेटाच आहे. अशीच माहिती गाव, शहर, राज्ये आणि देशपातळीला मिळत गेली तर त्यानुसार त्या देशातल्या नागरिकांचे जीवनमान कसे आहे, याचा अंदाज घेता येऊ शकतो. या अंदाजावरूनच भविष्यातली आर्थिक धोरणे ठरवता येतात. यावरून भविष्यातल्या अर्थ व्यवस्थेची दिशा कळते. हे सगळे डेटा किंवा माहितीमुळे शक्य आहे.

### डिजिटल पेमेंट्स : आधुनिक व्यापार

डिजिटल इंडियातील डिजिटल पेमेंट हा एक पारदर्शी व खात्रीलायक व्यवहार आहे. आपण पाठवलेले पैसे इच्छित व्यक्ती किंवा समूहा पर्यंत पोहचविण्यापुरतीच ती फक्त न राहता ती माहितीचा नवा व्यापार बनत आहे. विश्ववेध, राष्ट्रवेध, यूपीआय, गुगलपे भारतातील बहुतांश किरकोळ पेमेंट्सची प्रक्रिया करणारी केंद्रीय संस्था असलेली नॅशनल पेमेंट्स कॉर्पोरेशन ऑफ इंडिया (एनपीसीआय) सध्या यूनिकाइड पेमेंट्स इंटरफेस (यूपीआय) बाजार पेठेत सहभागी कंपन्यांचा वाटा किती असावा, या विषयीची मर्यादा निश्चित करण्याचा विचार करतांना दिसून येतात. यूपीआय ही पेमेंट्सची रचना, जी वापरकर्त्याकडून कोणताही मोबदला न घेता त्यांच्या बँक खात्याची माहिती न देता, विनाव्यत्यय, इतर वापरकर्त्यांना पैसे हस्तांतरण करण्याची परवानगी देते. २०१६ मध्ये स्थापना झाल्या पासूनच यूपीआयचा वापर बराच वाढला आहे, त्याचे कारण बँक नसलेल्या बिगर संस्थानी मोठ्या प्रमाणात पेमेंट्सच्या क्षेत्रामध्ये प्रवेश केला आहे. मिळणारे कॅशबॅक आणि इतर लाभ यामुळे यूपीआयच्या पेमेंट्समध्ये वर्षागणीक वाढ होताना दिसून येत आहे. ईलेक्ट्रॉनिक्स आणि माहिती तंत्रज्ञान मंत्रालयाचे पाठबळ लाभलेल्या यूपीआय व्यवहारासाठी कॅशबॅक प्रोग्राम मिळवलेल्या अॅप पैकी पहिले अॅप म्हणजे भीम. ५०० आणि १००० रुपयांच्या नोटाबंदी नंतर पंतप्रधानानी भीम पेमेंट्स अॅपला मोठे उत्तेजन दिले. सप्टेंबर २०१९ पर्यंत यूपीआयवर एकूण ९५५.०२ दशलक्ष व्यवहार झाले, त्यात सिंहाचा वाटा गुगलपे (५९.७५%) आणि फोनपे (२४.११%) द्वारे करण्यात आलेल्या व्यवहारांचा होता. यूपीआय बाजार पेठेत नव्याने प्रवेश करू इच्छिणाऱ्या संस्थाना मोठ्या कंपन्याशी जोमाने ठक्कर देण्याकरीता मोठ्या प्रमाणात प्रयत्न करताना दिसून येत आहे. या तुलनेत पेटीएम सारख्या कंपन्या आता आपला ऑनलाईन जाहिरात व्यवसाय उभारण्याचा प्रयत्न करीत आहेत, तर पेमेंट्स विभाग अधिकाधिक तोट्याचा बनू लागल्याने उत्पन्न वाढविण्यासाठी म्युच्यअल फंड सारख्या इतर वित्तीय उत्पादनांची विक्री फोनपेने सुरुवात केली आहे. त्या अर्थाने, पारंपारीक पेमेंट कंपन्या सारीपाट खेळत आहेत तर गुगल बहुधा थ्रीडी बुद्धीबळ खेळताना दिसून येत आहेत असे म्हणावे लागेल.

एकंदरीत आर्थिक क्षेत्रात संगणकिय प्रणालीचा वापर मोठ्या प्रमाणावर होत असल्याने व्यवहारांचा व माहितीच्या आदान-प्रदानाचा वेग वाढला आहे. विशेषतः या प्रक्रियेत पारदर्शकता येत आहे. डिजिटल व्यवहाराने केवळ उद्योगक्षेत्रातच नव्हे तर सामान्य माणसाच्या जीवनातही क्रांती आणली आहे असे सरतेशेवटी म्हणावे लागेल.



## आधुनिक देयक प्रणाली : फायदे आणि अडथळे

प्रा. बच्चेवार नामदेव विठ्ठलराव

संशोधक विद्यार्थी

महात्मा फुले महाविद्यालय, किनगांव  
ता. अहमदपूर जि. लातूर

### प्रस्तावना :-

आजचे युग हे संगणक युग म्हणून ओळखले जात आहे. प्रत्येक क्षेत्रात तंत्रज्ञान आणि संगणकाचा वापर वाढत आहे. या बदलत्या परिस्थितीला अनुरूप आर्थिक व्यवहारातही बदल होणे आवश्यक होते. त्या दृष्टीने भारत सरकारने प्रयत्न सुरु केले असून रोख विरहीत व्यवहार वाढवण्यासाठी सरकार प्रोत्साहन देत आहे. आधुनिक पद्धतीने आर्थिक व्यवहार पार पाडले तर चलन तुटवड्यावर मात करता येईल. त्याच बरोबर रोखीने व्यवहार पार पाडत असताना अनेक अडचणी व अडथळ्यांना सामोरे जावे लागते. परंतु आधुनिक पद्धतीने आर्थिक व्यवहार पार पाडल्यास वेळ आणि श्रमाच्या बचती बरोबरच जोखीमही कमी होते.

आधुनिक देयक प्रणाली वरदान की समस्या असा प्रश्न ग्रामीण भागातील लोकांना भेडसावत आहे. आजही भारतातील जास्त लोकसंख्या ग्रामीण भागात राहते. परंतु ग्रामीण भागातील समाज पूर्णतः सुशिक्षित नसून अनेक अशिक्षित लोक राहतात आणि अशिक्षित लोकांसाठी आधुनिक देयक प्रणाली समस्या ठरत आहे. आधुनिक व्यवहाराचे पूर्ण ज्ञान नसल्यामुळे ते पारंपारिक पद्धतीलाच प्राधान्य देतात व रोखीने व्यवहारावरच विश्वास ठेवता. केवळ ग्रामीणच नाही तर शहरी भागातसुद्धा काही लोक आधुनिक व्यवहार पद्धतीपासून दूर आहेत. खरे पाहता सर्वसामान्यांच्या दृष्टीने आधुनिक देयक प्रणाली फायद्याची व महत्त्वाची आहे. या पद्धतीचा वापर समाजातील प्रत्येक घटकाने केला पाहिजे.

भारत सरकारने आधुनिक व्यवहार पद्धतीले चालना देण्यासाठी प्रत्येक गावात माहिती केंद्र उभारले पाहिजे. चर्चासत्रांचे आयोजन केले पाहिजे आणि सर्वसामान्य जनतेला आधुनिक व्यवहार पद्धतीचे महत्त्व पटवून सांगितले पाहिजे. तसेच व्यवहारावर सवलती दिल्यासही चांगला फायदा होऊ शकतो. आधुनिक देयक प्रणालीची काही फायदे तोटे पुढीलप्रमाणे विचारात घेता येतील.

### संशोधनाची उद्दिष्ट्ये :

- १) आधुनिक देयक प्रणालीचा अभ्यास करणे.
- २) आधुनिक देयक प्रणालीचे महत्त्व विशद करणे.
- ३) आधुनिक देयक प्रणालीचे फायदे-तोटे विचारात घेणे.

### गृहितके :

- १) भारतात आधुनिक पद्धतीने आर्थिक व्यवहार होत आहेत.
- २) आधुनिक देयक प्रणाली सर्व ठिकाणी उपलब्ध आहे.

### संशोधन पद्धती :

प्रस्तुत शोधनिबंधासाठी द्वितीय स्रोताचा वापर केला आहे. त्यासाठी संदर्भग्रंथ, वर्तमानपत्र, मासिके, वेबसाईट इत्यादी द्वारे माहितीचे संकलन केले आहे.

### आधुनिक देयक प्रणाली म्हणजे काय ? :

समाजातील बऱ्याच घटकांना आजही आधुनिक देयक प्रणाली काय हेच माहित नाही. आधुनिक देयक प्रणालीमध्ये आर्थिक व्यवहार करण्यासाठी इलेक्ट्रॉनिक पद्धतीचा वापर केला जातो. ज्यात तुटक पद्धतीच्या माध्यमातून पैसे दिले व घेतले जातात जे डोळ्यांना मात्र दिसत नाहीत अगदी कमी वेळात व्यवहार पूर्ण होऊन देणारा आणि घेणारा दोघांचाही वेळ व श्रम वाचतात.

- 1) “प्रत्यक्ष रोख चलनाचा वापर न करता इलेक्ट्रॉनिक पद्धतीने आर्थिक व्यवहार पूर्ण करणे म्हणजे आधुनिक देयक प्रणाली होय.”
- 2) “मोबाईल बँकींग किंवा संगणकाच्या माध्यमातून पैशांची देवाण-घेवाण करणे म्हणजे आधुनिक देयक प्रणाली होय.”

वरील प्रमाणे आधुनिक देयक प्रणालीच्या सर्वसामान्य व्याख्या करण्याचा प्रयत्न केला आहे. या व्याख्यांच्या माध्यमातून आधुनिक देयक प्रणाली ही संकल्पना समजण्यास मदत होईल.

### आधुनिक देयक प्रणालीचे विविध मार्ग :

#### 1) आर. टी. जी. एस. :

देणी भागविण्यासाठी आर.टी.जी.एस. यंत्रणा रिझर्व बँकेने 2004 मध्ये उपलब्ध करून दिली आहे. या माध्यमातून आदेशित देणी ताबडतोब भागविली जातात. म्हणजे निधी हस्तांतरणात वेळेचा अवकाश नसतो हा व्यवहार एक बँक खाते ते दुसरे बँक खाते असा होतो. त्यामुळे निधी प्राप्त करणाऱ्याचे नाव, खाते क्रमांक व आय.एफ.सी. कोड आवश्यक असतो.

2) एन. ई. एफ. टी. :

देणी भागविण्यासाठी एन. ई. एफ. टी. ही आणखी एक यंत्रणा रिझर्व्ह बँकेने नोव्हेंबर 2005 मध्ये उपलब्ध करून दिली. या व्यवहारात देणी ताबडतोब न होता विशिष्ट वेळेनंतर पूर्ण होतात.

3) आय. एम. पी. एस. :

व्यक्ती ते व्यक्ती तसेच ग्राहक ते व्यापारी देणी भागविण्यासाठी वापरला जाणारा महत्त्वाचा प्रकार म्हणजे आय. एम. पी. सी. होय. ही सेवा रिझर्व्ह बँक पुरवत नसून एन. पी. सी. आय. पुरविते. 22 नोव्हेंबर 2010 पासून ही सेवा उपलब्ध आहे.

4) यु. पी. आय. :

व्यक्ती ते व्यक्ती तसेच ग्राहक ते व्यापारी देणी भागविण्यासाठी एकल आदेशातला सर्व समावेशक प्रकार म्हणजे यू. पी. आय. होय. ही सुद्धा सेवा एन. पी. सी. आय. च पुरवित असून एप्रिल 2016 पासून उपलब्ध आहे.

5) स्मार्ट कार्ड :

बँकेत खाते उघडल्यानंतर ग्राहकांना स्मार्ट कार्ड वितरीत केले जाते. या स्मार्ट कार्डच्या माध्यमातून दुसऱ्या व्यक्तीच्या खात्यावर पैसे पाठवता येतात. यासाठी त्या व्यक्तीचा खाते क्रमांक व आय. एफ. सी. कोड आवश्यक असतो. या कार्डचे विविध प्रकार आहेत. डेबिट कार्ड, क्रेडिट कार्ड, रुपे कार्ड, चीप कार्ड, स्ट्रीप कार्ड इत्यादी.

6) आधार पे :

आधारकार्डच्या माध्यमातून सुद्धा आधुनिक देयक प्रणालीचा वापर करता येतो. आधार क्रमांकाचा वापर करून खातेदाराची इलेक्ट्रॉनिक ओळख निर्माण केली जाते. सध्या ग्राहक ते व्यापारी देणी देताना डेबिट कार्ड ऐवजी मोबाईल आधारित आधार पे वापराची संकल्पना उदयास आली आहे.

**आधुनिक देयक प्रणालीचे फायदे :**

आधुनिक किंवा डिजिटल वितरण प्रणालीचे अनेक फायदे आहेत. रोख रक्कम जवळ बाळगावी लागत नाही. व्यवहार त्वरीत व जलद गतीने होतात. त्यामुळे लोक आपला वेळ आणि श्रम दोन्ही वाचवू शकतात. एखाद्या व्यक्तीला पैसे देण्यासाठी प्रत्यक्ष जाण्याची आवश्यकता भासत नाही. यातून आर्थिक व्यवहारांमध्ये गतीमानता येते. चलन तुटवडा भासत नाही. कागदी चलनाच्या छपाईवर येणारा खर्च सुद्धा कमी करता येतो. आधुनिक देयक प्रणालीचे काही महत्त्वपूर्ण फायदे पुढीलप्रमाणे स्पष्ट करता येतील.

- 1) चलन तुटवड्यावर मात करता येते.
- 2) आर्थिक व्यवहारांमध्ये गतीमानता येते.
- 3) वेळ व श्रमाची बचत.
- 4) सरकारच्या कर महसूलात वाढ.
- 5) रोख रक्कम जवळ बाळगण्याची आवश्यकता नाही.
- 6) जोखमीचे प्रमाण कमी करता येते.
- 7) व्यवहारात सुलभता येते.
- 8) पैसे देण्यासाठी प्रत्यक्ष जाण्याची आवश्यकता नाही.
- 9) कागदी चलन छपाईवरील सरकारचा खर्च कमी करता येईल.

**आधुनिक देयक प्रणालीतील अडथळे :**

आधुनिक देयक प्रणाली वापरण्यासाठी व हाताळण्यासाठी सोपी जरी वाटत असली तरी याही प्रणालीत थोड्याफार प्रमाणात धोका असतोच अलीकडे ऑनलाईन फसवणूकीचे प्रकार वाढत आहेत. त्यामुळे आधुनिक देयक प्रणालीचा वापर करत असताना सावधगिरी बाळगणे आवश्यक आहे. तसेच ही प्रणाली ग्रामीण भागातील अशिक्षित व वृद्धांना हाताळणे अवघड आहे. त्यांच्याकडून चूक होऊ शकतात आणि आर्थिक फटकाही बसू शकतो. आधुनिक देयक प्रणालीच्या माध्यमातून करोडपती काही क्षणात रोडपती होऊ शकते म्हणून आजही अनेक लोक या प्रणालीपासून दूर आहेत. या प्रणालीतील काही अडथळे पुढीलप्रमाणे स्पष्ट करता येतील.

- 1) आधुनिक देयक प्रणालीवरील लोकांचा अविश्वास.
- 2) भ्रमणध्वनी हरविणे.
- 3) वृद्ध व अशिक्षितांसाठी अवघड.
- 4) ओळखचोरीची भिती.
- 5) हॅकर्सची भिती.
- 6) नेटवर्कची समस्या.
- 7) बँकींग सेवा ग्रामीण भागात नसणे.
- 8) या प्रणालीसाठी सुरुवातीला जास्त खर्च येतो.
- 9) अल्पशी चुक मोठे नुकसान ठरू शकते.
- 10) समाजातील प्रत्येक घटकांपर्यंत ही प्रणाली पोचलेली नाही.

**निष्कर्ष :**

आधुनिक देयक प्रणाली हाताळण्यासाठी सुशिक्षित व शहरी लोकांसाठी सोयीची आहे. परंतु अशिक्षित आणि ग्रामीण भागातील लोकांना ही प्रणाली व्यवस्थित हाताळता येणे कठीण आहे. या प्रणालीचा वापर करण्यासाठी आधुनिक तंत्रज्ञानाची आवश्यकता आहे. जसे की, संगणक, नेटवर्क, बँकींग खाते आदी सोयी असल्याशिवाय या प्रणालीचा वापर करता येत नाही. वरील विवेचनातील पुढील काही महत्त्वपूर्ण निष्कर्ष निघतात.

- 1) सरकारसाठी उपयुक्त.
- 2) वृद्ध व अशिक्षितांना हाताळण्यास अवघड.
- 3) व्यवहार त्वरीत पूर्ण करता येतात.
- 4) येणाऱ्या काळात या प्रणालीचे वर्चस्व असेल.
- 5) कागदी चलनाचा वापर कमी होऊ शकतो.

**संदर्भ :**

- 1) स्पर्धा परीक्षा अर्थशास्त्र भाग-1 — किरण देसले, दिपस्तंभ प्रकाशन, जळगांव.
- 2) अर्थात - अच्युत गोडबोले - राजहंस प्रकाशन, पुणे.
- 3) सार्वजनिक अर्थकारण — जे. एफ. पाटील - फडके प्रकाशन, नागपूर.





## मेक इन इंडिया व भारतीय उद्योग क्षेत्र

प्रा. डॉ. आशा बालाजी भैरट

अर्थशास्त्र विभाग,  
महात्मा बसवेश्वर महाविद्यालय, लातूर

### प्रस्तावना :

कोणत्याही देशाच्या आर्थिक विकासात कुशल लोकसंख्या व नैसर्गिक साधन संपत्तीची उपलब्धता या दोन गोष्टी महत्वाच्या असतात. भारत हा नैसर्गिक साधन संपत्तीने युक्ततम असा देश असून येथे कुशल व सुशिक्षित बेरोजगारांचे प्रमाण मोठे दिसून येते. परंतु भारतात पुरेशा प्रमाणात भांडवलाची उपलब्धता नसल्याने आर्थिक विकासात अडथळे निर्माण होत आहेत. अर्थव्यवस्थेतील गुंतवणूकीचे प्रमाण वाढले तर भारतीय अर्थव्यवस्था आशिया खंडातील जलद विकास पावणारी अर्थव्यवस्था ठरेल. म्हणूनच मेक इन इंडिया त्या दृष्टीने भारतीय अर्थव्यवस्थेला उभारी आणण्यासाठी उचललेले पाऊल आहे असे म्हणावे लागेल. ease of doing Business Index पाहिला तर भारताचा रँक खूपच कमी आहे. त्यामुळे भारतात मोदी सरकारने भांडवलाच्या खुल्या आयातीचे धोरण स्विकारले. २५ सप्टेंबर २०१४ रोजी नवी दिल्ली येथे या योजनेला सुरुवात झाली. भारतीय उद्योजकांची उत्पादन प्रेरणा वाढावी हा या योजनेमागचा हेतू आहे. ease of doing Business मध्ये भारताचा क्रमांक (Rank) सुधारणे व त्यासाठी भारतीय अर्थव्यवस्थेत विदेशी गुंतवणूकीला चालना देऊन उत्पादन वाढ घडवून आणणे हे उद्दिष्ट समोर ठेवून मेक इन इंडिया योजनेचा प्रारंभ केला गेला.

### अभ्यासाची उद्दिष्ट्ये :

१. मेक इन इंडिया योजना अभ्यासणे.
२. मेक इन इंडिया योजनेचे भारतीय अर्थव्यवस्थेवरील परिणाम अभ्यासणे.
३. भारतीय उद्योग क्षेत्रातील प्रत्यक्ष विदेशी गुंतवणूकीचा प्रवाह अभ्यासणे.
४. शासनाने उद्योग क्षेत्राच्या विकासासाठी या योजनेमार्फत दिलेले प्रोत्साहन अभ्यासणे.
५. मेक इन इंडिया योजनेचे फलित व दोष अभ्यासणे.

### संशोधन पद्धती :

प्रस्तुत अभ्यास हा द्वितीयक साधनांवर आधारित असून उपलब्ध सामग्री विविध संशोधन पत्रिका, वर्तमानपत्र तसेच वेबसाईट वरून उपलब्ध केली आहे. या संशोधनात विश्लेषणात्मक व मूल्यमापनात्मक अभ्यास पद्धतीचा वापर करण्यात आला आहे.

### मेक इन इंडिया :

मेक इन इंडिया योजना ही स्वदेशी चळवळीसारखी एक योजना आहे. या उपक्रमामागील प्रमुख उद्देश म्हणजे अर्थव्यवस्थेच्या विविध क्षेत्रात रोजगार निर्मिती व कौशल्य विकासावर लक्ष केंद्रीत करणे होय. त्याचबरोबर उच्च गुणवत्तेचे मानक प्राप्त करणे आणि पर्यावरणावर होणारे परिणाम कमी करणे आहे.

या योजनेमुळे भारतातील भांडवल आणि तंत्रज्ञानाची गुंतवणूक आकर्षित होईल अशी अपेक्षा आहे. अर्थव्यवस्थेतील महत्वाच्या २५ क्षेत्रांना उभारी देण्यासाठी भारत सरकारने या योजनेस सुरुवात केली आहे. ही २५ क्षेत्रे पुढीलप्रमाणे आहेत. वाहन, ऑटोमोबाईल घटक, विमान चालन, बायोटेक्नॉलॉजी, रसायने, बांधकाम, संरक्षण उत्पादन, विद्युत यंत्रणा, इलेक्ट्रॉनिक प्रणाली, अन्न प्रक्रिया, माहिती तंत्रज्ञान व व्यवसाय प्रक्रिया व्यवस्थापन, लेदर, माध्यमे व करमणूक, खनिजे, तेल आणि वायू, औषधे, पार्ट आणि शिपिंग, रेल्वे, नुतनीकरणक्षम ऊर्जा, रस्ता आणि महामार्ग, जागा आणि खगोलशास्त्र, वस्त्र, औष्णिक ऊर्जा, पर्यटन आणि आतिथ्य कल्याण इत्यादी.

या योजनेत अंतराळ उत्पादनात (space products) ७४ टक्के, संरक्षण उत्पादनात (defence products) ४९ टक्के आणि प्रसार माध्यमे (News Media) २६ टक्के व इतर सर्व क्षेत्रातील उत्पादनासाठी १०० टक्के थेट विदेशी गुंतवणूकीला (FDI) मान्यता देण्यात आली. जपान - भारत मेक इन इंडिया विशेष वित्त पुरवठा निधी निर्माण केला गेला. हा निधी US \$ 12 billion एवढा होता.

मेक इन इंडिया या योजनेस सुरुवात झाल्यानंतर सप्टेंबर २०१४ ते फेब्रुवारी २०१६ पर्यंत भारताला गुंतवणूकीच्या वचन बद्धतेतून (Investment commitment) US \$ 250 billion निधी प्राप्त झाला. तसेच गुंतवणूक चौकशीतून (Investment inquiries) US \$ 23 billion निधी मिळाला. सन २०१६ - १७ मध्ये अमेरिका व चीन या देशांची गुंतवणूक (FDI) US \$ 60 billion एवढी होती.

मेक इन इंडियाच्या धर्तीवरच विविध राज्य सरकारांनी देखील आपल्या राज्यात ही योजना सुरू केली. जसे वाइब्रेंट गुजरात, मेक इन हरियाणा, मेक इन महाराष्ट्रा इत्यादी.

### मेक इन इंडियाचे भारतीय अर्थव्यवस्थेतील परिणाम :

विदेशी गुंतवणूक वाढविण्यासाठी सुरू करण्यात आलेल्या या योजनेमुळे उद्योग व उद्योजकतेला चालना मिळाली. त्याचबरोबर भारतात रोजगाराच्या नवीन संधी उपलब्ध झाल्या. पर्यावरणाचा समतोल राखला जाऊन लहान उद्योजकांना उत्तेजन मिळाले. या उद्योगात

निर्माण झालेल्या वस्तूंची निर्यात करून परकीय चलन वाढीस प्रोत्साहन मिळाले. भारतीय युवकात उत्पादन कौशल्य विकसित झाले, हे विशेष. या योजनेमुळे विकसित तसेच विकसनशील देशांकडून भारतात गुंतवणूक करण्याचे प्रस्ताव पाठवले जात आहेत. याचा फार मोठा अनुकूल परिणाम भारतीय अर्थव्यवस्थेवर दिसून येत आहेत. जर विदेशी मोठ्या कंपन्यांकडून भारतात प्रत्यक्ष गुंतवणूक वाढवली गेली तर भारताचे राष्ट्रीय उत्पादन वाढणार आहे. या योजनेने गुंतवणूकीसाठी जी २५ क्षेत्रे खुली करून दिली आहेत. त्यात भांडवल गुंतवणूकीस व आपले कौशल्य विकसित करण्याची मुभा आहे. जर या क्षेत्रात गुंतवणूक वाढत गेली तर रोजगार व तंत्रज्ञानाचा विकास देखील घडून येईल.

सन २०१४ मध्ये भारताची अर्थव्यवस्था ८ व्या क्रमांकावर असणारी मोठी अर्थव्यवस्था होती. ती सन २०१८ मध्ये ५ व्या क्रमांकावरील मोठी अर्थव्यवस्था बनली आहे. तसेच ease of doing business मध्ये २०१४ मध्ये भारत १३४ व्या क्रमांकावर होतो तो २००८ मध्ये १०० व्या क्रमांकावर आला आहे. तसेच भारत ग्लोबल कॉम्पिटिटिवनेस इंडेक्स (GCR) मध्ये सन २०१४ मध्ये ७२ व्या क्रमांकावर होता. तो सन २०१८ मध्ये १४० देशांच्या तुलनेत ५८ व्या क्रमांकावर आला आहे. ग्लोबल इनोव्हेशन इंडेक्स (GII) मध्ये सन २०१८ मध्ये १३० देशांमध्ये भारत ५७ व्या क्रमांकावर आहे.

मेक इन इंडिया योजनेत उत्पादन क्षेत्रात १२ टक्के ते १४ टक्के प्रतिवर्ष वृद्धी करण्याचे उद्दिष्ट ठेवले असून सन २०२२ पर्यंत सर्व वस्तूंचे उत्पादन भारतात सुरू होईल अशी अपेक्षा आहे. यामुळे भारतीय अर्थव्यवस्थे समोरील भाववाढीचा प्रश्न देखील कमी हेईल. या योजनेने जुन्या तंत्रज्ञानाऐवजी पारदर्शक व उपयुक्त प्रणाली स्विकारली आहे. ज्यामुळे भारतात उच्च दर्जाचे उत्पादन निर्माण होईल.

### भारतीय उद्योगात थेट विदेशी गुंतवणूक (FDI):

मेक इन इंडिया योजना उत्पादनवृद्धीस चालना देऊन भारताला वैश्विक उत्पादन केंद्र बनवण्यासाठी निर्माण झाली. या योजनेअंतर्गत २५ क्षेत्रांमध्ये आणि वेब पोर्टल मध्ये माहितीपत्रके पूरविण्यात आली. विविध क्षेत्रातील परदेशी इक्विटी कॅम्प शिथिल करण्यात आल्या. या योजनेची ओळख झाल्यानंतर पुढील वर्षापासून भारताच्या FDI मध्ये वैशिष्ट्यपूर्ण वाढ झाल्याचे दिसून येते. सर्वाधिक FDI संरक्षण उत्पादन, बांधकाम व रेल्वे संरचनेत होण्याच्या दृष्टीने प्रयत्न केले जात आहेत. प्रत्यक्षात रेल्वे, संरक्षण, औषधी या क्षेत्रात वाढत असल्याचे दिसून येते. इलेक्ट्रॉनिक वस्तूंची निर्यात २०२० पर्यंत शून्य टक्क्यांवर आणण्याचे उद्दिष्ट ठरविले गेले आहे.

खालील कोष्टकात उत्पादन क्षेत्रात आलेली प्रत्यक्ष विदेशी गुंतवणूक दर्शविली आहे.

### भारतीय उद्योगक्षेत्रातील प्रत्यक्ष विदेशी गुंतवणूक (US \$ Billion)

अ.क्र.	वर्ष	वार्षिक FDI प्रवाह
०१	२०१०-११	४.७९
०२	२०११-१२	९.३४
०३	२०१२-१३	६.५३
०४	२०१३-१४	६.३८
०५	२०१४-१५	९.६१
०६	२०१५-१६	८.४४
०७	२०१६-१७	११.९७

स्रोत- RBI Annual Report.

वरिल कोष्टकावरून असे दिसून येते की, भारतातील प्रत्यक्ष विदेशी गुंतवणूकीचा प्रवाह वाढत आहे. त्यामुळे मेक इन इंडिया योजनेला यश प्राप्त होताना दिसून येते. सन २०१४-१५ मध्ये FDI वाढून US \$ 9.61 Billion एवढी वाढली. नंतर सन २०१५-१६ मध्ये थोडी घटून US \$ 8.44 Billion झाली तरीही सन २०१६-१७ मध्ये यात US \$ 11.97 Billion एवढी वैशिष्ट्यपूर्ण वाढ झालेली दिसून येते.

### मेक इन इंडिया योजनेचे लाभ :

१) रोजगार संधीत वाढ : मेक इन इंडिया च्या प्रमुख हेतूंपैकी एक म्हणजे भारतीय नागरिकांना उद्योगाच्या संधी प्राप्त करून देणे होय. विशेषतः तरुणांना त्यांच्या वैचारिक प्रगल्भतेसह पुढे घेऊन जाणे हे या योजनेतून साध्य होणार आहे.

२) ब्रँड मूल्यात वृद्धि : सर्वसाधारणपणे शहरी भागातील उपभोक्ते किरकोळ विक्रेत्यांजवळील वस्तूऐवजी आंतरराष्ट्रीय ब्रँड वापरणे अधिक पसंत करतात. त्यामुळे लघु उद्योजकांना नफा मिळत नाही. परंतु मेक इन इंडिया कार्यक्रमांमुळे अशा छोट्या उद्योगात गुंतवणूक करणाऱ्या कंपन्यांमुळे भारतीय व्यापाराच्या ब्रँड मूल्यात वृद्धि होईल.

३) स्थूल देशांतर्गत उत्पादनात वाढ: आर्थिक विकासातून उत्पादन कार्यास चालना मिळते. या कार्यक्रमांमुळे केवळ व्यापार क्षेत्रालाच प्रोत्साहन मिळाले असे नव्हे तर स्थूल देशांतर्गत उत्पादनातही वाढ घडून येईल. निर्यात, वास्तूकला, कापड, दूरसंचार इत्यादी सारख्या विविध क्षेत्रांच्या विकासातून भारतीय अर्थव्यवस्था विकसित होईल.

४) **रुपयाचे मजबूतीकरण** : उत्पादन क्षेत्राच्या विकासातून भारत हा एक स्वयंचलित स्वरुपाचे केंद्र बनेल परिणामतः एफ.डी.आय. चा प्रवाह वाढून भारतीय रुपयाची अमेरिकन डॉलरच्या प्रभावातून मुक्तता होऊन रुपयाचे मजबूतीकरण घडून येईल.

५) **उद्योजकतेस चालना**: भारत हा एक विकसनशील देश आहे. त्यामुळे नवीन तंत्रज्ञानाचा अभाव दिसून येतो. ज्यामुळे आर्थिक विकासात अडथळे निर्माण होतात. परंतु मेक इन इंडिया कार्यक्रमाद्वारे भारतात येणाऱ्या अनेक देशांसह त्यांचे तंत्रज्ञानही भारतात येईल व त्याचा फायदा भारतीयांना होईल. यातूनच उद्योजकतेला चालना मिळेल. भारतातच कुशल श्रम निर्माण होईल.

६) **भांडवलाचा प्रवाह** : भारताच्या व्यवहारातील नेहमीच प्रतिकूल राहिला आहे. परंतु मेक इन इंडिया कार्यक्रमांमुळे भारतातच वस्तू व सेवांचे उत्पादन होईल त्यामुळे अशा वस्तूंच्या आयातीवर खर्च होणार नाही. तसेच विदेशी कंपन्यांच्या गुंतवणूकीमुळे भारताचा विदेशी देशांवर होणारा खर्च कमी होईल. या उलट विदेशातून भांडवल व मजूरीच्या रुपात खर्च वाढेल व भारतात भांडवलाचा प्रवाह सुरु होईल.

७) **व्यापार करणे सुलभ** : भारतात आपल्या उत्पादनाची निर्मिती करण्यात सर्व विदेशी कंपन्यांना परवानगी देण्यात आली त्याचबरोबर उद्योजकांवरील विविध निर्बंध कमी केल्यामुळे जगातील कोणत्याही उद्योजकास भारताशी व्यापार करणे सुलभ व सोयीचे होईल.

८) **नवप्रवर्तनास चालना**: भारतातील बहुअंशी युवक आपल्या उज्वल भविष्यासाठी विदेशीत जाण्याची योजना आखतात. त्यामुळेच आजपर्यंत भारत अशा नवप्रवर्तकास मुक्त आहे. मेक इन इंडिया कार्यक्रमांमुळे या युवा पिढीला रोजगार तर मिळेलच पण त्याचबरोबर त्यांच्या नवीन विचारांचा फायदा भारताला होऊन औद्योगिक क्षेत्र गगन भरारी घेईल.

**मेक इन इंडिया योजनेचे तोटे :**

१) **कृषी क्षेत्राकडे दुर्लक्ष** : या योजनेचा सर्वात प्रतिकूल परिणाम कृषी क्षेत्रावर होऊ शकतो. कृषीयोग्य जमिनीचे काही प्रमाण उद्योग स्थापनेसाठी वापरण्याची शक्यता नाकारता येत नाही. त्यामुळे उद्योगाच्या स्थापनेसह कृषी क्षेत्र दुर्लक्षित होऊ शकते.

२) **नैसर्गिक संसाधनांचा अपव्यय**: मेक इन इंडिया कार्यक्रम विनिर्माण उद्योगांवर आधारित आहे. उद्योगाच्या स्थापनेसाठी मोठ्या प्रमाणात नैसर्गिक संसाधनांची आवश्यकता असते. जसे जमिन, पाणी वगैरे त्यामुळे त्यांचा अपव्यय होण्याची शक्यता असते.

४) **उद्योग प्रधान अर्थव्यवस्था**: भारतीय अर्थव्यवस्थेचे कृषी, उद्योग व सेवा क्षेत्र हे वैशिष्ट्य आहे. भारतीय अर्थव्यवस्था कृषीप्रधान आहे. सेवा क्षेत्राचा वाटा जी.डी.पी. च्या ५७ टक्के आहे. परंतु मेक इन इंडिया कार्यक्रमांतर्गत उद्योग व निर्यातीवर भर दिला गेला त्यामुळे कृषी व सेवा क्षेत्राकडे दुर्लक्ष होण्याची शक्यता आहे.

५) **प्रदूषण** : भारतात प्रदूषण ही सर्वात मोठी समस्या आहे. भारतात ७६.५० इतका प्रदूषण सूचकांक आहे. त्यामुळे मेक इन इंडिया कार्यक्रम आर्थिक रुपात योग्य असेल परंतु परिस्थितीक रुपाने विपरीत प्रभाव होईल.

**निष्कर्ष :**

भारताने पुन्हा एकदा स्वतःला सिध्द केले आहे की, भारत हा जगात वेगाने विकास पावणारा देश आहे. जगाच्या सर्वाधिक विदेशी गुंतवणूक आकर्षित करणारा भारत हा पहिल्या १० देशांमध्ये मोडतो. त्यामुळे भारत विदेशी गुंतवणूकदारांसाठी व्यावसायिक मान्यता देणारा देश ठरला आहे. थेट विदेशी गुंतवणूक वाढविण्याच्या दृष्टीने शासनाने महत्त्वाची पावले उचलली आहेत. गुंतवणूकीची बंधने शिथिल केल्यामुळे देशातील गुंतवणूक वाढून देशाची प्रगती होईल.

मेक इन इंडिया योजना ही एक महत्त्वाकांक्षी योजना आहे. जर ह्या योजनेला यश प्राप्त झाले तर देशाला आयात करण्याची गरज राहणार नाही. देश स्वतः सर्व वस्तू निर्माण करण्यास सशक्त बनेल. देशाची अर्थव्यवस्था तीव्र गतिने विकसित होईल.

असे असले तरीही ज्याप्रमाणे नाण्याला दोन बाजू असतात त्याचप्रमाणे या योजनेला काही दुष्परिणाम देखील संभवतात. म्हणजेच ही योजना केवळ उत्पादन क्षेत्र व लोकसंख्येतील गरीब व मध्यमवर्गीयांचा विचार करते. परंतु विदेशी गुंतवणूकदार उच्चभू लोकांसाठी उत्पादन घेण्याची शक्यता आहे. त्यामुळे ही योजना ज्या उद्देशाने ठरविली आहे, ते साध्य होईलच असे म्हणता येणार नाही. उद्योग क्षेत्र हे भारतीय अर्थव्यवस्थेच्या विकासाचे महत्त्वाचे अंग आहे. जसे डिजिटल इंडिया या योजनेतून सेवा क्षेत्राच्या विकासासाठी प्रयत्न केले जात आहेत तसे मेक इन इंडिया उद्योग क्षेत्राच्या विकासासाठी प्रयत्नशील आहे. परंतु हे ध्येय तेवढे सोपे नाही. येत्या ५ वर्षात उत्पादनात १६ टक्के वरून ३५ टक्क्यांपर्यंत वाढ घडवून आणण्याचे उद्दिष्ट आहे. मेक इन इंडिया यासाठी साह्यभूत ठरणार असली तरी या योजनेची आपली काही आव्हाने आहेत जसे उत्पादन क्षेत्र हे गुंतवणूक व साधनांची उपलब्धता यावर अवलंबून आहे.

**उपाययोजना:**

मेक इन इंडिया योजनेंतर्गत उत्पादन व निर्यात वाढीचे उद्दिष्ट साध्य करताना गरीब व मध्यमवर्गीय उपभोक्त्यांच्या गरजा पूर्ण होतील याकडे लक्ष दिले गेले पाहिजे. तसेच सामान्यांच्या उपभोगाच्या वस्तूंच्या किंमती कमीत-कमी राहतील याकडे लक्ष केंद्रित केले पाहिजे. तसेच उद्योग क्षेत्राचा विकास व एफ.डी.आय. मध्ये वाढ घडून येत असताना कृषी व सेवा क्षेत्राकडे पुरेसे लक्ष दिले गेले पाहिजे.

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## कॅशलेस व्यवहार पध्दती : आढाने आणि उपाय योजना

संशोधक विद्यार्थी

पी.एस. भुस्से

सामाजिकशास्त्रे संकुल,  
स्वा.रा.ति.म.विद्यापीठ, नांदेड

भारताने ८ नोव्हेंबर २०१६ च्या विमुद्रीकरणातून ५०० व १००० च्या कागदी नोटा चलनातून बाद करून कॅशलेस पध्दतीने जास्तीत व्यवहार व्हावेत यासाठी प्रयत्न करण्यास सुरुवात केली. भारतीय अर्थव्यवस्थेतील जास्तीत जास्त व्यवहार कॅशलेस स्वरूपात किंवा इलेक्ट्रॉनिक माध्यमातून झाले पाहिजे यासाठी भारतीय रिझर्व्ह बँक व भारत सरकार सतत प्रयत्न करत आहेत. सध्या भारतात मोठ्या प्रमाणावर रोख पैशाच्या माध्यमातून म्हणजेच कागदी नोटांद्वारे व्यवहार होतात. ही पध्दत बऱ्याच वर्षांपासून सुरू आहे. छापिल नोटांच्या व्यवहारात भारत आघाडीपासून सुरू आहे. छापिल नोटांच्या व्यवहारात भारत आघाडीवर आहे भारतातील जास्तीत-जास्त लोक रोख पैशाच्या माध्यमातून व्यवहार करणे पसंद करतात. परंतु या व्यवहार पध्दतीमुळे आर्थिक गैर व्यवहार होण्यास अधिक वाव असतो.

कॅशलेस अर्थव्यवस्था म्हणजे जास्तीत-जास्त आर्थिक व्यवहार इलेक्ट्रॉनिक माध्यमातून करणे होय त्याऐवजी इतर पर्याय वापरले जात उदा, प्लास्टिक मनी RTGS, NEFT, IMPS, UPI, USSD इ. पर्यायांच्या माध्यमातून आर्थिक व्यवहार केले जातात. कॅशलेस अर्थव्यवस्था ही अधिक पारदर्शक असते. या माध्यमातून झालेले व्यवहार अधिक सुरळीत आणि फायदेशिर असतात. या पध्दतीच्या माध्यमातून व्यवहार हे घरी बसून सुध्दा करता येतात व त्याचबरोबर कमीत कमी वेळात जास्तीत जास्त व्यवहार करता येतात.

### कॅशलेस व्यवहार पध्दती :-

१. **मोबाईल बँकिंग** : वित्तीय संस्था आणि बँक यांना मोबाईल बँकिंगद्वारे सेवा पुरविली जाते. याद्वारे ग्राहक आपल्या मोबाईल मधील ॲप्लीकेशनच्या माध्यमातून सहजरीत्या आर्थिक व्यवहार करत असतो. कोणत्याही दोन व्यक्तींना कोणत्याही ठिकाणाहून खरेदी-विक्रीचे व्यवहार सहजरीत्या करता येतात.
२. **ई वॉलेट सुविधा** :- E-Wallet म्हणजेच इलेक्ट्रॉनिक वॉलेट ही सुविधा बऱ्याच दिवसांपासून इतर देशात उपलब्ध आहे. जवळपास सर्व बँका व काही खाजगी कंपन्यादेखील ही सुविधा पुरवतात. ही सेवा कोणत्याही मोबाईल किंवा कॉम्प्युटरच्या ऑपरेटिंग सिस्टिमवर उपलब्ध आहे.
३. **POS किंवा विक्रीचे ठिकाण** :- POS हे आपल्याकडील क्रेडीट कार्ड व डेबिट कार्ड वापरून पेमेंट करण्याची ही सुविधा आहे.
४. **आधार सक्षम पेमेंट सिस्टम (AEPS)** :- सध्या ग्रामीण भागात ही सुविधा मोठ्या प्रमाणात उपयोगी पडत आहे. या सुविधेद्वारे बँकेतून रक्कम काढणे व भरणे या गोष्टी सहज व सोप्या झालेल्या आहेत.
५. **अविस्तृत पुरक सेवा माहिती (USSD)** :- अविस्तृत पुरक सेवा प्रणालीद्वारे कोणत्याही मोबाईल फोनच्या इंटरफेसमधून आपण पैसे पाठवू शकतो. यासाठी स्मार्ट फोनची आवश्यकता नसते.

वरील पध्दतीशिवाय डिमाण्ड ड्राफ्ट, चेक, RTGS, NEFT, E-Coupons, Gift Card या सारख्या पध्दतीद्वारे सुध्दा कॅशलेस व्यवसाय करण्यास मदत होते.

### कॅशलेस करत असताना येणारी आव्हाने :-

१. **डिजिटल साक्षरतेचा अभाव** : भारतामध्ये मोठ्या प्रमाणात लोक निरक्षर आहेत. त्यामुळे अशा लोकांना आधुनिक व्यवहाराच्या पध्दती विषयी माहिती नाही आणि या व्यवहार पध्दतीच्या सहाय्याने व्यवहार करण्यास ते असमर्थ आहेत. एखादे सॉफ्टवेअर कसे हाताळावे, क्रेडीट कार्ड व डेबिट कार्ड चा वापर कसा करावा याविषयी निरक्षरता आहे म्हणून डिजिटल साक्षरता वाढवणे हे भारतासमोरील आव्हान आहे.
२. **इंटरनेट सुविधा** :- भारतामध्ये इंटरनेट सुविधांचा वापर जास्त प्रमाणात केला जात नाही त्यामुळे आधुनिक व्यवहार किंवा डिजिटल व्यवहार पध्दती प्रत्यक्षपणे पहावयास मिळत नाही. यासाठी इंटरनेटच्या ३५ व ४५ च्या सुविधा लोकांपर्यंत सहजपणे पोहोचल्यापाहिजे यासाठी उपाय योजना करणे गरजेचे आहे.
३. **रोख पैशांद्वारे जास्त व्यवहार** :- भारतातील जास्तीत जास्त व्यवहार रोख पध्दतीद्वारे केले जातात. हा रोख पैशाच्या माध्यमातून केलेला व्यवहार हा भारतातील लोकांना अधिक सोयीस्कर वाटतो परंतु प्रत्यक्षात या पध्दतीमुळे अनेक अडचणी निर्माण करतात त्या कॅशलेस पध्दतीने झालेला व्यवहार अधिक सोयीस्कर व सोपा असतो.
४. **ग्रामीण भागात डिजिटल पायाभूत सुविधांचा अभाव** :- भारतातील ग्रामीण भागात बँकेच्या शाखा पर्याप्त प्रमाणात स्थापन झालेल्या नाहीत. ए.टी.एम. मशीन व इतर सुविधा ग्रामीण भागात नाहीत. भारतातील बिहार, आसाम, मध्य प्रदेश आणि उत्तर प्रदेश यांची 70% आर्थिक दुर्बलता आहे. त्यामुळे मोबाईलचा वापर करणारे लोक खुप कमी आहेत. या राज्यात ग्रामीण भागातील फक्त 30% लोक स्मार्ट फोनचा वापर करतात.

**कॅशलेस व्यवहार सुधारण्यासाठी उपाययोजना :-**

**कॅशलेस करत असताना येणारी आव्हाने :-**

१. **ऑनलाईन व्यवहार वाढवणे** : बँकांनी आणि सरकारनी ऑनलाईन व्यवहार करण्यासाठी लोकांचे मनोधैर्य वाढवले पाहिजे. डिजिटल कॅशलेस व्यवहार करण्यासाठी त्यांनी प्रोत्साहन दिले पाहिजे. एका वर्षामध्ये एका क्रेडिट कार्डद्वारे कमीत कमी 2 लाखांचे व्यवहार व्हावेत यासाठी आवश्यक नियमांची छाननी करून ते ग्राहकावर लादले पाहिजे.
२. **आर्थिक सुरक्षा** : कॅशलेस व्यवहार करताना आर्थिक सुरक्षा असली पाहिजे. क्रेडिट कार्ड व डेबीट कार्ड यासंदर्भातील माहिती ग्राहकांव्यतिरिक्त कुणालाही उघड करता येऊ नये यासाठी फसवणुक विरोधी पथक स्थापन करून ग्राहकांना आर्थिक सुरक्षा दिली पाहिजे.
३. **इतर कॅशलेस अर्थव्यवस्थेकडून शिकले पाहिजे** : ज्या देशातील अर्थव्यवस्था अगोदर पासून कॅशलेस पध्दतीने व्यवहार करतात अशा देशातील अर्थव्यवस्थेकडे असणारे प्रतीमान आपण स्विकारले पाहिजे. उदा, ऊरूवे, स्विडन या सारख्या कॅशलेस अर्थव्यवस्था असणाऱ्या देशातील धोरणे व प्रतीमानाचा अभ्यास करून आपल्या अर्थव्यवस्थेत त्यादृष्टिने सुधारणा केल्या पाहिजेत.
४. **मोबाईल वॉलेट** : कॅशलेस व्यवहार पध्दतीमध्ये सर्वात महत्वाची पध्दती मोबाईल वॉलेट हि आहे. मोबाईल वॉलेट या पध्दतीमध्ये क्लोज्ड वॉलेट, सेमी क्लोज्ड वॉलेट व ओपन वॉलेट यांचा समावेश होतो. आपण वॉलेट यांचा समावेश होतो. ओपन वॉलेट ही पध्दती केलेली असते. अशाप्रकारच्या ओपन वॉलेटची जास्तीत जास्त निर्मिती बँकांनी करून कॅशलेस व्यवहार पध्दतीला उत्तेजन दिले पाहिजे.

**निष्कर्ष :**

कॅशलेस व्यवहार पध्दतीचा जास्तीत जास्त उपयोग व्हावा यासाठी लोकांना मार्गदर्शन करून ज्यांना कॅशलेस व्यवहाराचे फायदे लक्षात आणून देणे गरजेचे आहे. या पध्दतीविषयी लोकांना अधिकाधिक माहिती द्यावी त्यामुळे त्यांना डिजिटल चलनाच्या माध्यमातून व्यवहार करणे गरजेचे आहे. या व्यवहार पध्दतीचा व्यवहारामध्ये जास्त उपयोग झाला तर ग्राहकांना कर चुकवता येणार नाही त्यामुळे काळापैसा निर्माण होणार नाही व त्यामुळे अर्थव्यवस्थेतील व्यवहार अधिक पारदर्शी होईल. या पध्दतीचा वापर वाढवण्यासाठी आव्हाने मोठ्या प्रमाणात आहेत मात्र त्यावर उपाययोजना करून अर्थव्यवस्थेत सुधारणा करण्यासाठी कॅशलेस व्यवहार पध्दतीच्या माध्यमातून अधिकाधिक व्यवहार करणे गरजेचे आहे.

**संदर्भ :**

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## भारतीय भाषांसाठी, भाषा तंत्रज्ञानाचा वापर आणि प्रसार

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### प्रस्तावना :

भारत हा बहुभाषिक देश आहे. अनेक भाषा भारतामध्ये अस्तित्वात आहेत. घटनात्मकदृष्ट्या भारतीय भाषांमध्ये २२ भाषां या मान्यताप्राप्त असून त्याद्वारे सर्व भाषिक व्यवहार साधला जातो. मात्र भारतातील बहुतांश नागरीकांना इंग्रजी भाषेचे ज्ञान अवगत नसल्यामुळे आयटीच्या विकासाच्या फायद्यापासून ते वंचित रहातात. माहिती तंत्रज्ञानाचे फायदे सामान्य लोकांपर्यंत पोहचवायचे असतील तर भाषा तंत्रज्ञानाचा वापर त्या त्या प्रादेशिक भाषेमधून होणे गरजेचे असते. त्यासाठी सॉफ्टवेअर टूल्स व मानवी मशीन इंटरफेस पध्दती त्या त्या भाषेमध्ये उपलब्ध होणे अत्यावश्यक असते. भारतीय भाषांमध्ये माहिती आणि संप्रेषण तंत्रज्ञान (ICT) चा विस्तृत प्रसार व प्रचार होणे अत्यावश्यक आहे. संप्रेषण तंत्रज्ञान लोकांसाठी मुक्तपणे उपलब्ध असणे आवश्यक असते.

‘डिजिटल इंडिया’ ही संकल्पना भारत सरकारकडून सुरू करण्यात आलेली एक व्यापक मोहिम आहे. सुधारित ऑनलाईन पायाभूत सुविधाद्वारे व इंटरनेटच्या माध्यमातून देशाला खऱ्या अर्थाने तंत्रज्ञानाच्या क्षेत्रात डिजिटल सशक्त बनवून शासकीय सेवा सुविधा भारतातील नागरिकांना उपलब्ध करून दिल्या जाव्यात हा त्याचा मुख्य उद्देश आहे. सार्वत्रिक डिजिटल साक्षरता हा डिजिटल इंडियामधील मुख्य घटक आहे. सार्वत्रिक डिजिटल साक्षरतेसाठी माहिती तंत्रज्ञानाचा वापर प्रादेशिक त्या त्या भाषांमधून होण्यासाठी प्रयत्न होणे गरजेचे आहे. या दृष्टीने माहिती तंत्रज्ञान मंत्रालयाने भारतीय भाषांमध्ये तंत्रज्ञान विकास कार्यक्रम सुरू केला. याचा मुख्य हेतू म्हणजे, भारतीय भाषांमध्ये मानवी यंत्राशी चांगल्या पध्दतीने सुसंवाद साधण्यासाठी माहिती-प्रक्रिया साधने, विकसित करणे व त्या माध्यमातून बहुभाषिक ज्ञानात प्रवेश करण्यासाठी तंत्रज्ञान विकसित करणे हा आहे.

तंत्रज्ञान, सॉफ्टवेअर साधने व भारतीय भाषांसाठी संशोधन आणि विकास होणे महत्वाचे आहे. त्यासाठी भाषा तंत्रज्ञान उत्पादनांचा व साधनांचा प्रसार महत्वाचा ठरतो. इंग्रजीमधील उपलब्ध माहिती विविध भारतीय भाषांमध्ये अनुवादित करण्यासाठी ‘मशीन भाषांतर’ प्रणाली जास्त प्रमाणात विकसित व विस्तारीत होणे महत्वाचे ठरते. इतर भाषांमधील माहिती, ज्ञान, कागदपत्रे ही वापरकर्त्याला परिचित असणाऱ्या भाषांमध्ये प्रविष्ट करणे महत्वाचे असते. ‘स्पीच प्रोसेसिंग’ पध्दतीद्वारे स्थानिक भाषेचा डिजिटल मजकूर मशीनद्वारे वाचला जाऊ शकतो. त्यासाठी स्पीच प्रोसेसिंग पध्दती महत्वाची ठरते.

माहिती तंत्रज्ञानात मंत्रालयातील तंत्रज्ञान विभागाने भारतीय भाषेची सॉफ्टवेअर साधणे, तसेच फॉन्ट नावाचा राष्ट्रीय उपक्रम सुरू केलला आहे. त्याबरोबरच आयएसओ, युनिकोड, वर्ल्ड-वाइड-वेब, कन्सोर्टियम आणि भारतीय मानक ब्युरो या संस्थांमध्ये समन्वयातून व सक्रिय सहभाग्यातून भाषा तंत्रज्ञान विकासाला व मानविकरणाला प्रोत्साहण देत आहेत. ही निश्चितच भाषा तंत्रज्ञान विकास व प्रसार या दृष्टीने महत्वाची गोष्ट आहे. यातून भारत बहुभाषिक संगणकीय केंद्र म्हणून उदयास येत आहे. यातून भारतीय भाषांमध्ये खऱ्या अर्थाने देशांतर्गत आयसीटी प्रयोग विकासाला मोठ्या प्रमाणात चालना मिळेल.

ई-गव्हर्नन्स प्रभावी बनविण्यासाठी भारतीय भाषांमध्ये सामग्रीचा वापर वाढला पाहिजे. त्यासाठी भारतातील प्रमुख २२ आणि इतर भारतीय भाषांमध्ये इंग्रजी सामग्री भाषांतरित केल्याशिवाय खऱ्या अर्थाने सरकारचे डिजिटल उपक्रम यशस्वी होणार नाहीत.

‘स्मार्ट भाषा प्रक्रिया प्रयोग’ म्हणजेच मशीन भाषांतर, माहिती पुनर्प्राप्ती, भाषण सक्षम शोध व बहुभाषीक सामग्री तयार करणे. या साधनांचा वापर प्रभाविपणे करणे. ‘संगणकीय भाषाशास्त्र’ हे भाषा तंत्रज्ञान अभ्यासाचे क्षेत्र आहे. असे कार्यक्रम विकसित होणे महत्वाचे आहे की ज्याद्वारे जास्तीत जास्त भारतीय लोक ऑनलाईन येण्यास सक्षम होतील. संगणकीय भाषा व त्यात साक्षर होतील. उदा. इंग्रजी-हिंदी मशीन अनुवादामुळे त्यांच्या भाषेची वेब शोधून मूळ भाषेत सामग्री मोठ्या प्रमाणात व पुरेशी नसली तरीही इंग्रजीमध्ये भाषांतर करून सामग्री इंग्रजीमध्ये शोधता येते आणि ती माहिती त्या त्या मुळ भाषेत आणता येते.

संगणकीय भाषाशास्त्रात देखील सतत विविध आव्हानांना तोंड द्यावे लागते. भाषा ह्या वैविध्यपूर्ण व गतीशिल असतात. त्यात वेगाने बदल होत असतो. वेगवेगळ्या भाषांमध्ये संदर्भानुसार एक शब्द किंवा वाक्य किंवा त्याचा अर्थ भिन्न-भिन्न असतो. त्यामुळे संगणक भाषाशास्त्रात बदल घडवून संगणक ॲप्स सातत्याने अद्यावत केले जाणे अत्यावश्यक आहे. म्हणूनच जेएनयुमधील प्राध्यापक म्हणतात, “ब्राऊस करणे, नॅव्हिगेट करणे, फिल्टरिंग आणि वेबर माहिती प्रक्रिया करणे. यासारख्या सोप्या गोष्टीसाठी आम्हाला सॉफ्टवेअर तयार करण्याची आवश्यकता आहे. जी कोणत्याही भाषेमध्ये दस्तऐवजाच्या मजकुरावर मिळू शकेल.”<sup>१</sup>

भारतीय भाषा तंत्रज्ञानामुळे कोणत्याही भाषेतील ज्ञानसामग्रीचे भाषेत रूपांतर करणे शक्य झाल्यामुळे भाषा तंत्रज्ञानाचा वापर मोठ्या प्रमाणावर वाढतांना दिसतो आहे. जसे की, इंग्रजी, हिंदी इत्यादी भाषेतील ज्ञान, सामग्री, वाङ्मय याचे भाषांतर तंत्रज्ञानामुळे आपोआप होऊ शकते. तसेच संगणकीकृत केलेली पुस्तके व इतर ज्ञानाचे स्रोत असलेले साहित्य उपलब्ध होण्यास मदत होऊ शकते.



**भारतातील भाषा तंत्रज्ञानाची क्षेत्रे आणि भविष्यातील भाषा तंत्रज्ञानापुढील आव्हाने :**

**१) भारतीय भाषा इलेक्ट्रॉनिक उपकरणावर सक्षम करणे :**

भाषा तंत्रज्ञानामध्ये वापर करत असलेल्या भाषा इलेक्ट्रॉनिक उपकरणाला सक्षम करणे महत्वाचे ठरते. याचे कारणे इलेक्ट्रॉनिक उपकरणामध्ये सातत्याने बदल होत असतो. जसे एखाद्याने नवीन मोबाईल किंवा माहिती तंत्रज्ञानाचे एखादे साधन विकत घेतले तर ती व्यक्ती ज्या स्थानिक भाषेचा वापर करते, त्या भाषेसह हिंदी, इंग्रजी या भाषा अंतर्भूत असाव्यात. तसेच त्या ग्राहकाला दुसरीही एखादी भारतीय भाषा त्याच्या उपकरणावर हवी असल्यास तीचा अंतर्भाव करता आला पाहिजे.

**२) भारतीय भाषामध्ये ई-सामग्री वाढविणे :**

भारतीय भाषांमध्ये ई-सामग्रीची वाढ करणे अत्यंत महत्वाचे आहे. याचे कारण वर्तमान कालखंडामध्ये तरूण पीढी इंटरनेटचा वापर मोठ्या प्रमाणावर करत आहे. तसेच विविध प्रादेशिक भाषेतील सामग्री पुरेशा प्रमाणात इंटरनेटवर उपलब्ध नसल्यामुळे इंग्रजी भाषेतील सामग्रीवरती जास्त प्रमाणात अवलंबून रहावे लागते. तसेच भारतामध्ये इंग्रजी भाषेपेक्षा भारतीय भाषा येणारेच लोक जास्त असल्यामुळे भारतीय भाषामध्ये ई-सामग्री वाढविणे अधिक महत्वाचे आहे. नवीन ज्ञान, माहिती सर्व भारतीय भाषांमध्ये उपलब्ध होण्यासाठी त्या ज्ञानाचे, माहितीचे त्या त्या भाषेमध्ये भाषांतरच्या माध्यमातून माहिती पोहचविता येते.

**३) मशिन यंत्राद्वारे भाषांतर :**

मशीन यंत्राच्याद्वारे एका भाषेतील मजकूर तात्काळ दुसऱ्या भाषेत भाषांतरित करता येतो. यंत्राच्या शिवाय ज्या व्यक्तीला दोन भाषा अवगत असतात, तो व्यक्तीच एखाद्या भाषेतील ज्ञान सामग्री दुसऱ्या भाषेत भाषांतरित करू शकतो. मात्र व्यक्तीने केलेल्या भाषांतराचा दर्जाही बदलू शकतो. तसेच वेळही जास्त लागतो. ज्या व्यक्तींना दुसरी भाषा अवगत नसते, त्यांना त्या भाषेतील मजकूर समजण्याचा काहीच मार्ग उपलब्ध नसतो. अशा वेळी यंत्रांच्या मदतीने इतर भाषेतील मजकूर त्या व्यक्तीला जी भाषा येते त्या भाषेत तात्काळ भाषांतर होत असल्यामुळे दुसऱ्या भाषेतील मजकूर कळण्यास मदत होते. तसेच यंत्रांच्या सहायाने केलेल्या भाषांतराचा दर्जाही अधिक चांगला असतो. म्हणून यंत्र भाषांतर महत्वाचे ठरते. उदा. एखाद्या व्यक्तीने मोबाईल हे यंत्र साधन घेतले. तो व्यक्ती इंग्रजी भाषा न जाणणारा असला तरीही त्याला इंग्रजी भाषेतील मजकूर मोबाईलमधील 'Google Translate' या ॲपच्या माध्यमातून क्षणात स्व-भाषेत भाषांतरित करता येतो. राजीव संगल यांच्या मते, "यंत्राने भाषांतर करण्याची सोय सध्या १२ भारतीय भाषांमध्ये उपलब्ध असून ती सर्व म्हणजे २२ अनुसूचित भारतीय भाषांसाठी विकसित करण्याची गरज आहे."<sup>२</sup>

यावरून असे म्हणता येते की, दुसऱ्या भाषेतील ज्ञान, माहिती, मजकूर हा त्या त्या प्रादेशिक भाषेतून मशिन यंत्राच्याद्वारे प्रभाविपणे भाषांतरित करता येते. त्यासाठी त्या-त्या भाषेतून भाषांतर करण्यासाठी सॉफ्टवेअरची निर्मिती होणे गरजेचे आहे. तरच ज्ञानाचा स्रोत सर्व भाषिकांपर्यंत पोहचेल.

**निष्कर्ष :**

- १) भारतीय भाषांसाठी, भाषा तंत्रज्ञानाचा वापर व प्रसार करण्यासाठी अनुकूल परिस्थिती निर्माण होणे गरजेचे आहे.
- २) सर्व माहिती मोठ्या प्रमाणात इंग्रजी भाषेमध्ये उपलब्ध आहे, परंतु भारतीय भाषांमध्ये उपलब्ध करता येईल.
- ३) यंत्राद्वारे भाषांतर प्रक्रियेचा वेग वाढल्यास तंत्रज्ञान व्यवस्थापक व भाषांतराची सेवा पुरविणारे या माध्यमातून व्यवसायही उभारता येईल.
- ४) इतर भाषेतील माहिती मिळण्यास मदत होईल.

**संदर्भ :**

- १) <https://en.m.wikipedia.org>
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## कॅशलेस आर्थिक व्यवहाराचे विविध पर्याय

मोहन उत्तमराव देशमुख

संशोधक विद्यार्थी

स्वा.रा.ती.म.विद्यापीठ उपकेन्द्र, लातूर

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डॉ. दिलीप दादाराव माने

अर्थशास्त्र विभागप्रमुख

शिवाजी महाविद्यालय, रेणापुर

### प्रस्तावना :

भारतीय अर्थव्यवस्थेमध्ये विकासाचा दृष्टीकोण ठेवून सरकारने ८ नोव्हेंबर २०१६ मध्ये नोटाबंदीचा निर्णय घेतला. आणि चलनामध्ये असलेल्या १००० रू व ५०० रूपयांच्या चलनी नोटा चलनातून बाद करण्यात आल्या. सरकारचा नोटाबंदी करण्यामागील मुख्य उद्देश अर्थव्यवस्थेतील काळ्या पैशावरी नियंत्रण नकली चलनावर आळा, विदेशी दहशतवादापासून संरक्षण व अर्थव्यवस्थेमध्ये पारदर्शकता आणता यावी हा होता. आर्थिक व्यवहार रोकडविरहित व्हावेत या दृष्टीकोनातून पाऊले उचलण्यात आली. नोटाबंदीनंतर रोकडविरहित व्यवहाराला चालना देण्यासाठी शासनातर्फे अनेक सवलती व रोकडविरहित व्यवहारासंबंधी जागरूकता आणि मार्गदर्शन प्रणालीची उपलब्धता केली गेली.

सध्या भारतात मोठ्या प्रमाणावर रोख पैशाचा म्हणजेच नोटाद्वारे व्यवहार केले जातात. छापील नोटांच्या व्यवहारात भारत हा जगामध्ये आघाडीवर आहे. परंतु नोटाबंदीनंतर कॅशलेस अर्थव्यवस्थेला चालना देण्यात आली व कॅशलेस आर्थिक व्यवहाराचे विविध पर्याय उपलब्ध करून देण्यात आले.

### कॅशलेस अर्थव्यवस्था म्हणजे काय :

ह्या अर्थव्यवस्थेत व्यवहारामध्ये कॅश किंवा रोख रक्कमेऐवजी इतर पर्याय वापरले जातात. त्यामध्ये प्लॅस्टिक मनी, इ-वॉलेट, इंटरनेट बँकींग, मोबाईल बँकींग, इ. चा समावेश होतो.

‘रोकडविरहित कॅशलेस अर्थव्यवस्था म्हणजे अर्थव्यवस्थेत जास्तीत जास्त आर्थिक व्यवहार हे कोणत्याही रोख रक्कमेशिवाय डिजीटल माध्यमाद्वारे पार पाडले जाणे होय. म्हणजेच आर्थिक व्यवहारात डिजीटल माध्यमांचा जास्तीत जास्त वापर करणे होय.’

‘सर्व आर्थिक देवाण-घेवाण कोणत्याही रोख रक्कमेशिवाय करणे म्हणजेच कॅशलेस अर्थव्यवस्था होय.’

### कॅशलेस व्यवहाराचे विविध पर्याय :

१. धनादेश, मागणी धनाकर्ष (Cheque, Demand Draft)
२. प्लास्टिक मनी (Plastic Money)
३. इंटरनेट बँकींग (Internet Banking)
४. मोबाईल बँकींग (Mobile Banking)
५. इ-वॉलेट, मोबाईल-वॉलेट (e-wallet, mobile -wallet)
६. युपीआय (Unified Payment Interface)
७. पॉईंट ऑफ सेल (Point of Sale)
८. आधारकार्ड बँकींग (Aadhar Card Banking)

इत्यादी पर्यायांच्या साहाय्याने पेमेंट केले जाते.

**१.धनादेश, मागणी धनाकर्ष (Cheque, Demand Draft) :** रोकडविरहित व्यवहाराकरीता चेक व डी. डी यांचा प्रामुख्याने उपयोग केला जातो.

**२.प्लास्टिक मनी (Plastic Money)** मध्ये डेबीट कार्ड व क्रेडीट कार्ड चा वापर केला जातो. खातेदाराने स्वतःच्या बँक खात्याशी जोडलेल्या कार्डची बँकेकडे गरजेनुसार मागणी करतो.

**अ) डेबीट कार्ड :** आधिच खात्यात असलेल्या रक्कमेतून व्यवहारासाठी या पर्यायाचा उपयोग केला जातो.

**ब) क्रेडीट कार्ड :** या पर्यायामध्ये अगोदर व्यवहार किंवा खरेदी त्यानंतर महिन्याअखेरीस बँकेकडे पाठवलेल्या बिलानुसार रक्कम बँकेकडे जमा करावी लागते.

**३.इंटरनेट बँकींग (Internet Banking)** या पर्यायामध्ये आगोदर खातेदारास बँकेत रितसर अर्ज करून इंटरनेट बँकींग द्वारे व्यवहार करण्याची परवानगी घ्यावी लागते. त्यानंतर बँक युजर आयडी व पासवर्ड देते यालाच ऑनलाईन बँक खाते असेही म्हणतात त्या आयडी पासवर्डच्या सहाय्याने बँकेच्या इंटरनेट बँकींग वेबसाईटवर जाऊन लॉगिन करायचे लगेच खातेदाराचे खाते ऑनलाईन व्यवहारासाठी खातेदारास हाताळता येते. खरेदी करताना इंटरनेट बँकींग पर्याय निवडायचा युजर आयडी पासवर्ड टाकायचा त्यानंतर खातेदाराच्या फोनवर आलेला ओ.टी.पी. (OTP) टाकून खरेदी व्यवहार केला जातो. हा पर्याय इतर पर्यायापेक्षा नक्कीच सुरक्षित आहे.

**४.मोबाईल बँकींग (Mobile Banking)** : हा पर्याय इंटरनेट नसलेल्या फोनसाठी तयार करण्यात आला आहे. यात दोन उपपर्याय उपलब्ध आहेत. हे दोन्ही पर्याय वापरण्याकरीता प्रथम खातेदाराचा मोबाईल क्रमांक बँकेत खात्याला जोडणे आवश्यक आहे. त्यानंतर बँकेतून खातेदाराचेMMID युजर नेम व पासवर्ड दिला जातो. बँकेच्या निर्देशानुसारIMPS द्वारे खाते क्रमांक आणिIFSC CODE ची माहिती SMS द्वारे पाठवून पैसे सहज पाठवता येतात. मोबाईल बँकींग पर्यायाचे महत्त्वाचे वैशिष्ट्य म्हणजे कोणत्याही फोनवर इंटरनेट नसतानाही वापरात येते.

**५.इ-वॉलेट, मोबाईल-वॉलेट (e-wallet, mobile -wallet)** हा पर्याय म्हणजे मोबाईल मध्ये असलेसे अभासी पॉकीट जे की, व्यवहारासाठी व्यक्तीकडे असलेल्या पाकीटाची जागा घेऊ पाहते. या मोबाईल वॉलेटमध्ये काही ठरावीक रक्कम आपण जमा करू शकतो, साठवू शकतो. आणि व्यवहारासाठी तिचा वापर आवश्यकतेनुसार करू शकतो. ऑनलाईन व्यवहार खरेदी, रिचार्ज, पैसे पाठवणे इ. तसेच ऑफलाईन ठिकाणी उदा. किराणा विक्रेते रिश्का चालक, दैनंदिन विक्रेते यांच्या सोबत पैसे देवाणघेवाणीसाठी या पर्यायाचा वापर करता येतो. परंतु याचा वापर भारतामध्ये अत्यंत अल्प प्रमाणात केला जातो

**९.युपीआय (Unified Payment Interface)** : कॅशलेस व्यवहारासाठी भारत सरकारने हा एक नवीन पर्याय उपलब्ध करून दिला असून भविष्यामध्ये भारतात या पर्यायाचा जास्तीत जास्त वापर केला जाईल अशी अपेक्षा आहे. यामध्ये युजर आयडी पासवर्ड, बँक खाते क्रमांक, व आय एफ सी कोड या पैकी कशाचीही गरज नाही. या पध्दतीत केवळ एका युजर नेमचा वापर केला जातो. हा व्यवहार थेट बँकेतून पार पाडतात हा पर्याय वापरण्यासाठी खातेदाराचा फोन बँकेत खात्याला जोडलेला / मोबाईल नेट बँकींगद्वारे जोडलेला असावा तोच मोबाईल क्रमांक युपीआयशी जोडा या पध्दतीत ऑफलाईन पर्याय सुद्धा उपलब्ध आहे हा पर्याय ६९९६ डायल करून वापरता येतो.

**६. पॉईंट ऑफ सेल (POS)** : या पर्यायामध्ये ग्राहक विक्रेत्याकडे खरेदी केल्यानंतर विक्रेता बिलाची विक्रेता बिलाची रक्कम त्याच्याकडे असणा-या पी ओ एस मशीनमध्ये कार्ड स्पाईप करून पीन दाबायला सांगतो मशीनमध्ये कार्ड स्पाईप करण्यासाठी डेबीट / क्रेडीट कार्डचा वापर केला जातो या पर्यायात लगेच आपल्या बँक खात्यातून रक्कम विक्रेतेत्याच्या खात्यात जमा होते व एक पावती लगेच प्रिंट करून मिळते. इंधूए मशीनचा वापर अलीकडच्या काळात अनेक ठिकाणी सहज अनुभवास मिळतो उद. विविध स्टोअर्स, पेट्रोलपंप, थिएटर, इत्यादी. ठिकाणी हा NFS हा POS चा नवा प्रकार आहे. यामध्ये फोन टॅप करून पैसे जमा केले जातात. परंतु याचा वापर भारतामध्ये अत्यंत अल्प प्रमाणात केला जातो

**७.आधार कार्ड बँकींग** : या पर्यायामध्ये खातेदाराचे बँक खात्यास जोडावे लागते ज्या ठिकाणी पैसे भरणे करावयाचा आहे तिथे आधार क्रमांक नमुद करून बोट्याच्या फिंगर प्रिंट देऊन लगेच व्यवहार पूर्ण केला जातोआधार कार्ड वरील क्रमांक आणि बायोमॅट्रीक पध्दतीने बोट्याचे स्कॅन या माध्यमातून व्यवहाराची प्रक्रिया पार पाडली जाते. यामध्ये पैसे ट्रान्सफर करणे शिल्लक काढणे इ. व्यवहार केले जातात. परंतु या पध्दतीचा जास्त वापर केला जात नाही

**कॅशलेस अर्थव्यवस्थेमध्ये व्यवहार करतांना घ्यावयाची दक्षता:**

१. पासवर्ड कुणालाही न सांगणे.
२. पासवर्ड कुठेही लिखित स्वरूपात न ठेवणे.
३. अकाउंटची माहिती (युजर नेम, पासवर्ड, ओ.टी.पी., सी.व्ही.व्ही.) कुणालाही न सांगणे.
४. बँकेचा प्रतिनिधी म्हणून संभाषण करणाऱ्या फेक कॉलला प्रतिसाद न देणे.
५. काही कालावधीनंतर पासवर्ड/ पीन बदलत राहणे.
६. नेटबँकींग करताना वरचुअल की बोर्डचा जास्तीत जास्त उपयोग करणे.



**समारोप :**

कॅशलेस अर्थव्यवस्थेमध्ये वरील पर्यायांचा किंवा पद्धतीचा वापर हा ८ नोव्हेंबर २०१६ च्या नोटाबंदीच्या घोषणेनंतर खऱ्या अर्थाने करण्यास सुरुवात झाली. सन २०१७ नंतर या पद्धतीचा वापर करण्यात थोड्याफार प्रमाणात वाढ दिसून आली भारतामध्ये जवळपास ५ % लोक डिजीटल साधानाद्वारे आर्थिक व्यवहार करतात. कारण आजही भारत हा विकसनशील देश म्हणून ओळखला जातो. कारण येथे अज्ञान, असंघटीत क्षेत्र आणि ग्रामीण अर्थव्यवस्था मोठ्या प्रमाणात आहे. अशा परिस्थितीत भारताची अर्थव्यवस्था कॅशलेस करणे आव्हान आहे. असे असले तरी येणा-या पुढील काळात डिजीटल व्यवहारास प्रोत्साहन देऊन याविषयी साक्षर करून कॅशलेस अर्थव्यवस्थेचे महत्व, फायदे सांगून ही व्यवस्था अधिक उपयोगात येण्यासाठी सरकार, समाज, विविध सामाजिक संघटना, विद्यापीठ, उद्योजक, ग्राहक, विद्यार्थी इ. यांनी एकत्र येऊन प्रयत्न केल्यास निश्चितच वाढीस लागेल.

**संदर्भ :**

१. अर्थशास्त्र १ – डॉ किरण देसले (दीपस्तंभ)
२. दै.लोकसत्ता, दै. महाराष्ट्र टाईम्स
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## लोकशाहीकडे आगेकूच डिजिटल इंडिया कार्यक्रम एक अभ्यास

डॉ . विठ्ठल शंकरराव देशमुख

मु. कोपरा पो. आपेगाव ता. अंबाजोगाई जि. बीड

कोणत्याही कार्यक्रमाच्या यशस्वतेसाठी त्याच्या ठोस बांधणीची गरज असते. डिजिटल इंडिया उपक्रम सर्वाधिक प्रभावशाली ठरवा यासाठी डिजिटल इंडियाचे नऊ स्तंभ असल्याचे सरकारने म्हटले आहे. यातला प्रत्येक स्तंभ या उपक्रमाला आधार देण्याबरोबरच हा उपक्रम यशस्वी ठरवण्यासाठी योगदानपही देतो.

ब्रॉड बँड हायवे हा डिजिटल इंडियाचा पहिला स्तंभ आहे. यामध्ये नॅशनल ऑप्टिकल फायबर नेटवर्कद्वारे २.५ लाख ग्राम पंचायती जोडण्याची योजना आहे. यामुळे ग्रामीण जनता, सरकारच्या योजनांविषयी प्रभावी आणि सुलभपणे जाणून घेण्यासाठी सक्षम होईल. नॅशनल ऑप्टिकल फायबरसाठी सरकारने, १००० कोटी रुपये भागभांडवल असलेल्या, भारत ब्रॉडबँड नेटवर्क लिमिटेडची निर्मिती केली आहे. ६४१ जिल्ह्यातल्या ६,६०० विभागातल्या ५,५०,००० ग्रामपंचायती जोडण्यासाठी नॅशनल ऑप्टिकल फायबर नेटवर्क उभारण्याचे काम भारत ब्रॉडबँड नेटवर्ककडे सोपवण्यात आले आहे.

दुसरा स्तंभ आहे सार्वत्रिक मोबाईल कनेक्टिव्हिटी. देशातल्या ज्या भागांना मोबाईल कनेक्टिव्हिटी नाही अशा सर्व भागांना कनेक्टिव्हिटी कनेक्टिव्हिटी पुरवण्याचा उद्देश आहे. सध्या सुमारे ४२,००० खेड्यात मोबाईल कवरेज नाही. २०१४-१८ या काळासाठी १६,००० कोटी रुपये खर्चाच्या या प्रकल्पासाठी दळणवळण खाते नोडल एजन्सी म्हणून काम पाहणार आहे. यावरून २०१८ पर्यंत संपूर्ण भारतात मोबाईल कवरेज प्राप्त होईल असे सूचित होते. जनतेसाठी इंटरनेट वापर शक्य होण्यासाठी कार्यक्रम, हा तिसरा स्तंभ आहे. प्रत्येक ग्रामपंचायतीसाठी एक याप्रमाणे २.५ लाख सामायिक सेवा केंद्रे निर्माण करण्याचा सरकारचा मानस आहे. सद्य स्थितीमध्ये २.४२ लाख सामायिक सेवा केंद्र आहेत. सरकारी आणि व्यापारी सेवा देण्यासाठी बहू कार्यात्मक म्हणून ही केंद्र काम करतील. चौथा स्तंभ आहे, ई-प्रशासन तंत्रज्ञानद्वारे प्रशासनात सुधारणा. यामुळे विविध सरकारी विभागातल्या सेवा अधिक प्रभावी रित्या देण्यासाठी, याबाबतची प्रक्रिया सुलभ व्हावी यासाठी माहिती तंत्रज्ञानाचा सरकारकडून वापर करण्यासाठी मदत होते. डिजिटल इंडिया कार्यक्रमाचा पाचवा स्तंभ आहे, ई-क्रांती इलेक्ट्रॉनिक सेवा देणे, भारतातल्या सर्व नागरिकांना उत्तम प्रशासन देण्यासाठी, ई-प्रशासन आणि एम प्रशासन उपयुक्तेतेचा विचार करणे. प्रशासनातल्या परिवर्तनासाठी ई प्रशासनात रूपांतर हा दृष्टिकोन ई क्रांतीद्वारे बाळगला जातो. ई-क्रांती अंतर्गत अधीच ४४ प्रकल्प अभियान म्हणून राबवले जात आहेत. सद्य स्थितीला ई-क्रांतीद्वारे ३२२५ ई-सेवा यशस्वीपणे पुरवल्या जातात.

सर्वासाठी माहिती हा आहे. डिजिटल इंडिया कार्यक्रमाचा साहवा स्तंभ प्रशासनात पारदर्शकता आणणे हा याचा हेतू आहे. खुल्या माहिती तंत्रज्ञाना अंतर्गत, मंत्रालये, विविध विभाग, जनतेसाठी तत्परतेने माहिती देत असताना ऑनलाईन माहिती आणि कागददपत्रे यामुळे माहितीसाठी खुला आणि सुलभ मार्ग उपलब्ध होतो.

डिजिटल इंडिया कार्यक्रमाचा सातवा आणि सर्वात महत्वाचा स्तंभ आहे तो म्हणजे, इलेक्ट्रॉनिक्स निर्मिती. एका सरकारी अभ्यास अहवालानुसार, इलेक्ट्रॉनिक्स वस्तूंच्या मागणीत मोठ्या प्रमाणावर २२ टक्के वार्षिक चक्रवाढ दराने ऐवढे होत असल्याचे दिसत आहे. देशातल्या येत्या पाच वर्षांत छोटी शहरे आणि खेड्यातल्या १० लक्ष तरुणांवना माहिती तंत्रज्ञान क्षेत्रातल्या रोजगारासाठी प्रशिक्षण देण्याचे सरकारचे उद्दिष्ट होत. माहिती तंत्रज्ञान क्षेत्रात, सेवा देण्याचा व्यवसाय करण्यासाठी, सेवा देणाऱ्या तीन लाख एजन्टना, कौशल्य विकास कार्यक्रमांतर्गत. प्रशिक्षण देण्याचे सरकारचे लक्ष आहे. इलेक्ट्रॉनिक्स उत्पादनाला प्रोत्साहन मिळावे यासाठी इलेक्ट्रॉनिक्स क्षेत्राच्या विकासासाठी, सरकारने अनेक पाऊले उचलली आहेत. इलेक्ट्रॉनिक्स उत्पादन क्षेत्रात, गेल्या दोन वर्षांत, १.२८ लाख कोटी रुपयाचे २५० हून अधिक गुंतवणूक प्रस्ताव प्राप्त झाले आहे.

रोजगारासाठी माहिती तंत्रज्ञान हा आठवा स्तंभ माहिती तंत्रज्ञान क्षेत्रात, छोटी शहरे आणि खेड्यातल्या युवकांना रोजगाराच्या संधी प्राप्त होण्यासाठी आवश्यक ते प्रशिक्षण पुरवण्यावर लक्ष केंद्रीत करतो. येत्या पाच वर्षांत छोटी शहरे आणि खेड्यातल्या १० दशलक्ष तरुणांना माहिती तंत्रज्ञान क्षेत्रातल्या रोजगारासाठी प्रशिक्षण देण्याचे सरकारचे उद्दिष्ट आहे. माहिती तंत्रज्ञान क्षेत्रात सेवा देण्याचा व्यवसाय करण्यासाठी, सेवा देणाऱ्या तीन लाख एजन्टना, कौशल्य विकास कार्यक्रमांतर्गत, प्रशिक्षण देण्याचे सरकारचे लक्ष्य आहे. या कार्यक्रमांतर्गत करण्यात आलेली इंडिया बी पी आहे प्रोत्साहन योजना, देशभरात, बी पी आहे/ आय टी ई एस अंतर्गत, ४८,३०० जागा निर्माण करण्यासाठी, उद्योगजकांना प्रोत्साहन देण्यासाठी आहे. ग्रामीण आणि छोटे शहरातल्या युवा वर्गासाठी १,५०,००० रोजगार निर्मितीची क्षमता यात आहे. ४९३ कोटीचा आराखडा असलेल्या या प्रकल्पांतर्गत, असलेल्या या योजनेमुळे, लहान शहरात पायाभूत सोयी आणि मनुष्य बळाच्या दृष्टीने, क्षमता वृद्धी व्हायला मदत होईल, देशातल्या माहिती तंत्रज्ञान आणि आय टी ई एस अर्थात माहिती तंत्रज्ञान निगडित सेवा प्रणित विकासाच्या नव्या लाटेसाठी हा पाया ठरेल. लक्षाचे प्रमाणे, ईशान्येकडच्या बी पी आहे प्रोत्साहन योजनांमुळे, बी पी आहे/ आय टी ई एस विषयक घडमोडींना चालनामिळून ईशान्येकडच्या भागात माहिती तंत्रज्ञान आणि या क्षेत्राशी निगडित सेवा उद्योगाचा विकास आणि युवकांसाठी रोजगाराच्या संधी निर्माण होण्याला मदत होईल. ईशान्येकडच्या बी पी आहे प्रोत्साहन योजनेंतर्गत, ५००० जागा निर्माण करून त्याद्वारे ईशान्येकडच्या १५,००० युवकांना रोजगार पुरवण्याचे उद्दिष्ट आहे. याशिवाय, टेलिकॉम आणि त्याच्याशी संबंधित सेवामध्ये ग्रामीण मनुष्यबळाला प्रशिक्षित करण्याचा सरकारचा विचार असून त्यासाठी, पाच लाख ग्रामीण मनुष्य बळाला प्रशिक्षित करण्याचे लक्ष्य ठेवण्यात आले आहे. शेवटचा स्तंभ म्हणजे अल्प काळात अंमलबजावणी करता येण्याजोगा कार्यक्रम अर्ली हार्वेस्ट प्रोग्रॅम

संदेश देण्यासाठी माहिती तंत्रज्ञान मंच, सर्व विद्यापीठात वाय फाय, सार्वजनिक वाय-फाय हॉटस्पॉट, एस एम एस वर आधारित हवामान माहिती याचा या कार्यक्रमात समावेश आहे.

### सुप्रशासनासाठी डिजिटल इंडिया उपक्रम

पारदर्शकता आणि नागरिक सक्षमता यामधूनच उत्तम प्रशासनाचा उगम होतो. डिजिटल इंडिया कार्यक्रम हा संपूर्ण देशाचा कायापालट करणारा आणि उत्तम प्रशासनाची खातरजमा करणारा आणि उत्तम प्रशासनाची खातरजमा करणारा ठरावा यासाठी सरकारने काही उपक्रम आणले असून त्यासाठी बहू स्तरीय धोरण आखले आहे. डिजिटल धन योजना अभियान, आधार पे, भीम, डीजी लॉकर, दिशा, थेट लाभ हस्तांतरण, ई पंचायत यांचा यात समावेश आहे. विमुद्रिकरणाच्या निर्णयाने सरकारने काळ्या पैशाविरोधात लढा पुकारला आणि जनतेला रोकड व्यवहार कमी करण्यासाठी प्रोत्साहन दिले. नागरिक आणि व्यापाऱ्यांना डिजिटल व्यवहारासाठी प्रोत्साहन देण्यात डिजिटल धन अभियान हे कल्पक अभियान ठरले. संपूर्ण देशभरात डिजिटल धन मेळे आयोजित करून त्यातून नागरिकांनी, डिजिटल व्यवहारासाठी डाउनलोड इन्स्टॉल, डिजिटल पेमेंटच्या विविध पध्दती हाताळल्यात असा सरकारचा उद्देश आहे. तयाच बरोबर सरकारने, भारत इंटरनेट फॉर मनी अर्थात भीम हा डिजिटल पेमेंटसाठीचा मंच आणला यूनिकॉईड पेमेंटसाठीचा मंच आणला यूनिकॉईड पेमेंट इंटरनेट युपीआय चा वापर करत सोप्या, सरळ आणि जलद गतीने व्यवहार करणे भीम डिजिटल इंडिया कार्यक्रम हा संपूर्ण देशाचा कायापालट करणारा आणि उत्तम प्रशासनाची खातरजमा करणारा ठराव यासाठी सरकारने काही उपक्रम आणले असून त्यासाठी बहू स्तरीय धोरण आखले आहे. डिजिटल धन योजना अभियान आधार पे, भीम, डीजी लॉकर, दिशा, थेट लाभ हस्तांतरण, ई पंचायत यांचा ख्यात समावेश आहे. विमुद्रिकरणाच्या निर्णयाने सरकारने काळ्या पैशाविरोधात लढा पुकारला आणि जनतेला रोकड व्यवहार कमी करण्यासाठी प्रोत्साहन दिले. अॅपमुळे शक्य झाले ३० डिसेंबर २०१६ ला या अॅप ची सुरवात झाल्यापासून तयाची अनेक पटीने वृद्धी झाली आहे. फेब्रुवारी २०१७ पर्यंत, या अॅपला १७ दशलक्ष डाउनलोड मिळाले असून अॅपद्वारा, १९.३६ लाख व्यवहार झाले आहेत असे नुकत्याच एका अहवालात म्हटले आहे. २०१७ च्या जानेवारी आणि फेब्रुवारी या दोन महिन्यात भीम अॅपद्वारे ९५० कोटी रुपयाचे व्यवहार झाले. आर्थिक समावेशकता, वित्तीय नियोजन व्यवस्थापन, जन केंद्री, विना अडथळा, प्रशासनाला प्रोत्साहन, सार्वजनिक क्षेत्रतलया सेवा सुधारणा यासाठी, सरकारने जगातली सर्वात मोठी बायो मॅट्रिकवर आधारित ओळख यंत्रणा आधार सुरु केली. सध्या १.१३ अब्ज भारतीयांकडे आधार कार्ड आहे. बँक खाते उघडण्यासाठी आणि या खात्यात थेट लाभ जमा होण्यासाठी आधार महत्वपूर्ण आहे. बायो मॅट्रिकवर आधारित सत्यता पडताळणी प्रक्रियेवर आधारित आधार पेद्वारे आधारशी संलग्न बँक खाते धारक सर्व बँक व्यवहार केवळ अंगठ्याचा ठसा उमटवून करू शकतात. १४ एप्रिल २०१७ ला सुरवात झालेले आधार पे, करोडो भारतीयांसाठी सर्वसमावेशक पेमेंट प्लॅटफॉर्म ठरणार आहे.

डिजिटल समाजासाठी सरकार जोमाने कार्य करत असल्याने ताळागाळापर्यंत जन केंद्री सेवा अत्यावश्यक ठरते. हे लक्षात घेऊन हे अभियान ग्राम पंचायत स्तरावरच्या २.५ लाख सामायिक सेवा केंद्राद्वारे विविध जन केंद्री सेवा पुरवण्यासाठी सामायिक सेवा केंद्रांना बळकटी देत आहे. व्यवहारावर आणि सेवा देण्यावर आधारित ही सामायिक सेवा केंद्र एकाच मंचावरून अनेक ई सवेवा प्रदान करत आहेत.

### संदर्भ ग्रंथ सूची :

१. डॉ ओमकार राय, योजना विकास समर्पीत मासिक मे २०१७ पेज १७ ते २०.
२. बी.के. पटनाईक, योजना विकास समर्पीत मासिक, फेब्रुवारी २०१७ पेज ०७ ते १४



## डिजिटल पेमेंटसचे सामाजिक जीवनावरील परिणाम

प्रेरणा दिलीप दीक्षित

पीएच.डी संशोधक, समाजशास्त्र विभाग.

डॉ.बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ,  
औरंगाबाद.

### गोष्टवारा :

आजच्या आधुनिक युगात डिजिटल पेमेंटसचा वापर जास्त प्रमाणावर होताना दिसून येत आहे. यातील विविध पध्दतीचा वापर करून व्यक्ती आपले बँकिंग कार्य फारच जलद गतीने करत आहे. यामुळे वेळेची बचत होत आहे. समाजात वावरताना लोकांना पैसे खिशात बाळगण्याची आवश्यकता कमी प्रमाणात पडत आहे. समाजातील प्रत्येक क्षेत्रात सुलभता आणि सुरक्षितता निर्माण होण्यास मदत होत आहे. समाजाचा विकास घडवून आणण्यासाठी तसेच लोकांना विविध योजनांचा लाभ देण्यासाठी या पध्दतीचा उपयोग केला जातो.

### प्रस्तावना:

भारत डिजिटल इंडियाकडे गतीने पाऊल उचलत आहे. आज प्रत्येक क्षेत्रात कॅशलेस व्यवहार होताना आपण पाहतो अनुभवतो. व्यक्ती कोठेही असला तरी काही क्षणात एका खात्यातून दुसऱ्या खात्यात पैसे पाठवू शकतो. सर्व क्षेत्रात बरीच कामे डिजिटल पेमेंटस शिवाय केली जात नसल्याचे लक्षात येते. २०२६ पर्यंत जागतिक बाजारात डिजिटल पेमेंटस मध्ये १०७ ट्रिलियनची वाढ भारताला अपेक्षित असल्याचे दिसून आले आहे. म्हणजे, भारत यात आणखी प्रगती करण्याच्या तयारीत आहे असे लक्षात येते. या पध्दतीमुळे लोकांचा वेळ वाचत आहे. त्याचबरोबर शारीरिक कष्ट तसेच पैसे जवळ बाळगण्याची गरज पडत नाही. अशा अनेक बाबींमुळे समाजात एक सुरक्षितता सुलभता निर्माण होण्यास मदत होत आहे. त्याचबरोबर डिजिटल साक्षरतेचे प्रमाण वाढत आहे हे सुद्धा यावरून लक्षात येते.

### संशोधनाचे गृहितकृत्ये :

१. डिजिटल पेमेंटसमुळे आर्थिक व्यवहार कमी वेळेत आणि सुलभ होत आहे.
२. समाज डिजिटल साक्षरतेकडे जलद गतीने वळण घेत आहे.
३. निरक्षर व्यक्तींना डिजिटल पेमेंट पध्दतीचा उपयोग करण्यासाठी नेहमी साक्षर व्यक्तींवर अवलंबून राहावे लागत आहे.
४. डिजिटल पेमेंट ने व्यवहार करणे जोखीम पत्कारण्यासारखे आहे.

### संशोधनाचे उद्देश:

१. डिजिटल पेमेंटसचा सामाजिक जीवनावरील परिणामांचा आढावा घेणे.
२. भारतातील डिजिटल पेमेंटसचे प्रकार अभ्यासणे.

### संशोधन पध्दती:

संशोधनकाने वरील संशोधन करताना तथ्य संकलनासाठी दुय्यम शोधसामग्रीचा वापर केला आहे. त्यात संशोधन लेख, लघुशोधप्रबंध, मासिक, पुस्तके, न्यूज पेपर्स, जरनल आणि इंटरनेटवरील विविध वेबसाइटसचा वापर करण्यात आलेला आहे.

### डिजिटल पेमेंट:

देशातील डिजिटल पेमेंट साधनांना आणि त्याचा वापर करण्यासाठी, ग्राहकांना प्रोत्साहन देण्यासाठी भारत सरकार अनेक उपाययोजना करीत आहे. डिजिटल इंडियाचा एक भाग म्हणून, सरकार फेसलेस, पेपरलेस, कॅशलेस अशी डिजिटल सशक्त अर्थव्यवस्था निर्माण करण्याचे लक्ष ठेवत आहे आणि त्यात यशस्वी होताना दिसून येत आहे. डिजिटल पेमेंटच्या अनेक पध्दती आहेत. त्यापैकी कोणत्याही पध्दतीचा वापर करून व्यक्ती आपले आर्थिक व्यवहार सुलभरित्या पूर्ण करत आहेत. समाजात एक प्रकारची डिजिटल क्रांती घडून येत आहे. ग्राहकाला केव्हा ही कोटूनही पेमेंट करता येते. वेळ तर वाचतोच त्याचबरोबर व्यवहाराची गती वाढवण्यासाठी या पध्दती अत्यंत सोयीस्कर आहेत.

**संकल्पना:** “जेव्हा डिजिटल इलेक्ट्रॉनिक माध्यमांच्या वापराद्वारे वस्तू किंवा सेवा खरेदी केल्या जातात तेव्हा त्यास डिजिटल पेमेंट असे म्हणतात”.

“मोबाईल चॅनेल व इंटरनेटवर केलेली देयके म्हणजे डिजिटल पेमेंट होय”.

### डिजिटल पेमेंटसच्या पध्दती:

भारतात डिजिटल पेमेंटच्या काही पध्दती आहेत. ज्या रोजच्या व्यवहारात वापरल्या जातात. त्यात यु.एस.एस.डी., बँकिंग कार्ड, ए.ई.पी.एस., यु.पी.आय., मोबाईल वायलेटस, बँक प्रीपेड कार्ड, पी.ओ.एस., इंटरनेट बँकिंग, बी.एच.आय.एम. अशा अनेक पध्दतींचा वापर पैसे हस्तांतरणासाठी केला जातो.

वरील सर्व पध्दतींची माहिती पुढील प्रमाणे स्पष्ट करता येते.

**१. यु.एस.एस.डी. :** असंरचित पूरक सेवा म्हणजे ((Unstructured supplementary service data) आणि (National payments corporation of India)) एन.पी.सी.आय. कडून \*९९# ही सुविधा पुरविली जाते. कोणताही अॅप डाउनलोड न करता मोबाईल व्यवहार करण्यासाठी वापरला जाऊ शकतो. मोबाईल डेटा सुविधा नसतानाही या प्रकारची देयके दिली जाऊ शकतात. अशा प्रकारच्या डिजिटल पेमेंटचे मुख्य उद्देश समाजातील जास्तीत जास्त घटकाला बँकिंग प्रवाहात समावेश करून घेणे असा आहे. त्याप्रमाणे डिजिटल बँकिंग वर्कचे वातावरण समाजात निर्माण करणे तसेच या सेवेचा उपयोग निधी हस्तांतरणास प्रारंभ करण्यासाठी बँक स्टेटमेंटसवर नजर टाकण्यासाठी केला जातो.

**२. बँकिंग कार्ड :** सर्वात जास्त प्रमाणात वापरली जाणारी पेमेंट पध्दती म्हणजे बँकिंग कार्ड होय. या पध्दतीचा मुख्य फायदा म्हणजे ऑनलाईन खरेदीसाठी बँकिंग कार्डसचा उपयोग, डिजिटल पेमेंट अॅप्स, पीओएस मशीन, ऑनलाईन व्यवहार इ. मध्ये केला जातो. व्हिसा, रुपे आणि मास्टर कार्ड यापैकी काही सर्वात नामांकित आणि सुप्रसिद्ध कार्ड पेमेंट सिस्टम आहेत. या कार्डचा चार अंकी पिन डिजिटल व्यवहार

करण्यासाठी वापरला जातो फक्त वापर करताना काही बाबतीत गुपीतता, प्रामाणिकता, सुरक्षा, जपवणूक अशा बाबींकडे लक्ष देणे गरजेचे आहे. अन्यथा फार मोठी जोखीम पत्कारावी लागते. कारण, पिनकोड चोरीला गेल्यास आपल्या खात्यातील रक्कम चोरीला जाण्याची शक्यता नाकारता येत नाही त्यावेळी तात्काळ बँकेशी संपर्क साधणे आवश्यक आहे जेणे करून होणारे नुकसान टाळता येईल.

**३. ए.ई.पी.एस :** आधार सक्षम पेमेंट सिस्टम म्हणजे (Adhaar enabled payment system) याचा उपयोग सर्व बँकिंग व्यवहारासाठी केला जातो.जसे शिल्लक चौकशी, रोख रक्कम काढणे,रोकड ठेव,पेमेंट ट्रान्सफर आधार ते आधार फंड ट्रान्सफर इ. सर्व व्यवहार आधारित बँकिंग प्रतिनिधीद्वारे केले जातात. आपले ज्या बँकेत खाते आहे त्या बँकेत आपला आधार नंबर नोंदणीकृत असल्यासच या सेवेचा लाभ घेतला जातो.

डिजिटल पेमेंटला प्रोत्साहन देण्यासाठी हा आणखी एक चांगला उपक्रम आहे.

**४. यू.पी.आय :** यू.पी.आय. म्हणजे (Unified payments Interface) एक प्रकारची इंटरऑपरेबल पेमेंट सिस्टम आहे ज्याद्वारे कोणत्याही बँकेत खाते असलेला खातेदारक यू.पी.आय. द्वारे पैसे पाठवू आणि प्राप्त करू शकतो.या सेवेद्वारे वापरकर्त्यास त्यांच्या स्मार्ट फोनवरील यू.पी.आय. ॲपवर एकापेक्षा जास्त बँक खात्यांची लिंक अखंडपणे हस्तांतरण करण्यास मदत होते. याचा सर्वात मोठा उपयोग असा की,यामुळे वापरकर्त्यांना बँक खाते किंवा आयएफएससी कोड शिवाय पैसे हस्तांतरित करता येतात. यू.पी.आय. वापरण्यासाठी कोणतेही शुल्क आकारले जात नाही. याद्वारे ग्राहक पैसे पाठवू आणि प्राप्त करू शकतो तसेच शिल्लक चौकशी करू शकतो.

**५. मोबाईल वॉलेट:** मोबाईल वॉलेट हे व्हर्च्युअल वॉलेट आहे. जे मोबाईल डिव्हाइसवर पेमेंट कार्डची माहिती साठवतो.मोबाईल वॉलेटस वापरकर्त्यासाठी पेमेंट स्टोअर करणे हा एक सोयीस्कर मार्ग आहे. हे एक स्मार्टफोनचे विद्यमान अंगभूत वैशिष्ट्य आहे. मोबाईल वॉलेट क्रेडिट कार्ड कूपन किंवा बक्षीस कार्डाची माहिती संचयित करते एखादी व्यक्ती मोबाईल वॉलेटमध्ये पैसे जोडू शकते आणि पेमेंट करण्यासाठी आणि वस्तू सेवा खरेदी करण्यासाठी याचा वापर करू शकते. यामुळे क्रेडिट/डेबिट कार्ड वापरण्याची किंवा चार अंकी पिन लक्षात ठेवण्याची आवश्यकता पडत नाही. काही मोबाईल वॉलेटस व्यवहारासाठी शुल्क आकारू शकतात. त्याचप्रमाणे पेटीएम, फ्रीचार्ज मार्केटमधील काही मोबाईल पैसे भरणे ऑनलाइन खरेदी इ.सेवांचा समावेश आहे.

**६. बँक प्रीपेड कार्ड :** ग्राहक थेट विविध प्रकारच्या वस्तू व सेवा खरेदी करण्यासाठी प्रीपेड डेबिट कार्ड वापरू शकतो.याचा वापर करण्यासाठी जवळ रक्कम असणे अनिवार्य नाही.

**७. पॉइंट ऑफ सेल:** विक्री बिंदूला बऱ्याचदा सेवेचा बिंदू असे म्हणतात कारण,ते केवळ विक्रीचे ठिकाण नसून परतावा किंवा ग्राहकांच्य ऑर्डरचा देखील एक बिंदू आहे. पीओएस ही एक अशी प्रणाली आहे जी कंपनी आणि त्यांच्या ग्राहकांमध्ये ज्या वेळी वस्तू खरेदी केल्या जातात त्या वेळी व्यवहाराची प्रक्रिया आणि रेकॉर्डिंग करण्याची परवानगी देते.

**८. इंटरनेट बँकिंग:** ऑनलाईन बँकिंग व्यवहार करण्याच्या प्रक्रियेस इंटरनेट बँकिंग म्हणतात. यात खाते उघडणे, बंद करणे आवर्ती ठेव, हस्तांतरण अशा अनेक प्रकारच्या सेवांचा समावेश केला जातो. इंटरनेट बँकिंगला इबँकिंग किंवा व्हर्च्युअल बँकिंग असेही म्हणतात. इंटरनेट बँकिंगमध्ये वर्षातील कोणत्याही दिवशी कधीही लाभ घेता येतो. बँका त्यांच्या वेबसाइटवर ग्राहकांना सर्व प्रकारच्या बँकिंग सेवा प्रदान करतात आणि एखादा वापरकर्ता नाव आणि संकेत शब्द वापरून त्यांच्या खात्यास लॉग इन करू शकतो.

**९. मोबाइल बँकिंग :** स्मार्ट फोनद्वारे बँकिंग व्यवहार करणे म्हणजे मोबाईल बँकिंग होय. यात पैसे ट्रान्सफर करणे, ऑनलाईन पेमेंट करणे अशा अनेक प्रकारची कामे केली जातात तसेच, बँक आपल्या ग्राहकांना मोबाईलवर मेल करून महत्वाच्या नोटिस कळवते. बऱ्याच बँकेचे स्वतःचे ॲप असतात आणि ग्राहकाला एका बटणाच्या क्लिकवर बँकिंग व्यवहारासाठी ते डाउनलोड करू शकतात. मोबाईल बँकिंगची व्याप्ती केवळ यूपीआय सारख्या अनेक मोबाईल वॉलेटस, डिजिटल पेमेंट ॲप्स आणि इतर सेवांच्या साहाय्याने वाढत आहे.

**१०. बी.एच.आय.एम :** हे एक मोबाईल ॲप्लिकेशन आहे.याला भारत इंटरफेस मनी असे म्हणतात.या ॲप्लीकेशनचे नाव डॉ.बाबासाहेब भीमराव आंबेडकर यांच्य नावावरून 'भीम' असे नाव देण्यात आले आहे. हे ॲप 'युनिफाइड पेमेंट इंटरफेस' या प्रणालीवर आधारित आहे. मोबाईल, डेबिट कार्ड, वैध खाते असणाऱ्या कोणत्याही व्यक्तीला ही सेवा वापरता येते इतकेच नव्हे तर बँक सुट्टीच्या दिवशी या सेवेचा लाभ घेता येतो.पैशाची डिजिटल देवाण घेवाण सुलभरित्या करता येते. थेट बँकामार्फत इपेमेंट सुलभ करण्यासाठी आणि कॅशलेस व्यवहाराकडे वाटचाल करण्याच्या हेतूने या ॲपला निर्माण करण्यात आले आहे.

### सामाजिक जीवन आणि डिजिटल पेमेंट :

डिजिटल पेमेंटची सुविधा संपूर्ण जगात मोठ्या प्रमाणात विकसीत झाल्याचे दिसून येते. समाजातील प्रत्येक क्षेत्रात डिजिटल पेमेंट शिवाय कोणतीच कामे कमी वेळेत पूर्ण होत नाहीत. भारतही बऱ्याच प्रमाणात कॅशलेस, डिजिटल बँकिंग,मोबाईल बँकिंगचा मोठ्या प्रमाणावर वापर करत आहे.अशा पध्दतीत रोकड किंवा धनादेशांचा वापर केला जात नाही तसेच,व्यक्तीला खरेदीच्या ठिकाणी उपस्थित रहावे लागत नाही. घर बसल्या कोणत्याही क्षेत्रातील कामे व्यक्ती सहज करू लागला आहे.पैसे जवळ बाळगण्याची गरज कमी झाल्या कारणस्तव दिवसा खिसे कापू लोकांची भीती किंवा चिंता दूर झालेली लक्षात येते. पूर्वी प्रमाणे गर्दीत थांबून पैसे भरण्याची किंवा काढण्याची गरज भासत नसल्याने कष्ट कमी सोबत वेळेची बचत होऊन त्याच वेळेत व्यक्ती इतर कामे करू लागला आहे.कोणतेही क्षेत्र असो व्यवसाय, खरेदी, विक्री, प्रवास, हॉटेल, विविध मॉल्स, शॉप इत्यादी ठिकाणी विद्यार्थी, नौकरदार, व्यावसायिक, गृहिणी अशा कोणत्याही प्रकारच्या साक्षर व्यक्तीला डिजिटल पेमेंट पध्दत सोपी व सोयीस्कर आहे त्याचप्रमाणे शैक्षणिक फी, परिक्षा फॉर्म, ऑनलाईन कोर्सेस इत्यादीसाठी भरावी लागणारी फी डिजिटल पेमेंटने पे करता येते. डिजिटल पेमेंट संदर्भात आपल्या खात्यातून किती खर्च झाला ते बँक एसएमएस द्वारे आपल्याला कळवते यामुळे ग्राहकाला आपला खर्च लक्षात आल्याने तो काळजीपूर्वक पैसे खर्च करतो यातून बचत होण्यास मदत होते आणि बचतीतून गुंतवणूक होण्यास मदत होते.याच गुंतवणूकीचा उपयोग बँकेला होतो कारण बँकेतील रक्कमेचे प्रमाण वाढते .भारत सरकार समाजातील जे काही गोरगरीब लोक आहेत

त्यांच्यासाठी ज्या लाभ योजना आखते ती मूळ गरज गरजू व्यक्तीपर्यंत योग्य वेळेत पोचवण्यासाठी डिजिटल पेमेंटचा वापर केल्याने योजना संदर्भातील कामे सोपी होतात.शिवाय कामात पारदर्शकता येते तसेच पायाभूत सुविधांचा विस्तार होण्यास मदत होते.

प्रत्येक गोष्टीचे जसे फायदे असतात तसेच त्याचे तोटे किंवा जोखीम देखील पत्काराव्या लागतात.असेच काही डिजिटल पेमेंटचे देखील आहे .या पध्दतीचा वापर करण्यासाठी सुरक्षा ही अतिशय महत्वाची बाब आहे.तसेच गोपनीयता, अखंडता, प्रामाणीकता, उपलब्धता, अधिकृतता या सर्व बाबी लक्षात ठेऊनच व्यवहार करणे सुलभ आहे.अन्यथा व्यक्तीला आणि समाजाला यापासून होणाऱ्या नकारात्मक परिणामांना सामोरे जावे लागते. डिजिटल पेमेंट पध्दतीत जरी पैसे जवळ बाळगण्याची आवश्यकता पडत नसली तरी जवळ मोबाईल किंवा बँक कार्ड जर चोरीला गेले तर प्रवासात किंवा अडचणीच्या वेळेत अनेक समस्यांना सामोरे जावे लागते.त्याचबरोबर काही शैक्षणिक कार्यात अचानक इंटरनेटची सेवा बंद पडल्याकरणाने एक व्यक्तच काय तर संपूर्ण समाज ठप्प होऊन जातो. त्यात हॉस्पिटल, शैक्षणिक ठिकाणे, रेल्वेस्टेशन, बसस्थानक, विमानसेवा अशा अनेक क्षेत्रात असणाऱ्या लोकांचे फार मोठे नुकसान होते. त्याचबरोबर हळूवार इंटरनेटची गती असल्या कारणास्तव विद्यार्थ्यांना नौकरी संदर्भातील बऱ्याचदा संधी गमवावी लागते.

डिजिटल पेमेंट व्यवस्थेमध्ये बऱ्याचदा पैसे ट्रान्सफर करताना योग्य व्यक्तीच्या खात्यात जाण्या एवजी दुसऱ्याच व्यक्तीच्या खात्यात जमा होतात. त्यावेळीही आपले नुकसान होते म्हणजे सेक्यूर ट्रान्जेक्शन नसल्याकारणास्तव येथे धोका निर्माण होण्याची शक्यता नाकारता येत नाही.तसेच पेमेंट सर्विस प्रोवाइडर वर डिजिटल ट्रान्जेक्शन वर जास्त खर्च होतो. सायबर फसवणूक होण्याचे प्रकार ही आज आपल्याला रोज वर्तमानपत्रात वाचायला मिळतात आणि दिवसेंदिवस हे प्रमाण वाढत असल्याचे लक्षात येते. त्याचबरोबर महत्वाची बाब येथे लक्षात घेणे आवश्यक आहे की, याचा लाभ प्रत्येक व्यक्ती घेऊ शकते परंतू, निरक्षर लोकांना याचा लाभ घेता येत नसल्याकारणास्तव त्यांना साक्षर लोकांवर प्रत्येक वेळी अवलंबून राहावे लागते आणि प्रत्येक वेळी त्यांना मदत मिळेलच असे काही नाही त्यामूळे त्यांच्या कामात अडथळा निर्माण होतो किंवा अति महत्वाच कामाला सुध्दा जास्त वेळ जातो.बऱ्याचदा तर काम अपूर्ण राहिल्याने मोठे नुकसान होते. तसेच संपूर्ण समाजात किंवा भारतातील प्रत्येक खेड्यापर्यंत इंटरनेट तर दूरच तेथे लाइटची सुविधा २४ तास नसल्या कारणास्तव त्यांना अशा डिजिटल पेमेंट पध्दतीचा उपयोग होत नसल्याचे दिसून येत.त्यासाठी समाजाला डिजिटल पेमेंटसंदर्भात एका समान दिशेने सारख्या प्रमाणात आणणे आवश्यक आहे.खेड्यापर्यंत डिजिटल साक्षरता पोचणे आवश्यक आहे.जेणे करून एका वर्गाला दुसऱ्या वर्गावर अवलंबून राहावे लागणार नाही आणि समाज खऱ्या अर्थाने डिजिटल बनेल. त्याचबरोबर सायबर हॅकिंगच्या प्रकारावर आळा घालणे किंवा त्यावर नियंत्रण ठेवण्यासाठी काही नवीन तंत्रज्ञान विकसीत होणे आवश्यक आहे जेणेकरून समाजातील सायबर गुन्हे कमी होण्यास मदत होईल.

अशा प्रकारे डिजिट पेमेंट ही सुविधा जितकी चांगली आहे तितकीच ती काळजीपूर्वक करणे आवश्यक आहे.बाजारातील कोणते अॅप योग्य आहेत त्याचा वापर कसा करावा, त्यासंदर्भातील सर्व माहिती जाणून घेणे तसेच बँक नोटिस वेळोवेळी पाहणे एकंदरी डिजिटल पेमेंट वापरकर्त्यांनी हा व्यवहार अतिशय काळजीपूर्वक आणि वरिल फायदे ,नुकसान लक्षात घेऊन करणे गरजेचे आहे.जेणे करून समाजावर त्याचा वाईट परिणाम होणार नाही.या सर्व बाबी आपणास या संशोधनांती लक्षात येतात.

#### निष्कर्ष:

१. समाजातील प्रत्येक क्षेत्रात डिजिटल पेमेंटचा वापर होत असल्याने कार्य सुलभ होऊन वेळेची बचत होत आहे आणि शारीरिक कष्ट कमी होत आहेत.
२. भारतातील बँक व बँकेचे ग्राहक यांच्यामधील फेसलेस व कॅशलेसचे प्रमाण वाढत आहे.
३. डिजिटल पेमेंटमुळे मोबाईल, संगणक, इंटरनेटचा वापर वाढल्याने समाजात डिजिटल साक्षरतेचे प्रमाण वाढत आहे.
४. बऱ्याच खेडे गावात इंटरनेटची सुविधा नसल्या कारणास्तव तेथील लोकांना डिजिटल पेमेंटचा वापर करता येत नाही.

#### सारांश:

वरील संशोधनातून असे लक्षात येते की, समाजात डिजिटल पेमेंटचा वापर मोठ्या प्रमाणावर होत आहे. या पध्दतीमुळे समाज कॅशलेस सोबत फेसलेस होत आहे. व्यवहारीक क्षेत्रातील व्यक्तीची गर्दी कमी झाल्याकारणास्तव समाजातील अनावश्यक वरदळ, व्यक्तींच्या मोठ्या रांगा किंवा अशा ठिकाणी होणारे वाद, भांडणे आज आपल्याला पाहायला मिळत नाहीत तसेच आजारी किंवा वृद्ध व्यक्तींना रांगेत उभा राहण्याची गरज पडत नाही. प्रत्येक क्षेत्र आज डिजिटल झाल्याचे दिसून येते. सरकारचा प्रयत्न ही आपणास विविध योजनेतून लक्षात येतो. परंतू, येथे हे पण लक्षात येते की, हा व्यवहार अतिशय काळजीपूर्वक करणे आवश्यक आहे.अन्यथा बऱ्याच प्रकारचे नुकसान सहन करावे लागते.त्याचबरोबर अशा नुकसानीचे कारण आणि त्यावर उपाययोजना सुचवण्यावर सरकारने लक्ष केंद्रित करणे आवश्यक आहे हे वरील संशोधनांती लक्षात येते.

#### संदर्भग्रंथ सूची :

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## रोकडरहित भारतीय अर्थव्यवस्थेसमोरील आव्हाने : एक चिंतन

जयवर्धन भिमराव गच्छे  
संशोधक विद्यार्थी  
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सहयोगी प्राध्यापक  
अर्थशास्त्र विभाग प्रमुख  
स्वातंत्र्य सैनिक सुर्यभानजी पवार महाविद्यालय, पुर्णा (जं.)

### प्रस्तावना :

क्राऊथर यांच्या मते, ज्याप्रमाणे यंत्रशास्त्रात चाकाचा शोध, विज्ञानात अग्निचा शोध, राज्यशास्त्रात मताचा शोध मूलभूत स्वरूपाचा आहे. आदिम काळामध्ये आर्थिक व्यवहार होत असताना ज्या अडचणी आल्या त्या सोडवण्याच्या प्रयत्नातून मुद्रेचा शोध लागला. मुद्रेचा शोध लागण्यापूर्वी मानव आपल्याकडील जास्तीची वस्तू देऊन इतरांकडून स्वतःला लागणारी वस्तू मिळवत असे. यांतून परस्पर गरजा भागवल्या जात होत्या. यालाच वस्तू विनिमय पध्दत म्हणतात. यामध्ये मुद्रेचा लवलेशीही नव्हता, ही अर्थव्यवस्था मुद्रारहित अर्थव्यवस्था होती, कालांतराने या व्यवस्थेत उणिवा जाणवू लागल्यानंतर सर्वांसाठी स्वीकारार्ह माध्यम असावे या गरजेतून मुद्रेचा शोध लागला. अर्थशास्त्रात चलन या शब्दाचा अर्थ देवाणघेवाणीचे स्वीकारार्ह माध्यम असा सर्वसाधारणपणे घेतला जातो. आजची रोख रक्कमरहित डिजिटल अर्थव्यवस्थेची संकल्पना फार उन्नत, कार्यक्षम, गतिमान असून तिचा स्विकार हा मानवाला विकासांकडे नेणारा आहे. मुद्रेचा विकास वस्तू विनिमय मुद्रा , धातु मुद्रा, पत्रमुद्रा, प्रत्ययमुद्रा, व प्लास्टिक मुद्रा असा होऊन आज त्याची जागा डिजिटल मोड्स नी घेतली आहे. म्हणजेच रोकडरहित अर्थव्यवस्थेला गती मिळाली आहे.

८ नोव्हेंबर २०१६ रोजी मा. पंतप्रधान नरेंद्र मोदी यांनी ५०० व १००० नोटांची विमोद्रीकरणाची घोषणा केली. नोटाबंदी करत असताना अर्थव्यवस्थेतील काळ्या पैशावर नियंत्रण, नकली चलनावर आळा, विदेशी दहशतवादांपासून संरक्षण व त्याचबरोबर अर्थव्यवस्थेत पारदर्शकता आणता यावी, आर्थिक व्यवहार रोकडरहित व्हावेत यादृष्टिने हे पाऊल उचलले आहे असे सांगण्यात आले. त्यामुळे पुर्ण भारतभर एकच मुद्दा चर्चिला गेला तो म्हणजे रोकडरहित अर्थव्यवस्था होय. या निर्णयानंतर ८६% इतके भारतीय चलन अवैध ठरले. याला पर्याय म्हणून डिजिटल साधनांचा वापर अपरिहार्य ठरला. आर्थिक व्यवहार डिजिटल पध्दतीने व्हावेत यासाठी सरकारने उपाययोजना सुचवल्या आहेत. अशा परिस्थितीत डिजिटल साधने व त्यांचा वापर त्याबद्दलची जागरूकता, दक्षता, डिजिटल अर्थव्यवस्थेचे लाभ व दोष या संदर्भात सरकारने केलेल्या उपाययोजना आणि रोकडरहित अर्थव्यवस्थेचे भारतातील भवितव्य यांवर प्रकाश टाकणे आवश्यक आहे.

### संशोधनाची उद्दिष्टे :

१. रोकडरहित अर्थप्रणालीचा अभ्यास करणे.
२. डिजिटल पेमेंटसाठी वापरल्या जाणाऱ्या साधनांचा अभ्यास करणे.

### संशोधनाची गृहितकृत्ये :

१. रोकडरहित आर्थिक व्यवहारांची वाढ होताना दिसून येत नाही.
२. रोकडरहित आर्थिक व्यवहारांत पारदर्शकता दिसून येत नाही.
३. रोकडरहित अर्थव्यवस्थेमुळे अर्थिक विकास होताना दिसून येत नाही.

### संशोधन पध्दती :

प्रस्तुत शोधनिबंध लिहिण्यासाठी दुय्यम साधन सामुग्रीचा वापर करण्यात आला आहे. यामध्ये संदर्भ ग्रंथ, मासिके, शोधनिबंध, वृत्तपत्र आणि इंटरनेटचा आधार घेण्यात आला आहे. विश्लेषणात्मक पध्दतीने शोध निबंधाची मांडणी करण्यात आली आहे.

### रोकडरहित अर्थव्यवस्थेचा अर्थ :

“रोकडरहित अर्थव्यवस्था म्हणजे अर्थव्यवस्थेत जास्तीत जास्त आर्थिक व्यवहार हे कोणत्याही रोख रक्कमेशिवाय डिजिटल माध्यमांद्वारे पार पाडले जाणे होय. म्हणजेच आर्थिक व्यवहारांत डिजिटल माध्यमांचा जास्तीत जास्त वापर करणे होय.”

“सर्व आर्थिक देवाणघेवाण कोणत्याही रोख रक्कमेशिवाय करणे”

“जेथे सर्व आर्थिक व्यवहार कमीत कमी रोख रक्कमेत पार पाडले जातात म्हणजेच देवाण-घेवाण जास्तीत जास्त धनादेश, डी.डी. क्रेडीट व डेबीट कार्डस् मोबाईल बँकिंग, नेट-बँकिंग, आधारकार्ड, ई-वॉलेट आर. टी.जी.एस, निफ्ट याद्वारे पार पाडल्या जाते, अशा अर्थव्यवस्थेला रोकडरहित अर्थव्यवस्था म्हणतात.”

थोडक्यात रोख रक्कम स्वतःजवळ न बाळगता आर्थिक व्यवहारांसाठी E-payments सुविधा वापरात आणणे होय. आताच्या या उन्नत अवस्थेत अद्ययावत टेक्नोलॉजीच्या सहाय्याने ही अशक्यप्राय बाब शक्य झाली आहे.

**जगातील प्रमुख रोकडरहित अर्थव्यवस्था :**

अ.क्र.	देश	रोकडरहित व्यवहारांचे प्रमाण
१	स्वीडन	९७
२	बेल्जीयम	९३
३	फ्रान्स	९२
४	कॅनडा	९०
५	इंग्लंड	८९
६	ऑस्ट्रेलिया	८६
७	नेदरलँड	८५
८	अमेरिका	८०
९	जर्मनी	७६
१०	डेन्मार्क	७५
११	दक्षिण कोरीया	७०
१२	भारत	५

स्त्रोत : कॅपीटल जेमीनी फायनॅसियल सर्व्हीसेस ॲनॅलिसिस-२०१४-२०१५

या तक्त्यावरून असे दिसते की जागतिक अर्थव्यवस्थांशी भारताची तुलना केल्यास भारताची स्थिती अत्यंत दयनीय दिसून येते यावरून रोकडरहित अर्थव्यवस्था हे भारतासाठी एक आव्हानच आहे. स्वीडन हा देश प्रथम cashless country म्हणून ओळखला जातो. भारत हे एक विकसनशील राष्ट्र आहे. विकसित राष्ट्रांत रोकडरहित व्यवहार करण्यासाठी ज्या बाबी सहज उपलब्ध आहेत त्या पायाभूत बाबी भारतामध्ये सहज व मोठ्या प्रमाणावर उपलब्ध होत नाहीत.

भारतामध्ये रोख रक्कमेविषयी म्हणजेच आर्थिक व्यवहारात रोखडाधिष्ठित प्रणालीचे विशेष आकर्षण आहे. रोख रक्कम स्वतःजवळ ठेवणे हा अर्थशास्त्रातील वर्तणुकवादी वित्तीय सिध्दातांसारखेच आहे. भारतीय समाज रोख रक्कमेतील व्यवहार तो सुरक्षित मानतो, याउलट रोकडरहित व्यवहारात तो असुरक्षिततेची भावना बाळगतो. परंतु अलीकडच्या काळात निश्चलीकरण आणि रोख व्यवहारांवर आलेल्या बंधनामुळे गैरसोय निर्माण होऊन ऑनलाईन आणि मोबाईल बँकिंगकडे वळण्याशिवाय पर्याय नव्हता. यांमध्ये व्यवहारातील रक्कम हस्तांतरित करण्याच अनेक पर्याय उपलब्ध आहेत.

“The २०१८ Government E-payments Adoption Ranking The (EIU)” मध्ये घेण्यात आलेल्या ७३ राष्ट्रांच्या सर्वेक्षणात भारताचा २८ वा क्रमांक लागतो. ज्या राष्ट्राने E-payments साठी लागणारी साधने अद्ययावत केली आहेत त्या राष्ट्राची अर्थव्यवस्था अधिक cashless झालेली दिसून येते. E-payments स्विकृतीचे प्रमाण हे ज्या देशात आर्थिक व्यवहारांसाठी लागणारी साधने त्यामध्ये बँका, इंटरनेट, मोबाईल बँकिंग, ई-वॉलेट सहज उपलब्ध होतात त्या अर्थव्यवस्थेत E-payments स्विकृतीचे प्रमाण ज्या राष्ट्रांत जास्त आहे त्या देशातील अर्थव्यवस्था तेवढी cashless जास्त समजली जाते. भारत हा श्रेणीमध्ये ७३ राष्ट्रांमधील २८ वा देश आहे. त्याचा Score-७३.३ एवढा आहे. व तो Intermediate या गटाने मोडला जातो. या गटाचा Score ५०.१ to >७५ एवढा आहे.

**कॅशलेस आर्थिक व्यवहाराचे विविध पर्याय :**

१. चेक/डी.डी. पेमेंट
२. डेबिट कार्ड/क्रेडीट कार्ड
३. नेट बँकिंग
४. बँकिंग
५. POS (Point to Sale) मशिन
६. USSD Code
७. मोबाईल वॉलेट
८. आधार कार्ड
९. UPI कोड
१०. NFC इत्यादींच्या साह्याने पेमेंट केले जाते.

**डिजिटल व्यवहारांसाठी लागणाऱ्या आवश्यक बाबी व दक्षता:**

१. प्रत्येकाने बँक खाते, आधार कार्ड व पॅनकार्ड काढणे आवश्यक आहे.
२. मोबाईल नंबर बँक खात्याशी संलग्नित असला पाहिजे.
३. बँकेकडून क्रेडिट व डेबीट कार्ड काढले पाहिजे.
४. आपला कस्टमर आयडी, पासवर्ड, ओटीपी यासांख्या बाबी अत्यंत गोपनीय ठेवल्या पाहिजे.
५. नेट बँकिंग बँकेच्या संकतस्थळावरच जाऊन व्यवहार करणे.
६. व्हर्च्युअल किबोर्डचा वापर केला पाहिजे.
७. बँक अधिकाऱ्यांशी नेहमीच गडबडीच्या वेळी मदत घेणे.

**रोकडरहित अर्थव्यवस्थेचे लाभ :**

१. काळ्या पैशाला आणि समांतर अर्थव्यवस्थेला पायबंद बसेल.
२. करचोरीच्या प्रमाणांवर आळा बसला जाईल.
३. रियल इस्टेटच्या किंमती कमी होतील.
४. बनावट चलनाची समस्या संपुष्टात येईल.
५. मौद्रिक हस्तांतरणात पारदर्शकता दिसून येते.
६. भ्रष्टाचाराला आळा बसेल.
७. पैसा व वेळेचे बचत होते.
८. आरोग्य सुरक्षा वाढते.
९. विश्व बँकिंग सेवांची उपलब्धता.
१०. पर्यावरण संरक्षण.
११. ए.टी.एम. च्या व्यवस्थापनावरिल खर्च कमी.
१२. सामाजिक कल्याणात वाढ.

### रोकडरहित अर्थव्यवस्थेसमोरील आव्हाने :

- १. व्यक्तिगत गुप्ततेचा भंग :** प्रत्येक व्यक्ती आपले आर्थिक व्यवहार गुप्त ठेवण्याचा प्रयत्न करतो, परंतु सायबर गुन्हे, यामुळे सततची असुरक्षितता असल्यामुळे गुप्ततेचा भंग होतो
- २. सुरक्षेची चिंता :** दररोज वर्तमानपत्र, समाज माध्यमे यांवर बँक दिवाळखोरीत निघाल्याचे वृत्त पहावयास मिळते. यामुळे बँकेतील आपली रक्कम सुरक्षित आहे की नाही याची सततची चिंता असते.
- ३. सायबर गुन्हेगारी :** बँक खाते हॅक होणे, परस्पर पैसे काढून घेणे हे प्रकार दिवसेंदिवस वाढत आहेत २०१५-१६ मध्ये जागतिकस्तरावर सायबर गुन्हेगारीमुळे ४५ अब्ज डॉलर तर भारतात ४ अब्ज डॉलर एवढे मोठे नुकसान झाले आहे.
- ४. दारिद्र्य :** भारतामध्ये दारिद्र्याचे प्रमाण ३० टक्के असल्याने या वर्गाला बँकिंग सुविधेचा वापर करता येत नाही. रोजचे व्यवहार हे रोखच केले जातात. म्हणजेच यांना रोख व्यवहाराशिवाय जगणे अशक्यप्राय वाटते.
- ५. आर्थिक समानतेत वाढ :** डिजिटल अर्थव्यवस्थेत बँकाची व डिजिटल सेवा पुरविणाऱ्या कंपन्यांची चांदी होऊन त्यांना कमिशन मिळणार आहे. त्यामुळे सर्वसामान्य वर्गाचा पैसा यांना प्राप्त होऊन एकप्रकारे आर्थिक असमानतेत वाढ होत आहे.
- ६. डिजिटल व्यवहारांवरिल चार्जेस :** रोकडविरहित अर्थव्यवस्थेत डिजिटल व्यवहारांवरिल चार्जेस वाढवले तर त्याचा ताण उपभोक्त्यांवर पडणार आहे आणि हे चार्जेस सतत वाढण्यामुळे सामान्य वर्गाचेच नुकसान होणार आहे एप्रिल २०१७ पासून RBI ने डेबिट कार्डच्या वापरावर कॅश हॅन्डलींग चार्ज, सर्व्हिस चार्ज व सेस लावल्याने ग्राहकांवर बोझा पडत आहे.
- ७. आर्थिक व्यवहारात खोळंबा :** जर आपले क्रेडिट/डेबिट कार्ड चोरीला अथवा गहाळ किंवा चोरीला गेले तर नविन कार्ड मिळवण्यासाठी विलंब होतो. अशा काळात आर्थिक व्यवहार खोळंबले जातात.
- ८. पिन व पासवर्ड विसरणे:** देशात बरेच अशिक्षित आहेत शिवाय बऱ्याचदा वेगवेगळ्या बँक खात्यातील पिन नंबर व पासवर्ड वेगवेगळे असल्याने ते लक्षात रहात नाहीत त्यामुळे आर्थिक व्यवहारात अडचणी निर्माण होतात.
- ९. आर्थिक अरिष्ट्य :** अमेरिकन अर्थशास्त्रज्ञ स्टिव्ह हॅक यांच्यामध्ये रोखरक्कमधिष्ठीत भारतीय अर्थव्यवस्थेची परिणती रोखरक्कमरहित अर्थव्यवस्थेत केल्यास त्यातून आर्थिक अरिष्ट्य निर्माण होईल. (Just 100 at India-Cash Economy in a cashless Crisis)
- १०. इंटरनेट सुविधेचा अभाव :** भारत हा खंडप्राय देश आहे. भारतात केवळ शहरी भागातच इंटरनेट सुविधा उपलब्ध आहे. ग्रामीण भाग इंटरनेट सुविधेपासून दूर आहे शहरी भागातही इंटरनेटची सुविधा देखील खंडीत/कमीजास्त येताना दिसते इंटरनेटचा अभाव असल्याने आर्थिक व्यवहारांवर ताण पडण जास्तीचा खर्च, श्रम, पैसा व वेळदेखील वाया जाताना दिसते.
- ११. निरक्षरता व अज्ञान :** भारतात निरक्षरता व अज्ञान मोठ्या प्रमाणावर असल्याने डिजिटल साधनांचा वापर अनेकांना करता येत नाही. मोबाईल हाताळता न येणे, इंटरनेट वापरता न येणे इत्यादी प्रकारच्या बाबींमुळे अशा व्यक्तींच्या आर्थिक व्यवहारांवर मर्यादा येतात व यामध्ये त्यांचे आर्थिक नुकसान देखील होत असते.
- १२. ई-पेमेंटसाठी लागणाऱ्या सुविधेचा अभाव :** डिजिटल आर्थिक व्यवहारांसाठी लागणारी साधने यांच्या कमतरतेमुळे व्यवहार सुरळित होत नाहीत. स्वाईप मशीन, बँका, यांची कमतरता जाणवते.

वरिल आव्हाने पाहिल्यानंतर ही आव्हाने प्रयत्नपूर्वक दूर करता येतात व या डिजिटल आर्थिक व्यवहारांत अधिकची पारदर्शकता असल्याने रोकडविरहित अर्थव्यवस्था निर्माण करता येऊ शकते एकप्रकारे रोकडविरहित समाज निर्माण करता येऊ शकतो.

### समारोप

कॅशलेस अर्थव्यवस्थेसाठी भारतात १९६० पासून प्रयत्न सुरु झाले होते. त्यानंतरच्या १९९१ च्या आर्थिक सुधारणेनंतर यामध्ये गती येऊन ८ नोव्हेंबर २०१६ च्या नोटबंदीच्या घोषणेनंतर याला विशेष गती मिळाली. भारत हा एक विकसनशील देश आहे येथे दारिद्र्य, निरक्षरता, अज्ञान मोठ्या प्रमाणात असून असंघटीत क्षेत्र देखील मोठे आहे. भारतात केवळ ५% लोकच डिजिटल साधनांद्वारे आर्थिक व्यवहार करतात. अशा स्थितीत भारतीय अर्थव्यवस्था रोकडरहित करणे एक आव्हानच आहे. असे असले तरी डिजिटल व्यवहारांना प्रोत्साहन देऊन याबद्दल सर्वांना साक्षर करून रोकडविरहित अर्थव्यवस्थेचे महत्त्व, फायदे सांगून ही व्यवस्था स्थापित करणे शक्य आहे. रोकडाधिष्ठित अर्थव्यवस्थेचे रूपांतर रोकडरहित अर्थव्यवस्थेत करण्यासाठी सरकार, समाज, एन.जी.ओ. प्रशासन, विद्यापीठे, व्यापारी मंडळी, ग्राहक संघटना यांनी एकत्र येऊन प्रयत्न केल्यास निश्चितच दिर्घकाळात भारतीय अर्थव्यवस्था रोकडविरहित दिसेल.

### संदर्भ :

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## डिजिटल तंत्रज्ञान आणि सामाजिक नैतिकता

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### प्रस्ताविक :

गेल्या तीन दशकामध्ये जगातील जवळपास सर्वच देशात संगणक क्षेत्राचा शिरकाव व विकास झालेला दिसतो. झपाट्याने वाढणाऱ्या डिजिटल तंत्रज्ञानामुळे जगातील सर्व समाज परस्पर संवादी झाला आहे. या सर्वस्पर्शी तंत्रज्ञानामुळे जगातील संवाद व्यापार, शिक्षण, संस्कृती, उद्योग या सहित सर्वच क्षेत्रात परिवर्तन झालेले आहे. या डिजिटल तंत्रज्ञानाचा उपयोग सर्वच क्षेत्रात मोठ्या प्रमाणावर होताना दिसतो आहे. याचे कारण त्याची गती आणि जगातील आंतर नष्ट करण्याची क्षमता होय. कोणत्याही तंत्रज्ञानाचा सदुपयोग जसा होतो तसाच दुरुपयोगही होतो.

### उद्देश :

- डिजिटल तंत्रज्ञानामुळे सामाजिक बदल अभ्यासणे.
- डिजिटल तंत्रज्ञान आणि सामाजिक नैतिकतेच्या स्वरूपाचा अभ्यास करणे.
- डिजिटल तंत्रज्ञानामुळे होणाऱ्या सामाजिक गैर प्रकारातून निर्माण होणाऱ्या प्रश्नाचा अभ्यास करणे.

नवीन डिजिटल तंत्रज्ञानाचा सकारात्मक वापर केला नाही तर त्याचे दुष्परिणाम आपल्यालाच भोगावे लागतील. याची दुसरी बाजू एकलकोंडी होणारी, हिंसाचार वाढणारी, वाचन, अभिजीत संगीताची आवड कमी करणारी, आदर संस्कृतीचा न्हास करणारी पिढी जन्माला येत आहे. आणि या सर्वांचे मातृत्व डिजिटल तंत्रज्ञानाकडे जात आहे. म्हणूनच की काय या डिजिटल तंत्रज्ञानाचा वापर करताना मर्यादांचे भान ही कसे राखले पाहिजे यावर स्वतंत्रपणे वैश्वीक पातळीवर संशोधन करण्याची गरज जागतिक बँकेचा अहवाल स्पष्ट करतो. भारतामध्ये शासकीय स्तरावर पहिलीपासून संगणक अशा केवळ घोषणा होत असताना मायक्रोसॉफ्टच्या प्रोजेक्ट शिक्षण, इंटेलेक्च्युल क्लासरूम, पी.सी. इत्यादी माध्यमातून टेक्नोफुल विद्यार्थी शिक्षक घडविण्यात येत आहेत. त्याद्वारे डिजिटल तंत्रज्ञान शिकताना सांस्कृतिक, सामाजिक, नैतिक पातळीवरील भान निर्माण करण्याचे ध्येयही सोडून चालणार नाही. जगातील काही देशात डिजिटल तंत्रज्ञानाचा वापर सकारात्मक रूपाने केला जात आहे. त्यामुळे हे माध्यम घातक आहे असा अर्थ काढता येणार नाही. उलट त्यातून काही सामाजिक लाभ मिळवता येतात का? हा फायदा लक्षात येतो. या बाबत जागतिक पातळीवर विचार केला असता खालील बाबी लक्षात घेण्यासारख्या आहेत.

- चीनमध्ये १० लाख विद्यार्थी ऑनलाईन स्वरूपात शिक्षण घेत आहेत. या शिक्षणात सामाजिक नैतिकता वाढवण्यासाठी भर दिला जात आहे.
- अमेरिकेत फिजिक्स विद्यापीठाचे ऑनलाईन शिक्षण घेणारे विद्यार्थी १० देशात विस्तारलेले आहेत.
- आफ्रिकेतील युवक युवतीपर्यंत शिक्षणाची गंगा पोहचविण्यासाठी आफ्रिकन व्हर्च्युअल युनिव्हर्सिटी स्थापन करण्यात आली आहे. आरोग्य सकारात्मक जीवनशैली यांचा त्यातून संदेश दिला जात आहे. उपगृहाच्या माध्यमातून हे व्हर्च्युअल तंत्रज्ञान उपलब्ध करून दिले जात आहे.
- एच.आय.व्ही. एड्स बाबत जागरूकता निर्माण करण्यासाठी जगभर डिजिटल तंत्रज्ञानाचा वापर करण्यात येत आहे.
- आफ्रिकेतील डकार, ब्राझीलमधील साओ पावको मधील दुर्गम भागात लैंगिक शिक्षणाची माहिती देण्यासाठी शाळामध्ये डिजिटल तंत्रज्ञानाचा वापर करण्यात येत आहे.

जगामध्ये डिजिटल तंत्रज्ञानाचा सकारात्मक उपयोग केला जातोय. त्यामुळे या माध्यमाद्वारे काही खाजगी संस्था विनामुल्ये अशी माहिती प्रशिक्षण देत आहेत. इंटरनेट, मोबाईल कोर्ट कार्ड इत्यादीचा वापर करून नकळत कसे गुन्हे घडतात. याची जाणीव त्यातून करून दिली जात आहे. हीच बाब जागतिक बँक जागतिक पातळीवर सांगत आहे. विज्ञानाने दिलेले हे माध्यम दुधारी शस्त्र आहे. याची जाणीव सर्वांना होयला पाहिजे. म्हणून जागतिक बँकेने डिजिटल तंत्रज्ञानाचा गैर वापरावर पायबंद घालण्यासाठी उपाय योजना करण्याचे निर्देश दिले असून, ते भारतातही लागू होणार आहेत. ही आवश्यकता का निर्माण झाली याच्या काही घटना प्रतिनिधीक म्हणून पाहता येतील. उदा. एका तरूणाच्या मित्रांनी त्याच्या श्रीमंतीची माहिती मिळवली आणि खंडपीसासाठी त्याचे आपहरण केले. पण ही माहिती मोबाईलच्या माध्यमातून फुटली आणि पोलिसांपर्यंत पोहचल्यावर घाबरलेल्या मित्रांनी त्या तरूणाचा खून केला.

दुसरे उदा. असे की, काही मित्रांनी एका मित्रला कारमध्ये बसवून बेदम मारहाण करून त्याला रस्त्यावर फेकून दिले. प्रकरण पोलीसात गेले. तेव्हा अस उघडकिला आल की मार खाणाऱ्या मित्राने मारणाऱ्याच्या आईचे आणि बहिणी बद्दल ब्लॉगवर अश्लील मजकूर पाठवला होता.

मागील काही वर्षात भारतात अशा घटना वाढल्या आहेत. डिजिटल तंत्रज्ञानाद्वारे जगात कुठेही पोहचता येत असल्यामुळे अशा गुन्द्यांना भौगोलिक मर्यादा उरली नाही. युरोपीय देशातून प्रसारीत होणाऱ्या अश्लील साईटला मर्यादा घालणे शक्य नसल्याने भारतीय समाजासमोर मोठे आव्हान उभ राहिल आहे. भर रस्त्यावर तरुणीवर हमला करून विनयभंग करण्याची घटना याचाच परिणाम आहे. स्त्री ही भोगाची वस्तू आहे असा भयंकर संदेश इंटरनेटच्या माध्यमातून झटपट पसरत असल्याने साहित्य, धर्मग्रंथ, वैचारिक लेखन यावर मात झाली असून नैतिकतेचा बळी जात आहे.

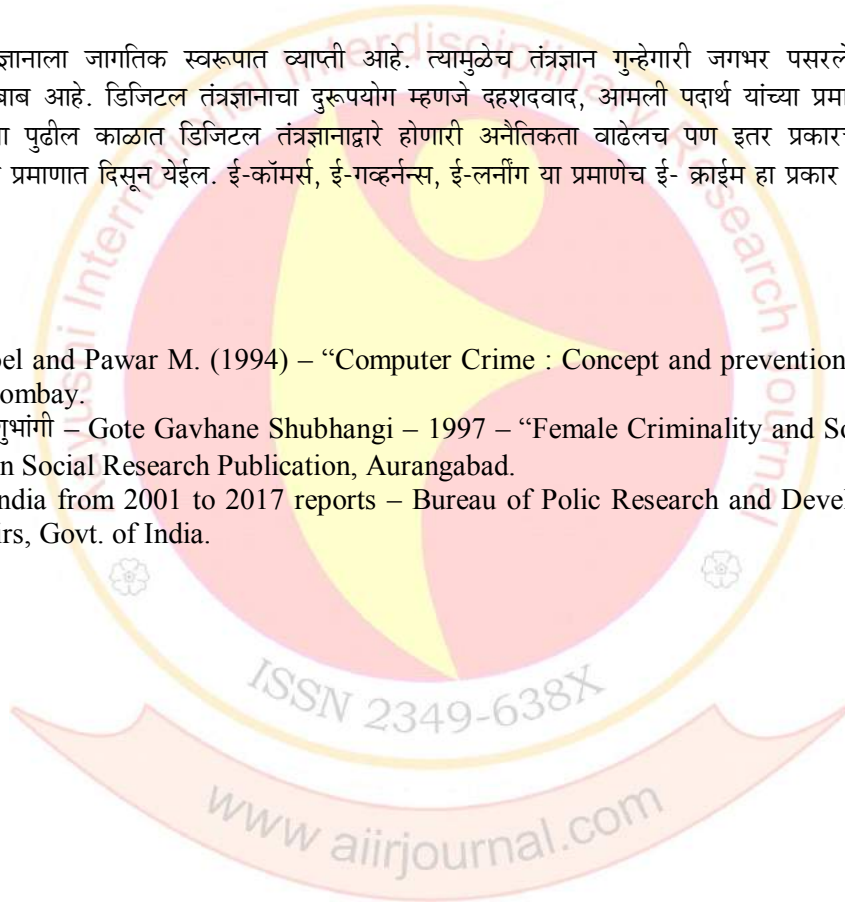
२१ वे शतक हे माहिती तंत्रज्ञानाचे युग, ज्ञानयुग म्हणून ओळखले जात आहे. तंत्रज्ञान हे मोठे भांडवल ठरणार आहे आणि डिजिटल तंत्रज्ञान हे माहिती मिळवण्याचे प्रभावी माध्यम होत आहे. इंग्रजीला तंत्रज्ञानाची भाषा म्हणून ओळखली जात आहे. या तंत्रज्ञानातील माहिती ज्ञानसाठ्याच्या अब्जावधी पानापैकी ७२ टक्के मजकूर हा इंग्रजीमध्ये आहे. त्यानंतर ७ टक्के जर्मन भाषा आहे. जपानी भाषेत ६ टक्के आणि इटालियन भाषेत २ टक्के मजकूर आहे. पण त्यातून नैतिकतेचे, सामाजिक संकेताचे संदेश प्रसारित होण्याऐवजी विकृतीचाच प्रसार होत आहे. ही बाब भारतात देखील घडू लागली आहे. कारण समाज स्वास्थ्य जपणारे भारतीय साहित्य विचार डिजिटल तंत्रावर पोहचलेले नाही. नवीन युगातील ज्ञानाची दारे उघडण्यासाठी आपल्या भारतीय भाषेतून पुस्तक उपलब्ध नाहीत. त्या डिजिटल युगात आपण कसे पोहचणार ?

#### सारांश :

डिजिटल तंत्रज्ञानाला जागतिक स्वरूपात व्याप्ती आहे. त्यामुळेच तंत्रज्ञान गुन्हेगारी जगभर पसरलेली आहे. त्यामुळे यावर नियंत्रण ठेवणे कठीण बाब आहे. डिजिटल तंत्रज्ञानाचा दुरुपयोग म्हणजे दहशदवाद, आमली पदार्थ यांच्या प्रमाणेच आंतरराष्ट्रीय कायदा करणे गरजेचे ठरते. या पुढील काळात डिजिटल तंत्रज्ञानाद्वारे होणारी अनैतिकता वाढेलच पण इतर प्रकारच्या नैतिकतेत देखील या तंत्रज्ञानाचा वापर मोठ्या प्रमाणात दिसून येईल. ई-कॉमर्स, ई-गव्हर्नन्स, ई-लर्निंग या प्रमाणेच ई-क्राइम हा प्रकार उदयाला आला आहे असे म्हणता येईल.

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## रोकड विरहित अर्थव्यवस्थेचे फायदे आणि तोटे

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Tq.kallam Dist. Osmanabad

### प्रस्तावना :-

सर्वाना सामावून घेणारी,पारदर्शी शासनासाठी भारतासारख्या सर्वात मोठ्या लोकशाहिच्या नागरिकांना रोकड विरहित अर्थव्यवस्थेत साक्षर करण्याची साद रोकड रहित अर्थव्यवस्था घालत आहे. प्रत्येक नव्या कामाची सुरुवात होण्यामागे काहीतरी कारण असते. असे कारण,ज्यामुळे समाजाच्या मुलभुत तत्वाच्या विशेषाधिकाराचे अतिशय कल्पक अशा जाणिवेसह परिवर्तनीय कल्पनेचे बीज रोवले जाते. जागतीक अर्थव्यवस्थेतला महत्वाचा घटक म्हणुन भारत देश झपाट्याने पुढे येत आहे, अशा पतिस्थितीत सर्वांना सामावुन घेणा-या लोकशाहीकडे वाटचाल करणे बंधनकारक असते. अशी ओकशाही ज्या ठिकाणी जनतेला माहिती घेण्यासाठी,सरकारच्या धोरणावर चर्चा करण्यासाठी, वेगवेगळ्या आर्थिक स्थरातल्या लोकांना धोरण तयार करण्यात आपले योगदान देण्यासाठी आवश्यक यंत्रणा तयार आहे. प्रशासन हि एकतर्फी यंत्रणा नाही तर ती सर्वसमावेशी ,चर्चात्मक आणि सहनिर्मितीची प्रक्रिया आहे. भारतासारख्या प्रगतीशील आणि तरुण वर्ग मोठया प्रमाणात असलेल्या देशात सामाजिक,आर्थिक निर्देशांक उंचावण्यासाठी मोठया परिवर्तनाचा विचार करणे उचित ठरेल.

जागतिक स्थरावर विचार केला तर समाजात भरपूर बदल घडुन येत आहेत,अशा वेळी तंत्रज्ञान विशेषतः माहिती तंत्रज्ञानाच्या क्षेत्रात जलद गतीने कांती होणे गरजेचे आहे. म्हणुनच प्रत्येक नागरिकाला प्रशासनात सहभागी होता यावे यासाठी त्यांना डिजीटली जोडुन,माहिती तंत्रज्ञान हा विकासाचा प्रमुख घटक व्हावा यासाठी शासन तत्पर आहे. भारतीय समाजाला रोकड विरहित अर्थव्यवस्थेत सक्षम तत्पर करुन प्रशासनात पारदर्शकता आणण्यासाठी त्यांना माहिती पर्यंत पोहोचता यावे यासाठी वर्तमान सरकार प्रयत्न करत आहे. म्हणुनच गरिब,श्रीमंत अशा सर्वच नागरिकासाठी सुप्रशासनाच्या केंद्रस्थानी रोकडविरहित अर्थव्यवस्था आमलात आणण्यासाठी सरकार प्राधान्य देत आहे.

जागतिक परिस्थितीचा अभ्यास केला तर विशेषतः पाश्चिमात्य राष्ट्र रोकड रहित अर्थव्यवस्थेत भारतापेक्षा फार पुढे आहेत. कारण रोकड रहित अर्थव्यवस्था भारतात यशस्वी करावयाची झाल्यास याठिकाणी अनंत अडचणी आहेत. अशा रोकड रहित अर्थव्यवस्थेचे वर्तमान काळात भारतीय समाजाला अनेक तोटे सहन करावे लागत आहेत. कारण भारतात असे अनेक दर्गम भाग आहेत की, ज्याठिकाणी भौतिक सुविधाचा अभाव आहे. अशा दुर्गम भागात अदिवासी समाज वास्तव्य करतो जो निरक्षर आहे. यासमाजाला आतापर्यंत माहिती तंत्रज्ञानात अवगत नाही. अशा समाजाला रोकड रहित अर्थव्यवस्थेत कसे सामावुन घेणार याशिवाय भारतात निरक्षरतेचे प्रमाण भरपूर आहे. त्यानाही ही अर्थव्यवस्था मान्य नाही. प्रस्तुत शोधनिबंधात रोकड विरहित अर्थव्यवस्थेचे फायदे व तोटे यावर प्रकाश टाकण्यात आला आहे.

### संशोधन उद्देश :-

1. आयकर विभागावर प्रकाश टाकणे.
2. भारतीय समाजाच्या साक्षरतेवर प्रकाश टाकणे.
3. जीडीपी विषयावर प्रकाश टाकणे.
4. रोकडविरहित अर्थव्यवस्थेवर प्रकाश टाकणे.
5. सामाजातील आर्थिक लुटालुटीवर प्रकाश टाकणे.

### गृहितके :-

1. रोकडविरहित अर्थव्यवस्थेत देशाचा आर्थिक विकास झालेला दिसुन येतो.
2. रोकडविरहित अर्थव्यवस्थेत नागरिकांच्या वेळेत बचत झालेली दिसुन येते.
3. रोकडविरहित अर्थव्यवस्थेत सर्व व्यवहाराची नोंद झालेली दिसुन येते.
4. रोकडविरहित अर्थव्यवस्था भारतासारख्या देशात यशस्वी होण्यासाठी भौतिक सुविधेचा अभाव दिसुन येतो.
5. रोकडविरहित अर्थव्यवस्थेत भारतातील बहुतांश समाज निरक्षर असलेला दिसुन येतो.

### संशोधन पध्दती :-

प्रस्तुत शोध निबंधासाठी ऐतिहासिक संशोधन पध्दतीचा उपयोग करण्यात आलेला आहे. तसेच संदर्भग्रंथ,लिखित साहित्य,वर्तमानपत्राचाही उपयोग करण्यात आला आहे.



अभिप्राय :-

1. **अभय टिळक (जेष्ठ अर्थतज्ञ) :-**

रोकड विरहित अर्थव्यवस्था हि आर्थिक विकासाच्या प्रवासात ब-याच प्रगल्भ पातळीवर येणारा टप्पा आहे. आपल्याला रोकड विरहित अर्थव्यवस्था हवी आहे. म्हणून व्यवस्थात्मक बदल राबवून किंवा लादून एकदम या व्यवस्थेत जाता येत नाही. त्याचे कारण आपल्या अर्थव्यवस्थेच्या रचनेत रचनेत दडलेले आहे. आपल्या अर्थव्यवस्थेत प्रामुख्याने लोकसंख्येचे उपजिविकेचे साधन शेती आहे. जवळपास 66 टक्के लोकसख्या ग्रामीण आहे. विकासाच्या प्रक्रियेत राज्यातच नाहीतर राज्यांतर्गत देखिल तफावत आहे. बिगरशेती, असंघटीत उद्योग - व्यवसायाचे प्रमाण एकुण अर्थव्यवस्थेच्या 88 टक्के आहे. जवळजवळ निम्मा भारत बँकिंग कल्चर संस्कृतीच्या बाहेर आहे. "जनधन"च्या माध्यमातून खात्याची संख्या वाढली असली तरी बँकेच्या माध्यमातून व्यवहार करण्याची संस्कृती आपल्याकडे अजून रुजली नाही. त्याचे कारण आपल दरडोई उत्पन्न रोकड विरहित अर्थव्यवस्थेबाबत आपण अनेक वेळा प्रगत राष्ट्रांचे उदाहरण देत असतो. पण तेथील दरडोई उत्पन्न किती आहे हे पाहत नाही. भारताचे आज जेवढे दरडोई उत्पन्न आहे त्या पातळीवर हे देश जेव्हा होते, त्यावेळी त्याच्या अर्थव्यवस्थेत रोकडविरहित अर्थव्यवस्थेत व्यवहाराचे प्रमाण किती होते? तर ते आजच्यापेक्षा नक्कीच कमी होते."<sup>1</sup>

❖ **रोकडविरहित अर्थव्यवस्थेचे फायदे :-**

1. **भक्कम पुरावा :-** रोकडविरहित व्यवहार हा वर्तमान काळात भक्कम पुरावा म्हणून पुढे आला आहे. रोकडविरहित अर्थव्यवस्था होण्या अगोदर झालेल्या व्यवहाराची खात्री देता येत नव्हती काही व्यवहार हे बुडीत होत होते. आता मात्र रोकडविरहित व्यवहारामुळे एखादया व्यक्तीने झालेला व्यवहार बुडवण्याचा प्रयत्न केला तर त्याच्या विरोधात न्यायालयात भक्कम पुराव्याच्या आधारे दाद मागता येते.
2. **भ्रष्टाचारास पायबंद :-** "आज आपण दररोज वर्तमान पत्रामध्ये वाचतो. दररोज एखादा तरी आर्थिक भ्रष्टाचार उजेडात आलेला दिसतो. हे सर्व भ्रष्टाचार रोकडविरहित अर्थव्यवस्था येण्या अगोदर झालेले बहुतांश दिसून येतात. कोटयावधी रुपयांचा भ्रष्टाचार आपल्या देशात झालेली प्रकरण आपण पाहिलेली आहेत. असा भ्रष्टाचार झाला नसता तर भारताच्या अर्थव्यवस्थेचे चित्र आज आपणाला वेगळे दिसले असते. ज्यावेळे पासून रोकडविरहित अर्थव्यवस्थेची अम्मलबजावणी सुरु झाली. त्यावेळे पासून अशा प्रकारच्या भ्रष्टाचारास आळा बसलेला दिसून येतो."<sup>2</sup>
3. **बनावट नोटावर नियंत्रण :-** जगातील प्रत्येक देशात आजमितीला बनावट नोटा बनवण्याच पेव पिकलेले आहे. या परिस्थितीवर प्रत्येक देश मात करण्याचा प्रयत्न करत आहे. परंतु या बनावट नोटा बंद करावयाच्या असतील तर त्यासाठी रोकड विरहित अर्थव्यवस्था उपयोगी पडेल अन्यथा यावर उपाय होउच शकत नाही. "भारतात 08 नोव्हें 2016 सरकारने नोट बंदीचा निर्णय घेतला आणि बनावट नोटा बनवणा-याचे धाबे दणाणले बनावट नोटांना काहीच अर्थ राहिला नाही. सर्व चालु असलेले चलन विशेषता 500, व 1000 च्या नोटा बंद केल्या. चालु व्यवहारात बंद केल्या आणि नविन चलन सुरु केले. त्याबरोबर रोकड विरहित अर्थव्यवस्थेला शासनाने प्रोत्साहन दिले."<sup>3</sup> यावर निर्णयामुळे आपोआपच बनावट नोटावर नियंत्रण प्रस्थापित झाले.
4. **आयकर विभागाची भुमिका :-** 08 नोव्हें 2016 रोजी भारत सरकारने नोटबंदीचा निर्णय घेतला आणि रोकड विरहित अर्थव्यवस्थेला चालना दिली. "रोकड विरहित अर्थव्यवस्थेला चालना देत असताना रोखीच्या व्यवहारावर नियंत्रण आणले आणि रोकड विरहित व्यवहाराचा पुरस्कार केला. अशा व्यवहाराची नोद आयकर विभागाला ठेवण्याचे आदेश देण्यात आले. त्यामुळे देशातील आर्थिक भ्रष्टाचारास आळा बसला."<sup>4</sup> आयकर विभागाच्या नोंदीमुळे भ्रष्टाचारास आळा तर बसलाच त्याचबरोबर देशाच्या आर्थिक विकास दर वाढला.
5. **विविध वस्तुची खरेदी सुलभ :-** "रोकड विरहित अर्थव्यवस्थेमुळे कोणत्याही वस्तुची खरेदी करता येऊ लागली. अशी व्यवस्था येण्याअगोदर प्रत्येक नागरीकास खिशात रोख रक्कम घेऊनच खरेदी करण्यासाठी जावे लागत असे कष्टाने कसावलेली रक्कम जवळ ठेवली असताना त्याची चोरी होते की काय? अशी भीती वाटत असे."<sup>5</sup> परंतु रोकडविरहित अर्थव्यवस्थेमुळे विविध वस्तुची खरेदी करताना कोणालाही जवळ रोख रक्कम जवळ बाळगण्याची आवश्यकता नाही. हे सर्व रोकड विरहित अर्थव्यवस्थेमुळे शक्य झाले.
6. **वेळेची व खर्चाची बचत :-** रोकड विरहित अर्थव्यवस्थेच्या अगोदर भारतातील लोकांचा आर्थिक व्यवहार करण्यासाठी बँकेत जाणे त्याठिकाणी रांगेत उभा राहणे या सर्व प्रक्रियासाठी संपुर्ण दिवसाचा वेळ जात होता. अशा परिस्थितीत ग्रामीण भागातील लोकांचे आर्थिक व्यवहार करण्यासाठी एक, दोन नाही तर आठ आठ दिवस जात होते. रोकड अर्थव्यवस्था अस्तित्वात आल्यापासून वरील सर्व प्रकार अटोक्यात आला. या व्यवस्थेमुळे सामान्य तसेच प्रवासातील दगदग सुध्दा रोकडविरहित अर्थव्यवस्थेमुळे कमी झाली. "रोकड विरहित

अर्थव्यवस्थेमुळे भारतातील आर्थिक व्यवहाराचा वेग वाडला. पुर्वी चेक ची पडताळणी करण्यासाठी आठ आठ दिवस लागत होते. ते दिवस आता राहिले नाहीत.<sup>6</sup> एकुणच रोकडविरहित अर्थव्यवस्थेमुळे सर्व व्यवहाराच्या सुविधा घरबसल्या नागरिकाला मिळू लागल्या. तसेच रोकड विरहित आर्थिक व्यवहार करण्यासाठी वेळेचे बंधन देखील राहिले नाही.

7. **अतिरेकी कारवायांना पायबंद :-** रोकडविरहित अर्थव्यवस्थेमुळे अतिरेकी कारवायांना पायबंद बसला. सरकारने रोखीच्या व्यवहारावर बंधन घातले वर्तमान काळात एखादा व्यक्ती बँकेत आर्थिक व्यवहार करण्यासाठी गेला तर त्या व्यक्तीला वीस हजाराच्या पुढे रोख रक्कम स्लीपद्वारे मिळत नाही. तसेच एखादा मोठा व्यवहार करावयाचा झाल्यास दोन लाखांच्या आत रोख रक्कम देता येते परंतु राहिलेली रक्कम ही रोकड विरहित व्यवहारातूनच पाठवता येते त्यामुळे अशी रक्कम नेमकी कोणाच्या खात्यावर जात आहे याची नोंद होऊ लागली. एखाद्या अतिरेकी संघटनेच्या नावावर तर अशी रक्कम जात नाही ना? याची नोंद होऊ लागली त्यामुळे अशा घटनांना पायबंद बसू लागला.
8. **बुद्धींत लोकांना राजकारणात संघी :-** मागच्या पंधरा वर्षांच्या काळापर्यंत राजकिय व इतर क्षेत्रात पैशाच्या जीवावर लोक निवडुन येत होते तसेच इतर क्षेत्रात आपापला दबदबा निर्माण करत होते. परंतु वर्तमान काळात तशी परिस्थिती राहिली नाही. "रोकड विरहित अर्थव्यवस्थेमुळे अशा लोकांवर अंकुश बसेल. अशा लोकांऐवजी चांगली कर्तबगार व बुद्धीवंत लोक निवडुन येतील व आपली संपुर्ण राजकिय व्यवस्था बदलून ख-या अर्थाची लोकसहभागाची लोकशाही अस्तित्वात येईल."<sup>7</sup>
9. **रोकड विरहित अर्थव्यवस्थेत उपलब्ध असलेल्या सुविधा :-** रोकड विरहित अर्थव्यवस्थेत वर्तमान काळात व्यवहार करण्यासाठी भरपूर पर्याय शासनाने उपलब्ध करून दिले आहेत. या सर्व पर्यायांच्या माध्यमातून प्रत्येक व्यक्ती रोकडविरहित व्यवहार करू शकतो. विशेषतः शासनाने "1). प्लॅस्टिक मनी, (डेबिट कार्ड, क्रेडिट कार्ड)2). इंटरनेट बँकिंग, 3). इ.वॉलेट / मोबाई वॉलेट 4). युपीआय(upi) 5). मोबाईल बँकिंग व ussd 6). posपॉईंट ऑफ सेल 7). आधार कार्ड, <sup>8</sup> इत्यादी पर्यायांच्या माध्यमातून व्यवहार करू शकतो.
10. **रोकड विरहित अर्थव्यवस्थेत घ्यावयाची काळजी:-** वर्तमान काळातील रोकड विरहित अर्थव्यवस्थेत प्रत्येक नागरिकाला व्यवहार करण्यासाठी विशेष काळजी घ्यावी लागते. ती म्हणजे "स्वतःचा पासवर्ड इतर कोठेही लिहून ठेऊ नये, स्वतःचा पासवर्ड कोणत्याही कार्डवर किंवा इतर कोणत्याही सांगु नये, स्वतःचा पासवर्ड कोणत्याही कार्डवर किंवा इतर कोठेही लिहून ठेऊ नये, स्वतःच्या खात्याची माहिती (युजरनेम / पासवर्ड / otp / cvv) कोणालाही सांगु नये. स्वतःला पंचेवीस लाखाच बक्षीस लागल आहे, बँकेतून बोलत आहोत आय.डी पासवर्ड सांगा वगैरे फोन करणा-यांना काहीही सांगु नये. असे फोन केवळ तुमची फसवणुक करण्याकरिता आलेले असतात. स्वतःच्या क्रेडीट कार्ड किंवा डेबीट कार्डचे डिटेलस कोणत्याही साइटवर सेव्ह करू नका, स्वतःच्या कार्डचा किंवा खात्याचा पासवर्ड ठराविक दिवसानंतर पासवर्ड / पिन बदलत रहा."<sup>9</sup> स्वतःनेट बँकिंग करत असताना virtual keyboard चा वापर करत रहा. इत्यादी प्रकारची काळजी प्रत्येकाने घेतली पाहिजे.

### ➤ रोकड विरहित अर्थव्यवस्थेतील तोटे:-

1. **भौतिक सुविधेचा अभाव :-** रोकड विरहित अर्थव्यवस्था ही शंभर टक्के विकसीत देशात यशस्वी होते. परंतु भारतासारख्या राष्ट्रात शंभर टक्के यशस्वी होणे हे अशक्य आहे. कारण आपल्या देशात बराच असा दुर्गम भाग आहे की, त्या ठिकाणी आज सुध्दा भौतिक सुविधा सरकारद्वारे उपलब्ध झालेल्या नाहीत अशा ठिकाणी रोकड विरहित अर्थव्यवस्था यशस्वी होणे अशक्य आहे. अशी जर व्यवस्था यशस्वी करावयाची असेल तर शासनाला अगोदर भौतिक सुविधा उपलब्ध करून द्याव्या लागतील हे मात्र नक्की आहे.
2. **नेटवर्कचे संकट :-** आजही आपल्या देशात ब-याच भागात नेटवर्कचा प्रश्न हे मोठे संकट आहे. कारण रोकड विरहित अर्थव्यवस्थेत नेटवर्कची भुमिका महत्त्वाची असते. नेटवर्कच नसेल तर तेथील व्यवहार हे ठप्प होतात. ग्रामीण भागातील व्यक्तींना अशी संकट सतत झेलावे लागतात. अशा वेळी या लोकांना संपुर्ण दिवस रोकड विरहित व्यवहार करण्यासाठी घालावी लागतो तरिही त्यांचा व्यवहार होत नाही.
3. **आर्थिक पिळवणुक :-** रोकड विरहित अर्थव्यवस्थेत वेळ वाचतो हे जरी सत्य असले तरी ठिकठिकाणी स्थापन झालेली नेटकॅफे असतील, खाजगी बँक असतील, स्वॅप मशीन असतील अशा ठिकाणी एखादया व्यक्ती व्यवहार करण्यासाठी आधार कार्ड किंवा डेबीट कार्ड घेऊन गेलातर त्या व्यक्तीकडून अशा ठिकाणी जास्तीची फीस घेतात त्यामुळे सामान्य व्यक्तीची अशा ठिकाणी आर्थिक पिळवणुक होते. त्यामुळे सामान्य व्यक्तीची अशा ठिकाणी आर्थिक पिळवणुक होते. त्यामुळे सामान्य माणसाला वाटते की, जुनीच व्यवहाराची पध्दत बरी होती.

4. **निरक्षरता:**— भारत अजुनही संपुर्ण साक्षर झालेला नाही. अशा परिस्थितीत रोकड विरहित अर्थव्यवस्था राबवणे अवघड आहे. एका बाजुने शासन रोकड विरहित अर्थव्यवस्था निर्माण करू पाहत आहे आणि दुसरीकडे साक्षरतेचे प्रमाण म्हणावे तसे वाढत नाही. निरक्षर व्यक्ती हा या व्यवस्थेपासुन दुर पळायला बघतो. त्याचा य व्यवस्थेवर विश्वास बसत नाही म्हणुन रोकड विरहित अर्थव्यवस्थेत निरक्षरतः हे मोठे संकट आहे.
5. **विद्युत पुरवठेचा प्रश्न** :- सरकार एका बाजुने देशातील सर्वभागामध्ये रोकड विरहित अर्थव्यवस्थेच्या व्यवहाराचे जाळे विस्तारू पाहत आहे हे खरे आहे परंतू दुस-या बाजुने मात्र ग्रामिण भागातील एक झाले दुसरे संकट दत्त म्हणुन उभे राहते. ग्रामिण भागातील विद्युत पुरवठा आजही व्यवस्थीत होत नाही. नेटवर्क जरी असले तरी विद्युत पुरवठा सुरळीत नसतो. एखाद्या वेळी गावातील ट्रान्सफार्मर दुरुस्त होत नाही. अशावेळी चार्जिंग केलेल्या बॅटच्या कितीदिवस चालतील हा प्रश्नच आहे. अशा परिस्थितीत आठ आठ दिवस रोकड विरहित व्यवहार ठप्प राहतात.
6. **सायबर हल्ले** :- आज जशा प्रकारे संपुर्ण जगात आंतकवादी हल्ल्यामुळे सामान्य माणसाच्या मनात दहशत निर्माण झाली आहे. तशाच प्रकारे सायबर हल्ल्यामुळे संपुर्ण जग भयभीत झाले आहे. अशा प्रकारच्या हल्ला हा दहशतवादी हल्ल्यापेक्षा महाभयानक होतो. त्यातुन झालेले आर्थिक नुकसान सहजासहजी भरुन येत नाही.

■ **निष्कर्ष :-**

1. रोकड विरहित अर्थव्यवस्थेमुळे अतिरेकी कारवायांना आळा बसतो.
2. रोकड विरहित अर्थव्यवस्थेमुळे चोरी,डाका,लुटालुट इ.घटनांना पायबंद होतो.
3. रोकड विरहित अर्थव्यवस्थेमुळे घरी बसुन कोणत्याही वस्तुची खरेदी किंवा विक्री करता येते.
4. रोकड विरहित अर्थव्यवस्थेमुळे आयकर विभागाकडे प्रत्येक व्यवहाराची नोंद होऊ लागली.
5. रोकड विरहित अर्थव्यवस्थेमुळे सामान्य नागरिकांची आर्थिक बचत होऊ लागली.
6. रोकड विरहित अर्थव्यवस्था यशस्वी करावयाची असेत तर भारतातील ग्रामीण,दुर्गम,अदिवासी,भागात शासनाने भौतिक सुविधा करणे आवश्यक आहे.

● **समारोप :-**

अशाप्रकारे पाश्चात्य देशात रोकडविरहित अर्थव्यवस्था ही जरी पुर्वीच सुरु झालेली असली तरी,भारतात मात्र 08 नोव्हें 2016 रोजी भारत सरकारच्या नोटबंदीच्या निर्णयापासुन रोकड विरहित अर्थव्यवस्थेचा भारतसरकारने पुरस्कार केलेला दिसुन येतो. एका बाजुने विचार केल्यास अशा अर्थव्यवस्थेचा फायदा आहे परंतु त्यासाठी संपुर्ण देश हा विकसित झालेला पाहिजे तरच अशी अर्थव्यवस्था यशस्वी होऊ शकत नाही. रोकड विरहित अर्थव्यवस्था भारतासारख्या देशात किती आणि कशी रुजते हा येणारा काळच ठरवेल.

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## भारतात कॅशलेस व्यवहाराची अंमलबजावणी : लाभ आणि फायदे

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### प्रस्तावना :-

भारतीय अर्थव्यवस्थेत अचानकपणे घडवून आणलेला बदल म्हणजे विमुद्रिकरण होय. भारताच्या पंतप्रधानांनी 8 डिसेंबर 2016 रोजी 500 आणि 1000 रुपयांच्या नोटा चलनातून बाद करण्याचा निर्णय जाहीर केला जेव्हा सर्वानाच मोठा धक्का बसला. भ्रष्टाचार, काळ्या पैशाला आळा घालणे आणि बनावट नोटांच्या समस्येला पायबंद घालणे आदी मुख्य हेतुनेच निश्चलिकरणाचा हा निर्णय घेण्यात आला होता. त्यानंतर 500 आणि 1000 रुपयांच्या नोटा अक्षरशः गायब झाल्या होत्या. रद्द केलेल्या नोटा देशाच्या चलनात 86 टक्के म्हणजे एकूण देशांतर्गत उत्पन्नाच्या 12.2 टक्के होत्या. त्या चलनातून बाद झाल्या. त्याची जागा आता नवीन नोटांनी घेतली आहे. भारतात यापूर्वी दोनदा निश्चलिकरण करण्यात आले होते. सर्वप्रथम 1946 साली आणि दुसऱ्यांदा 1978 मध्ये. पण, त्यावेळी भारताची अर्थव्यवस्था उर्जितावस्थेत नव्हती. शिवाय, त्यावेळी निश्चलिकरण झालेल्या नोटा खूपच अधिक मूल्याच्या होत्या. त्यामुळे सामान्य लोकांना त्याचा फारसा त्रास झाला नव्हता. परंतु नुकत्याच करण्यात आलेल्या निश्चलिकरणामुळे मात्र खूप जणांना त्रास सहन करावा लागला. मोठ्या प्रमाणावर वापरात असलेल्या 500 आणि 1000 रुपयांच्या नोटा अचानक चलनातून बाद झाल्यामुळे लोकांना धान्य, भाजीपाला, दुध अशा दैनंदिन वापराच्या वस्तू घ्यायलाही जवळ पैसा उरला नाही. मुलांच्या शाळेचे शुल्क कसे भरणार आणि पगाराचा पैसा कसा मिळणार आदी प्रश्नांनी सामान्य लोकांना भंडावून सोडले होते. बँक आणि एटीएम मशीनमध्ये चलनाचा असलेला तुटवडा सामान्य लोकांच्या अडचणीत भर घालीत होता. बाद झालेल्या नोटा बँकेत जमा करण्यासाठी आणि त्या बदलून घेण्यासाठी तसेच उपलब्ध असलेल्या तुटपुंज्या नोटा एटीएममधून काढण्यासाठी लोकांच्या लागलेल्या रांगा संपूर्ण देशात दिसून आल्या, अशा स्थितीत एकच बाब लोकांना सुखावत होती, ती म्हणजे निश्चलिकरणा मागचा उद्देश तो म्हणजे काळा पैसा बाहेर काढले आणि दहशतवादासाठी होत असलेला अर्थपुरवठा थांबवणे. त्याचबरोबर सरकारचा आणखी एक उद्देश होता, तो म्हणजे कमीतकमी रोकड वापरणारी अर्थव्यवस्था निर्माण करणे. सर्व आर्थिक व्यवहार तपासता येणार असल्यामुळे कॅशलेस अर्थव्यवस्थेद्वारे पारदर्शकता जोपासता येते. ज्या देशातील बहूसंख्या लोक निरक्षर आहेत आणि डिजिटल व्यवहारांसाठीच्या पायाभूत सुविधांची ग्रामीण भागात जिथे वानवा आहे, अशा देशात संपूर्ण कॅशलेस अर्थव्यवस्था निर्माण करणे अशक्य आहे. त्यामुळे सरकारचा 'कॅशलेस' अर्थव्यवस्था म्हणजे न्यून रोकड अर्थव्यवस्था निर्माण करण्याचा प्रयत्न आहे. डिजिटल व्यवहारामध्ये अर्थातच सायबर गुह्याचा धोका असतो. सायबर गुन्हे टाळण्याचे निश्चित उपायही आहेत. परंतु बऱ्याचदा तंत्रज्ञानामुळे नव्हे तर केवळ वापरकर्त्यांच्या निष्काळजीपणामुळे सायबर गुन्हे असल्याचे आढळून आले आहे. सायबर सुरक्षेबाबत जनजागृती आणि कडक कायदे करून या समस्येवर मात करता येऊ शकते. नोटाबंदीनंतर देशभर जाणवू लागलेल्या नोटाटंचाईवर मात करण्यासाठी डिजिटल पेमेंट प्रणालीचा स्वीकार करण्याचे आवाहन पंतप्रधान नरेंद्र मोदी ह्यांनी केले. वस्तुतः डिजिटल प्रणालीवर भर देण्यावर रिझर्व्ह बँकेत खूप आधीपासून विचारविनिमय सुरू झाला. चलन आणि जीडीपीचे प्रमाण युरोपात 3 ते 5 टक्के आहे. तर अमेरिकेत 5 टक्के आहे. चीन रशियात ते 11.5 टक्के आहे. तर जपानमध्ये 19 टक्के आहे. भारतात 1951 साली बँकाचा शाखाविस्तार फारसा झालेला नव्हता. त्या काळात जीडीपीच्या 30 टक्के चलनी नोटा प्रचलित होत्या. दरम्यानच्या काळात बँकांचा शाखा विस्तार मोठ्या प्रमाणात झाला.

### संशोधन लेखाचा उद्देश :-

सदर संशोधन लेखाचा उद्देश हा कॅशलेस व्यवहाराची आव्हाने आणि उपाय याचा अभ्यास करणे असा आहे.

### संशोधन पध्दती :-

प्रस्तुत संशोधनासाठी दुय्यम स्रोताचा वापर करण्यात आलेला असून त्यात प्रकाशित व अप्रकाशित पुस्तके तसेच संकेतस्थळे इत्यादींचा वापर करण्यात आला आहे. संकलित माहितीच्या आधारे शोधनिबंधाच्या अभ्यासाची योग्य मांडणी करण्यात आली आहे.

### कॅशलेस व्यवस्थेचे फायदे :-

भारतीय अर्थव्यवस्था ही जगातील वेगाने वाढणारी अर्थव्यवस्था आहे पण त्याला काळा पैसा, भ्रष्टाचार, दहशतवाद, बेकायदेशीर मालमत्ता यांचे ग्रहण आहे. यावर लेखा परीक्षण, अंमलबजावणी संस्था काम करीत असतात, डिजिटल व इलेक्ट्रॉनिक व्यवहारात अनेक आर्थिक व्यवहार हे औपचारिक व्यवस्थेतून केले जात असल्याने ते शक्य असते त्यामुळे त्याचे अनेक फायदे आहेत. भारतात नवीन कॅशलेस पध्दती फार थोडे लोक

वापरत आहेत त्यांचे प्रमाण 10 ते 15 टक्के आहे. ब्राझील, चीनमध्ये हे प्रमाण 40 टक्के आहे. दरम्यान 2014 मधील आकडेवारीनुसार भारतात अर्थव्यवस्थेबाहेरील चलन हे देशांतर्गत उत्पन्नाच्या 11.1 टक्के आहे. हे प्रमाण रशिया, मेक्सिको, ब्राझील या अर्थव्यवस्थांपेक्षा जास्त आहे. त्यामुळे कॅशलेस बाजारपेठेच्या वापरास मोठा वाव आहे. रोखमुक्त कॅशलेस साधनांचा वापर सोपा, विश्वासार्ह, सुरक्षित व किफायतशीर करणे आवश्यक आहे कर्ज, विमा यात त्यांचा वापर शक्य आहे. डिजिटल पायाभूत सुविधा बँकांमध्ये सुरु करणे आवश्यक आहेत. रोखमुक्त समाजाने सरकार व जनतेस अनेक फायदे होतात. गुन्ह्यांच्या प्रमाणात घट झाली. इलेक्ट्रॉनिक व डिजिटल व्यवहारांमुळे नोटा बाळगाव्या लागणार नाहीत त्यामुळे इतर गुन्हे तर कमी होतीलच शिवाय अंमली पदार्थ तस्करी, दहशतवादाला अर्थपुरवठा काळ्या पैशाची साठवणूक हे गुन्हे कमी होतील. बँकिंग क्षेत्राला लाभ-डिजिटल अर्थव्यवस्थेचा लाभ हा बँकिंग प्रणालीस होणार आहे. जेव्हा लोक डिजिटल पेमेंट करतील तेव्हा रोखीची गरज कमी होईल व बँकांमध्ये मोठ्या प्रमाणात पैसे राहतील. बचतही जास्त होईल. रोखविरहित व्यवहारांवर सरकार सहज लक्ष ठेवू शकते त्यामुळे करचुकवेगिरी टाळता येईल व महसून वाढेल. गेल्या दोन महिन्यात डिजिटल व्यवहार वाढले आहेत व स्वाइप मशीनचे प्रमाण वाढले आहे, छोटी दुकाने व रस्त्यावरील पथारीवाले हे सुद्धा स्वाइप मशीन वापरत आहेत. त्यामुळे इलेक्ट्रॉनिक व्यवहार वाढणार आहेत, रकमा वेगाने दिल्या घेतल्या जातील. अनेक लोक रोखीकडून मोबाईल वॉलेटकडे वळतील. मोबीविकच्या दाव्यानुसार 2017 पर्यंत ते 10 अब्ज डॉलर्सची उलाढाल करतील व लाखो व्यापारी याचा स्वीकार करतील. यातून पारदर्शकता वाढेल तसेच करचुकवेगिरी कमी होईल. महसूल वाढेल. भारत हा विकसनशील देश आहे. त्यात गरिबांची संख्या जास्त आहे. त्यामुळे कॅशलेस व्यवहार हे कितपत प्रभावी ठरतील हा प्रश्न आहे. देशाने आधी पारदर्शक अर्थव्यवस्था निर्माण करून मग कॅशलेसकडे वळावे हा पर्याय त्यात आहे. रोख पैशाच्या व्यवहारांचा शेवट ही कल्पना जरी आततायी वाटत असली तरी प्रत्यक्षात येत आहे हे मात्र खरे. 30 डिसेंबर 2016 रोजी पंतप्रधान मोदी यांनी भीम अॅप हे इ-वॉलेट सुरु केले. त्यामुळे ऑनलाइन व्यवहार सुलभ होणार आहेत. आधार कार्डशी निगडित हे अॅप डिजिटल पेमेंटसाठी उपयुक्त आहे. बँक खात्यातून पैसे थेट हस्तांतरीत करता येतील. हे अॅप युपीआय सक्षम बँक खात्यांशी संबंधित आहे पण त्यात एकच खाते त्याच्याशी जोडता येईल. दोन खाते असलेल्यांना दोनदा युपीआय व्यवहार करावे लागतील. मनुष्यबळ विकास मंत्रालयाने लोकांना डिजिटल व्यवहारांसाठी प्रोत्साहित केले आहे. खासगी संस्थांनी रोखीत पैसे स्वीकारू नयेत असे आवाहन करण्यात आले आहे. दुकाने, कॅटीन, इतर सेवात कॅशलेस व्यवहारांचा आग्रह आहे. विद्यार्थी, शिक्षक यांनी लोकांना या व्यवहारांचे प्रशिक्षण देण्यास सांगितले आहे. मनुष्यबळ मंत्रालयाने त्यासाठी सूचनांकरिता वेबपेज सुरु केले आहे.

ह्या अर्थव्यवस्थेनुसार व्यवहारासाठी कॅश किंवा रोख रक्कम वापरण्याऐवजी इतर पर्याय वापरले जातात जसे की प्लॅस्टिक मनी, इ वॉलेट, इंटरनेट बँकिंग. ज्यामध्ये छापील नोटांचा अजिबात समावेश नसतो. या प्रकारच्या अर्थव्यवस्थेची भारताला नक्कीच गरज आहे. ही व्यवस्था मोठ्या प्रमाणात अंमलात आणणे शक्य आहे. भारतीयांमधील वाढलेला फोनचा वापर यासाठी अधिक उपयुक्त ठरणार आहेच या अर्थव्यवस्थेमुळे सर्व व्यवहार बऱ्यापैकी पारदर्शक असतील, सुरक्षित असतील आणि त्यामुळे काळ्या पैशाला थांबवण शक्य आहे. ह्या व्यवस्थेनुसार व्यवहार करणेसुद्धा सोपं असल्यामुळे लवकरच याचा मोठा प्रसार होईल असे चित्र या चलनबदलाच्या निमित्ताने का होईना पण दिसू लागले आहे.

कॅशलेस अर्थव्यवस्थेचे आणखी काही फायदे सांगताना असे म्हणता येईल की, छापील नोटांमधून होणारे गैरव्यवहारांना आळा बसेल. चलन व्यवस्थापन, नोटांच्या छपाईचा सरकारी खर्च वाचेल. बनावट नोटा छापण्याचे प्रकार बंद होतील. आयकर विभागाकडे प्रत्येक व्यवहाराची नोंद होईल. रोख रक्कम, सुटे पैसे जवळ बाळगण्याची गरज नाही. धनादेश वटन्याची वाट पहावी लागणार नाही, त्यामुळे सर्व व्यवहार जलद गतिने आणि गरजेनुसार सुरक्षित रित्या होत आहेत. कॅशलेस व्यवहारांतही अनेक पर्याय उपलब्ध झाले आहेत. ज्यात- प्लॅस्टिक मनी (डेबिट कार्ड, क्रेडिट कार्ड), इंटरनेट बँकिंग, इ- वॉलेट/मोबाईल वॉलेट, युपीआय (UPI), मोबाइल बँकिंग (USSD), पॉइंट ऑफ सेल (POS) यांचा समावेश होतो.

आधार कार्ड द्वारे देखिल कॅशलेस व्यवहाराचे अनेक फायदे आहेत जे खालीलप्रमाणे आहेत.-

- रोकडरहित व्यवहार करणे सुलभ आणि सोयीचे असते तसेच ते रोख रक्कम हाताळण्यापेक्षा अधिक सुरक्षितही असते.
- रोकडरहित व्यवहारांद्वारे अर्थव्यवस्था अधिक प्रगत व विकसित होते आणि रक्कम प्रदान प्रणाली अत्याधुनिक करता येते. त्याचप्रमाणे, रोकडरहित व्यवहारांमुळे अर्थव्यवस्थेत अधिक पारदर्शकता आणि उत्तरदायित्व स्थापित करणे, आर्थिक व्यवहारांच्या प्रक्रियेचे मुल्य कमी करणे आणि समांतर व बेकायदेगीर अर्थव्यवस्थेचे निर्मूलन करणे, यांसारखे महत्त्वाची परिवर्तने करणे शक्य होते.

- व्यापारी वर्गाला त्यांच्या भौगोलिक कक्षांच्या पलीकडे जाऊन व्यापार करणे शक्य होते, त्यांच्या व्यवसायातील ग्राहकांची संख्या वाढवता येते, आणि त्याद्वारे व्यवसायाची वृद्धी करता येते.
- कागदी चलन छापण्याची आवश्यकता कमी झाल्यामुळे कागदाची मागणीत घट होते, परिणामतः कमी झाडे कापली जातात, आणि त्यामुळे साहजिकच पर्यावरण संरक्षणाला आणि संवर्धनाला मोठा हातभार लावता येतो.
- ग्रामीण अर्थव्यवस्था विकासाला हातभार लावता येतो, अर्थातच ग्रामीण जनतेच्या सर्वांगीण विकासाला चालना मिळते.
- कोणतीही लाच घेता येत नसल्याने सर्व शासकीय व्यवहार अत्यंत पारदर्शक होऊन संपूर्ण भ्रष्टचाराला आळा बसेल.
- राजकीय पक्ष, रियल इस्टेट, ज्वेलर्स इत्यादी ठिकाणी मुरणारा प्रचंड काळा पैसा चलनात येईल व अर्थव्यवस्थेला गती येईल.
- जर कॅशलेस अर्थव्यवस्था 50 ते 60 टक्के आसपास झाल्यास BTT बँकिंग ट्रान्सक्शन टॅक्स व व्हेज यासारखे टॅक्स फक्त राहून इतर सर्व विविध टॅक्स बंद होऊन सर्व नागरिकाना टॅक्स बदलची भिती किंवा चिंता राहणार नाही.

#### समारोप :-

भारत सरकारने कमी रोकड अर्थव्यवस्थेच्या दिशेने योग्य पाऊल उचलले आहे. तथापी, इतर देशांच्या अनुभवावरून असे दिसते की, कमी रोकड अर्थव्यवस्थेसाठी पायाभूत सुविधा आणि नियम यांची आवश्यकता आहे. यासाठी सरकारी वित्त संस्था आणि व्यापारी वर्गाने एकत्रित कार्य करण्याची आवश्यकता आहे. सरकारने घेतलेल्या पुढाकारामुळे आणि उचललेल्या पाऊलामुळे, डिजिटल इंडिया कार्यक्रम यशस्वीरित्या उद्दिष्ट साध्य करेल. या कार्यक्रमाला सहकार्य करण्याचा कल नागरिकांनी दर्शवला असल्याने जगभरात, डिजिटलदृष्ट्या सर्वात जास्त सक्षम समाज म्हणून भारताने पुढे येण्यात कोणतीच अडचण नाही. येत्या काळात डिजिटल इंडिया कार्यक्रम, भारताचे डिजिटल विकसित राष्ट्रात परिवर्तन घडवेल यासाठी सरकार आणि नागरिक अनेक नवी उद्दिष्ट साध्य करू शकतील.

#### संदर्भसूची :-

- 1) योजना मासिक जानेवारी 2017
- 2) योजना मासिक डिसेंबर 2018
- 3) लोकराज्य जानेवारी 2017
- 4) दैनिके : दै. महाराष्ट्र टाईम्स, दै. टाईम्स ऑफ इंडिया, दै. इकोनॉमिक टाईम्स, दै. लोकसत्ता



## डिजिटल इंडिया आणि बँक व्यवसायातील तंत्रज्ञान

प्रा.डॉ. चेतना दत्तात्रय जगताप

क.मा.ज.महाविद्यालय ,वाशी

ता.वाशी जि.उस्मानाबाद

### प्रस्तावना :-

आजच्या जागतिकीकरणाच्या युगात बँक व्यवसायातील तंत्रज्ञानाला अनन्यसाधारण महत्त्व प्राप्त झाले आहे. केंद्र सरकारने घोषित केलेल्या नोटाबंदी व चलन बदलामुळे डिजिटल पेमेंटमध्ये मोठ्या प्रमाणावर वाढ दिसून आली आहे. अनेक रिटेल दुकानदारांना व व्यापाऱ्यांना विनारोकड व्यवहार करणे भाग पडल्याने डिजिटल पेमेंटचा परिणाम दिसून येत आहे. एवढे दिवस ई-कॉमर्स कंपनीसाठी पेमेंटची विनारोकड, इलेक्ट्रॉनिक पध्दत वापरली जात असे मात्र आता बहुतांश ठिकाणी डिजिटल पेमेंट पध्दती वापरली जाईल असा निष्कर्ष असोचे मज्या अहवालात काढण्यात आला आहे. अहवालानुसार यापूर्वी केवळ बँकांच्याच मोबाईल पेमेंट प्रणालीचा वापर सर्वाधिक होत होता, मात्र आता बिगरबँक, प्रिपेड पेमेंट, इन्स्ट्रुमेंट अर्थात पीबीआय सेवा पुरवठादारांना रिझर्व बँकेने डिजिटल पेमेंटची सेवा देण्याची परवानगी दिली आहे. त्यामुळे मोबाईल वॉलेटमधून पैशाचे हस्तांतरण एवढी पीबीआय ची सेवा मर्यादित राहिली नसून या सेवेच्या साह्याने आता वस्तू व सेवा खरेदी करणेही शक्य होणार आहे याशिवाय नोटाबंदीमुळे वॉलेट व्यवहारामध्येही मोठ्या प्रमाणावर वाढ दिसून येत आहे.

### अभ्यासाची उद्दिष्ट्ये :-

- 1) डिजिटल बँक पध्दतीचा अभ्यास करणे.
- 2) डिजिटल पेमेंट पध्दती अभ्यासणे.
- 3) डिजिटल वॉलेटची संकल्पना अभ्यासणे.

### संशोधन पध्दती:-

प्रस्तूत शोध निबंध हा द्वितीय साधन सामग्रीवर आधारित असून वर्तमानपत्र, मासिक, संकेतस्थळे, बँक व्यवसाय आधारित पाठ्य पुस्तके इत्यादींचा अभ्यास केला आहे.

### डिजिटल पेमेंट:-

पूर्वापार चालत आलेल्या रोखीतल्या व्यवहारांच्या कायदांना सर्वज स्विकृती मिळाली आहे. असे असले तरी देखील रोख व्यवस्थापन संरचनेत नोटांच्या छपाईचा खर्च होतो. रोख व्यवस्थापन संरचनेत नोटांच्या छपाईचा खर्च, बिल संकलन केंद्र, एटीएम साठी नेटवर्क आणि रोख रक्कम भरणे मशीन, बँकेमध्ये रोख व्यवहारांसाठी काऊंटर इत्यादींचा समावेश आहे. रोख रक्कमेशी संबंधित असलेल्या असुरक्षिततेमुळे डिजिटल पेमेंटचा वापर झपाट्याने वाढत असल्याने या खर्चामध्ये लक्षणीय घट होण्याची शक्यता आहे. रोख व्यवहार हे निनावी असतात आणि एकदा का व्यवहार झाला की याची नोंद कोठेही राहत नाही. याविरुद्ध डिजिटल पेमेंट पध्दती आहे. यामध्ये व्यवहाराची स्पष्टपणे नोंद राहते म्हणून डिजिटल पेमेंट हे पारदर्शी व्यवहार तंत्र आहे.

### डिजिटल पेमेंट अनिवार्य:-

भविष्यात रेल्वे तसेच राज्य सरकारची परिवहन उपक्रमांची तिकिटे काढण्यासाठी केवळ डिजिटल पेमेंटचाच पर्याय उपलब्ध करण्याची शक्यता आहे.

केवळ सार्वजनिक सेवा परिवहन सेवाच नव्हे तर सर्वच सरकारी विभागांना यामध्ये कशा पध्दतीने सामावून घेता येईल यादृष्टीने प्रयत्न करण्यात येत असल्याचे सांगितले. भीम अॅप आणि भारत क्यूआर कोड सारख्या सरकारी पेमेंट गेट वे सेवेखेरीज सर्वप्रकारच्या सरकारी सेवांसाठी नव्याने काही प्लॅटफॉर्म तयार करता येतील का शिवाय रोख व्यवहारांना प्राधान्य न देता डिजिटल पेमेंटला प्राधान्य देणाऱ्यांना काही लाभ देता येतील का, असा शासनाचा प्रयत्न आहे. देशात होणाऱ्या एकूण व्यवहारांपैकी सर्वाधिक हिस्सा सरकारी देण्यांसाठी खर्च होतो. ही देणी डिजिटल पेमेंटच्या माध्यमातून दिली तर, केंद्र सरकारच्या डिजिटल इंडिया मोहिमेला प्रोत्साहन मिळेल. रेल्वेचे तिकिट काऊंटर, पासपोर्ट कार्यालय, बस आणि मेट्रोची तिकीट आदी ठिकाणी 'भारत क्यूआर कोड' चा उपयोग करता येईल वीज बिल आणि पाणी पट्टी देण्यासाठी डिजिटल पेमेंटपध्दतीचा उपयोग करता येणे शक्य होईल.

रिझर्व बँकेच्या सुचनेनुसार व्हिसा, मास्टर कार्ड, अमेरिकन एक्सप्रेस व रुपे या कार्ड पुरवठादार कंपन्यांनी एकत्र येऊन एकमेकांमध्ये वापरता येतील अशी क्यूआर कोड आधारित पेमेंट सुविधा निर्माण केली. नोटाबंदीनंतर ई-वॉलेट, युनीफाइड पेमेंट इंटरफेस (युपीआय) यांची वाढ झाल्यामुळे या क्षेत्राची दुपटीने वाढ झाली आहे.

### डिजिटल वॉलेट:-

ई-वॉलेट ही संकल्पना गेल्या काही वर्षांपासून आपल्या देशामध्ये लोकप्रिय होत आहे. अचानक घोषित झालेल्या नोटाबंदीनंतर ही संकल्पना जवळजवळ सर्वांकडूनच स्वीकारली गेली आणि आता हीच संकल्पना आपल्या जीवनाचा अविभाज्य भाग बनली आहे. डिजिटल

वॉलेट म्हणजे काय, तर हे तुमच्या पैशाच्या बटव्याचे डिजिटल रूपांतर म्हणता येईल. मात्र या डिजिटल वॉलेट मध्ये असणारी रक्कम ही 'व्हर्च्युअल' किंवा अप्रत्यक्ष असते. अगदी सोप्या भाषेत सांगायचे झाल्यास हे डिजिटल वॉलेट स्मार्टफोन मध्ये एका 'अॅप'च्या माध्यमातून उपलब्ध असते. या अॅपद्वारे हव्या असलेल्या सामानांची खरेदी करता येवू शकते तसेच ग्राहकांना विमान प्रवासासाठी किंवा रेल्वे प्रवासासाठी तिकीटे आरक्षित करता येवू शकतात. दैनंदिन गरजेच्या वस्तुंची खरेदी, वेगवेगळ्या प्रकारच्या बीलांचे पेमेंट इत्यादी या अॅपद्वारे घरबसल्या करता येते. तसेच या अॅप द्वारे एकमेकांना पैसे ट्रान्सफर करू शकतात. ई-वॉलेट मध्ये पैसे जमा करण्याकरिता कोणत्याही प्रकारचा सामान्यपणे चार्ज आकारला जात नाही. पेमेंट करताना अॅप, एसएमएस, क्युआर कोड, स्कॅनिंग अशा अनेक पर्यायांचा वापर करू शकतात.

#### ई-वॉलेटचे फायदे:-

- १) ई-वॉलेटच्या वापरामुळे व्यक्तीला रोख रक्कम जवळ बाळगण्याची आवश्यकता भासत नाही.
- २) डेबिट कार्डस्, क्रेडिट कार्डस् न वापरताही खरेदी करता येते.
- ३) ई-वॉलेटच्या वापरामुळे तुमच्या बँकेच्या खात्याबद्दलची कोणतीही माहिती उघड होण्याची शक्यता नसते.
- ४) अगदी लहानात लहान रक्कम ही ई-वॉलेटच्या साहाय्याने भरू शकता.
- ५) सुटे पैसे, बाकी, इत्यादी समस्या भेडसावत नाहीत.

ई-वॉलेट्स हे प्री-पेड असतात म्हणजेच तुम्ही त्याचा वापर करण्याआधीच त्यामध्ये पैसे जमा करावे लागतात. त्यामुळे याचा वापर केल्यानंतर पेमेंट डीक्लाईन होण्याचे म्हणजेच नाकारले जाण्याची शक्यता नसते. ई-वॉलेटचा वापर अतिशय सुरक्षित आहे. याद्वारे केलेल्या प्रत्येक ट्रान्सॅक्शननंतर ग्राहकाला एसएमएस द्वारे सूचना पाठवली जाते मात्र या ई-वॉलेट्स बदलल्या डिटेल्स किंवा पासवर्ड इतरांना सांगणे टाळायला हवे.

#### समारोप:-

भारत सरकारने डिजिटल पेमेंटमधील नव कल्पनांना प्रोत्साहन द्यावे तसेच डिजिटल पेमेंट स्वीकृती संरचना विकसीत करण्यासाठी प्रोत्साहन दिले पाहिजे त्याचप्रमाणे डिजिटल देयक (पेमेंट) कक्षेतील कंपन्यांना स्वातंत्र्य देणे आवश्यक आहे जेणेकरून ते व्यापाऱ्यांना योग्य प्रकारे डिजिटल देयके स्वीकारण्यास सक्षम करतील मग ते वॉलेंट, युपीआय किंवा इतर नव कल्पना ज्यामुळे डिजिटल देयके (पेमेंट) स्वीकारत असलेल्या व्यापाऱ्यांची संख्यादेखील वाढू शकते. म्हणून डिजिटल देयके (पेमेंट) सुरू करण्याचा हेतु हा मुळात ग्राहक आणि व्यापारी या दोघांचा विश्वास संपादन करणे हाच आहे. डिजिटल पेमेंटच्या खर्चाची आणि शुल्काची पारदर्शकता तसेच वेळोवेळी तक्रारनिवारण, ग्राहक व्यापारी शिक्षण आणि जागरूकता या बाबी सुनिश्चित करून याबाबत विश्वास निर्माण केला जाऊ शकतो. भारत सरकारच्या मार्गदर्शनाखाली बँकिंग आणि वित्तीय सेवा उद्योगाने विश्वास संपादन करण्यासाठी अनेक उपाय केले आहेत आणि अजूनही बरेच काही करण्याची गरज आहे. निश्चितच तंत्रज्ञानात होणाऱ्या निरंतर नवोन्मेशामुळे आणि डिजिटल देयके (पेमेंट) बदल वाढणाऱ्या जनजागृतीमुळे तो काळ दुर नाही. जेव्हा रोखविरहीत व्यवहाराचे भारताचे स्वप्न पूर्ण होईल.

#### संदर्भ:-

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## डिजीटल पेमेंटचे फायदे-तोटे

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### प्रस्तावना :-

आजचे युग हे कॉम्प्युटरचे युग आहे. कॉम्प्युटरचा शोध चार्ल्स बॅबेज यांनी लावला. कॉम्प्युटरमुळे आपल्या जीवनात खूप मोठा बदल झाला आहे. या कॉम्प्युटर बरोबरच आपल्या जीवनात मोबाईल (स्मार्टफोन) चे आगमन झाले आणि त्यामुळे तर जग अतिशय जवळ आले आहे. अगदी काही क्षणामध्ये आपण दुस-या देशाविदेशातील बातम्या दररोज घडणा-या घडामोडी या घरबसल्या पाहू शकतो. हे सर्व शक्य होते इंटरनेटमुळे. “जगातील सर्व कॉम्प्युटर मिळून जे महाप्रचंड जाळे तयार होते त्यालाच इंटरनेट असे म्हणतात”.

आजच्या माहिती तंत्रज्ञानाच्या युगामध्ये भारत हा सर्वांत वेगवान अवलंबनाचा अनुभव घेणारा आघाडीचा देश आहे. व्यवसायातील नवनवीन कल्पना, सरकारी कार्यवाही आणि गुंतवणूक यांचा एकत्रित परिणाम म्हणून हे शक्य झाले आहे. नविन डिजीटल प्रणालीमुळे कामाच्या प्रकारात खूप मोठा बदल होत गेला आणि याचाच प्रभाव लोकांच्या जीवनशैलीवर झाला आहे. सध्या भारताचे डिजीटल रूपांतर लक्षणीय वाढीच्या मार्गावर आहे. डिजीटल सेवा या आपल्या देशाची शक्ती शतगुणीत करणा-या ठरतील यात शंका नाही.

### डिजीटल पेमेंट म्हणजे काय ?

जेव्हा डिजीटल इलेक्ट्रॉनिक माध्यमाद्वारे वस्तू किंवा सेवाची खरेदी केली जाते, तेव्हा त्याला डिजीटल पेमेंट असे म्हणतात.

### उद्दीष्टे :-

प्रस्तुत शोध निबंधाची उद्दिष्टे पुढीलप्रमाणे.

- १) डिजीटल इंडिया कार्यक्रम अभ्यासणे.
- २) डिजीटल पेमेंट या योजनेचा अभ्यास करणे.
- ३) डिजीटल पेमेंट या योजनेच्या फायद्या / तोट्यांचा अभ्यास करणे.

### संशोधन पद्धती :-

प्रस्तुत शोधनिबंध हा द्वितीय सामग्रीवर आधारित आहे. यासाठी विविध मासिके, ग्रंथ, दैनिक वर्तमानपत्र यांचा अभ्यास केला.

### डिजीटल पेमेंटचे स्वरूप :-

#### १) सुरक्षितता :-

अलिकडे सायबर क्राईम यासारख्या घटना घडत आहेत. यासाठी वापरकर्त्यांनी आपला डेटा सुरक्षित केला पाहिजे. अन्यथा अनधिकृतपणे आपले पैसे दुस-यांच्या खात्यावर ट्रान्सफर होणे, डेटा चोरीस जाणे इ. गैरप्रकारांची शक्यता असते.

#### २) विश्वसनियता :-

भारतामध्ये किंवा इतर देशामध्ये सरकारी नियामक सहकार्य या सायबर हल्ल्यापासून बचाव व्हावा यासाठी लागू केले आहेत. त्यामुळे लोक डिजीटल पेमेंट पद्धतीचा जास्तीत जास्त स्वीकार करीत आहेत.

#### ३) लवचिकता :-

बाजारामध्ये वेगवेगळ्या प्रकाराच्या पेमेंट पद्धती उपलब्ध आहेत. या सर्व सुविधांचा वापर सर्वांनी पुरेपूर घेतला पाहिजे.

उदा :- पेमेंट बँक, बँकिंग ॲप, ई वॉलेट इत्यादी.

### डिजीटल पेमेंटच्या पद्धती :-

- १) भारत इंटरफेस फॉर मनी (बीएचआयएम)
- २) मोबाईल बँकिंग
- ३) इंटरनेट बँकिंग
- ४) पॉईंट ऑफसेल (पीओएस)
- ५) प्री पेड कार्ड
- ६) मोबाईल वॉलेट्स
- ७) आधार सक्षम पेमेंट सिस्टीम (ईपीएस)
- ८) बँकिंग कार्ड इत्यादी

### डिजीटल पेमेंटचे फायदे :-

#### १) वेळेची बचत :-

डिजीटल पेमेंटचा सर्वांत महत्वाचा फायदा वेळेची बचत हा आहे. आपण अगदी काही क्षणामध्ये मनी ट्रान्सफर ने कोठेही पैसे पाठवू शकतो किंवा दुस-याकडून घेवू शकतो. बँकेत किंवा पोस्टात जाऊन आपला वेळ घालवणार नाहीत.

#### २) व्यवहार शुल्क कमी :-

डिजीटल पेमेंटमध्ये बरेच मोबाईल ॲप मोबाईल वॉलेट्स, आधार लिंक आहेत ते ग्राहकांच्या सेवेसाठी कोणत्याही प्रकारे पैसे घेत नाहीत.



उदा. युपीआय इंटरफेस ग्राहकांना विनामुल्य सेवा पुरवितात.

**३) कॅशबॅक आणि सुट :-**

डिजीटल पेमेंट ॲप आणि वॉलेट्स वापरणा-या ग्राहकांना भरपूर बक्षिसे आणि सवलती देण्यात आल्या आहेत. ब-याच कॅश बँक ऑफर आहेत त्या ग्राहकांना फायद्याच्याच ठरल्या आहेत.

**४) बिले भरण्यासाठी :-**

बरेचसे ॲप बिले भरण्यासाठी उपयुक्त आहेत. फोनची बिले, लाईट बिल, ऑनलाईन खरेदीचे बिले कोणत्याही अडचणी शिवाय येथे भरता येतात.

**५) काळ्या पैशावर नियंत्रण :-**

डिजीटल पेमेंटमुळे सरकार प्रत्येक गोष्टीची नोंद ठेवण्यास मदत होते. काळा पैसा बनावट नोटांपासून फसवणूक कमी होती. ऑनलाईन व्यवहारामुळे नोटा न हाताळता त्या जास्त काळ टिकतील आणि नोटा छपाईसाठी किंमतही कमी झाल्याने अर्थव्यवस्थेला एक प्रकारची चालना मिळू शकते.

**६) ग्राहकांचे संरक्षण :-**

ग्राहकांची फसवणूक झाल्यास ग्राहकांच्या हिताचे संरक्षण करण्यासाठी तक्रार निवारण यंत्रणा उपलब्ध असतात. एखाद्या वेळेस तुमचे कार्ड हरवल्यास ते तुम्ही ब्लॉक करू शकता आणि आर्थिक व्यवहार बंद करू शकतात. एखाद्या वेळेस तुम्ही चुकून कोणाच्या खात्यात पैसे ट्रान्सफर झाल्यास तक्रार करून ते पैसे तुम्हांला परत मिळू शकतात.

**डिजीटल पेमेंटचे तोटे :-**

**१) हॅकिंग :-**

ऑनलाईन व्यवहार करत असताना आपले खाते हॅक होवू शकते. आपला पूर्ण डाटा दुस-या कॉम्प्युटर वर घेवून आपल्या खात्यातील रक्कम चोरीला जाऊ शकते. या सायबर क्राईम गुन्ह्याला आपण बळी पडू शकतो.

**२) मर्यादा :-**

खात्यावर भरपूर प्रमाणात रक्कम असुनही आपण त्यांनी ठरवलेल्या रकमेपेक्षा जास्त रक्कम काढू शकत नाहीत. त्यामुळे आपल्याला मोठी रक्कम काढता येत नाही.

**३) इंटरनेट प्रवेश :-**

ऑनलाईन व्यवहारासाठी नेट चालू असणे गरजेचे आहे आणि तांत्रिक कारणामुळे जर बंद असेल तर आपण आपल्या खात्यातून पैसे काढू शकत नाहीत किंवा कोणताही व्यवहार करू शकत नाहीत. तसेच कॉम्प्युटरमध्ये वायरस येऊन आपली माहितीसुद्धा डिलीट होऊ शकते.

**४) विविध पेमेंट सिस्टिममध्ये पैसे ट्रान्सफर करणे :-**

काही वेळेस ब-याच इलेक्ट्रॉनिक पेमेंट सिस्टिम एकमेकांना सहकार्य करत नाहीत. या प्रकारात आपल्याला ई- चलन विनीमयाच्या सेवा वापराव्या लागतात आणि जर आपण एखाद्यावेळेस चुकून दुसरीकडे पैसे ट्रान्सफर केले तर ते लवकर मिळणे शक्य नसते.

**५) किचकट सेवा:-**

आपल्या देशामध्ये शहरी भागाच्या तुलनेत ग्रामीण भागात साक्षरतेचे प्रमाण कमी असल्या कारणाने किचकट वाटते आणि त्यामुळे ते शक्यतो या सेवा वापरणे टाळतात.

**६) फसवणूक / प्रामाणिकरण :-**

ऑनलाईन पेमेंटच्या वेळी ओळखण्याची कोणतीही माहिती दिलेली नसल्यामुळे नंतर एका व्यक्तीला शुल्काबद्दल विवाद करणे फारच कठीण जाते. ई- पेमेंटसह सोयीचे आणि गतीचे फायदे दिले तर हे फसव्या क्रेडीट कार्ड व्यवहारासाठी योग्य संधी निर्माण करते.

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## कॅशलेस व्यवहार : शासनाचे एक चांगले पाऊल

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सोनपेठ जि. परभणी

### प्रस्तावना :-

आज देशात ८० टक्के व्यवहार रोखीने होतात. त्यामुळे काळा पैसा व भ्रष्टाचार याला मोठा वाव मिळतो. हे सर्व टाळण्यासाठी पारदर्शी प्रशासन आणि काळ्या पैशाला वेसन घालण्यासाठी आता सर्वांनीच कॅशलेस पद्धतीचा अवलंब करणे महत्वाचे आहे. केंद्राने नोटा बंदीच्या निर्णयानंतर कॅशलेस व्यवहारास प्राधान्य दिले असून त्यादृष्टीने सुविधाही उपलब्ध करून दिलेल्या आहेत. बदलत्या परिस्थितीत जगाच्या बरोबरीने चालण्यासाठी भारतालाही बदलावे लागत आहे. त्यामुळे कॅशलेस व्यवहार सर्व पातळीवर होणे गरजेचे बनले आहे. कॅशलेस इंडिया ही संपूर्ण देशव्यापी मोहिम होत आहे. सर्व व्यवहार स्वाइप मशीनवर पेमेंट करून झाले पाहिजेत. आपल्या अर्थव्यवस्थेत पारदर्शकता येण्यासाठी भविष्यात ऑन लाईन पेमेंट्स अतिशय गरजेची आहेत.

खाजगीकरण, उदारीकरण आणि जागतिकीकरणाच्या काळात डिजिटल बँकिंगला विशेष महत्त्व प्राप्त झाले आहे. पारंपारिक पद्धतीने पेमेंट करण्याच्या बाबतीत भारत नेहमीच सोयीस्कर राहिले आहे. नोटाबंदीनंतर भारताने कॅशलेस इकॉनॉमी होण्याकडे वेगाने वळण घेतले आहे. डिजिटल इंडिया चळवळ किंवा सरकारच्या पुढाकाराने भारतीयांनी खरेदीसाठी देय देण्याचा व्यवहार करण्याच्या पद्धतीमध्ये कमालीचा बदल झाला. ऑनलाईन खरेदी ही भारतात सध्याची प्रवृत्ती बनली आहे.

पारंपारिक पेमेंट पद्धती ऐवजी ई - पेमेंट करणे खुप सोयीचे आहे. आपण दिवसा किंवा रात्री कोणत्याही वेळी जगातील कोणत्याही भागातून वस्तू किंवा सेवांसाठी ऑनलाईन पैसे भरल्यामुळे आपल्या ग्राहकांना त्यांच्या व्यवहारांची लाइनमध्ये वेळ घालविण्याची गरज नाही.

सध्या देशात कॅशलेस म्हणजे रोकडरहित व्यवहारांच्या दिशेने जाण्यासाठी प्रयत्न सुरु आहेत. आज शहरात नगरानगरात बँका आणि एटीएम सेंटर असले तरी ग्रामीण भागात बँकिंग व्यवस्था अजून पोहोचलेली नाही. बँकामध्ये खातेदारांच्या प्रमाणात पुरेसे कर्मचारी नसल्यामुळे खातेदारांना बँकेत अनेक खेटे मारावे लागतात. त्यासाठी ग्रामीण भागात बँकिंगचे जाळे विस्तारणे आणि बँकिंग व्यवस्था सक्षम करणे आवश्यक आहे. ग्रामीण अर्थव्यवस्थेवरच शहरी अर्थव्यवस्था अवलंबून आहे. ग्रामीण भागाचा अजूनही म्हणावा तेवढा विकास झालेला नाही.

८ नोव्हेंबर, २०१६ रोजी पाचशे व हजारच्या नोटा बंद केल्यानंतर शहरापेक्षा ग्रामीण भागातील नागरिकांना अधिक आर्थिक अडचणीचा सामना करावा लागला आहे. शहराच्या तुलनेत खेडेगावात, ग्रामीण भागात बँकांची आणि एटीएमची कमी संख्या आहे. त्यासाठी बँकिंगचे जाळे ग्रामीण भागात उभे करणे महत्वाचे आहे.

### संशोधनाचे उद्देश :-

संशोधनाचे खालीलप्रमाणे उद्देश निश्चित करण्यात आले.

१. कॅशलेस व्यवहाराची संकल्पना स्पष्ट करणे.
२. कॅशलेस व्यवहाराचे प्रकार शोधणे.
३. कॅशलेस व्यवहाराचे फायदे शोधणे.
४. निष्कर्ष काढणे.

### गृहितके :-

सदर संशोधनाची खालीलप्रमाणे गृहितके निश्चित करण्यात आली आहेत.

१. कॅशलेस व्यवहार सर्व क्षेत्रात करण्यात येत आहे.
२. कॅशलेस व्यवहार कोणत्याही वेळेस करता येतात.
३. कॅशलेस व्यवहारामुळे बँकेत जायची गरज नाही.

### अभ्यास पद्धती :-

सदर शोधनिबंधासाठी द्वितीय साधन सामग्रीचा वापर करण्यात आला असून त्यात संदर्भ ग्रंथ, दैनिक वर्तमानपत्रातील अग्रलेख, मासिके, इंटरनेट इत्यादीचा आधार घेवून निश्चित उद्देशानुसार शोधनिबंध तयार करण्यात आला आहे.

### डिजिटल पेमेंटचे प्रकार :-

डिजिटल पेमेंटचे पर्याय स्वस्त व सोपे असल्यामुळे ग्राहकांना पसंत असतात. ऑनलाईन खरेदी करताना ग्राहक डिजिटल पेमेंटचा उपयोग करतात. डिजिटल पेमेंटचे खालील प्रकार पडतात.

**अ) मोबाईल वॉलेट :-**

मोबाईल वॉलेटमध्ये सर्व तपशील सुरक्षितपणे साठविले जातात. वॉलेटमध्ये पैसे टाकता येतात किंवा त्यातून काढता येतात. वस्तूची खरेदी वॉलेट वापरून करता येते. पे.टी.एम, फ्रीचार्ज, मोबीक्विक ही मोबाईल वॉलेटची उदाहरणे आहेत. मोबाईल वॉलेटच्या वापरामुळे बँकेच्या कार्डचे सीव्हीव्ही किंवा चार अंकी पिन लक्षात ठेवावा लागत नाही. अनेक बँकांनी सरलपणे डाऊनलोड करता येणारे स्वतःचे मोबाईल वॉलेट विकसित केले आहेत.

**ब) एईपीएस (आधारवर चालणारी पेमेंट व्यवस्था) :-**

एईपीएस वापरून पैसे काढणे, बॅलन्स जाणून घेणे, पैसे डिपॉझिट करणे, इतर लोकांना पैसे पाठविणे इत्यादी बँकेची कामे करता येतात. आधार कार्डची पडताळणी करून सर्व व्यवहार रोख न वापरता करता येतात.

**क) यू.एस.एस.डी. (अनस्ट्रक्चर्ड सप्लीमेंटरी सर्व्हिस डेटा) :-**

कोणतेही मोबाईल ॲप डाऊनलोड न करता ही सेवा वापरून भारतात डिजिटल उलाढाली करता येतात. या सेवेला एन.पी.सी.आय. यांचा पाठिंबा आहे. यू. एस. एस.डी. हिन्दीमध्ये सुद्धा उपलब्ध असून कोणाला पैसे पाठवणे, बँकेचे स्टेटमेंट मिळवणे व बॅलन्स रक्कम तपासणे असे व्यवहार ही सेवा वापरून करता येतात.

**ड) यू. पी. आय. (यूनीफाईड पेमेंट इंटरफेस) :-**

कोणत्याही बँकेत खाते असले तरी ग्राहक यू.पी.आय. ॲप वापरू शकतो. एकापेक्षा जास्त बँक खाते ग्राहकाला यू.पी.आय ॲपला जोडता येतात व पैशांचे व्यवहार करता येतात. ही सेवा वापरण्यासाठी फक्त बँक खाते आणि बँकेत मोबाईल नंबर रजिस्टर्ड असणे आवश्यक आहे. यू.पी.आय. चे सर्व व्यवहार निःशुल्क असतात. यू.पी.आय.डी. व पासवर्ड हरवल्यास सहजपणे परत मिळविता येतो.

**इ) बँकेचे कार्ड :-**

बँकेचे कार्ड हा डिजिटल पेमेंटचा सर्वात लोकप्रिय प्रकार आहे. याला विसा, मास्टरकार्ड, रूपे सारखे कार्ड प्रसिद्ध आहेत. ऑनलाईन खरेदी, ऑनलाईन व्यवहार व पीओएस मशीनमध्ये बँकेचे कार्ड वापरता येतात.

**१. कॅशलेस व्यवहाराचे फायदे :-**

भारतीय बाजारपेठेत ग्राहक आणि व्यापाऱ्यांचा एक मोठा समूह आहे. पेमेंटचे व्यवहार माहित नाहीत अशांना डिजिटल पेमेंटच्या वापराचे फायदे समजावून सांगितले जातात. या व्यवहारामुळे खालीलप्रमाणे फायदे दिसून येतात.

**२. सोयीस्कर आणि जलद पद्धत :-**

डिजिटल पेमेंटचा वापर करण्यामागचं सर्वात महत्वाचे कारण म्हणजे त्याच्या वापरातील सुलभता. डिजिटल पेमेंटचे असंख्य पर्याय ग्राहकासाठी उपलब्ध आहेत. प्रत्येकजण आपल्या सोयीने हे पर्याय वापरू शकतो. उदा. मोबाईल फोनद्वारे ऑनलाईन बिले भरणे, ई - वॉलेटचा वापर करून सार्वजनिक वाहतुकीसाठी तिकीट काढणे किंवा पे कार्ड वापरून खरेदीचे पैसे चुकते करणे. हे सर्व व्यवहार कांही सेकंदात होतात. सुट्या पैशाची समस्या निर्माण होत नाही.

**३. सुरक्षित यंत्रणा :-**

भारतातील पेमेंट नियमन एका प्रगतशील सुरक्षित यंत्रणेमार्फत केलं जाते. ही यंत्रणा नागरिकांच्या आर्थिक व्यवहारांची काळजी घेते. आर्थिक व्यवहारांच्या सुरक्षेसाठी अनेक उपाय योजले आहेत त्यामुळे नियमही तयार करण्यात येतात.

**४. ग्राहकांच्या हिताचे रक्षण होते :-**

ग्राहक हा बाजारपेठेचा राजा असतो. त्याची फसवणूक झाल्यास ग्राहकांच्या हिताचं संरक्षण करण्यासाठी तक्रार निवारण यंत्रणाही उपलब्ध आहेत. कार्ड हरवल्यास ते कार्ड आपण ब्लॉक करून आर्थिक व्यवहार खंडीत करू शकता येतात. चूकीने एखाद्याला जास्तीचे पैसे दिल्यास तक्रार करून हे पैसे परत मिळविता येतात. संबंधित यंत्रणेला वेळेत फसवणूकीची माहिती दिल्यास चूकीने गेलेले पैसे संबंधीत यंत्रणा मिळवून देते.

**५. आर्थिक फायदा :-**

शासन आणि पेमेंट इन्स्ट्रुमेंट काढणाऱ्या कंपन्या ग्राहकांना कॅश बँक योजना आणि सवलतीच्या माध्यमातून प्रोत्साहन देतात. पेमेंट सेवा पुरवठादारही पेमेंट्सवर फसवणुकी विरोधात विमा देवून त्यातील जोखीम कमी करण्यात येत आहे.

**६. व्यवहार सहज करता येतो :-**

व्यापारी मार्फत दररोज कांही किंवा इतर उत्पादन किंवा सेवा खरेदीसाठी दररोज व्यवहार केले जातात त्यांच्यासाठी डिजिटल जाणे फायदेशीर आहे. प्रवासा दरम्यान सुरक्षित आणि सोयीस्कर पर्याय देऊन तो वापर कर्त्यास मदत करतो आणिबाणीच्या काळात डिजिटल पेमेंट कोणत्याही अडचणीशिवाय करता येते कारण त्यासाठी पैसे भरण्यासाठी कोठेही शारीरिकरित्या हजर राहण्याची गरज नसते त्यामुळे वेळ वाचविण्यास मदत होते.

**७. सवलतीच्या तरतूदी :-**

डिजिटल चळवळीमुळे विविध प्रसंगी खरेदी तसेच सवलतीच्या बाबतीत फायदा होऊ शकतो. डिजिटल पद्धतीचा वापर करण्यास प्रोत्साहीत करण्यासाठी शासनाने २००० रुपयापर्यंतच्या कार्ड व्यवहारावर सेवा कर माफ करण्याची घोषणा केली. शासनाच्या अशा प्रोत्साहानामुळे आणि उपायामुळे लोकांना अधिक डिजिटल अनुकूल बनण्यास मदत होते.



**८. चांगल्या गुंतवणूकीसाठी मदत होते :-**

डिजिटल व्यवहारामुळे व्यक्तींना खर्चावर देखरेख करण्यास मदत होते. मानसशास्त्रीय दृष्टीकोनातून काही खर्च कमी करणे बंधनकारक होते. डिजिटल पेमेंटचा व्यवहार रोख असल्यामुळे चोरीच्या बाबतीत डिजिटल पेमेंट प्लॅटफॉर्म ताबडतोब रोखला जाऊ शकतो. प्रवासात स्वतः बरोबर रोख रक्कम बाळगण्याची गरज नाही.

**९. पैसे पाठविण्याची सुविधा :-**

ग्राहकांना यापुढे रोख रक्कम घेऊन जाण्याची किंवा एटीएमला भेट देण्याची गरज नाही. त्यांनी देय देण्यासाठी शारिरीकरीत्या उपस्थित राहण्याची देखील गरज नाही. ग्राहक जगाच्या कोणत्याही भागातून केव्हाही पैसे देऊ शकतात. पारंपारिक व्यवहारांपेक्षा डिजिटल व्यवहार अधिक सुरक्षित असतात.

**१०. वेळेची बंदत होते :-**

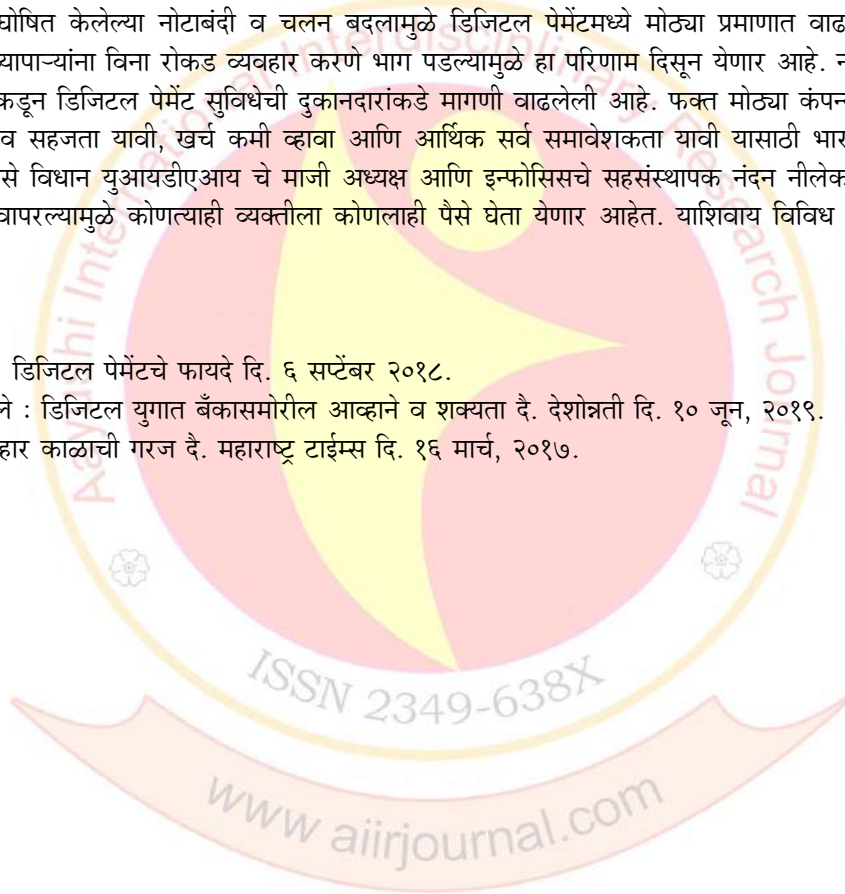
डिजिटल व्यवहारामुळे आपल्याला बँक आणि पोस्ट ऑफीसच्या लाइनमध्ये उभे राहून बराच वेळ लागत नाही. यामुळे कांही वेळात (मिनिटांत ) आपण व्यवहार करू शकतोत.

**निष्कर्ष :-**

केंद्रशासनाने घोषित केलेल्या नोटाबंदी व चलन बदलामुळे डिजिटल पेमेंटमध्ये मोठ्या प्रमाणात वाढ दिसून येत आहे. अनेक रिटेल दुकानदारांना व व्यापाऱ्यांना विना रोकड व्यवहार करणे भाग पडल्यामुळे हा परिणाम दिसून येणार आहे. नोटाबंदीनंतर दैनंदिन गरजा पूर्ण करण्यासाठी लोकांकडून डिजिटल पेमेंट सुविधेची दुकानदारांकडे मागणी वाढलेली आहे. फक्त मोठ्या कंपन्यांच्या सोयीसाठी नाही तर व्यवहारात पारदर्शकता व सहजता यावी, खर्च कमी व्हावा आणि आर्थिक सर्व समावेशकता यावी यासाठी भारतात डिजिटल पेमेंटपद्धती सुरु करण्यात आली असे विधान युआयडीएआय चे माजी अध्यक्ष आणि इन्फोसिसचे सहसंस्थापक नंदन नीलेकणी यांनी केले. युनिफाईड पेमेंट इंटरफेस सुविधा वापरल्यामुळे कोणत्याही व्यक्तीला कोणत्याही पैसे घेता येणार आहेत. याशिवाय विविध बिले ऑनलाइन देता येणे शक्य आहे.

**संदर्भ ग्रंथ सूची :-**

१. अनिधा चंदा : डिजिटल पेमेंटचे फायदे दि. ६ सप्टेंबर २०१८.
२. प्रा.कृ.ल. फाले : डिजिटल युगात बँकासमोरील आव्हाने व शक्यता दै. देशोन्नती दि. १० जून, २०१९.
३. कॅशलेस व्यवहार काळाची गरज दै. महाराष्ट्र टाइम्स दि. १६ मार्च, २०१७.



## डिजिटल तंत्रज्ञान आणि बदलते सामाजिक जीवन

प्रा. श्रीमती बी.जी. कांबळे,  
वसंतराव काळे महाविद्यालय,  
ढोकी, ता. जि. उस्मानाबाद.

### प्रस्तावना :

इतिहासासह अनेक सामाजिक आणि आर्थिक क्रांतीचा साक्षीदार आहे. सुरुवातीला कृषी क्रांती, औद्योगिक क्रांती, त्यानंतर तंत्रज्ञानाच्या क्रांतीमुळे मानवी जीवनात अमूलाग्र बदल झाला आहे. डिजिटल क्रांतीमुळे विकासाची गती व संधीची व्याख्याच बदलली आहे. यासोबतच सामाजिक, सांस्कृतिक जीवनशैलीत मोठी घूसळण सुरु झाली आहे.

डिजिटलकरणाची सुरुवात झाली तेव्हा तिचा वेग कमी असल्यामुळे बदल लक्षात येत नव्हते. सुरुवातीला डिजिटल म्हणजे नोंदी ठेवणे, कार्यालयाचे व्यवस्थापन करणे, माहितीवर प्रक्रिया करणे इ. कामे केली जात होती. मात्र गेल्या कांही वर्षांपासून डिजिटल क्रांतीमध्ये झालेल्या संशोधनामुळे इंटरनेट, रोबोटिक्स इंजिनियरिंग, कृत्रिम बुद्धिमत्ता व इतर तंत्रज्ञानामुळे सामाजिक, आर्थिक क्रांतीला सुरुवात झाली आहे.

डिजिटल क्रांतीने सामान्य माणसाच्या जीवनात मोठी उलथापालथ घडवून आणली आहे. याचे मोठे उदाहरण म्हणजे मोबाईल क्रांती. आज मोठा उद्योगपती असो किंवा रिश्काचालक, विद्यार्थी असो किंवा गृहीणी प्रत्येकजण मोबाईलचा वापर करून घरबसल्या अनेक सेवांचा लाभ घेत आहेत.

### संकल्पना/अर्थ :

माहिती तंत्रज्ञानाच्या मदतीने भारतात सर्वसमावेशक विकास घडवण्याच्या दृष्टीकोणातून देशाचे पंतप्रधान माननीय श्री. नरेंद्र मोदी यांनी १ जूलै, २०१५ रोजी डिजिटल इंडिया ही योजना कार्यान्वीत केली. देशातील गरीब आणि वंचित लोकांना विकासात्मक सर्वव्यापक आणि सहज उपलब्ध अशा तंत्रज्ञानाचा वापर करून स्वयंपूर्ण बनवणे हा या कार्यक्रमाचा मुख्य उद्देश आहे. दिल्लीतील इंदिरा गांधी इनडोअर स्टेडीयममधून त्याचे उद्घाटन झाले.

सामान्य भारतीयांचा सर्वांगीण विकास आणि सशक्तीकरण हा प्रमुख विचार डिजिटल इंडियाच्या केंद्रस्थानी आहे. डिजिटल भारत या उपक्रमांतर्गत देशात डिजिटल ओळख, डिजिटल पायाभूत सुविधा तयार करणे, रोजगार व उद्योजकांना प्रोत्साहन देणे या सारखे विविध कार्यक्रम राबवण्यात आले.

### शोध निबंधाची उद्दिष्टे :

- १) डिजिटल तंत्रज्ञान व बदलते सामाजिक जीवनांचा अभ्यास करणे.
- २) डिजिटल तंत्रज्ञानाचे सामाजिक जीवनावरील परिणामाचा अभ्यास करणे.
- ३) डिजिटल तंत्रज्ञानाचा समाज जीवनासमोरील आव्हानांचा अभ्यास करणे.

### डिजिटल तंत्रज्ञान व बदलते सामाजिक जीवन :

डिजिटल तंत्रज्ञानामुळे प्रशासनात लोकांचा सहभाग वाढवला व तो अधिक पारदर्शक बनवला जात आहे. या अभियानामार्फत सरकारचा देशाला एक माहिती तंत्रज्ञानावर आधारीत सशक्त अर्थसत्ता बनवण्याचा प्रयास आहे. डिजिटल भारत कार्यक्रमातील विविध उपक्रमाचा लाभ घेण्यासाठी डिजिटल आधार सेवेमार्फत देशातील सर्व नागरिकांना बायोमेट्रीक पध्दतीतून विशिष्ट क्रमांक दिला जातो. आधारमुळे शिधा योजना, मनरेगा, पहल, शिष्यवृत्ती अशा योजनांमध्ये असणारे दलाल बनावट लाभार्थी खोटी नावे दूर करणे शक्य झाले आहे. जगातील ८० देशांमध्ये २०० पेक्षा जास्त जम बसलेल्या माहिती तंत्रज्ञान क्षेत्राला एक समृद्ध उद्योग व बाजारपेठ लाभलेला देश म्हणून भारताचे नाव जागतिक स्तरावर घेतले जाते. डिजिटल इंडियामुळे ग्रामीण भागातही इंटरनेटचा वापर सुरु झाला आहे. त्यामुळे सरकारच्या योजनांची माहिती लोकांना लगेच कळते.

तंत्रज्ञानाच्या वापरामुळे नवनवीन माहिती ही सामान्याला कळू लागली आहे व लोकांच्या जीवनमानात परिवर्तन दिसून येत आहे. त्यांच्या राहणीमानाचा दर्जा उंचावला आहे. नोकरीच्या संधी उपलब्ध झाल्या आहेत.

लहान गावापर्यंत देखील इंटरनेट सेवा पोहोचली आहे. व त्यामुळे पूर्वी जी विद्यार्थ्यांना स्कॉलरशिपसाठी कागदपत्र जमा करावी लागत व त्यामध्ये वेळ व पैसा खर्च होत असे परंतु आता घरबसल्या शिष्यवृत्ती विद्यार्थ्यांच्या खात्यावर जमा होते. वृद्ध व्यक्तीला स्वतः जीवंत असलेले प्रमाणपत्र काढण्यासाठी कितीतरी कागदपत्रे करावी लागत होती. परंतु आधार कार्डच्या माध्यमातून डिजिटलकरणांमुळे पेन्शन वृद्धांच्या खात्यावर जमा होत आहे.

तरुणांना नोकरीच्या जागा कधी निघतात व स्पर्धा परिक्षा कधी होतात या माहितीसाठी नेहमी चौकशी करावी लागत असे केवळ माहिती न मिळाल्यामुळे, वेळेवर कागदपत्रे तयार न झाल्यामुळे त्यांची नोकरीची संधी जात असे परंतु डिजिटल तंत्रज्ञानामुळे इंटरनेटमुळे विद्यार्थी सर्व कांही त्यांना माहिती मिळवू शकतो.

तरूणांना तांत्रिक शिक्षणामुळे नोकरीच्या संधी उपलब्ध झाल्या आहे. स्वच्छ भारत अभियानामुळे भारत देशामध्ये स्वच्छता मोहीम सर्वत्र राबवली जात आहे.

**डिजिटल सेवासाठी पुढील योजना लक्षात घेता येते.**

- १) नॅशनल नॉलेज नेटवर्क २) इंटरनेट ३) ई-स्वाक्षरी

**प्रभावी प्रशासनासाठी**

- १) जनधन आधार मोबाईल २) डिजिटल भरणा ३) डिजिटल सरकारी सेवा वितरण  
४) राष्ट्रीय शिष्यवृत्ती पोर्टल ५) जीवन प्रमाण ६) ई-हॉस्पिटल आणि वैद्यकीय सुविधांची, सेवांची नोंदणी  
७) शेती बाजारपेठ-इलेक्ट्रॉनिक ८) डिजि लॉकर ९) इलेक्ट्रॉनिक विसा  
१०) ई-न्यायालये ११) शासकीय ई-बाजारपेठ १२) सायबर सुरक्षा

या वरील योजनांचा समावेश डिजिटल भारत यामध्ये होतो व अशा अनेक योजना आहेत की ज्याचा लाभ सामाजिक व आर्थिक जीवनात बदल घडवून आणत आहे.

**डिजिटल तंत्रज्ञानाचा सामाजिक जीवनावर अनुकूल परिणाम :**

- डिजिटल तंत्रज्ञानामुळे समाजात भ्रष्टाचार हा मूळापासून नष्ट झालेला दिसून येत आहे.
- प्रशासकीय कार्यालयात कागदपत्र काढण्यासाठी खर्च येत असे व प्रत्येक कामामध्ये भ्रष्टाचाराचे प्रमाण अधिक आढळून येत असे. परंतु डिजिटल तंत्रज्ञानाला सर्व व्यवहार हे पारदर्शक व लवकर होत आहेत.
- कागदपत्राचा अनावश्यक खर्च टळला आहे. तसेच वेळही वाया जात नाही.
- जीवन प्रमाण या योजनेच्या अंतर्गत वृद्धांना त्यांच्या जीवंत असलेल्या कागदपत्र काढण्यासाठीचा येणारा खर्च होत नाही व वेळीच भेटणारी पेन्शन याचा लाभ होत आहे.
- कॅशलेस व्यवहारामुळे घरबसल्या सर्व बिले भरणे, बँकींग व्यवहार करणे, खरेदी, विक्री करणे सोपे झाले आहे. त्यामुळे गृहीणी हे पद महत्वाचे न मानण्यापेक्षा आता एक गृहीणी देखील विविध कामे घरबसल्या मोबाईलद्वारे करत आहे. त्यामुळे कौटुंबिक जीवनात पतीच्या कामात हातभार लावण्यात मदत होत आहे.
- माहिती तंत्रज्ञानाच्या क्षेत्रात अधिकाधिक रोजगाराच्या संधी उपलब्ध झाल्या आहेत. माहिती तंत्रज्ञान व इलेक्ट्रॉनिक क्षेत्रात नोकऱ्या मिळवण्यासाठी १.७ कोटी मनुष्यबळाचे प्रशिक्षण देण्यात आले आहे. यामुळे ग्रामीण भागातील तरूणांना नोकरी मिळत आहे.
- डिजिटल लॉकर या योजनेअंतर्गत नागरिकांना त्यांची पॅनकार्ड, पासपोर्ट, गुणपत्रिका, प्रमाणपत्र आदी डिजिटल कागदपत्र सुरक्षितरित्या साठवण्यास मदत होत आहे.
- एक स्वच्छ भारताची निर्मिती झाली आहे.
- समाजातील मागास वर्गासाठी व गावागावातील सर्व सामान्य ते वरिष्ठ वर्गापर्यंत सर्वचजण या सर्व योजनांचा लाभ घेत आहेत. त्यामुळे प्रत्येक व्यक्तीच्या जीवनात एक वेगळा बदल घडून आलेला दिसून येत आहे.
- लाख पंचायतीच्या ६ लाख गावांना ब्रॉडबँडने जोडले आहे.
- सर्व शाळांमध्येही वाय-फाय सुविधाची निर्मिती केली जात आहे. कांही विद्यार्थी रेल्वे स्टेशनवरील वाय-फायच्या वापरामुळे अभ्यास, रेल्वे स्टेशनमध्ये बसून स्पर्धा परिक्षेचा अभ्यास करत आहेत.

**डिजिटल तंत्रज्ञानाचा सामाजिक जीवनावर प्रतिकूल परिणाम**

- कांही गावात इंटरनेट सुविधा नाहीत. त्यामुळे नवीन योजनांचा लाभ कांही गावांपर्यंत पोहोचलेला नाही.
- गरीब व्यक्तीं जास्त महाग मोबाईल खरेदी करू शकत नाही. त्यामुळे त्यांच्यापर्यंत या योजना पोहोचू शकत नाहीत.
- कमी शिकलेले व अज्ञान अशा लोकांना तंत्रज्ञानाचा वापर करता येत नाही.
- इंटरनेटची मंद स्पीड लोकांना माहिती मिळवण्यासाठी बाधक आहे.
- ऑनलाईन घोटाळे, फसवेगिरी, सायबर गुन्हे हे घडत असलेले दिसून येत आहेत.
- लहान मुलांमध्ये मोबाईल गेम्स, इंटरनेटचा वापर करण्याचे प्रमाण वाढले आहे. त्यामुळे मुलांच्या मैदानी खेळ खेळण्याच्या सवयी बंद झाल्या आहेत. त्यामुळे मुलांमध्ये स्थूलता, डोळ्यांना कमी दिसणे, अभ्यासाकडे दुर्लक्ष होत आहे, आरोग्यावर परिणाम दिसून येत आहेत.
- तरूणांमध्येही पुस्तक वाचन, अवांतर विषयाचे वाचन करण्याचे प्रमाण खूपच कमी झाले आहे. प्रत्येक तरूणांना मोबाईल वेड लागले आहे.
- एकमेकांमधील संवाद संपत चालले आहेत. फेसबुक, व्हॉट्सअप, यामुळे दूरच्या लोकांना बोलण्यात येत आहे. परंतु जवळ असणाऱ्याशी संवाद/संभाषण कमी प्रमाणात होत आहे.
- इंटरनेटच्या माध्यमामुळे लहान बालकांमध्ये अश्लील चित्रे पाहून विचित्र वृत्ती वाढली आहे. अशातून देशामध्ये अशा बलात्कारासारख्या भिषण घटना घडत आहेत. गुन्हेगारीत वाढ होत आहे.



**डिजिटल तंत्रज्ञानाचे समाज जीवनासमोरील आव्हाने :**

- १) डिजिटल तंत्रज्ञानामुळे समाजात खूप बदल झाले आहेत. तसेच भारत देश मदत घेणाराच न राहता इतर देशाला मदत करणारा देश म्हणून गणला जाईल.
- २) डिजिटल इंडियामुळे भारताची नवीन ओळख निर्माण होत आहे.
- ३) सायबर गुन्हे, भ्रष्टाचार रोखण्यासाठी विविध कायदे करण्याची व उपाययोजना केल्या आहेत.
- ४) डिजिटल भारत उपक्रम भविष्यातील भारतासाठी तंत्रज्ञानावर आधारीत व्यवस्था सक्षम करण्याबरोबरच २०२५ पर्यंत देशाच्या अर्थव्यवस्थेला मिलीयन डॉलर्सच्या पातळीपर्यंत पोहोचवण्यासाठी व उच्च विकासदर वाढ प्राप्त करण्यासाठी पोषक वातावरण निर्मिती करत आहे.
- ५) जगातील सर्वाधिक डिजिटल तंत्रज्ञानाच्या वापरकर्त्यांच्या यादीत भारताचे नाव पहिले तीन क्रमांकात येते.

नवभारत निर्माणचे स्वप्न पूर्ण होत आहे. नवीन शोधांना प्रोत्साहन देणे, ग्राहकांच्या अधिकाराचे संरक्षण करणे, दूरसंचार उद्योगाची योग्य वाढ होण्यासाठीचे वातावरण तयार करणे ही जबाबदारी नियामकाला पेलावी लागते. व्यवसायासमोरील आव्हाने, तंत्रज्ञानविषयक आव्हाने, आहेत.

**निष्कर्ष :**

डिजिटल इंडियामुळे दूरसंचारक्षेत्रात सर्वात मोठे परिवर्तन पहायला मिळाले. नवीन तंत्रज्ञान, व सेवा यांचे आज शोध लागत आहेत. या नवीन तंत्रज्ञानाने आणि सेवांनी भौगोलिक सीमारेषा दूर केल्या आहेत. रोजगाराच्या संधी नवीन उपलब्ध केल्या आहेत. जगभरातील दिग्गज कंपन्या भारताकडे आकर्षित झाल्या आहेत. असा हा डिजिटल तंत्रज्ञान समाज जीवन उंचावण्यात असलेला वाटा अभ्यासता येतो.

डिजिटल तंत्रज्ञानामुळे घरबसल्या सर्व व्यवहार होत आहेत. हे गृहीणींच्या जीवनातही मोठ्या प्रमाणात मदत झाली आहे. गॅस बुकींग, लाईट बिल भरणे, ऑनलाईन खरेदी विक्री इ. चांगल्या सुविधा आहेत. परंतु सोशल मिडीयामध्ये म्हणजेच व्हॉट्सअॅप, फेसबुक, टिकटॉक या सारख्या माध्यमामुळे गृहीणींचा अधिक अधिक वेळ, तसेच तरूणांचा अधिक वेळ त्यामध्ये वाया जात आहे व त्यामुळे घरातील व्यक्तींकडे दुर्लक्ष यातून ताण-तणावाचे वातावरण निर्माण होवून त्याचा परिणाम कुटूंबावर होत आहे. डिजिटल तंत्रज्ञानामुळे देश प्रगती पथावर वाटचाल करत आहे. परंतु कमी शिकलेले, गरीब, निरक्षर, मागासलेल्या जमाती, खेड्या-पाड्यांपर्यंत डिजिटल तंत्रज्ञानाचा फायदा होत नाही. एकंदर सामाजिकरण व डिजिटल तंत्रज्ञान या एकाच नाण्याच्या दोन बाजू म्हणता येते.

**संदर्भ :**

- १) योजना मासिक (डिसेंबर-२०१८)
- २) वीकीपिडीया

## नोटाबंदी आणि डिजिटल पेमेंट सिस्टिम

गणेश नारायण कानडे  
(विद्यार्थी संशोधक)

महाविद्यालय - कृषि महाविद्यालय, उस्मानाबाद.

### प्रस्तावना -

एकविसावे शतक अर्थकारणवेधी झाले आहे. आपल्या विकासात्मक मुल्यांना अधिक गतीने साध्य करण्यासाठी संपूर्ण जगात ओढ निर्माण झाली आहे. भारताने सुद्धा आपली नीतिमुल्ये, सर्जनशीलतेला ओळखुन डिजिटल पेमेंट सिस्टिमचा अंगिकार केला आहे. समाजकारणाला अंतर्मुख होऊन भविष्यवेधी अर्थकारणाची कल्पना करताना भारत आज दिसत आहे. नोटाबंदीने डिजिटल पेमेंट व्यवहारांना गती देण्यास मदत केली आहे. नोटाबंदीने बनावट नोटांना तिल्लांजली देण्याचा प्रयत्न केला. भविष्यवेधी अर्थव्यवस्थेची आणि समाजकारणाची दिशा आणि दशा ठरण्यात मोलाचा वाटा डिजिटल पेमेंट सिस्टिम साकारतील अशी आशा..

8 नोव्हेंबर 2016 च्या रात्री दूरचित्रवाहिणीवरून घोषणा करण्यात आली की, आज मध्यरात्रीपासुन 500 व 1000 रु च्या नोटांना कायदेशीर मान्यता राहणार नाही.

नोटाबंदी म्हणजे चलनात असणाऱ्या नोटांना चलन बाह्य ठरवणे होय. नोटाबंदीच्यावेळी देशात 17.9 लाख कोटी रुपये पैसे चलनात होते, त्यात 500 व 1000 रुपयांच्या नोटांचे मुल्य 15.44 लाख कोटी, म्हणजेच एकुण मुल्यांच्या 86 % होय. नोटाबंदीने 86% चलन बाद करण्यात आले. तब्बल 15 वर्षांच्या कालावधीत या नोटा छापल्या गेल्या होत्या. नोटाबंदीचे हे पाऊल उचलण्याची तयारी 9 महिन्यांपासुन सुरु होती असा दावा जरी केला असला तरी, तो किती फोल होता हे कळलेच. नोटाबंदी केल्यानंतर नवीन नोटांच्या छपाईसाठी शाई आयात करण्यासाठी निविदा जारी कराव्या लागल्या. नोटाबंदीचा निर्णय बेजबाबदारपणे घेतला याचा आणखी एका दाखला म्हणजे 500 रु च्या नोटा व्यवहात आणण्यापूर्वी 2000 रु च्या नोटा आणणे.

नोटाबंदीने काळ्या अर्थव्यवस्थेवर घाव घालण्याचा प्रयत्न म्हणजे पाचटामध्ये सुई शोधण्यासारखे आहे. काळी अर्थव्यवस्था यात काळी प्राप्ती, काळा पैसा, काळी संपत्ती या तीनही संकल्पनेचा अंतर्भाव आहे. नोटाबंदीने काही प्रमाणात काळ्या पैशांवर जरी अंकुश ठेवण्याचा प्रयत्न केला असला तरी काळी संपत्ती आणि काळी प्राप्ती चं काय ? काळ्या प्राप्तीचा जो भाग नोटांच्या स्वरूपात जवळ बाळगला जातो, तो काळा पैसा व जो मालमत्तेत गुंतवला जातो ती काळी संपत्ती होय. नोटाबंदीचा परिणाम केवळ काळ्या पैशावर होऊ शकतो, पण त्याच्या निर्मितीवर नाही. एका वर्तमानपत्र अन्वये ही बाब समोर आली आहे की, काळा पैसाधारक आपल्या प्राप्तीतील अत्यंत कमी हिस्सा नोटांच्या स्वरूपात जवळ ठेवतात. काळ्या प्राप्तीचा सर्वांत मोठा हिस्सा रिअल इस्टेट क्षेत्रात आहे. काळा पैसा अनेक बेकायदेशीर मार्गांनी देशाबाहेर पाठवला जातो. उदा - हवाला, आयात, निर्यात इत्यादी. या गुंतवणुकीचा महत्वाचा मार्ग म्हणजे परदेशात खोट्या कंपन्यांची नोंद करुन त्यांच्यामार्फत पैसा भारतात गुंतवणे. यासाठी पी-नोट्स (पार्टिसिपेटरी नोट्स) चा उपयोग केला जातो यामार्फत परदेशी गुंतवणुकदारांना भारतीय शेअर मार्केटवर नियंत्रण ठेवणाऱ्या सेबीकडे नोंदणी करण्याची गरज नाही. मे 2016 मध्ये डबल टॅक्स अडव्हॉन्स करारामध्ये दुस्त्या करण्यात आल्या पण, यातुन पी-नोट्सला वगळण्यात आले. नोटाबंदी करुन काळ्या अर्थव्यवस्थेवर घाव घालणे म्हणजे, झाडाचे पान कोमजले म्हणुन संपूर्ण झाडच मुळापासुन काढून टाकण्यासारखे आहे.

काळ्या अर्थव्यवस्थेचा आकार फार विस्तृत आहे .एका नामांकीत विद्यापिठाच्या संशोधनानुसार, भारतातील काळी प्राप्ती ही जीडीपीच्या 62% आहे. जीडीपीचा जवळपास अर्धा भाग असंघटीत क्षेत्रातुन निर्माण होतो, असंघटीत क्षेत्रावरच भारताची 85% लोकसंख्या अवलंबुन आहे. याक्षेत्रातील बहुतांश प्राप्ती ही काळी नाही. महसुलाचा 70% भाग हा अप्रत्यक्ष करातुन भेटतो. रिझर्व्ह बँकेचे माजी गव्हर्नर सांगतात की, नोटाबंदीने जास्तीत जास्त 3 लाख कोटी इतकी काळी मिळकत बाद होईल म्हणजे जीडीपीच्या 3.2% होय. पण नंतर प्रकाशीत झालेल्या वृत्तानुसार 99.30% बाद नोटा बँकेत जमा झाल्या, म्हणजे या 3 लाख कोटींच्या काळ्या प्राप्तीवर पण प्रश्नचिन्हच. या 3 लाख कोटी साठी 15.44 लाख कोटी रुपये चलनातुन बाद करणे म्हणजे हा हिती मोठा भावडेपणा.

नोटाबंदीची समयसुचकता किती वाईट होती हे यावरून स्पष्ट होती की तो काळ म्हणजे, खरीप पिकांच्या कापणीचा व रब्बी पिकांच्या पेरणीचा. नोटाबंदीमुळे शेतकऱ्यांचा माल विकत घेण्यासाठी व्यापाऱ्यांकडे पैसे नव्हते. शेतकऱ्यांना पैशापोटी शेतीमाल बेभाव किंमतीने विकावा लागला. जरी व्यापारी धनादेश देत असले तरी चलनतुटवडयामुळे शेतकऱ्यांना पैसेच काढता येत नव्हते. मंडईतील धंदा 25 ते 70% खालावला गेला. शेतकऱ्यांना पैसे पुरविणारा दुसरा स्रोत म्हणजे, ग्रामीण भागातील सहकारी

बँका, मात्र नोटाबंदीचा परिणाम यांनाही झालाच. शेतकऱ्यांकडे बियाणे, खते खरेदी करण्यासाठी मिळकत नव्हती, टँक्टर मजुरांना देण्यासाठी पैसे नव्हते, याचा थेट परिणाम रब्बी पिकांवर झाला. नोव्हेंबरच्या अखेरपर्यंत पिककर्जासाठी राखुन ठेवलेल्या रकमेपैकी केवळ 17% रक्कम वितरीत करण्यात आली. नोटाबंदी म्हणजे शेतकऱ्यांना शवपेटिकेवर शेवटचा खिळा ठोकला गेला अशीच होती.

असंघटीत क्षेत्रातील केवळ शेतकरीच नव्हे तर, लघु व किरकोळ व्यापाऱ्यांना सुद्धा नोटाबंदीचा फार मोठा घात झाला. भारतात जगातील सर्वाधिक म्हणजे 1.49 कोटी किराणा दुकाने आहेत. यापैकी बहुतांश छोटे रिटेल दुकानदार आहेत. भारतातील प्रमुख व्यापारी संघटना - अखिल भारतीय व्यापारी संघटनेच्या आकडेवारीनुसार नोटाबंदीच्या निर्णयानंतर व्यापारात 75% इतकी प्रचंड घट झाली. गरजेच्या वस्तु घेण्यासाठी लोकांकडे पैसे नव्हते, असतील तर 2000 रु ची नोट, मग सुट्ट्या पैशांचा प्रश्न आहेच. चलनटंचाईमुळे अनेक उद्योग डबघाईला आले. उत्तरप्रदेशातील मोरादाबादमधील पितळ उद्योग हे याचे जीवंत उदाहरण. भंगाराचा व्यवसाय करणाऱ्या लोकांकडून पितळ निर्मितीसाठी कच्चा माल पुरवला जातो. भंगारवाले विविध ठिकाणाहून रोख रक्कम देऊन भंगार खरेदी करतात. यावर नंतर टप्याटप्याने प्रक्रिया करून वस्तु बनवल्या जातात. प्रत्येक टप्यावर काम करणाऱ्या मजुराला रोजच्या दराने मजुरी दिली जाते, मग जर व्यवहारात चलनचं उपलब्ध नसेल तर कसा हा उद्योग चालणार ? तब्बल 6,000 कोटींची उलाढाल असलेला हा उद्योग संकटात सापडला याप्रमाणे लखनऊनमधील नक्षीकाम उद्योग, फरीदाबादमधील बांगड्या उद्योग, लुधियानातील होजियरी उद्योग, तिरुपूरमधील वस्त्रोद्योग इत्यादी अशा बऱ्याच उद्योगांना नोटाबंदीचा फार मोठा फटका बसला. हजारो कामगार बेरोजगारीच्या दरीत ढकलले गेले. याच चक्राचा परिणाम भारताच्या जीडीपीवर झाला. आज तिसऱ्या तिमाहीत जीडीपी 4.5% वर खालावली. अर्थव्यवस्था कोलमडली, रोजगार गेले, भ्रष्टचाराला किरकोळच वचक बसला मग साध्य तरी काय केले नोटाबंदीने ?

नोटाबंदीने दहशतवाद्यांची रसद काही प्रमाणात थांबवली गेली. यामुळे विदेशातून होणाऱ्या अंमली पदार्थांच्या, शस्त्रांच्या व्यापारावर काही प्रमाणात अंकुश लावण्याचा प्रयत्न करण्यात आला. रिझर्व्ह बँकेच्या आकडेवारीनुसार देशात बनावट नोटांचे मुल्य 400 कोटी होते. म्हणजेच नोटाबंदीने बनावट नोटांना हद्दपार करण्यात काहिशी भुमिका निभावली. नोटाबंदीने काळ्या अर्थव्यवस्थेवर भलेही नगण्य परिणाम झाला असला तरी, काळा पैसा काही प्रमाणात तरी बाद झाला असेच म्हणावे लागेल. किमान सरकारने काळ्या अर्थव्यवस्थेवर प्रहार करण्याचा प्रयत्न तरी केला आणि लवकरच ही समस्या मुळापासून उखडून टाकण्यासाठी आणखी पावले उचलली जातील अशीच अपेक्षा.

8 नोव्हेंबर रोजी जेव्हा नोटाबंदीची घोषणा करणारे निवेदन प्रसिद्ध केले तेव्हा त्यात केवळ काळ्या पैशांच्या विषयावर भाष्य करण्यात आले होते. त्यात डिजिटल पेमेंट व्यवस्थेबाबत काहीही नमूद करण्यात आले नव्हते. पण नोटाबंदीच्या सपशेल अपयशानंतर आपल्या बोलण्यात बदल करत डिजिटल पेमेंटच्या अंमलबजावणीकडे लक्ष केंद्रित केले.

डिजिटल पेमेंट म्हणजे ईलेक्ट्रॉनिक माध्यमांचा उपयोग करून पैशांचा व्यवहार करणे होय. डिजिटल पेमेंट व्यवहारात बरीच माध्यमे वापरली जातात जसे की, बँकिंग कार्ड्स, मोबाईल वॉलेट्स, प्रीपेड कार्ड्स, इंटरनेट बँकिंग इ. नोटाबंदीनंतर डिजिटल पेमेंट व्यवहारात प्रचंड वाढ नोंदवली गेली. रिझर्व्ह बँकेच्या आकडेवारीनुसार 250 कोटी प्रति माह इतक्या वेगाने हे व्यवहार बळकटी झाले. पण एका रिपोर्ट नुसार आजही 70% पैसे व्यवहार हे रोकड स्वरूपात केले जात आहेत. डिजिटल पेमेंट व्यवहारांना अधिक वेगाने बळकटीला नेण्याची आवश्यकता आहे. प्रोत्साहनपरत्वे राष्ट्रीय स्तरावर यासाठी बरेच उपक्रम राबवताना दिसत आहे. याचेच एक द्योतक म्हणजे सरकारने नुकतेच एनईएफटी व आरटीजीएस व्यवहारांवर लीक कर शुन्य केला आहे. हा निर्णय स्वागताहार्थच आहे. नोटाबंदीनंतर जी मरगळ बाजारात विकोपाला गेली होती, त्यात तरलता निर्माण करण्याचे काम काही अर्थी डिजिटल पेमेंट व्यवहाराने केले. सरकारही आपल्या सर्व विभागांना अशा व्यवहारांवर भर देण्यास प्रोत्साहन देत आहे उदा. शहर विकास मंत्रालयाने घोषणा केली की संपत्ती कर, व्यवसाय कर, पाणीपट्टी, वीजबील इ. भरणा ईलेक्ट्रॉनिक माध्यमांन्वये करता येईल. रेल्वे टिकीट खरेदीवर 10 लाख रुपयांचा मोफत विमा, डिजिटल माध्यमांद्वारे टोल भरणा केल्यास सवलती देण्यात येते आहेत.

ग्रामीण भाग सर्वदाच विकासापासून वंचित राहिला आहे. पण सरकारने ग्रामीण जनतेला देखील या अर्थकारणवेधी योजनेत समाविष्ट करण्याचा निर्धार केलेला दिसतोय. यासाठी शेतकऱ्यांना रुपे किसान कार्डची व्यवस्था करून देण्यात आली. दहा हजार लोकसंख्या असलेल्या गावांत दोन पीओएस ( पॉईंट ऑफ सेल ) मशीनची व्यवस्था करण्याची घोषणा करण्यात आली आहे. प्रत्येक डिजिटल पेमेंट व्यवहारांसाठी इंटरनेटची आवश्यकता नाही. यूएसएसडी हे एक असेच माध्यम आहे. डिजिटल पेमेंट सर्व्हिसेसला अधिक आधार देण्याहेतू आज भारतात 45 पेक्षा जास्त पीपीआय . ( प्रिपेड पेमेंट इन्स्ट्रुमेंट ) कंपनी स्थापन झाल्या



आहेत. छोटे किराणा दुकानदारही कार्ड स्वाईप मशीन बसवण्यास उत्सुक आहेत. नोटाबंदीनंतर 67 बँकानी मोबाईल बँकिंग सुविधा उपलब्ध केली आहे. डिजिटल पेमेंट सिस्टिममुळे पैशाची देवाणघेवाण सोयीची, अधिक कार्यक्षम व जलद होण्यास मदत झाली आहे.

डिजिटल पेमेंट सिस्टिमने जेवढी तरलता शहरी भागात निर्माण केली. तेवढी तरलता ग्रामीण भागात निर्माण झाली नाही. आजही भारतातील 833 मिलीयन लोकसंख्या ग्रामीण भागात वास्तव्यास आहे. जर सर्वसमावेशक विकास साधायचा असेल तर या योजनेची व्याप्ती ग्रामीण भागातही तितक्याच अधिकतेने होणे गरजेचे आहे. ग्रामीण जनतेत डिजिटल पेमेंट व्यवस्थेसंदर्भात जागृती निर्माण करणे प्रस्थ आहे. त्या लोकांना या व्यवस्थेप्रती विश्वास निर्माण करणे फार गरजेचे आहे. बऱ्याच डिजिटल पेमेंट व्यवहारांसाठी इंटरनेट सुविधा गरजेची असते. पण दुर्दैवाने आजही बऱ्याच खेडेगावात इंटरनेट सुविधा उपलब्ध नाही, यासाठी सरकारने ग्रामीण भागात पायाभूत सुविधांवर भर देणे गरजेचे आहे.

डिजिटल पेमेंट सिस्टिमला सर्वस्वी मोठा धोका म्हणजे ईथिकल हॅकर्सचा आहे. मागच्या काही दशकात हॅकर्सचा खूप मोठा प्रारुभाव दिसून येत आहे. ईथिकल हॅकर्समुळे ऑनलाईन फसवेगिरीचा धोकाही खूप वाढला आहे. एका अभ्यासानुसार जगभरात गतवर्षी 10.7 अब्ज डॉलर्सचे फसवे ऑनलाईन व्यवहार झाले. हा आकडा 2020 पर्यंत 25.6 अब्ज डॉलरपर्यंत जाण्याची भीती या अभ्यासात वर्तविण्यात आली आहे. नोटाबंदीच्या अवघ्या एका महिन्यापूर्वी भारतातील इंटरनेट बँकिंग सुरक्षायवस्थेत सर्वात मोठी हॅकिंगची घटना घडली. समाजकंटक हॅकर्सनी फसवे व्यवहार करण्यासाठी 30 लाख डेबिट कार्ड आणि त्यांचे पिन क्रमांक चोरले. हि चिंतेची बाब म्हणावी लागेल. भारतातील निरक्षरता आणि दारिद्र्य लक्षात घेता डिजिटल पेमेंट व्यवस्थेसाठी फार मोठ्या प्रमाणात जनजागृती करणे महत्वाचे आहे. ऑनलाईन फसवणुकीपासून सुरक्षा मिळविण्यासाठी सायबर सेल विभागाची स्थापना करणे गरजेचे आहे.

डिजिटल पेमेंट सिस्टिमला गती देण्यासाठी डिजिटल व्यवहारांवरील जीएसटी कमी करण्याची गरज आहे. पीओएस ( पॉईंट ऑफ सेल ) मशीनवरील 18 % टक्के जीएसटी मध्ये कपात करण्यात यावी, तसेच विविध सेवांवरील करात कपात करण्यात यावी. जनसामान्यांमध्ये आर्थिक साक्षरता वाढवण्याचे प्रयत्न करण्यात यायला हवेत. इंटरनेट सुविधेला ग्रामीण स्तरापर्यंत सामान्यांतील शेवटच्या घटकापर्यंत नेण्याची आवश्यकता आहे. संपूर्णतार्किकतेनिशी डिजिटल पेमेंट सिस्टिमचा प्रसार करण्याची गरज आहे..

#### सारांश -

नोटाबंदीनंतर डिजिटल पेमेंट व्यवस्थेत बरीच तरलता निर्माण झाली. डिजिटल पेमेंट सिस्टिमने बाजारातील मरगळतेला काही अंशी हद्दपार करण्यास महत्वाची भूमिका बजावली आहे. डिजिटल पेमेंट सिस्टिमने भविष्यवेधी अर्थकारणाची घडी प्रस्थापित केली आहे. नोटाबंदीने बराच अर्थी असंघटीत क्षेत्राचा गळा घोटण्यात आला, पण काही अंशी काळा पैशांच्या व्यवहारावर अंकुश ठेवण्याचा प्रयत्न केला.

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## छत्रपती शिवाजी महाराजांचे आर्थिक धोरण

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### प्रस्तावना :-

१७ व्या शतकात महाराष्ट्रात छत्रपती शिवाजी महाराजांनी हिंदवी स्वराज्यात महाराष्ट्रात आदर्श प्रशासन निर्माण करण्याचा प्रयत्न केला. त्यांच्या राजकीय धोरणाप्रमाणेच त्यांचे प्रशासन हे सुद्धा अत्यंत आदर्श होते. त्यांनी आपल्या काळात मूलकी व लष्करी प्रशासनात लोककल्याणकारी तत्वांचा अंगिकार सर्व क्षेत्रात अंमलात आणून महाराष्ट्रात नव्हे तर अखिल भारतीय राज्यकर्त्यांना मार्गदर्शक ठरेल. अशी अर्थव्यवस्थेचे कुशल नियोजन व प्रयोजन करून महाराष्ट्राला एका आदर्श तत्वाचा वारसा प्राप्त करून देवून बहुजन वंचित रंजले गाजले व दुर्लक्षित घटकांना न्याय मिळवून देण्यासाठी शिवाजी महाराजांनी आपले जीवन पणावर लावून सर्व सामान्यांचे हित जोपासून महाराष्ट्रात कृषीप्रधान व उद्योगप्रधान संस्कृती जोपासण्याचा प्रयत्न शिवाजी राजांनी केला आहे.

शिवाजी महाराजांनी आर्थिक विचारात शेती उद्योग व शेतकरी वर्गाला अधिक प्राधान्य होते. याचे कारण शेकडो वर्षांपासून शेतकरी हा वर्ग परकीय सत्तांच्या गुलामीला कंटाळला होता. त्यांना मुक्त जीवन प्राप्त करून देण्याचा खरा प्रयत्न शिवाजी राजांनी केलेला आहे. शेती, उद्योग व शेतकरी वर्ग यांच्या वरील कर व त्यांच्या पिकांना देण्यात येणारे संरक्षण हे अत्यंत शिस्तबद्ध असल्याने महाराष्ट्रातील शेतकरी वर्ग हा सन्मानाने जगू लागले. शिवाजी राजांनी शेतकरी, शेतमजूर, वंचित घटकांना न्याय मिळवून देण्याचा सातत्याने प्रयत्न केला. असल्या कारणाने महाराष्ट्रात कृषी संस्कृती ही उर्जितावस्थेकडे वाटचाल करू लागले. याचे सर्वश्रेष्ठ शिवाजी राजांनाच द्यावे लागते. शिवाजी राजांनी आदर्श राज्य निर्माण करण्यासाठी आदर्श अर्थ व्यवस्था निर्माण करून राज्य सक्षम बनविले.

### १) शेती व्यवसाय :-

शिवाजी महाराजांच्या काळात शेती हा प्रमुख व्यवसाय असून या व्यवसायाची सर्वांगिन प्रगती करण्यासाठी शिवाजी महाराजांनी प्रयत्न केलेले आहेत. " शिवकाळात शेती व्यवसायाची भरभराट घडवून आणण्यासाठी राजांनी अनेक योजना अंमलात आणल्या. त्यामध्ये शेतकऱ्यांना कर्जे, कृषी अवजारे व जलसिंचनाच्या सोयी सवलती ह्या शिवाजी राजांनी प्राप्त करून दिल्यात शिवाय जमीन महसूलाचे प्रमाण हे सुद्धा जमीनप्रतवारी वरून केल्याने शेतकऱ्यांचा आर्थिक फायदा झाला तसेच शेतकऱ्यांच्या कृषी पिकांना व मालास संरक्षणाची हमी दिल्याची माहिती अनेक कागदपत्रांमध्ये पाहावयास मिळते.<sup>१</sup> थोडक्यात शिवाजी महाराजांच्या आर्थिक विचारात कृषी व्यवसायात राजांनी महत्त्व दिल्याने शिवाजी राजे हे रयतेचे राजे ठरले.

### २) व्यापार :-

शिवाजी महाराज हे थोर अर्थतज्ञ असावेत कारण कौटिल्याच्या अर्थशास्त्रात आदर्श राज्यकर्त्याने राजकारणाबरोबरच अर्थशास्त्राकडे लक्ष द्यावे असे नमूद केलेले आहे. याचा प्रभाव शिवाजी राजावर पडला असल्यानेच शिवाजी राजांनी आपल्या साम्राज्यास अंतर्गत व परकीय व्यापाराला महत्त्व दिले. "व्यापार हा अर्थव्यवस्थेचा कणा असून त्यातून मिळणारी मिळकत उत्पन्न हे स्वराज्याच्या विकासास पूरक ठरणार हे राजांना कळून चुकले त्यामुळे राजांनी इंग्रज, डच, फ्रेंच, पोर्तूगीज या परकीय सत्तेसोबत व्यापार विविध क्षेत्रात करून या मुंबई, दाभोळ, राजपूर ही व्यापारी ठिकाणे विकसीत केलीत"<sup>२</sup> छत्रपती शिवाजी महाराजांनी इंग्रजांना अंतर्गत व्यापारापासून अलिप्त ठेवले कारण स्थानिक व्यापाऱ्यांना त्यांच्या स्पर्धेची झळ पोहचू नये हा उद्देश राजांचा होता. शिवाजी राजांच्या आर्थिक विचारात व्यापाऱ्यांना बरेच प्राधान्य होते.

### ३) उद्योगधंदे :-

शिवाजी महाराजांच्या आर्थिक विचारात उद्योगधंद्याला महत्वाचे स्थान दिले गेले. "राजांनी शेती व व्यापाराप्रमाणेच अनेक उद्योगांची निर्मिती केली असे वर्णन राजव्यवहार कोष या ग्रंथात नोंद मिळते."<sup>३</sup> शिवाजी महाराजांच्या काळात बारा बलुतेदार व अठरा अलुतेदार या शिवाय इतर अनेक उद्योग मोठ्या प्रमाणात चालत होते. त्यामध्ये कापड उद्योग, साखर उद्योग, मसाले, जहाजबांधणी, मिठ उद्योग, कागद उद्योग, सुवर्ण उद्योग ( रत्न काम) हे उद्योग भरभराटीस आले होते. या सर्व उद्योगांची नोंद साहित्यात मिळते. बर्नियर म्हणतो. इतर वस्तु प्रमाणेच भारतीय कारागीर उत्तम अलंकार बनवितात व युरोपीयन सुवर्णकारांच्या तोडीची दागिने तयार करतात."<sup>४</sup> शिवकाळात व्यापार व उद्योग करण्यासाठी बैल, उंट, घोडे, रेडे, गाढवं, बैलगाड्या व जहाजे ही वाहतुकीची मुख्य साधने होती. या काळात उद्योग करण्यासाठी अनेक बाजारपेठा निर्माण झाल्या. यामध्ये चोळ, दाभोळ, कल्याण, भिवंडी, पेण ही उद्योगासाठी प्रसिद्ध केंद्र बनली.

शिवाजी राजांनी उद्योगधंद्यांना भरपूर संरक्षण प्राप्त करून दिले. तसेच शिवाजी राजांनी या व्यापार व उद्योग धंद्यावर जे महसूल मिळाले. त्यातून अनेक कामे हाती घेतले. " शिवरायांनी परकीय सत्तेतील इंग्रज, डच, पोर्तूगीज या सत्तेसोबत तांबे, शिसे, लोखंड, बंदूकीची दारू, तोफा, बंदूक, जस्त, पारा वेगळ्या दर्जाचे कापड, रंगिन कापड, लाल सूत, दोरा इत्यादीचा पूरवठा करी "<sup>५</sup> थोडक्यात राजांनी उद्योगधंद्यांना प्राधान्य दिले हे दिसून येते.

### ४) व्यापारी महसूल/ कर पद्धती :-

शिवाजी महाराजांनी कृषी उद्योगापासून ते व्यापारावर अनेक प्रकारचे कर लावले होते. मध्ययुगीन काळात शेरशहा सुरी व मोगल बादशहा अकबर यांच्या आदर्श कर पद्धतीचा वापर छत्रपती शिवाजी राजांनी केला. "शेतकऱ्यांकडून" शेतसारा जमिनीच्या प्रतवारीवरून गोळा केल्या जात असे तसेच हे कर एकूण उत्पन्नाच्या ३३% कर सरकाराला द्यावा लागत असे. या करा शिवाय शिवकाळात व्यापाराकडून जकातीच्या

स्वरूपात महसूल गोळा केला जाई. साधारण : या कराचे प्रमाण ३/४ एवढे सरकाराला द्यावे लागत आहे. याशिवाय परकिय, वस्तूवर आयात - निर्यात कराच्या स्वरूपात वसूल केल्या जात असे. शिवकाळात असे गुलामावर कर लावल्या जात असे." गुलामावर अधिक कर लादून ही गुलामी पद्धत बंद करण्याचा प्रयत्न राजांनी केलेला आहे. शिवाजी राज्यांच्या आर्थिक नियोजनामुळे या काळातील सर्व घटक हे समृद्धतेने जीवन जगत होते. याचे सर्व श्रेय शिवाजी राजांच्या आर्थिक धोरणाला द्यावे लागते.

#### ५) शिवकालीन चलन :-

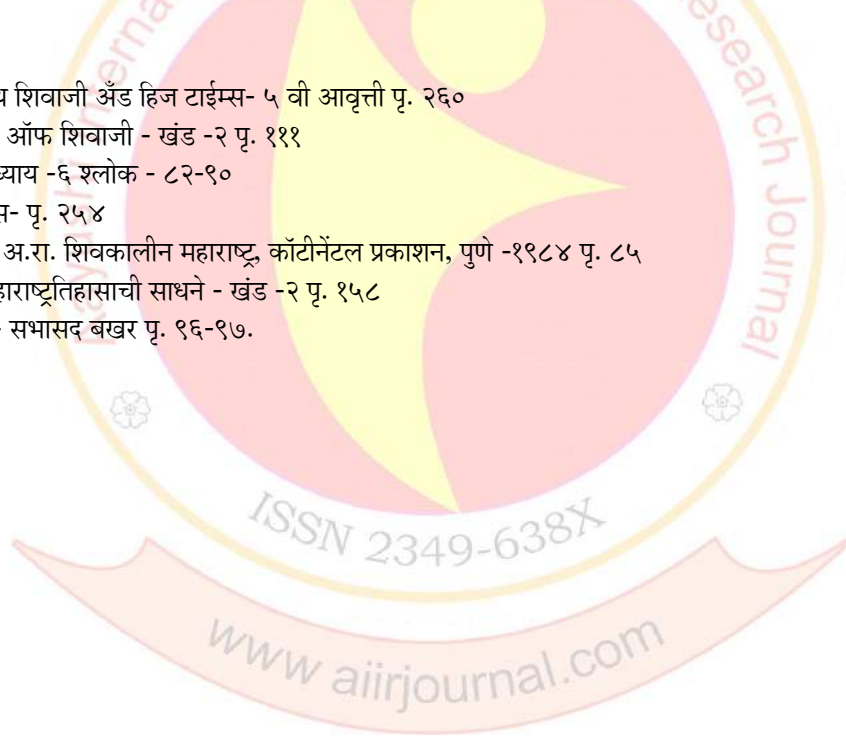
शिवाजी महाराजांच्या काळात महाराष्ट्रात अनेक प्रकारची नाणी अस्तित्वात होती. शिवाजी महाराजांच्या काळात प्रामुख्याने सोने, चांदी व तांबे या तीन धातूंची नाणी मोठ्या प्रमाणात आढळून आलीत. यामध्ये 'होन' हे प्रमुख नाणे होते. होन यामध्ये २६ विविध सोन्याची नाणी प्रचलित होती. शिवाजी राजांनी स्वतः च्या राज्याभिषेक प्रसंगी (१६७४) साली स्वतंत्र नाणे निर्माण करून आपल्या राज्याचे अस्तित्व दाखवून दिले." सभासद बखरीद महाराजांच्या ३२ प्रकारची सुवर्ण नाणी तसेच सहा चांदीची नाणी व काही तांब्याची नाणी पाडण्यात आले होते". या नाण्यावर एका बाजूला 'श्रिशिवराज' हे शब्द तर दुसऱ्या बाजूला 'छत्रपती' हे कोरलेले होते. शिवाजी राजांनी नाण्यांच्या बाबतीत मुसलमान राज्यांची नकल केली नाही. ही नाणी अत्यंत साधी वाटतात 'शिवराई' हे शिवकालीन सर्वात लहान नाणे होते. याशिवाय 'अश्रफी' हे नाणे कोकणात प्रचलित होते.

#### ६) निष्कर्ष :-

छत्रपती शिवाजी महाराज ह्यांनी आर्थिक धोरण अंमलात आणत असतांना शिस्तीचा वापर करून हिंदवी स्वराज्याला मूर्त स्वरूप प्राप्त करून देण्याचा प्रयत्न केला. त्यांनी राज्यात अनियमितता, भ्रष्टाचार, अनागोंदी, बेफिकीरी यांना वाव न देता मूलकी व लष्करी प्रशासनाला आदर्श नियमावली घालून दिल्याने राज्यांच्या हिंदवी स्वराज्यात राजकीय, सामाजिक, आर्थिक व धार्मिक या सर्व क्षेत्रात समतेचे तत्व लागू झाले तसेच राजांनी जातपात, धर्म यांचा विचार न करता सर्व अधिकाऱ्यांना व अष्टप्रधान मंडळाला राजांनी कामाला लावण्याचे काम केले. शिवाजी राजांचे आर्थिक धोरण १७ व्या शतकातील संपूर्ण भारतात एक आदर्श होते हे दिसून येते.

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## रोकड विरहित अर्थव्यवस्था : एक अभ्यास

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ता.परळी वै. जि.बीड

### प्रस्तावना :

काही दिवसापूर्वीच झालेल्या चलनबदलामुळे भारतातल्या अर्थव्यवस्थेमध्ये बरेच बदल घडले आणि पुढे ही घडतील पुर्वकल्पना न देताना झालेल्या या बदलामुळे काळपैसा उघडकीस आणण्यास आणि तो चलनातून बाद करण्यास मदत झाली असली तरी नव्या नोटांच्या तुटवड्याचा मोठा प्रश्न निर्माण झाला होता. एटीएम, बँकामध्ये नोटाबदलासाठी रांगा लागल्या. सध्या या रांगा बऱ्याच कमी झाल्या आहेत. मात्र याच काळात अनेक वर्षांपासून ज्याची गरज होती जे प्रत्यक्षात आणणे सुद्धा शक्य होते. ते आता घडताना दिसत आहे. ते म्हणजेच कॅशलेस व्यवहार तर आज पाहू या कॅशलेस ईकॉनॉमि काय प्रकार आहे ? यासाठी कोणते कोणते पर्याय उपलब्ध आहेत ? आपल्यासाठी कोणते पर्याय योग्य ठरतील.

ह्या अर्थव्यवस्थेनुसार व्यवहारासाठी रोख रक्कम वापरण्या ऐवजी इतर पर्याय वापरले जातात. जसे की, प्लॉस्टिक मनी, ई-वॉलेट, इंटरनेट बँकिंग ज्यामध्ये छापील नोटाचा अजिबात समावेश नसतो. याप्रकारच्या अर्थव्यवस्थेची भारताला नक्कीच गरज आहे. ही व्यवस्था मोठ्या प्रमाणात अमलांत आणणे सुद्धा शक्य आहे. भारतीया मधील वाढलेला फोनचा वापर यासाठी अधिक उपयुक्त ठरणार आहेच या अर्थव्यवस्थेमुळे सर्व व्यवहार बऱ्यापैकी पारदर्शक असतील, सुरक्षित असतील आणि त्यामुळे काळ्या पेश्याला/गैरव्यवहारांना थांबवणे शक्य आहे. ह्या व्यवस्थेनुसार व्यवहार करणे सुद्धा सोप असल्यामुळे लवकरच याचा मोठा प्रसार होईल. असे चित्र या चलन बदलाच्या निमित्ताने का होईना पण दिसू लागले आहे.

### नोट बंदीपूर्वी अर्थव्यवस्थेतील व्यवहार :

सध्या भारतात मोठ्या प्रमाणावर रोख पेश्याचा म्हणजेच नोटाद्वारे व्यवहार होतात. ही पध्दत बऱ्याच वर्षांपासून सुरु आहे. छापील नोटांच्या व्यवहारात भारत आघाडीवर आहे. या पध्दतीचे तोटे चलनबदलाच्या निमित्ताने आपल्या समोर आले आहेतच. अलीकडे गेल्या काही वर्षात प्लॉस्टिक मनी (डेबिट/क्रेडिट कार्ड) याचा वापर वाढला आहे. तरीही ही पध्दत या व्यवस्थेमध्ये म्हणाव्या इतक्या मोठ्या प्रमाणात वापरले जात नाही.

### कॅशलेस अर्थव्यवस्थेचे फायदे :

1. छापील नोटामधून होणारे गैरव्यवहाराना आळा बसेल.
2. चलन व्यवस्थापन, नोटांच्या छपाईचा सरकारी खर्च वाचेल.
3. बनावट नोटा छापण्याचे प्रकार बंद होतील.
4. आयकर विभागाकडे प्रत्येक व्यवहाराची नोंद होईल.
5. रोख रक्कम, सुटे पैसे जवळ बागळण्याची गरज नाही.
6. धनादेश वठण्याची वाट पाहावी लागणार नाही त्यामुळे सर्व व्यवहार जलदगतीने होतात.
7. सुरक्षित व्यवहार आणि गरजेनुसार अनेक पर्याय उपलब्ध आहेत.

### कॅशलेस अर्थव्यवस्थेमध्ये उपलब्ध असलेले विविध पर्याय :

1. **प्लॉस्टिक मनी** : (डेबिट कार्ड, क्रेडिट कार्ड) ह्या पर्यायांमध्ये डेबिट कार्ड/क्रेडिट कार्डचा वापर होतो. खातेदार बँक खात्याशी जोडलेल्या कार्डची बँकेकडे गरजेनुसार मागणी करतो. डेबिट कार्ड अधिक खात्यात असलेल्या रक्कमेतून व्यवहार खरेदीसाठी डेबिट कार्डचा वापर केला जातो. क्रेडिट कार्डचा अर्थ व्यवहार किंवा खरेदीनंतर महिन्या अखेरीस बँकेने पाठवलेल्या बिलानुसार रक्कम बँकामध्ये जमा करण्यासाठी क्रेडिट कार्डचा प्रत्यक्ष वापर करताना दोन्ही कार्डचा वापर सारख्याच पध्दतीने होतो. कार्डधारक एटीएम मशिनमध्ये जावून त्याचा सुरक्षित चार अंकी पिन टाकून पैसे काढू शकतो. दुकानामध्ये खरेदी करू शकतो यानंतर बँकेमधून त्या व्यक्तीच्या खात्यातून रक्कम थेट दुकानदाराच्या खात्यात जमा होते.
2. **इंटरनेट बँकिंग** : या पर्यायामध्ये अर्थ बँकाकडे अर्ज द्यावा लागतो त्यानंतर बँक तुम्हाला युजर आयडी व पासवर्ड देते याला तुमच “ऑनलाईन बँक खात” असही म्हणता येईल. तो आयडी, पासवर्ड घेवून तुम्ही तुमच्या बँकेच्या इंटरनेट बँकिंग वेबसाईटवर जावून लॉगिन केल की, खात ऑनलाईन व्यवहारासाठी तयार होते. खरेदी करताना इंटरनेट बँकिंग पर्याय निवडायचा, आपली बँक निवडायची युजर आयडी पासवर्ड टाकायचा, तुमच्या फोनवर आलेला ओटीपी येथे टाकल्यास तुमचा खरेदी व्यवहार पूर्ण होतो. हा पर्याय सर्व पर्यायांमध्ये सर्वांत सुरक्षित आहे.
3. **ई-वॉलेट / मोबाईल वॉलेट** : सोप्या शब्दात सांगायचे तर हे मोबाईल मध्ये असलेले आभासी पॉकिट ! जे व्यवहारासाठी खऱ्याखुऱ्या पाकिटाची जागा घेवू पाहतंय ! या मोबाईल वॉलेट मध्ये आपण ठराविक रक्कम साठवू शकतो आणि ती कोठेही व्यवहारासाठी वापरता येते. ऑनलाईन व्यवहार (खरेदी/रिचार्ज/पैसे पाठवणे इ.) तसेच ऑफलाईन ठिकाणी जसे की, किराणा

विक्रेते, रिश्का/टॅक्सी चालक दैनंदिन विदेत (भाजी, पेपर, इ.) यांना पैसे देण्यासाठी सहज करता येतो. या वॉलेट मध्ये तुम्ही तुमच्या बँक खात्यातून (क्रेडिट कार्ड/डेबिट कार्ड/नेट बँकिंग) द्वारे पैसे भरायचे आणि ते पैसे नंतर वरीलप्रमाणे ठिकाणी Send Money/recvie money असे पर्याय वापरून वापरू शकतो.

४. **यु.पी.आय.** (Unified Payment interface) यु.पी.आय. हा एक नवीन पर्याय उपलब्ध करून देण्यात आला असून भविष्यात याचा वापर अधिक केला जाईल अशी अशा आहे. या पध्दतीमध्ये युजर्स आयडी/पासवर्ड/बँक खात्याचा क्रमांक यापैकी कशाचीही गरज नाही. युपीआय मध्ये केवळ एका युजर्स नेमचा वापर होता ज्याद्वारे व्यवहार थेट बँकामधून पार पडतात. या युजर्स नेम ला व्ही.पी.ए. (व्हर्च्युल प्रायव्हेट अँड्रेस) म्हणतात. यामुळे पैसे पाठविण्याकरिता केवळ या नावाचाच वापर करून काही क्षणात पैसे पाठविता येतात. यु.पी.आय. व मोबाईल वॉलेट या दोन वेगळ्या गोष्टी असून यु.पी.आय.मध्ये मोबाईल वॉलेट प्रमाणे रक्कम भरावी लागत नाही. यासाठी थेट बँक खात्यामधूनच व्यवहार केला जातो. ही वापरण्यासाठी सध्या तरी तुमचा फोन तुमच्या बँक खात्याला मोबाईल/ नेट बँकिंग मार्फत जोडलेला असावा त्यानंतर तुम्ही तुमच्या बँकेचे अधिकृत ॲप फोन डाउनलोड करून वापर करू शकता.
५. **मोबाईल बँकिंग :** हा पर्याय बेसिक फोन्स/ इंटरनेट नसलेल्या फोन्स साठी तयार करण्यात आला असून यामध्ये दोन उपपर्याय उपलब्ध आहेत. दोन्ही पर्याय वापरण्यासाठी प्रथम तुमचा फोन क्रमांक बँकेमध्ये तुमच्या खात्याला जोडावा लागेल त्यानंतर तुम्हाला एम.एम.आयडी, युजर्स नेम व पासवर्ड दिला जाईल. ज्याद्वारे बँकेच्या निर्देशानुसार आय.एम.पी.एस.द्वारे खातेक्रमांक आणि आय.एफ.एस.सी.कोडची माहिती एस.एम.एस.द्वारे पाठवून पैसे सहज पाठविता येतात. मोबाईल बँकिंग पध्दतीच वैशिष्ट म्हणजे हा पर्याय अगदी कोणत्याही फोनवर ऑफलाईन म्हणजेच इंटरनेट नसताना वापरता येतो.
६. **पॉइंट ऑफ सेल : (Pos)** ह्या पर्यायामध्ये आपण विक्रेतेकडे वस्तू खरेदी करतो वस्तू खरेदी करतो त्यानंतर विक्रेता बिल सांगून रक्कम त्याच्याकडील Pos मशिन कार्ड टाकून पिन टाकण्यास सांगतो. ह्यावेळी आपण प्लास्टिक मनीमध्ये पाहिलेल डेबिट/क्रेडिटकार्डच वापरतो. ह्या मशीनमध्ये आपल कार्ड टाकून पिन टाकला की आपल्या बँक खात्यातून रक्कम लगेच विक्रेत्याच्या खात्यात जमा होते.
७. **आधारकार्ड बँकिंग :** याप्रकाराच्या व्यवस्थेमध्ये आधी तुमच आधारकार्ड बँक खात्याला संलग्न कराव लागेल त्यानंत ज्याठिकाणी पैसे दयायचे आहेत. तिथ तुमचा आधारकार्ड क्रमांक टाका व तुमच्या बोटद्वारे फिन्नार प्रिंट द्या लगेच व्यवहार पार पडेल. म्हणजेच आधारकार्ड वरील क्रमांक आणि बायोमेट्रीक पध्दतीने बोटच स्कॅन याद्वारे पैसे ट्रान्सफर, शिल्लक, पैसे काढणे इ. व्यवहार करता येतात.

#### कॅशलेस अर्थव्यवस्थेमध्ये घ्यावयाची काळजी :

1. तुमचा पासवर्ड कोणालाही सांगू नका.
2. तुमचा पासवर्ड कार्डवर किंवा कुठेही लिहून ठेवू नका.
3. तुमच्या खात्याची माहिती (युजर नेम/पासवर्ड/ओटीपी/सी.व्ही.व्ही) कोणालाही सांगू नका.
4. कार्डची माहिती कोणत्याही साईटवर सेव्ह करू नका.
5. ठराविक दिवसानंतर पासवर्ड/पिन बदलत रहा.
6. नेट बँकिंग करताना Virtual Keyboard चा वापर करा.

#### सारांश :

नोटबंदीच्या निर्णयानंतर काही दिवसातच कॅशलेस व्यवहाराची जोमाने चर्चा होवू लागली कॅशलेस व्यवहार करण्यासाठी बँकामध्ये पुरेसे प्रगत तंत्रज्ञान असलेले कर्मचारी, इंटरनेट कनेक्टीव्हिटी, अर्थसाक्षरता, आधुनिक संगणकीय तंत्रज्ञान इ.ची सोय असणे महत्वाचे असते. देशातील काळा पैसा, नकली नोटा आणि दहशतवादी कारवाया करणाऱ्या संघटनाना आळा घालण्यासाठी नोटबंदी करण्यात आली होती. मोठ्या शहरामध्ये तसेच मॉलमध्ये जिथे इलेक्ट्रीसिटी व इंटरनेटच्या सुविधा उपलब्ध आहेत. अशाठिकाणी कॅशलेस व्यवहार मोठ्या संख्येने होतात. ज्याठिकाणी या मुलभत सोयी जर मुबलक प्रमाणात नसेल तर कॅशलेस व्यवहाराचा कितीही प्रसार केला तरी कॅशलेस व्यवहारामध्ये अथडथळ निर्माण होतील. कॅशलेस व्यवहार आर्थिक व्यवहार करण्याचा प्रगतशील मार्ग आहे. या प्रगत तंत्रज्ञानाच्या माध्यमातून जो गरीब वर्ग फोन वापरू शकत नव्हते असा वर्ग दैनंदिन जीवनात मोबाईलचा वापर करून कॅशलेस व्यवहार करू लागले. कॅशलेस अर्थव्यवस्था सफल होण्यासाठी शिक्षणाचे प्रमाण जास्त हवे कॅशलेस व्यवहार प्रगती आणि आधुनिक अर्थविभागाच्या तुलनेने अधिक सोयीचा असल्याने त्याचा शक्य तितक्या लवकर अवलंब करणे आवश्यक आहे. त्यामुळे भ्रष्टाचार आणि गुन्हेगारीला आळा घालता येईल.

#### संदर्भग्रंथ :

- १) जैन पी.एम.(२००६), ई-पॅमेंट अँड ई-बँकिंग इंडियन बँकर.
- २) द इकनॉमिक्स टाईम्स.
- ३) पाण्डे आय.एम.फायनान्शियल मॅनेजमेंट.

## डिजिटलायझेशन द्वारे पायाभूत विकास – एक अभ्यास

प्रा.डॉ. बी.जी. खटाळ

दयानंद वाणिज्य महाविद्यालय, लातूर.

२१ व्या शतकात जग हे डिजिटल वर्ल्ड बनत आहे. जगामध्ये प्रत्येक क्षेत्रात अतिशय वेगाने डिजिटायझेशन होत आहे. मग ते क्षेत्र उत्पादन बनवून विकण्याचे असो. दैनंदिन जीवनातील मानवी व्यवहार असो किंवा सरकारने त्यांच्या नागरिकांना दिलेल्या सामाजिक सेवा असोत. या सर्व ठिकाणी अतिशय वेगाने डिजिटलायझेशन होत आहे. माहिती तंत्रज्ञानाच्या मदतीने भारतात सर्वसमावेशक विकास घडवण्याच्या दृष्टीकोनातून देशाचे पंतप्रधान माननीय श्री.नरेंद्र मोदी यांनी डिजिटल भारत हा उपक्रमाची सुरुवात केली.

देशातील गरीब व वंचित लोकांना विकासात्मक, सर्व व्यापक आणि सहज उपलब्ध अशा तंत्रज्ञानाचा वापर करून स्वयंपूर्ण बनविणे हा या डिजिटल कार्यक्रमाचा मुळ उद्देश आहे. डिजिटलकरणाची सुरुवात खूप वर्षापूर्वीच झाली होती. मात्र याचा वेग मंद असल्यामुळे होत असलेले बदल लक्षात येत नव्हते.

डिजिटल तंत्रज्ञानामुळे अपेक्षित माहिती वेगाने मिळत आहे. सामाजिकीकरण, बँकिंग, शॉपिंग अदान-प्रदान, संदेशवहन यामुळे नवीन पर्याय कमी किंमती हे सगळे शक्य झाले आहे. यामुळे डिजिटल तंत्रज्ञानातून भारताच्या पायाभूत विकासाला चालना मिळाली.

### डिजिटल इंडिया म्हणजे काय.

देशातील प्रशासनात लोकांचा सहभाग वाढवणे, प्रशासनातील पारदर्शी बनवणे, शासनाकडून लोकांना मिळणारा प्रतिसाद वाढवणे ते अधिक लोकांभिमूख करणे अशा उद्देशांनी पंतप्रधान नरेंद्र मोदी यांच्या सरकारने १ जुलै २०१५ रोजी देशात डिजिटल इंडिया अभियानाची सुरुवात करण्यात आली. या अभियानामार्फत देशात जनजागृती करण्यासाठी ३६ राज्यात हा कार्यक्रम राबवण्यात आला.

### शोध निबंधाची उद्दिष्टे :-

१. डिजिटल इंडिया या उपक्रमाचा अभ्यास करणे.
२. डिजिटलायझेशनचा पायाभूत विकासावर पडलेल्या प्रभावाचा अभ्यास करणे.

### डिजिटल इंडियाची उद्दिष्टे :-

१. प्रत्येक नागरिकांसाठी डिजिटल सोयी-सुविधा.
२. मागणीप्रमाणे प्रशासन आणि सुविधांचा पुरवठा.
३. नागरिकांचे डिजिटल सबलीकरण.

### डिजिटल इंडियाचे आधारस्तंभ :-

- १ ब्रॉड बॅण्ड महामार्ग.
- २ दूरध्वनीची सार्वत्रिक उपलब्धता.
- ३ नागरी इंटरनेट उपलब्धता कार्यक्रम.
- ४ ई. गव्हर्नन्सच्या माध्यमातून प्रशासाचा चेहरामोहरा बदलणे.
- ५ ई. क्रांती - सेवांचा इलेक्ट्रॉनिक माध्यमातून पुरवठा.
- ६ इलेक्ट्रॉनिक उत्पादनात वाढ.
- ७ आयटीसाठी नोकऱ्यांची निर्मिती.

### डिजिटल तंत्रज्ञानाद्वारे पायाभूत विकास

देशामध्ये विविध शासन योजना तसेच शासकीय सेवांचा लाभ सर्वसामान्य नागरिकांना विशेषतः ग्रामीण भागातील जनतेला सहजपणे माफक दरात उपलब्ध व्हावा त्यासाठी ३.६ लाख डिजिटल सेवा वितरण केंद्रांचे विस्तारित जाळे ग्रामीण भारतात पसरलेले आहे.

### भारत बिल पेमेंट सिस्टिम :-

या ॲप्लीकेशन मुळे खाजगी क्षेत्रातील कंपन्यांनी बनविलेल्या अशाच प्रकारच्या ॲप्लीकेशनची निर्मिती झाली. तसेच या ॲप्लीकेशनमुळे सरकारी सेवांची बिले भरणे लोकांना सोपे झाले. एप्रिल २०१७ ला भारत बिल पेमेंट सिस्टिमची सुरुवात झाली. डिजिटलद्वारे भरण्यात आलेल्या बिलांची संख्या दुपटीपेक्षा जास्त वाढली. या सिस्टिम प्रणालीतून राज्याचा विकास साधला जातो.

### भारत इंटरफेम फॉर मनी (बी.एच.आय.एम. - भीम)

या प्रणालीद्वारे डिजिटल देयक व्यवहार अतिशय सोपे झाले आहेत. सध्याच्या प्रणालीतून गुगल पे, तेज ची सुरुवात आणि व्हॉटस ॲप मार्गे घ्यावयाची देयके आपण पाहत आहोत. डिजिटल भारताची सुरुवात २०१५ ला झाली असली तरी २०१७-१८ या वर्षात भारतात अब्जावधी रुपयांचे १० लाखांहून अधिक डिजिटल देयक व्यवहार झालेले आहेत.

### भारतमॅप्स (Bharat Maps)

भारतमॅप्स ही बहुस्तरीय वेब सेवा असून जागतिक भूस्थानिक मानकानुसार निरंतर देशनिहाय नकाशे, उपग्रहावरून आलेली छायाचित्रे आणि संकरीत नकाशे यांचे मिळून बनलेले आहेत. नागरी सेवा प्रदान करण्यासाठी केंद्र आणि राज्य सरकारी विभागांना मदत करण्यासाठी डिजिटल इंडिया कार्यक्रमाचा हा एक अत्यावश्यक घटक आहेत.

भौगोलिक माहिती व्यवस्थेची यशस्वी अंमलबजावणी ग्रामीण विकासाच्या मनरेगा योजनेत झालेली आहे. भौगोलिक माहिती पध्दतीद्वारे (जीआयएस) मनरेगा योजनेत झालेली आहे. जीआयएस मनरेगा कामगारांना आसपास कुठे काम उपलब्ध आहे, कामाचे ठिकाण



नेमके कुठे आहे, प्रत्यक्ष वेळेतील पारदर्शक दिसून येते. मनरेगा मालमत्तेबाबत असलेल्या जिओ पोर्टलमुळे नागरिकांना लाभ होत असून नागरिकांकडून समवर्ती सामाजिक ऑडीट आणि कामाच्या सध्दस्थिती, दर्जा वैधता आदी बाबत प्रतिसादात्मक माहिती मिळवण्याची संधी वाढवली आहे.

- ४) **जीवन प्रमाण :-** या शासनाच्या सेवेद्वारे अत्यंत सहजरित्या निवृत्तीवेतनधारक ज्येष्ठ नागरिकांना आधार क्रमांकाद्वारे कागदपत्रांची पडताळणी करून निवृत्ती वेतन थेट बँकेत मिळण्याची व्यवस्था करण्यात आली आहे. २०१४ या वर्षापासून सुरु करण्यात आलेल्या या सेवेद्वारे आतापर्यंत १.७३ कोटी दाखले वितरित करण्यात आले आहे.
- ५) **डिजिटल देयके :-** डिजिटलद्वारे व्यवहार करण्यासाठी भीम-यूपीआय, भीम आधार, भारत क्यूआर कोड, नॅशनल इलेक्ट्रॉनिक टोल कलेक्शन इ. अशी अनेक नाविण्यपूर्ण डिजिटल देयक साधने लागू केली आहेत. तसेच भीम – यूपीआय सहित यूपीआयवर, डिजिटल देयक व्यवहार ऑक्टोबर २०१६ ते मार्च २०१९ या काळात ८००० पट वाढले आहेत.
- ६) **कृषि क्षेत्रात डिजिटल तंत्रज्ञानाचा वापर :-** कृषि क्षेत्रात डिजिटल तंत्रज्ञानाचा वापर करून शेतीचा विकास साधला जातो. तंत्रज्ञानाचा वापर करून शेतात अन्नधान्य पिकवणे, उत्पादन वाढवणे, सुरक्षित साठवणे, प्रक्रिया करून टिकवणे, दुर अंतरावर पाठवणे अशा अनेक बाबी सुलभपणे शक्य आहेत. जगातील बऱ्याच देशात शेतकऱ्यांची अनेक कामे रोबोट म्हणजेच यंत्र मानव करतो. सध्दस्थितीत चौथी औद्योगिक क्रांती घडत आहे. कृत्रिम बुद्धिमत्ता, रोबॉटिक्स, अभासी वास्तव, त्रिमितीय छपाई, नॅनो व तंत्रज्ञान, जैव तंत्रज्ञान, स्वयंचलित मोटारगाड्या, वस्तुंचे इंटरनेट म्हणजे इंटरनेट ऑफ किंग्ज, ड्रोन्स यासारख्या असंख्य तंत्रज्ञानातून देशात चौथी औद्योगिक क्रांती झाली. डिजिटलच्या माध्यमातून कृषि क्षेत्राचा विकास झाला.
- ७) **इलेक्ट्रॉनिक राष्ट्रीय शेती बाजारपेठ :-** संपूर्ण देशातील शेतकऱ्यांसाठी त्यांच्या शेती उत्पादनाची खरेदी विक्री करण्यासाठी हे संकेतस्थळ सुरु करण्यात आले आहे. या संकेत स्थळावर विविध शहरातील शेती उत्पन्न बाजार समिती एकत्रित येऊन राष्ट्रीय स्तरावर शेती उत्पादनांसाठी बाजारपेठ तयार करतात. आज पर्यंत सोळा राज्यातील ५८५ कृषि उत्पन्न बाजार समिती एका व्यासपीठावर एकत्रित आलेल्या आहेत. तसेच ९३ लाख शेतकरी व ८४ हजार व्यापारी यांनीही या संकेत स्थळावर नोंदणी केली आहे.
- ८) **इलेक्ट्रॉनिक विसा :-** कोणत्याही मध्यस्थाविना बाहेरच्या देशात जाण्यासाठी लागणारी लेखी परवानगी असणारे कागदपत्र अर्थात विसा मिळण्यासाठी संबंधित संकेतस्थळावरून ऑनलाईन पध्दतीने अर्ज भरून सहजपणे विसा मिळण्याची सोय उपलब्ध झाली आहे.
- ९) **ई-न्यायालये :-** मोबाईल ॲपच्या मदतीने देशभरातील न्यायालयात चालत असलेल्या खटल्याबाबत तपशीलवार माहिती मिळणे शक्य झाले आहे. खटल्यांची ताजी माहिती, न्यायमूर्तींचे निर्णय, न्यायालयाच्या अधिसूचना इत्यादी तपशील प्राप्त होतो.
- १०) **सरकारी कारभारात डिजिटलायझेशन :-** सरकारी कारभारात डिजिटलायझेशनला सुरुवात झाली. तेंव्हा माहिती साठवण, कार्य क्षमता, वृद्धी, आर्थिक माहितीवर प्रक्रिया व वर्गीकरण अशा अनेक उद्देशांचा त्यात समावेश होतो. त्यामुळे अर्थ (कोषागार), कर निर्धारण (व्यापारी कर प्राप्तीकर, अबकारी कर), सांख्यिकी यात त्याचा वापर सुरु झाला. या विभागात त्यामुळे मोठया प्रमाणात विकास झाला आहे.

#### सारांश / निष्कर्ष :-

अशा प्रकारे डिजिटलच्या माध्यमातून देशाचा विकासाला गती मिळाली. डिजिटलद्वारे आदान – प्रदान, लाभ हस्तांतरण निधी, भीम ॲप, फोन पे, गुगल पे, डिजिटल देयके, भारत मॅप्स एकत्रितरित्या या तंत्रज्ञानाचा वापर करून देशाला डिजिटलायझेशन बनवले गेले. आजच्या काळात डिजिटल तंत्रज्ञानातून शहरी व ग्रामीण भागाचा विकासामध्ये वाढ झाली.

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## कॅसलेस व्यवहाराची साधने, फायदे व तोटे

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ता. कळंब जि. उस्मानाबाद.

### प्रस्तावना:-

भारतासह आज अनेक देश कॅशलेस व्यवहाराकडे वळतांना दिसून येत आहेत. दिनांक 08 नोव्हेंबर 2016 रोजी भारतात मोदी सरकारने 500 व 1000 रुपयाच्या नोटा चलनातून बाद केल्या आणि या नोटबंदीपासून कॅशलेस व्यवहाराने भारतात वेग घेतल्याचे दिसून येते. कारण नोटबंदी अगोदर कॅशलेस व्यवहाराचा वेग हा 20 ते 50 टक्के होता तो नोटबंदीनंतर 40 ते 70 टक्के झाला यावरून या घटनेचा व कॅशलेस व्यवहाराचा जवळचा संबंध असल्याचे दिसून येते. असे असले तरी आजही बरेच व्यवहार हे नोटांद्वारे होत असल्याचे दिसून येते. कॅशलेस व्यवहाराबाबत आजही लोकांमध्ये ब-याच मोठ्या प्रमाणात गैरसमज आहेत. कॅशलेस व्यवहाराबाबत अनेक लोकांना माहिती नाही. सायबर काईम मोठ्या प्रमाणात असल्यामुळेसुद्धा बरेचसे लोक कॅसलेस व्यवहार करण्यास धजावत नाहीत.

कॅशलेस अर्थव्यवस्थेमध्ये व्यवहारासाठी रोख रकम वापरण्याऐवजी इतर पर्याय वापरले जातात. यामध्ये प्लॅस्टिक मनी, इ वॉलेट, इंटरनेट बँकिंग, इ. ज्यामध्ये छापील नोटांचा समावेश नसतो. त्यामुळे काळ्या पैशाच्या व्यवहारावर आळा बसू शकतो. अशा व्यवहाराची भारतीय अर्थव्यवस्थेला गरज आहे. अशाप्रकारचे व्यवहार करणे फार सोपे आहे. त्याबाबतची माहिती मात्र असणे आवश्यक आहे. त्यासाठी अशा व्यवहाराची जनजागृती होणे आवश्यक आहे.

### संशोधनाची उद्दिष्ट्ये:-

1. भारतातील कॅशलेस व्यवहारांचा अभ्यास करणे.
2. कॅशलेस व्यवहाराच्या साधनांचा अभ्यास करणे.
3. कॅशलेस व्यवहाराच्या फायद्यांचा अभ्यास करणे.
4. कॅशलेस व्यवहाराच्या तोट्यांचा अभ्यास करणे.

### संशोधन पध्दती :-

प्रस्तुत शोधनिबंधासाठी संशोधनाच्या दुय्यम साधनाचा वापर करण्यात आलेला आहे. ज्यामध्ये संशोधनाशी संबंधित पुस्तके, मासिके, पाक्षिके, साप्ताहिके, तसेच वर्तमानपत्राचा वापर करण्यात आलेला आहे.

### कॅशलेस व्यवहाराची साधने :-

1. **इंटरनेट बँकिंग:-** अलिकडे इंटरनेट बँकिंगचा मोठ्या प्रमाणात वापर केला जात आहे. कारण कॅशलेस व्यवहारांमध्ये सर्वात सुरक्षित व्यवहार या साधनाच्या वापरातून केला जातो. इंटरनेट बँकिंगचा वापर करतांना बँकेकडे अर्ज करून आपला युजर आयडी व पासवर्ड घ्यावा लागतो. आपल्या आर्थिक व्यवहारासाठी इंटरनेट बँकिंगचा वापर आपण करू शकतो. हा वापर करतांना बँक आपल्याला या व्यवहारासंदर्भात एक OTP देते. त्याचा वापर करून आपण इंटरनेट बँकिंगचा वापर करू शकतो. हा पर्याय इतर पर्यायापेक्षा अधिक सुरक्षित आहे. कारण या आर्थिक व्यवहाराबाबत आपल्या रजिस्टर्ड मोबाईलवर मॅसेज येतो. तसेच आपण ज्यावेळेस इंटरनेट बँकिंगचा वापर करतो त्यावेळेस आपण हा वापर सुरु केल्याचा व बंद केल्याचा सुद्धा मॅसेज आपल्या मोबाईलवर येतो. इंटरनेट बँकिंग हा उत्तम पर्याय आहे.

2. **प्लॅस्टिक मनी:-** प्रचलीत चलनासोबतच प्लॅस्टिक मनी सुद्धा आपले कार्य करत असतो. यामध्ये डेबिट कार्ड, क्रेडिट कार्ड याचा समावेश होतो. खातेदाराला आपला आर्थिक व्यवहार पूर्ण करण्यासाठी बँकेकडून एक प्लॅस्टिक कार्ड देण्यात येतो. त्या कार्डला एक चिप बसवलेली असते. या कार्डच्या माध्यमातून आपल बँकेतून पैसे काढणे किंवा बँकेत पैसे भरणे तसेच आपल्या खात्यावरून पैसे दूस-याच्या खात्यावर पाठवण्यासारखे व्यवहार आपण करू शकतो. आपल्या खात्यावर असलेल्या रकमेच्या साहायाने व्यवहार करण्यासाठी डेबिट कार्डचा वापर केला जातो. तर अगोदी कार्डच्या साहायाने खरेदी करून नंतर महिणा अखेर ते बिल पेड करण्यासाठी क्रेडिट कार्डचा वापर केला जातो.

3. **मोबाईल बँकिंग:-** आपल्या आर्थिक व्यवहारासाठी हा पर्याय वापरण्या अगोदर आपला मोबाईल नंबर आपल्या बँक खात्याशी जोडणे आवश्यक आहे. त्यानंतर आपल्याला बँकेकडून एक MMID, यूजरनेम व पासवर्ड देण्यात येतो.

ज्याद्वारे बँकेच्या निर्देशानुसार IMPS द्वारे खाते क्रमांक आणि IFSC कोडची माहिती SMS द्वारे पाठवून पैसे सहज पाठवता येतात. या पर्यायाचा वापर करतांना आपला व्यवहार सुरक्षित होण्यासाठी बँकेला आपली काही माहिती देणे आवश्यक असते.

**4. आधार कार्ड बँकिंग:-** ज्याप्रमाणे मोबाईल बँकिंगचा वापर करण्या अगोदर मोबाईल नंबर आपल्या बँक खात्याला जोडणे आवश्यक आहे. अगदी त्याप्रमाणेच आधार कार्ड बँकिंगचा वापर करण्या अगोदर आपले आधार कार्ड आपल्या बँक खात्याला जोडणे आवश्यक आहे. या पर्यायाचा वापर करून बँकेचे व्यवहार करतांना ज्या ठिकाणी पैसे द्यावयाचे आहेत तिथे अगोदर आपला आधार कार्डचा नंबर टाकावा लागतो. त्यानंतर आपल्या बँकेच्या फिंगर प्रिंट देऊन आपला व्यवहार पूर्ण करता येऊ शकतो. अशाप्रकारे या साधनाच्या साह्याने आपण आपल्या खात्यावरील पैसे दुस-याच्या खात्यावर टाकू शकतो, आपण आपले पैसे काढू शकतो, खात्यावरील शिल्लक तपासू शकतो, इ व्यवहार या पर्यायाचा वापर करून आपण करू शकतो.

**5. इ वॉलेट:-** ज्याप्रमाणे आपण खीशामध्ये पैसे ठेवण्यासाठी पाकिट वापरतो त्याप्रमाणे आपले आर्थिक व्यवहार पूर्ण करण्यासाठी इ वॉलेटचा वापर केला जातो. या इ वॉलेट मध्ये आपण ठराविक रक्कम साठवून ठेऊ शकतो. आणि हि साठवलेली रक्कम आपणास कुठेही आपल्या व्यवहारासाठी वापरता येते. इ वॉलेटच्या माध्यमातून आपण वस्तुची खरेदी, पैसे पाठवणे, रीचार्ज करणे, बिल भरणे, इ सारखे व्यवहार करू शकतो. इ वॉलेट मध्ये पैसे भरण्यासाठी आपण क्रेडीट कार्ड, डेबिट कार्ड किंवा नेट बँकिंगचा वापर करू शकतो. हा पर्याय पूर्णपणे सुरक्षित आहे. या वॉलेटच्या वापरसाठी एक पासवर्ड असतो. तसेच याद्वारे केलेल्या व्यवहाराची आपणास इ मेलच्या साह्याने माहिती मिळत असते.

**6. यूपीआय:-** सध्या यूपीआय हा एक नविन पर्याय कॅशलेस व्यवहारामध्ये वापरण्यात येत आहे. भविष्यमध्ये या पर्यायाचा वापर अधिक केला जाण्याची शक्यता अधिक आहे. यामध्ये यूजरआयडी, पासवर्ड, खाते क्रमांक, आयएफएससी कोड, यापैकी कशाचीही आवश्यकता नसते. यामध्ये केवळ एका यूजरनेमचा वापर केला जातो. ज्याच्या साह्याने आपले व्यवहार बँकेमार्फत पार पाडले जातात. या यूजरनेमला UPA असे म्हणतात. यामध्ये पैसे पाठवण्यासाठी केवळ या नावाचाच वापर करून काही क्षणातच पैसे पाठवता येतात. यूपीआय हे मोबाईल वॉलेट पेक्षा वेगळे आहे यामध्ये वॉलेटप्रमाणे पैसे भरण्याची गरज नाही. थेट बँक खात्यामधूनच व्यवहार केले जातात. यासाठी त्याच्या बँकेचे ॲप अगोदर आपल्या मोबाईलमध्ये डाऊनलोड करून घ्यावे लागते.

**7. पॉइंट ऑफ सेल:-** कॅशलेस व्यवहारामधला हा पर्याय वस्तुची खरेदी करण्यासाठी मोठ्या प्रमाणात वापरला जातो. या पर्यायामध्ये डेबिट कार्ड किंवा क्रेडिट कार्डचा वापर करून व्यवहार पूर्ण केला जातो. एखाद्या मॉलमध्ये, दुकानामध्ये किंवा पेट्रोल पंपावर या साधनाचा वापर मोठ्या प्रमाणात होतांना दिसून येतो. वस्तुची खरेदी केल्यानंतर दुकानमालकाचे बिल पेड करण्यासाठी पीओएस मशीनमध्ये कार्ड टाकून पिन टाकला की आपल्या बँक खात्यातून रक्कम दुकानदाराच्या खात्यात जमा होते. हल्ली पीओएस मशीन ब-याच ठिकाणी वापरात येत असल्याचे दिसून येते.

**कॅशलेस व्यवहार करतांना घ्यावयाची काळजी:-**

1. कॅशलेस व्यवहार करतांना या व्यवहारात वापरण्यात येणारा पासवर्ड कोणासोबतही शेअर करू नये. त्यामुळे आपल्या खात्यावरची रक्कम काढल्या जाऊ शकते.
2. इंटरनेटच्या युगात आपल्या बँक खात्यासंदर्भातील कोणतीही माहिती इंटरनेटच्या कसल्याही वेबसाईटवर सेव करू नये. किंवा आपल्याकडील कार्डची माहिती कोणालाही देऊ नये.
3. आपल्या बँक खात्याची माहिती कोणासोबतही शेअर करू नये. उदा. यूजरनेम, पासवर्ड, आपला ओटीपी नंबर, आपल्या कार्डचा सीव्हीव्ही नंबर यामुळे आपले बँक खाते सुरक्षित राहणार नाही.
4. कॅशलेस व्यवहार करतांना आपण जो पासवर्ड वापरतो ठराविक दिवसानंतर बदलला पाहिजे. काही लोक सायबर काईमच्या माध्यमातून आपला पासवर्ड मिळवून आपल्या खात्यातील रक्कम बाढण्याची शक्यता असते.
5. अनेक वेळा आपणास फोन कॉल येतात की आम्ही बँकेमधून बोलत आहोत. आम्हाला तुमच्या बँक खात्याची माहिती द्या. अशाप्रकारचे फोन कॉलस येतात. ते फसवे असतात, त्यांना आपल्या खात्याची कोणतीही माहिती देऊ नये कारण अशाप्रकारचे कॉल कोणत्याही बँकेकडून येत नसतात.

**कॅशलेस व्यवहाराचे फायदे:-**

1. नोटांच्या व्यवहारामध्ये काळ्या पैशाचा मोठ्या प्रमाणात वापर केला जातो. जास्त मुल्यांच्या बनावट नोटांची छपाई करून अर्थव्यवस्थेमध्ये बनावट चलन आणले जाते अशा व्यवहारांना कॅशलेस व्यवहारामुळे आळा बसतो.



- कॅशलेस व्यवहार हे साधारणपणे बँकांमार्फतच चालतात त्यामुळे या सर्व व्यवहाराची नोंद होते. त्यामुळे आयकर विभागाला कर आकारणे सोपे जाते. कर बुडवेगीरीचे प्रमाण यामुळे कमी होते.
- कॅशलेस व्यवहारा अगोदर सर्व व्यवहार हे बँकेत प्रत्यक्ष जाऊनच करावे लागत होते. त्यामुळे बँकेत गर्दी असेल तर या व्यवहारासाठी बराच वेळ लागत होता. कॅशलेस व्यवहार हे बँकेमार्फत केले जात असले तरी त्यासाठी बँकेज जाण्याची गरज नसते म्हणून वेळेची बचत मोठ्या प्रमाणात होते.
- एखाद्या व्यक्तीला प्रवासाला किंवा आपला आर्थिक व्यवहार पार पाडण्यासाठी एका ठिकाणाहून दुस-या ठिकाणी जावयाचे असल्यास त्याला स्वतः जवळ रोख रक्कम बाळगण्याची गरज नाही. वरील साधनांच्या माध्यमाने तो आपले व्यवहार पूर्ण करू शकतो.
- चलन व्यवस्थापन व नोटांच्या छपाईचा खर्च यामुळे वाचेल. कॅशलेस व्यवहारामुळे नोटांच्या छपाईचा खर्च मोठ्या प्रमाणात वाचतो. कारण यामध्ये बरेचसे व्यवहार हे नोटांशिवाय चालतात.
- जास्तीत जास्त व्यवहार हे कॅशलेस पध्दतीने केल्यामुळे बँकेतील कर्मचा-यावर केल्या जाना-या खर्चात बचत होते. कमी कर्मचार्यांच्या साह्याने बँकचे सर्व व्यवहार सुरळीतपणे पार पाडले जातात. तसेच बँकेला आपल्या सर्व व्यवहाराची नोंद लिखील स्वरूपात ठेवण्याची गरज नाही. त्यामुळे कर्मचा-यांवर केल्या जाणा-या खर्चात बचत होते.
- कॅशलेस द्वारे केले जाणारे व्यवहार हे सुरक्षीत आहेत. आणि आपल्या वेळेनुसार, आपल्या सवडीनुसार ते पार पाडता येण्याजोगे आहेत.
- कॅशलेस व्यवहारास चालना देण्यासाठी इंधन, ई वॉलेट, मोबाईल वॉलेट, कडीट किंवा डेबिट कार्डच्या साह्याने इंधन भरल्यास 0.75 टक्के सवलत तसेच रेल्वे तिकिटांवर 1 जानेवारी 2017 पासून 0.5 टक्के सवलत, रेल्वे खानपान सेवेसाठी डिजिटल पेमेंट केल्यास 5 टक्के सवलत, राष्ट्रीय महामार्गावर फास्ट टॅगने टोल भरल्यास तसेच विमा कंपन्यांचे प्रिमीयम ऑनलाइन भरल्यास 10 टक्के सवलत देण्यात येतात याचा फायदा ग्राहकांना होतो.

#### कॅशलेस व्यवहाराचे तोटे:-

- अशा व्यवहामधून हँकर आपली माहिती चोरून आपल्या खात्यावरील रक्कम पळवण्याचे प्रकार अलिकडे वाढत चाललेले दिसून येत आहेत.
- कॅशलेस व्यवहाराबाबत लोकांमध्ये प्रचंड अज्ञान आहे. आजही शासनाने अनेक व्यवहार कॅशलेस करण्यास प्रोत्साहन दिले असले तरी, लोकांच्या मनात भिती आहे. आपले पैसे ज्याला पाठवायचे आहेत त्याच्याच खात्यावर जातील की नाही, अशी भिती वाटते.
- कॅशलेस व्यवहारामध्ये मोठ्या प्रमाणात इंटरनेटचा वापर केला जातो. ग्रामीण भागातील लोकांना इंटरनेटचा वापर करणे कठीण असते. त्यामुळे ग्रामीण भागातील लोक कॅशलेस व्यवहाराकडे वळत नाहीत.
- कॅशलेस व्यवहार हे मोठ्या प्रमाणात आपल्या मोबाईलशी संबंधित आहेत. जर आपला मोबाईल हरवला किंवा त्यामध्ये काही बिघाड झाला तर अशा व्यवहारामध्ये अडथळे निर्माण होतात.
- कॅशलेस व्यवहामध्ये प्रत्यक्ष पैसे आपल्या हातून जात नसल्यामुळे खर्चात वाढ होण्याची शक्यता नाकारता येत नाही.

#### सारांश:-

असे असले तरी भारतात आज कॅशलेस व्यवहाराबाबत मोठ्या प्रमाणात जागरूकता निर्माण होण्याची गरज आहे. कॅशलेस व्यवहारासाठी सुरक्षीतता वाढवण्याची गरज आहे. अशाप्रकारच्या व्यवहारामधून लोकांचे आर्थिक नुकसान हाणार नाही याची काळजी घेणे आवश्यक आहे. जगातील अनेक विकसीत देशांमध्येसुद्धा संपूर्ण कॅशलेस पध्दतीने व्यवहार करणे शक्य झालेले नाही. जगातील टॉप टेन कॅशलेस देशांचा विचार करता कॅनडा, स्वीडन, इंग्लंड, फ्रान्स, अमेरिका, चीन, ऑस्ट्रेलिया, जर्मनी आणि जपान या देशांचा समावेश होतो. कॅशलेस व्यवहाराबाबत भारतात अनेक सुरक्षा व सुविधा निर्माण होणे आवश्यक आहे तरच कॅशलेसचे फायदे भारतात पहावयास मिळतील.

#### संदर्भ सूची:-

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## रोकडविरहीत भारतीय अर्थव्यवस्था: आव्हाने व उपाय

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### प्रस्तावना—

प्राचीन काळी देवान—घेवानीचे व्यवहार वस्तू विनिमय पध्दतीने होत होते. त्या काळात व्यापार करण्यासाठी स्वतःजवळ मोठ्या प्रमाणात वस्तूची साठवण करावी लागत असे. त्यामुळे या पध्दतीने व्यवहार करणे अडचणीचे ठरत होते. या पध्दतीत बदल करून नंतरच्या काळामध्ये व्यवहारासाठी अर्थव्यवस्थेत चलन म्हणून धातूची नाणी वापरण्यात येवू लागली. परंतु नंतर ते नाणे देखील स्वतःजवळ बाळगणे गैरसोईचे होवू लागले. त्यामुळे चलनामध्ये कागदी नोटांचा वापर सुरू झाला. कागदी नोटांमुळे अर्थव्यवस्था सुरळीतपणे चालू लागली.

भारताचे पंतप्रधान मा. नरेंद्र मोदी यांनी ८ डिसेंबर २०१६ रोजी ५०० व १००० रूपयांच्या नोटा चलनातून बाद करण्याचा निर्णय जाहिर केला. रद्द केलेल्या नोटा देशाच्या चलनात ८६ टक्के म्हणजे जीडीपीच्या १२.२ टक्के होत्या. चलनी नोटा बाद करण्यामागे भारत सरकारचा उद्देश असा होता की भ्रष्टाचार, काळ्या पैशाला आळा घालणे तसेच कमीत कमी रोकड वापरणारी अर्थव्यवस्था निर्माण करणे, म्हणजेच रोकडविरहीत अर्थव्यवस्था निर्माण करणे. परंतु अर्थव्यवस्थेतील व स्वतःजवळील रोख पैसा कमी झाल्यामुळे लोकांना आपले व्यवहार पूर्ण करण्यासाठी पर्यायी मार्गांचा शोध व स्विकार करणे भाग पडले. आपले व्यवहार पूर्ण करण्यासाठी लोकांनी रोकडविरहीत व्यवहाराचा मार्ग अवलंबला. अशा रीतीने आर्थिक व्यवहारात मोठ्या प्रमाणात रोकडविरहीत साधनांचा वापर करण्यास सुरवात झाली.

### शोध निबंधाचे उद्दिष्टे:—

- १) रोकडविरहीत व्यवहाराचा अभ्यास करणे.
- २) रोकडविरहीत व्यवहार करतांना येणाऱ्या अडचणींचा शोध घेणे.
- ३) रोकडविरहीत व्यवहारासाठी असणाऱ्या साधनांचा अभ्यास करणे.
- ४) रोकडविरहीत व्यवहारातील अडचणीवरील उपाययोजनांचा शोध घेणे.

### संशोधन पध्दती व तथ्य संकलन:—

प्रस्तूत शोध निबंधासाठी रोकडविरहीत अर्थव्यवस्था: आव्हाने व उपाय हा विषय निवडला असून शोध निबंधाच्या उद्दिष्टाप्रत पोहचण्यासाठी वर्णनात्मक व विश्लेषणात्मक संशोधन पध्दतीचा वापर करण्यात आला आहे.

प्रस्तूत शोध निबंधाच्या तथ्य संकलनासाठी दुय्यम स्रोतांचा उपयोग करण्यात आला आहे. यामध्ये संदर्भग्रंथ, वर्तमानपत्रातील लेख, विविध संकेतस्थळे इत्यादींचा वापर करण्यात आला आहे.

### रोकडविरहीत व्यवहार म्हणजे काय?:—

रोकडविरहीत व्यवहार म्हणजे सर्व आर्थिक देवाण—घेवाण कोणत्याही रोख रकमेशिवाय करणे होय. एखाद्या वस्तूचे अथवा सेवेचा मोबदला, देयकांचा भरणा डेबिट कार्ड/क्रेडिट कार्ड या साधनांद्वारे किंवा इंटरनेटच्या आधारे बँकिंग प्रणालीचा वापर करून किंवा मोबाईल वरील विविध ऑप्सच्या माध्यमातून करण्यात आले तर अशा व्यवहारास रोकडविरहीत व्यवहार म्हणतात. कोणत्याही देण्या—घेण्याच्या आर्थिक व्यवहारासाठी कागदी चलनांचा वापर न करता केलेले व्यवहार रोकडविरहीत व्यवहार होय. म्हणजेच डिजिटल पध्दतीने करण्यात येणारे आर्थिक व्यवहार हे रोकडविरहीत व्यवहार ठरतात. आपण घरबसल्या आपल्या सोयीनुसार संगणक प्रणालीचा वापर करून केलेले व्यवहार डिजिटल व्यवहार होय.

### रोकडविरहीत अर्थव्यवस्था:—

संपूर्णपणे रोकडविरहीत अर्थव्यवस्था असणारा एकही देश आजच्या जगात नाही. रोकडविरहीत व्यवहारांचा अधिकाधिक वापर करणाऱ्या देशांमध्ये प्रगत देशांचा समावेश होतो. प्रामुख्याने डेन्मार्क, नॉर्वे, स्वीडन हे देश वेगाने रोकडविरहीत अर्थव्यवस्थेकडे वाटचाल करीत आहेत. डेन्मार्क किंवा स्वीडन सर्व प्रथम संपूर्णतः रोकडविरहीत अर्थव्यवस्था होण्याची शक्यता वर्तविली जात आहे. स्वीडन या देशात २५ टक्के आर्थिक व्यवहार नो कॅश पध्दतीने होत असतात तर भारतात नो कॅश व्यवहाराचे प्रमाण २२ टक्के आहे. भ्रष्टाचार कमीतकमी असणाऱ्या देशांच्या यादीत स्वीडन तिसऱ्या क्रमांकावर आहे तर भारत या यादीत ७६ व्या क्रमांकावर आहे. यावरून रोकडविरहीत व्यवहार जेवढे जास्त तेवढा भ्रष्टाचार कमी असतो. अमेरिकेमध्ये ७० ते ८० टक्के व्यवहार कॅशलेस पध्दतीने होतात. तेथे १०० डॉलरच्या वर चलन अस्तित्वात नाही. अमेरिकेने १९६९ मध्ये १०० डॉलरच्या वर नोट बंद केल्या आहेत.

भारतीय अर्थव्यवस्था रोकडविरहीत व्यवहार करण्यामध्ये इतर देशांच्या तुलनेत खुप मागे आहे. भारतामध्ये २०१४ साली चलनाचे प्रमाण सकल देशांतर्गत उत्पादनाच्या १२.४२ टक्के होते. हेच प्रमाण चीनमध्ये ९.४७ टक्के तर ब्राझीलमध्ये ८ टक्के असल्याचे दिसून येते. भारताची इतर विकसनशील आणि विकसीत देशांशी तुलना केल्यास बहुतेक देशांपेक्षा भारतीय अर्थव्यवस्थेत वर्तमान परिस्थितीत जवळपास ६० टक्के व्यवहार नगदी स्वरूपात होतात. विशेषतः ग्रामीण अर्थव्यवस्था ही संपूर्णतः नगदी व्यवहारावरच आधारीत आहे. भारताच्या एकूण लोकसंख्येच्या जवळपास ६८ टक्के लोकसंख्या ग्रामीण भागात वास्तव्य करून राहते. या ग्रामीण भागातील कामगारांना नगदी स्वरूपात मजुरी मिळते. याचाच अर्थ भारतीय अर्थव्यवस्था रोकडविरहीत होण्यासाठी ग्रामीण भागातील व्यवहारांवर अवलंबून आहे.

### रोकडविरहीत व्यवहाराची साधने:-

भारताचे पंतप्रधान मा. नरेंद्र मोदी यांच्या नोटबंदीच्या निर्णयावर उलटसुलट प्रतिक्रिया उमटत असतांना मा. पंतप्रधान मात्र आपल्या निर्णयावर ठाम आहेत. त्यांनी आपल्या मन की बात या कार्यक्रमातूनही रोकडविरहीत अर्थव्यवस्थेवर जोर दिला आहे. नरेंद्र मोदी यांनी मेरा मोबाईल.... मेरा बँक ..... मेरा बटुआ असा संदेश देत रोकडविरहीत व्यवहारासाठी डिजिटल मार्गाचा अवलंब करण्यास सांगितले आहे. रोकडविरहीत व्यवहारासाठी वापरण्यात येणारी साधने पुढीलप्रमाणे—

- १) **प्लास्टीक मनी ( डेबिट कार्ड/क्रेडीट कार्ड)**—भारतात नोटबंदी अगोदर प्लास्टीक मनी या साधनाचा मर्यादीत वापर होता. परंतु आता त्यात झपाट्याने वाढ होत आहे. यामध्ये क्रेडीट व डेबिट कार्डचा वापर करून एटीएम मधून पैसे काढणे, पैसे हस्तांतरीत करणे, वस्तूंची खरेदी करणे इत्यादी अशी कामे करता येतात. या साधनांद्वारे ग्राहकांना कोणत्याही बँकेच्या एटीएम व्दारे आपले व्यवहार पार पाडता येतात. येथे मात्र प्लास्टीक मनी वापरामध्ये पैसा बँक खात्याच्या माध्यमातून ग्राहकांमध्ये हस्तांतरीत होतो.
- २) **चेक/डीडी**—सर्वांना परिचयाची असलेली ही जुनी पध्दती आहे. या पध्दतीमध्ये आर्थिक व्यवहार हे चलनी नोटांशिवाय पूर्ण केले जातात. मात्र या पध्दतीत प्रत्यक्ष बँकेत जावून सर्व आर्थिक व्यवहार करावे लागत असल्यामुळे वेळ जास्त खर्च होतो.
- ३) **नेट बँकिंग**—ही एक इंटरनेटवर आधारीत बँकिंग प्रणाली आहे. या प्रणालीद्वारे ग्राहक घर बसल्या किंवा आपल्या कार्यालयातील संगणकाद्वारे बँकेच्या संपर्कात राहून आपल्या खात्यातील रक्कम तपासणे, पैशाचे हस्तांतरण करणे, देयकांचे शोधन करणे, अर्ज करणे, विविध योजनांची माहिती घेणे इत्यादी आर्थिक व्यवहार पार पाडू शकतो.
- ४) **मोबाईल बँकिंग**—ही सुध्दा इंटरनेटवर आधारीत एक बँकिंग प्रणाली आहे. या सेवेद्वारे ग्राहक आपल्या स्मार्ट फोनच्या आधारे बँकेच्या संपर्कात राहून वस्तूंची ऑनलाईन खरेदी करणे, पैशाचे हस्तांतरण करणे, खात्यातील रक्कम तपासणे, अर्ज करणे, इत्यादी आर्थिक व्यवहार पूर्ण करू शकतो.
- ५) **पीओएस मशिन**—पीओएस (POS) म्हणजेच पॉइंट ऑफ सेल अर्थात विक्रीचे ठिकाण. शहरी भागात ही अगदी सामान्य बाबत झाली आहे. या साधनाद्वारे आपण विक्रेत्याकडून वस्तू खरेदी केल्यास विक्रेता बिलाची रक्कम सांगून ती रक्कम त्याच्याकडील (POS) मशिनमध्ये आपले कार्ड सरकवून (स्वाईप करून) पिन टाकला की आपल्या बँक खात्यातून रक्कम लगेच विक्रेत्याच्या खात्यात जमा होते. ही मशिन दुकाने, थिएटर, पेट्रोल पंप इत्यादी ठिकाणी पहायला मिळते.
- ६) **अविस्तृत पुरक सेवा माहिती (USSD)**—अनस्ट्रक्चर्ड सप्लीमेन्ट्री सर्व्हिस डेटा (USSD) या प्रणालीच्या सहायाने कोणत्याही मोबाईलच्या इंटरफेसमधून आपण पैसे पाठवू शकतो. यासाठी आपल्याकडे स्मार्ट फोन असण्याची आवश्यकता नाही.
- ७) **आधार सक्षम पेमेंट सिस्टिम (AEPS)**—आधार कार्डच्या सहायाने आपले आर्थिक व्यवहार पूर्ण करता येतात. या साधनाद्वारे आर्थिक व्यवहार पार पाडण्यासाठी आपले आधार कार्ड बँक खात्याशी जोडून घेणे आवश्यक आहे. आधार बायोमॅट्रीक्सच्यावेळी रेकॉर्ड केले गेलेले तुमचे फिंगर प्रिंट खरेदी—विक्रीच्या व्यवहारात ग्राहक धरले जातात.
- ८) **ई-वॉलेट (E-Wallet)**—आपल्या मोबाईल वरून फोटो पाठविणे जेवढे सोपे आहे तेवढेच ई-वॉलेटद्वारे मोबाईल किंवा संगणकामधून पैशाचे व्यवहार करणे शक्य आहे. सोप्या शब्दात सांगायचे तर हे एक मोबाईल मध्ये असलेले आभासी पाकीट आहे. ई-वॉलेटमध्ये आपण ठराविक रक्कम साठवून ठेवू शकतो आणि ती रक्कम कुठेही व कोणत्याही वेळी आर्थिक व्यवहारासाठी वापरू शकतो.
- ९) **युपीआय (UPI)**—युनिफाईड पेमेंट इंटरफेस (UPI) हे साधन मोबाईलमधून मेसेज पाठविण्याइतके सोपे आहे. प्रत्येक बँकेचे स्वतःचे मोबाईल ॲप आहे. या ॲपच्या मदतीने स्मार्ट फोनचा वापर करून आर्थिक व्यवहार करणे शक्य झाले आहे. युपीआय व ई-वॉलेट हे दोन वेगवेगळे साधन असून युपीआयमध्ये ई-वॉलेट प्रमाणे पैसे भरण्याची गरज नसते. तर यासाठी थेट बँक खात्यामधून व्यवहार केला जातो. भविष्यात या साधनाचा वापर अधिक केला जाईल अशी आशा आहे.
- १०) **ऑनलाईन हस्तांतरण (RTGS/NEFT)**—रोकडविरहीत व्यवहारासाठी हा सर्वात सोपा मार्ग आहे. मोठ्या रक्कमेचे हस्तांतरण करण्यासाठी RTGS/NEFT या मार्गाचा अवलंब करण्यात येतो. मात्र रोख रक्कम हस्तांतरीत करण्यासाठी इंटरनेटची सुविधा असणे गरजेचे आहे.



### भारतीय अर्थव्यवस्थेसमोरील रोकडविरहीत व्यवहारासंबंधी आव्हाने:-

- १) भारत जरी रोकडविरहीत अर्थव्यवस्थेच्या दृष्टीने पुढे चालत असला तरी त्यापुढे अनेक आव्हाने समोर असल्याचे दिसते आहे. भारताची लोकसंख्या १३० कोटीपेक्षा जास्त आहे. त्यापैकी जवळपास ६५ ते ७० टक्के लोकसंख्या ही ग्रामीण भागात वास्तव्यास आहे. या भागामध्ये अपुऱ्या सोयी-सुविधा असल्याने रोकडविरहीत व्यवहार करतांना अनेक अडचणींना सामोरे जावे लागते आहे. तेव्हा अशा भागांमध्ये पायाभूत सुविधा उपलब्ध करून देणे हे एक भारतापुढे मोठे आव्हान आहे.
- २) जनधन योजना या सारख्या योजना आखून सुध्दा देशातील खुप मोठा वर्ग बँकिंग सेवांपासून दूर आहे. त्यामुळे त्यांना रोकडविरहीत व्यवहारासाठी आवश्यक साधने मिळणे कठीण जात आहे. तसेच जनधन योजनेअंतर्गत चालू करण्यात आलेल्या खात्यांपैकी जवळपास २० ते २३ टक्के खात्यात शुन्य टक्के रक्कम आहे. रोकडविरहीत व्यवहाराच्या यशस्वीतेसाठी ही खाती कार्यक्षमपणे वापर करण्यास चालना देण्याची गरज आहे.
- ३) मोबाईलव्दारे डिजिटल पेमेंट करण्यासाठी स्मार्ट फोनची आवश्यकता असते. परंतु भारतातील बऱ्याच लोकांकडे ते उपलब्ध नाही. तसेच क्रेडीट कार्ड / डेबीट कार्ड, मोबाईल वॉलेट यांचा वापर करून केलेल्या व्यवहारांमुळे मिळणारे फायदे बहुसंख्य जनतेला माहित नाहीत. त्यामुळे भारतातील बहुसंख्य नागरीक आर्थिक व्यवहारांसाठी रोख रक्कमेलाच प्राधान्य देतात.
- ४) आपल्या देशामध्ये इतर देशाच्या तुलनेत इंटरनेट वापरणाऱ्यांचे प्रमाण खुप कमी आहे. इंटरनेट व वीजेअभावी विशेषतः ग्रामीण भागांमध्ये रोकडविरहीत व्यवहार करणे शक्य होत नाही. तसेच वेगवान इंटरनेटची जोडणीसुध्दा पुरेशा प्रमाणात नाही. सार्वजनिक वायफाय, मोबाईल चार्जिंग स्टेशन अशा सुविधा फार कमी प्रमाणात दिसून येतात.
- ५) हॅकींग आणि सायबर चोरी हे डिजिटल क्षेत्रासमोरील फार मोठे आव्हान आहे. रोकडविरहीत अर्थव्यवस्थेमध्ये जास्तीत जास्त आर्थिक व्यवहार हे इलेक्ट्रॉनिक्स पध्दतीने पार पाडल्या जातात. इंटरनेटचा जास्तीत जास्त वापर हा सायबर गुन्ह्यांना उत्तेजन देणारा आहे.
- ६) रोकडविरहीत अर्थव्यवस्थेमध्ये पिओएस (POS) मशिनची भूमिका फार महत्वाची आहे. किरकोळ कामापासून ते मोठमोठ्या मॉल्समध्ये ग्राहक हे पीओएस मशिन्सच्या आधारे देयके देत असतात. परंतु सध्या देशामध्ये १५ लाख पीओएस मशिन्स असून एवढ्या कमी पीओएस मशिन्समधून डिजिटल व्यवहार करण्यावर मर्यादा येतात.

### रोकडविरहीतव्यवहारासाठी आव्हानांवरील उपाययोजना:-

- १) भारतीय अर्थव्यवस्था रोकडविरहीत होण्यासाठी भारतीय समाजाची डिजिटल साक्षरता वाढविण्यासाठी सरकारने प्रयत्न करावे.
- २) रोकडविरहीत व्यवहार करताना सुरक्षिततेला सर्वाधिक प्राधान्य देवून लोकांमध्ये विश्वास निर्माण करणे गरजेचे आहे.
- ३) रोकडविरहीत व्यवहारांवर लादण्यात येणारे अधिभार कमी करून जनतेला प्रोत्साहन देणे आवश्यक आहे.
- ४) रोकडविरहीत व्यवहारांसाठी सर्व जनतेला बँकिंग व्यवहारात आणले जाणे गरजेचे आहे.
- ५) पीओएस(POS)मशिनची सद्यःस्थितीतील संख्या खुपच कमी आहे. ती वाढविण्यासाठी बँकांना प्रोत्साहन देणे.
- ६) ग्रामीण भागात राष्ट्रीयकृत बँकांचे किंवा सहकारी बँकाचे जाळे निर्माण करणे तसेच या शाखांमध्ये ई-बँकिंग सुविधा निर्माण करून देणे.
- ७) एटीएम मशिन्सची सुविधा सर्वत्र उपलब्ध करून देणे.
- ८) ग्रामीण भागात शासकीय खर्चातून वेगवान इंटरनेट सुविधा उपलब्ध करून देणे.

### सारांश:-

माहिती तंत्रज्ञानाच्या युगात एका नवीन कांतीमुळे माध्यमांची गुणवत्ता वाढत आहे. बदलत्या युगात संवादवहनाचे व जनसंपर्काची माध्यमे प्रगती करित आहेत. नवनवीन सुधारणांमुळे माध्यमांच्या कार्यात गतिशिलता निर्माण झाली आहे. या बदलत्या स्वरूपाचा फायदा देशाच्या अर्थव्यवस्थेला होत असलेला दिसून येतो. रोखीने मोठ्या प्रमाणात व्यवहार होत असल्यास भ्रष्टाचार, काळा पैसा, कर चुकवेगीरी, चलनसाठा, आतंकी कारवाही इत्यादी समस्या निर्माण होतात. रोकडविरहीत व्यवहारांमुळे वरील समस्यांची पूर्णतः सोडवणूक होत नसली तरी त्याची तीव्रता बऱ्याच प्रमाणात कमी होण्यास मदत होते.

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- ५)<http://cashlessindia.gov.in>

## डिजिटल तंत्रज्ञान : काळाची गरज – एक अभ्यास

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ता.जि.उस्मानाबाद.

### प्रस्तावना :-

प्राचीन काळापासून राज्यकर्ते नेहमीच आपले राज्य प्रगतशील कसे राहिल याची महत्त्वाकांक्षा बाळगून होते. सिंधु संस्कृती, इजिप्त संस्कृती, रोमन किंवा ग्रीक संस्कृती असो प्रत्येक कालखंडातील राज्यकर्ते राज्याच्या विकासासाठी प्रयत्नशील होते. एवढेच नव्हे तर सम्राट अकबर, कृष्णदेवराय, छत्रपती शिवाजी महाराज, चंद्रगुप्त मौर्य, राजा चोल सम्राट आणि टिपू सुलतान यासारख्या राजांनी राज्यकारभार चालवण्यासाठी चांगली प्रशासन व्यवस्था निर्माण केली. या प्रशासनातून राज्याचा विकासासाठी प्रयत्न करण्यात आले.

सध्या संपूर्ण जगाला डिजिटल क्रांतीचे वेध लागले आहेत. त्यात भारतही मागे नाही. देशभरात विविध क्षेत्रात डिजिटल तंत्रज्ञानाचा अवलंब करण्यात येत आहे. उदाहरणार्थ नवे तंत्रज्ञान आणि डाटा विश्लेषण याचा वापर करून सरकार विविध योजना राबवताना मोठे बदल करत आहेत. लाभार्थ्यांना थेट अनुदान (डीबीटी), सार्वजनिक वित्त व्यवस्थापन, ई.बाजार, भीम अॅपचा वापर करून डिजिटल व्यवहारांना प्राधान्य देण्यात आले आहे. या सर्व तंत्रज्ञानातून भारताचा विकासाला गती प्राप्त झाली आहे.

### डिजिटल म्हणजे काय :-

डिजिटल म्हणजे नोंदी ठेवणे, कार्यालयाचे व्यवस्थापन करणे, माहितीवर प्रक्रिया करणे इत्यादी कामे केली जात होती. डिजिटल क्रांतीमध्ये झालेल्या संशोधनामुळे नव्या संधी निर्माण झाल्या. यामुळेच विकासाची पुनर्रचना करण्याची गरज पडू लागली आहे.

इंटरनेट, कृत्रिम बुद्धिमत्ता, रोबोटिक्स, इंजिनिअरिंग, ब्लॉग चें तंत्रज्ञान आणि इतर तंत्रज्ञानामुळे सामाजिक व आर्थिक विकासाला सुरुवात झाली व तंत्रज्ञानाच्या विकासांमुळे भारतीय अर्थव्यवस्थेला मोठी चालना मिळाल्याचे दिसून येते.

भारताचा सर्वांगीण विकास हा डिजिटल क्रांतीचा मुख्य उद्देश आहे. या विकासातून भारत देश जगातील आर्थिक केंद्र होणार आहे. या डिजिटल क्रांतीमधून सर्वसामान्य माणसाच्या जीवनात कायापालट होणार आहे. सामान्य भारतीयांचा सर्वांगीण विकास आणि सशक्तीकरण हा प्रमुख विचार डिजिटल इंडियाच्या केंद्रस्थानी आहे.

### शोध निबंधाचे उद्दिष्ट्ये :-

- डिजिटल आधारभूत संरचना अभ्यास करणे.
- डिजिटल योजनेचा पायाभूत विकासावर पडलेल्या प्रभावाचा अभ्यास करणे.
- डिजिटल योजनेच्या ॲप्लिकेशनचा अभ्यास करणे.

### डिजिटल सेवांसाठी पायाभूत विकास :-

भारताचा विकास यशस्वीपणे होण्यासाठी मजबूत अशा डिजिटल पायाभूत विकासाची निर्मिती करणे ही आजच्या काळाची गरज आहे.

### भारतात निर्मिती क्षेत्राच्या विकासासाठी डिजिटल भारत :-

#### भारत नेट :-

ग्रामीण भागामध्ये उच्च वेगाने इंटरनेट सेवा उपलब्ध व्हावी यासाठी देशभरातील सुमारे २.५० लाख ग्रामपंचायतीत ऑप्टिकल फायबर नेटवर्क तयार करण्यात येत आहे. आतापर्यंत सुमारे २,९१,६८९ किलोमिटरची ऑप्टिकल फायबर यंत्रणेद्वारे १,१९,९४७ ग्रामपंचायतीत जोडणी पूर्ण झाली आहे. अशा डिजिटलच्या माध्यमातून भारताच्या विकासाला गती आली आहे.

#### नॅशनल नॉलेज नेटवर्क :-

डिजिटलच्या माध्यमातून देशांतर्गत संशोधनाने विकसित करण्यात आलेली ही व्यवस्था, शैक्षणिक व संशोधन क्षेत्रामध्ये माहितीचे आदान प्रदान सोप्या पध्दतीने व्हावे या उद्देशाने कार्य करण्यात आले आहे. उदाहरणार्थ - ऑनलाईन पध्दतीने चर्चा, शिकवणी वर्ग इ. उपक्रमातून भारतीय विकास होत आहे.

#### सायबर सुरक्षा :-

सुरक्षित व विश्वसनीय तंत्रज्ञानाचा विकास हा देशाच्या समातोल विकास वाढीसाठी अत्यंत आवश्यक बनला आहे. सायबर सुरक्षिततेच्या माध्यमातून सर्वसामान्य नागरीकांची गोपनीय व आर्थिक माहिती कोणत्याही प्रकारे उघड होणार नाही, ही शासनाची जबाबदारी आहे. या अडचणीवर मात करण्यासाठी डिजिटलच्या माध्यमातून सायबर सुरक्षा केंद्र सुरु करण्यात आले आहे. इ.सन २०१७ पासून राष्ट्रीय सायबर सुरक्षा कार्यरत करण्यात आली आहेत.

### सार्वजनिक वित्तक्षेत्रात डिजिटल तंत्रज्ञानाचा प्रभाव :-

अलिकडील काळामध्ये सार्वजनिक क्षेत्रात मोठया प्रमाणात डिजिटलचा वापर होत आहे. संस्थेचा डेटाबेस, बँकेचे एकीकरण, कोअर बँकिंग सोल्यूशन, शासनाचा ई-बाजार इत्यादी घटकांचा विकास हा डिजिटलच्या माध्यमातून करण्यात येतो.

सार्वजनिक वित्त क्षेत्रात नेहमी वापरल्या जाणाऱ्या कमी किंमतीच्या वस्तु आणि सेवा यासाठी खिडकी ऑनलाईन खरेदीसाठी २०१६ मध्ये शासनाची ई-बाजार व्यवस्था सुरु करण्यात आली. त्याचप्रमाणे केंद्रीय सार्वजनिक खरेदीदार, पोर्टलची सेवा जास्त किंमतीच्या वस्तुसाठी (२ लाख व त्यापेक्षा जास्त किंमतीच्या) सुरु करण्यात आली.

### थेट लाभ हस्तांतरण (डी.बी.टी.) :-

सार्वजनिक वित्त व्यवस्थापनाच्या माध्यमातून बँकेशी इलेक्ट्रॉनिक माध्यमातून संवाद साधून सरकारकडे एकंदरी किती निधी शिल्लक आहे याची समग्र अशी माहिती देते यालाच थेट लाभ हस्तांतरण असे म्हणतात.

प्रशासनाच्या अनेक स्तरांमुळे निधी हस्तांतरीत होण्यासाठी जन्मजात विलंब होत असेल तर थेट लाभ हस्तांतरण तंत्रज्ञानाच्या आगमनामुळे नागरिकांना लाभ हस्तांतरीत करण्याच्या मार्गात अमुलाग्र असा बदल झाला आहे. थेट लाभ हस्तांतरणामुळे आधार आणि बिगर आधार आधारीत निधी वाटप करणे शक्य झाले.

ऑनलाईन पेमेंट तंत्रज्ञानात आधुनिकीकरण व्यवसाय करणे सहज सुलभ करण्याच्या संदर्भातच नव्हे तर व्यवहारांच्या सर्व संभाव्य स्तरांवर पारदर्शकता आणण्याच्या संदर्भातील अत्यंत महत्वाचे आहे. आज एकूण लाभ हस्तांतरण ७,३८,७६२ कोटी इतका निधी आहे. तसेच यातून संपूर्ण भारतभर ज्या विविध सरकारी योजना अंमलात आणल्या जात आहेत. तसेच स्वच्छ भारत अभियान व्यासपीठाने लाभार्थ्यांना निधी हस्तांतरीत करण्यासाठी थेट लाभ हस्तांतरण तंत्रज्ञानाचा मोठ्या प्रमाणात उपयोग झाला आहे.

### डिजिटल व्यासपीठ :-

सरकारमध्ये असलेल्या क्लाऊड पायाभूत विकासाच्या उपलब्धतेमुळे राष्ट्रीय स्तरावर अनेक डिजिटल व्यासपीठांचा उदय झाला आहे. **एक राष्ट्रीय एक व्यासपीठ** या संकल्पनेतून डिजिटल व्यासपीठ तयार झाले आहे. या व्यासपीठाने वाहने, घरे, शौचालय, शिधापत्रिका यांच्यासाठी राष्ट्रीय रजिस्टर तयार करून अंतरसंचालितता निरंतर एकात्मिकरण आणि एकत्रीकरण हे मुद्दे हाताळले गेले आहेत.

### सारांश :-

भारतामध्ये डिजिटल तंत्रज्ञानाच्या विकासाचा प्रसार करण्यासाठी नविन शोध आणि मुल्यांकन करण्यासाठी प्रयत्नाची पराकष्टा करत आहे. नविन तंत्रज्ञान स्विकारण्याच्या धोरणानुसार कृत्रिम बुद्धिमत्ता ५ जी.एच. तसेच कॉम्प्युटिंग असे क्षेत्र निश्चित करण्यात आले आहे. डिजिटलच्या माध्यमातून डाटा अनालिसेस, कृत्रिम बुद्धिमत्ता इत्यादीसाठी उत्कृष्टता केंद्रे स्थापित करण्याचा पुढाकार सरकारने घेतला असून सरकारी पायाभूत सुविधा तंत्रज्ञानाचा स्विकार आणि विविध पुढाकारासाठी त्याची उपाय योजना करण्यात आली. यातूनच इ.सन २०२५ पर्यंत भारतीय अर्थव्यवस्था ट्रिलियन डॉलरची डिजिटल अर्थव्यवस्था विकसित करणे हा डिजिटल भारत उपक्रमाची येणारी काळासाठी उपयुक्त आहेत.

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## शेती उद्योग आणि सेवा क्षेत्रातील डिजीटल पध्दती

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ता. अंबाजोगाई जि. बीड

### प्रस्तावना :-

भारत हा कृषिप्रधान देश असून या देशाची अर्थव्यवस्था प्रामुख्याने शेतीवर अवलंबून आहे. भारताच्या एकूण लोकसंख्या पैकी ७० टक्के लोकसंख्या ग्रामीण भागात (खेड्यात) वास्तव्य करित आहे. या ग्रामीण लोकांचा प्रमुख व्यावसाय शेती आणि शेती पूरक व्यवसाय आहे. भारतात १९७१ पर्यंत शेती उद्योग पारंपारिक पध्दतीने केलेला दिसून येतो. यामध्ये पारंपारिक पध्दतीने शेतीची मशागत पारंपारिक बि. बियानांचा वापर, मानव आणि पशु श्रम शक्तीचा वापर केला जात असे. या पारंपारिक शेती उद्योग पध्दतीमुळे शेती उत्पादन मर्यादित होत असे.

भारतीय स्वातंत्र्यानंतर केंद्र सरकारने शेती उद्योगात तंत्रज्ञानाचा विकास करण्याकरिता १९५८ साली 'शेती विज्ञान आणि तंत्रज्ञान विकास धोरण' निश्चित केले तर के. पंतप्रधान श्रीमती इंदिरा गांधी यांनी ३ जानेवारी १९८३ साली शेती उत्पादनाला गती आणि आर्थिक विकास साध्य करण्याकरिता शेती तंत्रज्ञान धोरण समिती स्थापन केली. त्यानुसार शेतीच्या मशागती करिता यांत्रिक अवजारे, शेतीला पाण्याची सुविधा, संकरीत बि-बियाने रासायनिक खते, इत्यादीच्या निर्मितीला गती मिळाली.

पंतप्रधान नरेंद्र मोदी म्हणतात, भारताच्या आधुनिकीकरणातील विज्ञानाचे महत्व आपण जाणतो. विज्ञान आणि तंत्रज्ञानाविषयी आपल्या समाजात प्रेम निर्माण व्हायला हवे. शेतीचा दर्जा सुधारणे ग्रामीण भागाला आवश्यक आहे. त्या करिता शेतक-यांना परवडणाऱ्या दरात तांत्रिक साधने उपलब्ध करून देणे तेव्हाच भारताला उत्पादन क्षेत्रात अग्रेसर बनवणे शक्य होईल. त्यांच्या विचारा प्रमाणे शेतीचे तांत्रिक पध्दतीने व्यवस्थापन शेती मशागती करिता प्रशिक्षण आणि मेळावे घेतले जात आहेत. पिकांची लागवड, खतांचा वापर औषध फवारणी, इत्यादीचे मेळावे घेवून शेती उद्योगातील जागृती केली जात आहे. अशा तांत्रिक शेती उद्योगामुळे शेती उत्पादनात मोठ्या प्रमाणात वाढ झाली. या तांत्रिक शेती उद्योगात मानवी श्रमशक्तीचा अल्प उपयोग आणि यंत्र शक्तीचा मोठ्या प्रमाणावर वापर करून शेती उत्पादन वाढीचे दृश्य स्वरूप म्हणजेच 'शेती उद्योगातील डिजीटल स्वरूप' होय.

आधुनिक काळात ग्रामीण भागात (खेड्यात) सेवा सुविधांचा मोठ्या प्रमाणात विकास झाला आहे. त्यामध्ये दळण-वळणाकरिता पक्के रस्ते. वाहतूकीच्या सुविधा, वैद्यकीय व शैक्षणिक सुविधा, शासकीय कार्यालय आणि कर्मचारी सुविधा, बँकांची निर्मिती विद्युतीकरण इंटरनेट, टेलीव्हिजन व भ्रमणध्वनी सुविधा इत्यादीची उपलब्धता झाली. या सुविधामुळे ग्रामीण लोकांचे सेवा क्षेत्र डिजीटल बनले आहे. आज ग्रामीण भागात शेती उद्योग आणि सेवा क्षेत्रातील डिजीटल पध्दतीचे स्वरूप आणि त्याचा परिणाम यांचे अध्ययन करण्याकरिता प्रस्तुत अध्ययन विषयाची निवड करण्यात आली आहे.

सदरील संशोधनाला अनुसरून पुढील प्रमाणे उद्दिष्टे मांडण्यात आली आहेत.

### संशोधनाची उद्दिष्टे :-

- १) शेती उद्योगातील डिजीटलचे स्वरूप जाणून घेणे
  - २) शेती उद्योगातील डिजीटलच्या परिणामांचे अध्ययन करणे
  - ३) डिजीटल शेती उद्योगातील घटकांचा अभ्यास करणे.
- प्रस्तुत उद्दिष्टांच्या पूर्तते करिता खालील प्रमाणे गृहितके मांडण्यात आली आहेत.

### गृहितके :-

- १) शेती उद्योगातील डिजीटल पध्दतीमुळे उत्पादनाचा स्तर उंचावला आहे.
- २) शेतक-यांना तांत्रिक शेती पध्दतीच्या अनिवार्यतेची जाणीव झाली आहे.
- ३) औद्योगिककरणामुळे शेती उद्योगात डिजीटल पध्दत विकसीत झाली आहे.

सदरील गृहितकांच्या अध्ययना करिता पुढील प्रमाणे संशोधन पध्दतीचा अवलंब करण्यात आला आहे.

**संशोधन पध्दती :-** प्रस्तुत संशोधन लेख लिहिण्याकरिता प्रामुख्याने द्वितीय स्रोत सामुग्रीचा वापर करण्यात आलेला आहे. यामध्ये विविध संदर्भिय ग्रंथ, मासिके, शासनाचे अहवाल, वर्तमान पत्रातील संपादकीय लेख, प्रकाशित व अप्रकाशित प्रबंध, इंटरनेट इत्यादी साधनांचा आधार घेण्यात आला आहे. सदरील शोध निबंधाच्या मांडणी करिता वर्णनात्मक संशोधन पध्दतीचा अवलंब करण्यात आला आहे.

### विषय प्रतिपादन :-

आधुनिक काळात शेती उद्योग आणि सेवा क्षेत्राचे स्वरूप तांत्रिक बनले असून त्यामध्ये यंत्र शक्ती आणि तंत्रज्ञानाचा अवलंब केला जात आहे. त्यांचे घटक पुढील प्रमाणे दिसून येतात.

- १) आधुनिक काळात शेतीचे व्यवस्थापन हे तांत्रिक पध्दतीने केले जात आहे. त्यामध्ये शेतीचे सपाटीकरण, गाळभरणी, नाल्याची निर्मिती आणि बांध उभारणी केली जात आहे.
- २) शेती मशागतीकरिता ट्रॅक्टरद्वारे नांगरणी, मोगडणी, कुळवणी, पेरणी, केली जात आहे. पीक काढणी करिता काढणी यंत्र ऊसतोडणी करिता तोडणी यंत्र मळणी यंत्र वापरले जात आहे. त्यामुळे वेळेची, श्रमाची बचत होत आहे.
- ३) कोरडवाहु शेती पाण्याखाली यावी या करिता तलाव शेततळी, विहिर, टुबवेल, यांची सुविधा केली जात आहे. पाणी नियोजना करिता पाईपलाईन टिबक सिंचन, तुषार पध्दतीचा अवलंब केला जात आहे. शेती करिता अल्प दरात विद्युत पुरवठा मिळत आहे. यामुळे बागायती शेतीचे क्षेत्र वाढून शेती उत्पादनात वाढ होत आहे.
- ४) वर्तमान काळात शेती उत्पादनामध्ये मोठ्या प्रमाणात बदल होत आहेत. त्यामध्ये फळ बागायतीमध्ये द्राक्षे, केळी, लिंबुनी, संत्री, मोरंबी डाळींब, भाजीपाला, नगदी पिकामध्ये ऊस, कापूस, भुईमुग, सोयाबीन हरभरा, मोसंबी ही पिके घेतली जात आहेत. या पिकांमुळे शेतकऱ्यांचे आर्थिक उत्पादन वाढलेले दिसून येते.
- ५) शेती उत्पादीत मालाच्या सुरक्षिततेत व साठवणी करिता शासनाकडून शेती फार्महाऊस, कांदाचाळ, फळे व पालेभाज्या करिता शीतगृह निर्मिती करिता शासन अनुदान देत आहे. त्यामुळे अत्पादित माल खराब होता साठवून ठेवता येत आहे.
- ६) शासन व कृषि विद्यापीठे शेतकऱ्यांनी कमी क्षेत्रात दर्जेदार आणि जास्तीत जास्त उत्पादन काढवे या करिता कृषि प्रदर्शन मेळावे, मार्गदर्शन शिबीरे घेत आहे. ज्या शेतकऱ्यांनी आधुनिक बि-बियानांचा अवलंब केला त्यांच्या पिकांचे प्रदर्शन ठेवून आधुनिक बि-बियानांचे महत्व पटवून दिले जात आहे. शेतकऱ्यांना शेती उद्योगात येणाऱ्या समस्या सोडवण्या करिता मेळावे घेतले जात आहेत. या मेळाव्यात तज्ञांचे मार्गदर्शन दिले जात आहे. त्यामुळे आज शेतकरी आधुनिक शेती पध्दतीचा अवलंब करून कमी क्षेत्रात जास्तीत जास्त उत्पादन करित आहेत.
- ७) शेती उद्योगाची अवजारे आणि सुविधा खरेदी करिता शासनाकडून अनुदान आणि बँक व सोसायटी मार्फत कर्ज दिले जात आहे. शेती उद्योगात शेतकऱ्यांना तोटा होऊ नये या करिता पीकविमा योजना राबविली जात आहे. नैसर्गिक आपत्ती घडून आली तर शासनाकडून आर्थिक अनुदान मदत दिली जात आहे. अशा शासनाच्या आर्थिक मदतीमुळे शेतकऱ्यांचा आर्थिक स्तर उंचावलेला आहे.
- ८) शेतकऱ्यांच्या पिकाला योग्य भाव मिळावा या करिता शेतकरी संघटना १९३२ पासून स्थापन झाल्या आहेत. राजकिय क्षेत्रात दबावगट निर्मिती करिता शेतकरी कामगार पक्ष स्थापन झाला आहे. या संघटना मार्फत शासनाकडून पिकांचे हमीभाव बांधून घेतले जात आहेत. त्यांच बरोबर उत्पादीत माल शासनाने खरेदी करणे बंधनकारक केले आहे. त्यामुळे शेतकऱ्यांना उत्पादित मालाची चिंता राहिली नाही.
- ९) आधुनिक काळात शेती उद्योगा बरोबरच शेती पुरक व्यवसाय यावर भर दिला जात आहे. शेती पुरक व्यवसाया करिता शासनाकडून आर्थिक अनुदान व प्रशिक्षण दिले जात आहे. यामध्ये रेशीम उद्योग, शेळीपालन, कुक्कुटपालन, मच्छीपालन मदमाशीपालन, वन्हा पालन, दुग्ध व्यवसाय, गांडूळ खत उद्योग इत्यादी होय. या शेती पुरक व्यवसायांमुळे शेतकऱ्यांचे आर्थिक उत्पन्न व जीवन स्तर उंचावला आहे.

### ग्रामीण भागातील विकसीत सेवा सुविधा :-

वर्तमान काळात ग्रामीण लोकांना तांत्रिक व आधुनिक सेवा सुविधा उपलब्ध झाल्या आहेत. त्यामध्ये पक्के रस्ते, नाल्या व लाईटची व्यवस्था पिण्याकरीता शुध्द व शितजल व्यवस्था झाली आहे. ग्रामीण लोकांच्या आरोग्याचा स्तर उंचावण्या करिता खेड्यात प्राथमिक आरोग्य केंद्राची स्थापना केली आहे. त्यामध्ये डॉक्टर नर्स, आणि आशा स्वयंसेवीकांची नेमणूक करण्यात आली आहे. खेड्यात मुला-मुलींच्या शिक्षणाकरीता शाळा महाविद्यालय कृषी विद्यालय सुरु करण्यात आली आहेत. ग्रामीण लोकांना स्थानिक पातळीवर शासकीय कामकाजाकरीता तलाठी व ग्रामसेवक कार्यालय, ग्रामपंचायत, पोलिस चौकी, बँका इत्यादीची स्थापना करण्यात आली आहे.

ग्रामीण भागात संगणक, इंटरनेट, टेलिफोन, टेलिव्हिजन, आणि भ्रमणध्वनी इत्यादीची सुविधा झाली आहे. त्यामुळे ग्रामीण लोकांना स्थानिक पातळी पासून ते जागतिक पातळी पर्यंतची माहिती सहज उपलब्ध होत आहे.

### डिजिटल पध्दतीचा परिणाम :-

ग्रामीण उद्योग आणि सेवा क्षेत्रात डिजिटल पध्दती विकसीत झाल्यामुळे शेती उद्योगात मानवी श्रम कमी होवून यांत्रिक श्रमाला महत्व प्राप्त झाले आहे. ग्रामीण लोकांमध्ये तांत्रिक दृष्टीकोन निर्माण झाला आहे. त्यांचा जन संपर्क स्थानिक स्तरापासून तालुका, जिल्हा स्तरावर होत आहे. त्यांनी पारंपारिक व्यवसाय पध्दतीचा त्याग करून आधुनिक व्यवसाय पध्दती स्विकारली आहे. त्यांचे रहाणीमान जीवनपध्दती वैचारिक स्तर, आरोग्य आर्थिक दजा उंचावलेला दिसून येतो.

### अध्ययनाचे महत्व :-

प्रस्तुत अध्ययना अंतर्गत मांडण्यात आलेल्या विषय विवेचनात शेती उद्योग आणि सेवा क्षेत्रात डिजिटल पध्दती कशी विकसीत झाली आहे. हे स्पष्ट दिसून येते. या अध्ययना अंतर्गत संशोधक, विद्यार्थी, यांना शेती उद्योगात होत असलेले परिवर्तनाचे स्वरूप आणि परिणाम यांची सहज जाणीव होण्यास मदत होईल. त्याच बरोबर सेवा क्षेत्रामध्ये तंत्रज्ञानाचा सहभाग आणि सेवा क्षेत्रामध्ये तंत्रज्ञानाचा सहभाग आणि सेवाक्षेत्राचे बदलते स्वरूप यांची नोंद घेण्यास मार्गदर्शक ठरेल.

**सारांश :-**

शेती उद्योग आणि सेवा क्षेत्रातील डिजीटल पध्दती या अध्ययनात शेती उद्योगाचे होत असलेले तांत्रिक आणि यांत्रिक स्वरूप स्पष्ट दिसून येत आहे. या क्षेत्रातील डिजीटल पध्दतीच्या विकासामध्ये आधुनिकीकरण आणि औद्योगिकीकरणाची गती यांचा समावेश झालेला आहे. सेवा क्षेत्राचे स्वरूप तांत्रिक आणि विशाल होत असल्यामुळे विश्वाचे स्वरूप लहान होत असलेले स्पष्ट होते.

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## कॅशलेस प्रणाली आणि ग्रामीण अर्थव्यवस्था Digital Payment System and Rural Economy

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### कॅशलेस अर्थव्यवस्था:

एखाद्या वस्तुचे मूल्य अथवा सेवेचा मोबदला, देयकांचा भरणा डेबिट/क्रेडिट कार्डद्वारे अथवा इंटरनेटच्या आधारे बँकींग प्रणालीचा वापर करून अथवा मोबाईलवरील विविध ॲप्सच्या माध्यमातून करणे, त्याकरीता कोणत्याही प्रकारचे रोख कागदी चलन वापरले जात नाही त्यास रोकडविरहीत व्यवहार असे म्हणतात. ही सर्व प्रक्रिया ऑनलाईन प्रक्रियेद्वारे केली जाते यालाच कॅशलेस (Digital) म्हणतात.

आज जगातील एकही देश यापासून वंचित राहिलेला नाही. कॅशलेस व्यवहारामध्ये प्रगत राष्ट्रांचा मोठ्या प्रमाणात सहभाग वाढला आहे. मुख्यतः डेन्मार्क, नार्वे, स्वीडन हे देश वेगाने कॅशलेस व्यवहाराला प्राधान्य देत आहेत. कदाचित हे देश संपूर्णतः कॅशलेस होण्याच्या मार्गावर आहेत. परंतु भारतात अशी परिस्थिती निर्माण होण्यास फारच वेळ लागणार आहे. कारण आपल्या देशात अनेक सामाजिक- तांत्रिक अडचणी आहेत. त्यामध्ये वाढती लोकसंख्या, गरीबी, दारिद्र्य, अज्ञान, अनुभवी तज्ञ प्रशिक्षकांचा अभाव, तांत्रिक प्रणालीच्या माहितीचा अभाव, तांत्रिक प्रणालीच्या उपलब्धतेचा अभाव इत्यादी.

कॅशलेस व्यवहारामुळे काळा पैसा, भ्रष्टाचार कमी होईल अशा उद्देशाने प्रंतप्रधान नरेंद्र मोदींनी ५०० व १००० रुपयांच्या नोटा बंदीचा निर्णय तातडीने घेतला. संपूर्ण आर्थिक व्यवहार कॅशलेस करण्यासाठीचा प्रयत्न चालू आहे. पण त्यामध्ये अनेक अडथळे आहेत. हे अडथळे कमी केल्याशिवाय आपल्या देशात कॅशलेस यंत्रणा पूर्णपणे यशस्वी होईल असे वाटत नाही. दैनंदिन व्यवहार करण्याकरिता प्रत्यक्ष चलनांची देवाण-घेवाण अथवा खरेदी-विक्री करण्यासाठी चलनाशिवाय पर्याय उरत नाही. कारण हा व्यवहार दोन्ही बाजूने होणे महत्त्वाचे आहे. सद्यस्थितीत अजूनही कॅशलेस व्यवहार मोबाईलद्वारे ऑनलाईन करता येतात असे नाही कारण बहुसंख्य नागरिकांना ते हाताळता येत नाहीत किंवा व्यवहार करता येत नाहीत. याबाबत प्रचंड अज्ञान आहे.

### रोखीनेच व्यवहार करणे:

आजही ग्रामीण भागात बहुसंख्य म्हणजे जवळपास ९३ टक्के व्यवहार हे रोखीनेच केले जातात. फार मोठ्या प्रमाणात असंगठित क्षेत्र असल्याने तिथे रोखीनेच व्यवहार करावा लागतो. येथे डिजिटल साक्षरतेची गरज नसते.

वाढता ए टी एमचा वापर:

ए टी एमचा वापर प्रामुख्याने रोखीने पैसे काढण्यासाठी केला जातो आणि इतर ऑनलाईन व्यवहार टाळले जातात. आपल्याकडे फार मोठ्या प्रमाणात ए टी एम कार्ड आहेत. २४ कोटी पेक्षाही अधिक ए टी एम कार्ड उपलब्ध आहेत. परंतु आज ८० टक्के व्यवहार रोखीनेच पैसे काढण्याकरीताच केले जातात. कार्डच्या माध्यमातून व्यवहार करणाऱ्यांची संख्या ही शहर-निमशहरी भागात अधिक प्रमाणात आहे. परंतु ग्रामीण भागात यांची खुपच कमतरता दिसून येते.

ग्रामीण भागात मोबाईल - इंटरनेट सुविधांचा अभाव:

रोकडविरहीत व्यवहारांसाठी इंटरनेटची जोडणी असणे अत्यावश्यक असते. ग्रामीण भागामध्ये ही इंटरनेटची जोडणी ही अत्यंत अल्प प्रमाणात उपलब्ध आहे. तसेच गरीब, अशिक्षित आणि स्मार्टफोन खरेदी शिवाय पर्याय उपलब्ध नाही आदि समस्यांना ग्रामीण भागातील लोकांना तोंड द्यावे लागते. यामुळे प्लास्टिक मनीच्या व्यापक व्यवहारांवर मर्यादा येत असल्याचे दिसून येते.

ग्रामीण भागात खाजगी बँकांचा हळूवार प्रवेश:

खाजगी क्षेत्रातील बँका ग्रामीण भागात हळूवारपणे आपले अस्तित्त्व निर्माण करू पहात आहेत. २०१४ च्या वार्षिक आर्थिक सर्वेक्षणात हे नमूद करण्यात आले आहे. खाजगी क्षेत्रातील बँकांपैकी त्याच्या नवीन शाखांमधील ५० ते ६५ टक्के शाखा या ग्रामीण भागात सुरु केल्या असल्याचे दिसून येत आहे. खाजगी क्षेत्रातील नामांकित अशा ICICI, AXIS, HDFC, YES इत्यादी बँकांनी विस्तारादरम्यान बँक नसलेल्या ठिकाणी किंवा कमी बँका आहेत अशा ठिकाणी गेल्या पाच-सात वर्षात आपली मोठी हजेरी लावली आहे. रिझर्व्ह बँकेने ग्रामीण क्षेत्रातील ज्या विभागात बँका नाहीत अशा ठिकाणी शाखा विस्तारास प्राधान्य देण्याचे आदेश २०१३ ते २०१६ या त्रैवार्षिक योजनेअंतर्गत दिलेले आहेत. रिझर्व्ह बँकेने नवीन सुरु होणाऱ्या शाखांपैकी २५ टक्के शाखा या ग्रामीण क्षेत्रात सुरु करण्याचे निर्देश दिले आहेत. त्याच प्रमाणे मध्यवर्ती बँक ज्या ठिकाणी २५ टक्क्यांपेक्षा अधिक शाखा उघडल्या जातील त्यांना अर्थसहाय्य देत आहेत.

### विक्रीच्या मूलस्थानी साधनांची कमतरता:

रिझर्व्ह बँकेच्या अहवालानुसार १.४४ दशलक्ष ठिकाणी विक्रीच्या मूलस्थानी यंत्रणा अस्तित्त्वात आहे. ही यंत्रणा अनेकविध ठिकाणी बँकांनी सुरु केली आहे. असे जुलै २०१६ च्या अहवालात नमूद करण्यात आले आहे. बहुतेक यंत्रणा ही शहरी अथवा निमशहरी भागात आहे.

ग्रामीण भागातून फार मोठी रक्कम पाठवितांना अनेक समस्यांना तोंड द्यावे लागते. मात्र या सर्व सुविधांमध्ये कमीत कमी छोटी रक्कम पाठविता येत नाही. कारण त्याला अधिक कमीशन द्यावे लागते. उदा: ५, १०, २०, ५०, १०० असा व्यवहार करताना रक्कमेपेक्षा जादा कमीशन मोजावे लागते.

संगणक यंत्रणा व त्याकरीता लागणारी इतर साधने ही सर्वसामान्यांना परवडणारी नाहीत. तसेच एखादे उपकरण बंद पडल्यास त्याला दुरुस्त करण्यासाठीचा तज्ञ, प्रशिक्षित वर्ग नसल्याने अनेक वेळा ऑनलाईन व्यवहार बंद पडतात. एखादा गंभीर प्रसंग असल्यास पैशांची देवाण-घेवाण करताना ग्रामीण भागातील जनतेने विविध समस्यांना तोंड द्यावे लागते. वाढती लोकसंख्या, वाढता बँकांचा ऑनलाईन व्यवहार यामध्ये चलनविरहीत व्यवहार करणे अडचणीचे होऊन बसले आहे. आधुनिक काळात तंत्रज्ञान वाढले पण त्याचा पाहिजे तसा उपयोग करता येत नाही. एखादे उपकरण कसे वापरावे यांची माहिती फारशा लोकांना नाही.

समारोप:

२१ वे शतक म्हणजे माहिती तंत्रज्ञानाचे शतक मानले जाते. माहिती तंत्रज्ञानाच्या युगात एका नवीन क्रांतीमुळे माध्यमांची गुणवत्ताही वाढली आहे. थोडक्यात काय? संवाद क्रांतीचे युग निर्माण झाले आहे. सोशल मिडीयाच्या माध्यमांतून जनसंपर्क वाढला असून यामुळे मुलभूत माहिती व शिक्षण होणे सोपे झाले आहे. यामुळे प्रत्येक व्यवहार गतीमान बनला आहे. याचा फायदा ही अनेकजण मोठ्या प्रमाणात घेत आहेत. भारताने खाऊजा धोरण स्विकारल्यामुळे बदलत्या तंत्रज्ञानाचे देखील आव्हान स्विकारावे लागणार आहे. आव्हाने स्विकारताना त्यातील मुलभूत अडथळे दूर झाले पाहिजेत. विशेष करून ग्रामीण अर्थव्यवस्था ही कृषी प्रधान असल्याचे बहुसंख्येने नागरीक ग्रामीण भागात रहातात. हा चलनविरहीत व्यवहार पूर्णपणे ग्रामीण भागात अयशस्वी झाल्याचे चित्र दिसून येते. त्याला अनेक कारणे जबाबदार आहेत. मुलभूत गरजा किंवा भौतिक सुविधा उपलब्ध झाल्याशिवाय पूर्णपणे कॅशलेस प्रणाली यशस्वी होणार नाही. कॅशलेस व्यवहारासाठी जनजागृती होणे गरजेचे असून त्याची अंमलबजावणी करण्यासाठी कल्याणकारी योजनांना बँक खात्यांमार्फत जोडणे एक धोरणात्मक निर्णय ठरू शकेल. समृद्ध पायाभूत बँकिंग व्यवस्था ही कॅशलेस व्यवहारांसाठी मोठी गरज आहे. आर्थिक साक्षरतेची मोहिम राबविणे महत्त्वाचे आहे. आर्थिक कौशल्य आणि क्रेडिट मॅनेजमेंट या विषयावर संवाद किंवा चर्चा सत्रे आयोजित झाली पाहिजेत.

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७. दै. महाराष्ट्र टाइम्स, ई पेपर



## भारतातील वित्तीय व्यवहारांच्या संदर्भात डिजिटल पेमेंट सिस्टम - एक दृष्टिक्षेप

### संशोधक विद्यार्थीनी

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### मार्गदर्शक प्रा. डॉ. अशोक कोरडे

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### गोषवारा :

भारतातील बँकिंग व्यवहाराचे स्वरूप डिजिटल पेमेंट सिस्टीममुळे बदलले आहे. दहा वर्षांपूर्वीचा कालावधी पाहिला तर बँकामार्फत कोणतेही आर्थिक व्यवहार करण्यासाठी, देयके हस्तांतरीत करण्यासाठी कमीत कमी ५ ते १० दिवस आवश्यक आहेत परंतु डिजिटल पेमेंट सिस्टीममुळे आता काही सेकंदांच्या अवधीत देयके दिली जातात. ही क्रांती एका दिवसात घडली नसून ती काही काळात घडून आली. या अभ्यासामध्ये दुय्यम डेटाच्या मदतीने भारतातील डिजिटल पेमेंट सिस्टीमच्या बदलावर लक्ष केंद्रीत करतात या अभ्यासावरून असे लक्षात येते की, भारतातील डिजिटल पेमेंट सिस्टीममुळे आर्थिक व्यवहार वाढला आहे.

### प्रस्तावना :

मायकेल ऑल्डरिकने १ जानेवारी १९७९ मध्ये जगातील डिजिटल पेमेंट सिस्टीम तंत्रज्ञानाची ओळख करून दिली. त्यामुळे ग्राहकांना फोन व इलेक्ट्रॉनिक माध्यमातून थेट खरेदी करता येऊ शकेल. याची शाश्वती येते. त्यांच्या या नाविन्यपूर्णतेने प्रशस्त तंत्रज्ञानाद्वारे व्यावसायिकांना आणि ग्राहकांना इलेक्ट्रॉनिक पध्दतीने त्यांचे पैसे हस्तांतरीत करण्याचा एक नविन मार्ग प्राप्त झाला. ही प्रक्रिया १०० टक्के सुरक्षित होती आणि खरेदी त्वरीत होते. इंटरनेट जगभरात पसरल्यानंतर डिजिटल पेमेंटची सुरुवात झाली. ९० च्या दशकाच्या पूर्वार्धात स्टॅनफोर्डमध्ये फेडरल क्रेडीट युनियन (१९९४) ची स्थापना झाली. वित्तीय संस्था जी तिच्या सर्व सभासदांना ऑनलाईन इंटरनेट बँकिंग सेवा देते. ऑनलाईन आणि ऑफलाईन व्यवहार आंतर व्यासपिठावर होत आहेत हे प्रामुख्याने इंटरनेट कनेक्शनसह तंत्रज्ञानाने उत्कृष्ट मोबाईल डिव्हाइसच्या दोलायमान विस्ताराशी संबंधित आहे आणि जे किरकोळ विक्रेते आपआपल्या स्मार्टफोनसह त्यांच्या विट आणि मोटार स्टोअरमध्ये पैसे देण्याची परवानगी देतात ते आजकाल अप्रत्यक्ष आहेत.

डिजिटल पेमेंट म्हणजे देय देण्याचा एक मार्ग आहे डिजिटल मोडद्वारे, डिजिटल पेमेंटमध्ये ग्राहक आणि व्यापारी दोघेही पैसे पाठविण्यासाठी आणि प्राप्त करण्यासाठी वापरण्याच्या डिजिटल पध्दती वापतात. याला इलेक्ट्रॉनिक पेमेंट असेही म्हणतात. डिजिटल पेमेंटमध्ये कोणतीही कठोर रोख गुंतलेली नाही. डिजिटल पेमेंटमधील सर्व व्यवहार ऑनलाईन केले जातात. आर्थिक व्यवहार करण्याचा हा त्वरीत आणि योग्य मार्ग आहे.

### अभ्यास पध्दती :

प्रस्तुत अभ्यास हा पूर्णपणे द्वितीय साधन सामग्रीवर आधारित असून या अभ्यासासाठी डिजिटल पेमेंट सिस्टीम संदर्भात दैनंदिन वर्तमानपत्रे, मासिके, संदर्भग्रंथ, इंटरनेट माहिती इ. आधार घेण्यात आलेला आहेत.

### अभ्यासाची उद्दिष्ट्ये :

प्रस्तुत अध्ययनाची प्रमुख उद्दिष्ट्ये पुढील प्रमाणे आहेत.

१. भारतातील डिजिटल पेमेंट पध्दतीचा अभ्यास करणे.
२. भारतातील डिजिटल पेमेंट सिस्टीमचा फायदे व नुकसान याचा अभ्यास करणे.

### भारतात डिजिटल पेमेंटची पध्दत :

बँक व्यवसायात स्वतःची इंटरनेट बँकिंग सुविधा आहे. इंटरनेट बँकिंग हा डिजिटल पेमेंटचा जुना मार्ग आहे. ग्राहक कमी शुल्कासह मनी टान्सफरसाठी इंटरनेट बँकिंगचा उपयोग करू शकतात. इंटरनेट बँकिंगचा वापर सहसा नॅशनल इलेक्ट्रॉनिक फंड ट्रान्सफर, (एन. एफ.टी.) रिअल टाइम ग्रॉस सेटलमेंट (आर.टी.जी.एस.) किंवा त्वरीत पेमेंट सर्व्हिस (आय.एम.पी.एस.) मार्फत ऑनलाईन फंड ट्रान्सफर करण्यासाठी केला जातो. युनिफाइड पेमेंट इंटरफेस (यु.पी.आय.अॅप्स) यु पी आय अॅप्स पैसे पाठविण्याचा द्रुत उपाय आहे. व्हर्च्युअल पेमेंट अॅड्रेस किंवा भारतातील फायनान्शियल सिस्टम कोड आणि खात्याचा क्रमांक वापरणे. यु.पी.आय किंवा युनिफाइड पेमेंट इंटरनेटफेस एक पेमेंट मोड आहे. जो मोबाईल अॅपद्वारे बीएचआयएम अॅप्सद्वारे फंड ट्रान्सफर करण्यासाठी वापरला जातो. आम्ही युपीआय अॅप्स वापरून दुसऱ्या खात्यात निधी हस्तांतरीत करू शकतो. युपीआयची एकमात्र मर्यादा आहे.

AEPS/AEPS चा अर्थ आहे आधार आधारित डिजिटल पेमेंट मोड ईपीएस म्हणजे आधार सक्षम पेमेंट सेवा कोणत्याही व्यापाऱ्याला पैसे भरण्यासाठी फक्त आधार क्रमांक आवश्यक आहे. ईपीएस ही बँक ते बँक व्यवहार आहे म्हणून आपण दिलेला पैसा आपल्या खात्यातून खाली येईल आणि थेट दुसऱ्या खात्यात जमा होईल. कार्ड बँक आणि इतर काही संस्थांनी आरबीआय ने अधिकृत क्रेडीट कार्ड जारी केले. क्रेडीट कार्ड आपल्याला पैसे काढण्यासाठी अतिरिक्त पैसे वापरण्याची सुविधा देतात. आम्ही देशांतर्गत आणि आंतरराष्ट्रीय पेमेंटसाठी क्रेडीट कार्ड वापरू शकतो. बँकेने आपल्या खात्यावर डेबिट कार्ड जारी केले आहेत. आमच्या खात्यात शिल्लक असताना आम्ही डेबिट कार्ड वापरू शकतो. आमच्या खात्यातून डेबिट कार्ड डेबिटसह दिलेली देयके आणि तत्काळ दुसऱ्या खात्यात जमा होतात. दरम्यान देय देयक करण्यासाठी आम्ही डेबिट कार्ड वापरू शकतो.

व्यापाऱ्यांना पैसे देताना प्रत्येक व्यवहारावरील २.० टक्के ई वॉलेटस ही अधिक कार्यक्षमतेसह आपल्या भौतिक वॉलेटचा डिजिटल मोड आहे. आम्ही आमचेपैसे ई वॉलेटमध्ये ठेवू शकतो तसेच फोन रिचार्ज करण्यासाठी ई वॉलेट वापरू शकतो. वीज बीलांचा उपयोग करतो वेगवेगळ्या ठिकाणी पैसे भरतो आणि आपल्या मित्रांना पैसे पाठवू शकतो. ई वॉलेटपैकी काही फोन पे, गुगल पे, पेट्टीएम इ.

### डिजिटल पेमेंट सिस्टीमचे फायदे :

१. **सोयीस्कर वेगवान आणि सुलभ** : डिजिटल पेमेंट सिस्टीम अधिक सोयीस्कर, वेगवान आणि सुलभ पेमेंट सिस्टीम आहे. हे वेळेची बचत करते, डिजिटल पेमेंटस ग्राहकांना बँकेच्या सुट्टीसह २४/७ च्या आधारावर आणि वर्षाच्या सर्व दिवसावर उपलब्ध असतील.



२. **अर्थव्यवस्था लाभ** : अर्थव्यवस्थेत वित्तपुरवठा करण्याचा सर्वात सोपा मार्ग आहे. डिजिटल फूट प्रिंट डिजिटल पेमेंटमधील सर्वात मोठा फायदा म्हणजे सर्व व्यवहारांची नोंद ठेवली जाऊ शकते. डिजिटल देयकाचे फायदे म्हणजे वापरकर्त्याने केलेल्या प्रत्येक व्यवहाराचा मागोवा घेऊ शकतो.
३. **ब्लॉक मनी कंट्रोल** : डिजिटल पेमेंटमुळे सरकार विविध वित्त गोष्टीचा मागोवा ठेवू शकेल आणि काळा पैसा आणि बनावट नोटांचा प्रवाह कमी करण्यासाठी याचा उपयोग केला जातो.
४. **कमी धोका** : जुन्या आर्थिक तुलनेत डिजिटल पेमेंट सुरक्षित आहे. व्यवहार करणे त्यांच्यावर सुरक्षित प्रवेशद्वार प्रक्रिया केली जाते ती जिओ डिजिटलमध्ये हस्तक्षेप करण्यास कठीण असतात परंतु डिजिटल देयकाचा मोठा फायदा म्हणजे ही सिस्टीम वापरण्यासाठी सवलत मिळवणे होय.
५. **भ्रष्टाचारास आळा घालणे** : भारतासारख्या अफाट लोकसंख्येच्या देशातील भ्रष्टाचार नियंत्रण ठेवणे कठीण आहे. परंतु भारतामध्ये मोठ्या प्रमाणात रोख स्वरूपात व्यवहार केले जातात. यावर उपाय म्हणून डिजिटल पेमेंट सिस्टीम व्यवहारामुळे भ्रष्टाचाराला आळा बसण्यास मदत होईल.
६. **आर्थिक समावेशकता वाढेल** : डिजिटल पेमेंट सिस्टीममुळे सरकारला किमान वेतन कायद्यावर लक्ष देता येईल. ज्या ठिकाणी बँकिंगच्या सुविधा नाहीत अशा ठिकाणी इ पेमेंट किंवा मोबाईल बँकिंगच्या माध्यमातून सहज व्यवहार करता येणार आहे. तसेच कल्याणकारी योजनाचा निधी लाभार्थ्यांच्या खात्यात सहज पोहचवता येणार आहे.

**नुकसान :**

१. **इंटरनेट कनेक्टिव्हिटी** : इतर देशाच्या तुलनेत केवळ भारतात इंटरनेट पेस डिजिटल पेमेंट ची कार्यक्षमता कमी आहे.
२. **सायबर गुन्हे** : देशात सायबर सिक्युरिटी व्यवस्था सुरक्षित नाही त्यामुळे खात्यातील पैसे चोरीला जाण्याची भिती कायम असणार आहे. त्यामुळे भारत सध्या डिजिटल पेमेंट व्यवहाराला चालना देण्यासाठी आणि सुरक्षित ठेवण्यासाठी दुसऱ्या देशासोबत काम करत आहे.

**संदर्भ सूची :**

१. समावेशक बँकिंग - Indian Institute of Banking & Finance
२. पुणे जिल्हा सहकारी बँक लेखनिक - यशोदा पब्लिकेशन, पुणे
३. आधुनिक बँक व्यवसाय - निराली प्रकाशन
४. महाराष्ट्र टाईम्स - वृत्तपत्र
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## कॅशलेस अर्थव्यवस्था आणि नवे पर्याय

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८ नोव्हेंबर २०१६ रोजी रात्री ८ वाजता देशाचे पंतप्रधान नरेंद्र मोदींनी देशाला उद्देशून केलेल्या भाषणात ५०० व १००० रुपयांच्या नोटा चलनातून रद्द केल्याची घोषणा केली. बँकांचे सर्व व्यवहार बंद झाल्यानंतर केलेल्या या घोषणेनंतर देशभरातील सुमारे दोन लाख ATM च्या बाहेर लांबच लांब रांगा लागल्या. रात्री १२ पूर्वी प्रत्येकाला चलनी नोटा हव्या होत्या. त्यादेखील शंभरच्याच त्यामुळे जो तो ४०० रुपयेच बँकेतून काढू लागला. कारण दुसऱ्या दिवशी बँका बंद राहणार होत्या. त्यामुळे ज्याच्याकडे डेबिट, क्रेडिट असे कोणतेही कार्ड होते. त्या प्रत्येकाने ATM कडे धाव घेतली. चलनातील या बदलाबाबत नेमकी माहिती कळत नव्हती आणि नेमकं काय करायचं ते देखील माहित नव्हतं पण एक मात्र निश्चित होते की, प्रत्येकाला रोख चलन हवे होते. त्यातही कागदी नोटांची गरज आहे. या प्रक्रियेला काळा पैसा बाहेर काढण्याचे कारण दिले जात होते. तसेच बनावट नोटांवर आळा हे देखील कारण सांगितले जात होते. त्याच बरोबर कॅशलेस अर्थव्यवस्थेचे दिवस आल्याचा किंवा लवकरच येऊ घातले असल्याचा दावा काही लोकांकडून केला जाऊ लागला. अगदी संसदेत देखील या कॅशलेस शब्दाचे पडसाद उमटले. पंतप्रधानांच्या प्लास्टिक मनी वापरण्याच्या सुचनेवर विरोधक देशातील प्लास्टिक मनीच्या मर्यादित विस्ताराची आकडेवारी घेऊन तुटून पडले आणि अनेक वर्षांपासून ज्याची गरज भारतीय अर्थव्यवस्थेला होती व जे प्रत्यक्षात आणणंसुद्धा शक्य होतं ते आता घडताना दिसत आहे ते म्हणजे कॅशलेस व्यवहार !

कोणतीही वस्तु अथवा सेवा खरेदी करण्यासाठी रोख चलन न देता त्या वस्तु अथवा सेवेचे मुल्य इतर मार्गाने (डेबिट/क्रेडिट कार्डासारखे प्लास्टिक मनीचे पर्याय किंवा पैसे देण्याच्या, खरेदी, विक्री करण्याच्या सुविधा देणारी पोर्टल्स) संबंधित विक्रेत्याच्या खात्यात जमा करणे हा त्यापैकी एक भाग झाला. तसेच प्रत्यक्ष बँकेत न जाता बँकिंगचे सर्व व्यवहार इंटरनेटच्या माध्यमातून घरबसल्या संगणक अथवा मोबाईलच्या माध्यमातून करणे (डिजिटल बँकिंग) हा त्यातील दुसरा भाग झाला. विविध करांचा भरणा देखील या पध्दतीने करता येणे, एका खात्यातून दुसऱ्या खात्यात पैसे हस्तांतरण करणे, देयकांचा भरणा करणे याचादेखील यात समावेश केला जातो. चलनबंदीच्या घोषणेनंतर या सर्व पर्यायांकडे लोकांचा ओघ वाढणे अगदीच साहजिक म्हणावे लागेल.

देशात साधारण ३० वर्षांपूर्वी केवळ डेबिट आणि क्रेडिट कार्ड हे दोन व्यवहारांचे पर्याय होते. नंतरच्या काळात इंटरनेट बँकिंगचा पर्याय उपलब्ध झाला आणि पाठोपाठ इंटरनेट बँकिंग तसेच कार्डाचा वापर करून वस्तु, सेवा खरेदी कर अथवा देयके भरणा, तिकीट विक्री अशा सुविधा मिळू लागल्या. अर्थात तेव्हादेखील सारा भर होता तो कार्डाच्या आधारे प्रत्यक्षात त्या ठिकाणी स्वाइप मशीनच्या आधारे पैसे देण्यावर.

साधारण १५ वर्षांपूर्वी इंटरनेट बँकिंग स्थिरावू लागले आणि चार-पाच वर्षांपूर्वी स्मार्ट फोन या घटकाने या क्षेत्रात प्रवेश केला. स्मार्ट फोनमुळे या सर्व व्यवहारांची व्याख्याच बदलून टाकली. अर्थातच कॅशलेसदेखील ही पध्दती त्वरेने अंगीकारली. विशेषतः व्यापारी बँकांनी, अँड्रॉइड आणि आयओएस प्रणाली, थ्रीजी इंटरनेट सुविधा आणि आता 4 G इंटरनेट सुविधा यामुळे मोबाइल क्षेत्रात क्रांतीच झाली. या तंत्रज्ञानातील क्रांतीचा आर्थिक व्यवहारांना थेट फायदा झाला. किंबहुना मोबाइलद्वारा होणाऱ्या आर्थिक व्यवहारांमुळे अर्थव्यवस्थेत एक प्रकारे मोठा बदल झाला असे म्हणता येईल. मात्र एकूण व्यवहाराच्या तुलनेत हा बदल मर्यादितच म्हणावा लागेल.

भारतीय 'रुपे' या यंत्रणाधारित कार्डाच्या वापरात १०० टक्क्यांनी वाढ झाली. अनेक अॅप्सच्या माध्यमातून उत्पादन आणि सेवा खरेदी विक्रीच्या व्यवहारात ५० टक्के वाढ झाली. कॅशलेस व्यवहाराच्या सुविधा देणारे मोबाइल अॅप पोर्टल्सनी अनेक सवलती जाहीर केल्या. प्रत्येकाला या व्यवहारात आपला सहभाग वाढवायचा होता. समाजातील सर्वच स्तरात कॅशलेस व्यवहारात वाढ होत गेली तर बँकांमध्ये जुन्या नोटा बदलणे व जमा करणे हेच काम गेले पंधरा दिवस प्रामुख्याने होताना दिसते. पण याचा अर्थ आपली अर्थव्यवस्था कॅशलेस व्यवस्थेकडे झुकत आहे असेच म्हणावे लागेल.

आपल्या देशाची लोकसंख्या सुमारे सव्वा अब्ज इतकी आहे. एका अंदाजानुसार त्यापैकी निम्म्याहून अधिक नागरिक बँकिंगच्या परिघात येत नाहीत. रिझर्व्ह बँकेच्या आकडेवारीनुसार देशभरात बँकेच्या माध्यमातून सप्टेंबर २०१६ मध्ये झालेले एकूण व्यवहार (दोन लाख तीन हजार सहाशे सत्तेचाळीस) २०३६४७.८० अब्ज रुपये आहेत. यामध्ये बँक खात्याशी निगडित सर्व व्यवहार येतात. एकूण व्यवहारापैकी २४१.९८ अब्ज रुपयांच्या व्यवहारासाठी क्रेडिट कार्डाचा पीओएस मशीनवर वापर करण्यात आला. तर M वॉलेटचा वापर करून ३१.९२ अब्ज रुपयांचे व्यवहार करण्यात आले आहेत. मोबाइल बँकिंगच्या माध्यमातून ७७६.८८ अब्ज व्यवहार झाले. सप्टेंबर २०१६ मध्ये आपल्या देशात ७२८.१६ दशलक्ष डेबिट कार्डधारक आहेत. तर २६८६ दशलक्ष डेबिट कार्डधारक आहेत. थोडक्यात काय तर एकूण व्यवहाराच्या तुलनेत कॅशलेस व्यवहारातील हे महत्वाचे घटक तसे कमीच आहेत.

ज्येष्ठ अर्थतज्ञ अभय टिळक याबाबत असे सांगतात, "कॅशलेस अर्थव्यवस्था ही आर्थिक विकासाच्या प्रवासात बऱ्याच प्रगल्भ पातळीवर येणारा टप्पा आहे. आपल्याला कॅशलेस अर्थव्यवस्था हवी आहे म्हणून व्यवस्थात्मक बदल राबवून किंवा लादून एकदम या

अवस्थेत जाता येत नाही. त्याचे कारण आपल्या अर्थव्यवस्थेत दडलेलं आहे. आपल्या अर्थव्यवस्थेतील लोकसंख्येचे उपजीविकेचे साधन शेती हे आहे. जवळपास ६६ टक्के लोकसंख्या ग्रामीण आहे. विकासाच्या बाबतीत राज्याराज्यांतच नाही तर राज्या-राज्यांतर्गत देखील तफावत आहे. जवळपास निम्मा भारत बँकिंग कल्चर-संस्कृतीच्या बाहेर आहे. जनधनच्या माध्यमातून खात्यांची संख्या वाढली असली तरी बँकेच्या माध्यमातून व्यवहार करण्याची संस्कृती आपल्याकडे अजून रुजलेली नाही त्याचं कारण म्हणजे आपले दरडोई उत्पन्न होय.

ज्या अर्थव्यवस्थेचा पाया हा नवीन संस्कृती स्विकारायला उत्क्रांत झालेला नसेल किंवा सक्षम झालेला नसेल, तेथे ही संस्कृती लादली तर या संक्रमण काळात खुप अडचणी निर्माण होतील.

- १) अर्थकारणात बदल घडून येणे.
- २) शेतीकडून बिगर शेतीकडे अतिरिक्त मनुष्यबळ वळणे.
- ३) सरासरी उद्योगधंद्याचे आकारमान वाढणे.
- ४) असंघटीत क्षेत्रामधून संघटीत क्षेत्रात अधिक उद्योग निर्माण होणे.
- ५) रोजगाराचा दर्जा वाढणे.
- ६) सरासरी उत्पन्न या घटकांची गरज कॅशलेस अर्थव्यवहारांची नवीन संस्कृती रुजवण्यासाठी आहे.

नवनवीन तंत्रज्ञान आत्मसात करणे आणि ते राबवणे यासाठीचे कौशल्य, प्रगल्भता आपल्याकडे आहे. पण हे तंत्रज्ञान व्यवहारात राबवण्यासाठी ज्या पूरक गोष्टी आवश्यक आहेत त्याची कमतरता आहे याचे उत्तम उदाहरण म्हणजे एनएफसी तंत्रज्ञानाचा डेबिट कार्डांमधील वापर NFC = Near Field Communication आपले डेबिट कार्ड स्वाइप करण्याऐवजी केवळ त्या मशिनपुढे धरायचे की तुमच्या खात्यातून ती रक्कम वजा होणार, पण सध्या अशी POS मशीनच आपल्याकडे नाहीत. येणाऱ्या कांही काळात अशी मशीन्स वापरली जाऊ शकते. POS मशीन विकत घ्यायचे असेल तर दहा हजारांच्या आसपास खर्च येतो. त्यामध्ये नवे तंत्र आले तर तो खर्च वाढत जाणार. त्यासाठी व्यापाऱ्यांची मानसिकता तयार होण्याची गरज आहे.

एकुणच POS मशीनचा खर्च कमी व्हावा असे वाटत असेल किंवा हा खर्च पेलण्यासाठी क्षमता यावी असे वाटत असेल तर एकुणच कॅशलेस व्यवहारांचे व्हॉल्यूम वाढण्याची गरज आहे. सध्या व्हॉल्यूम कमी म्हणून खर्च अधिक आणि खर्च अधिक म्हणून त्याचा वापर करण्याचे प्रमाण कमी अशी अवस्था आहे. आज देशात १४ लाखांच्या आसपास POS मशीन्स आहेत. अंदाजानुसार ही गरज दोन कोटीची आहे. याचा वापर कानाकोपऱ्यात पोहचवण्याचे तांत्रिक ज्ञान आहे पण त्यासाठीच्या आधारभूत व्यवस्थेची कमतरता आहे. त्यामुळे हे प्रकरण कॉंबडी आधी की अंडे असे झाले आहे. कॅशलेस व्यवहार सुरळीत होण्यासाठी तीन महत्वाच्या गोष्टींची गरज अभय टिळक हे सांगतात.

- १) मोबाईल कनेक्टिव्हिटी
- २) अखंडित विजेचा पुरवठा
- ३) किमान डिजिटल साक्षरता

भारतीय दुरसंचार नियामक प्राधिकरणाच्या मार्च २०१६ च्या अहवालानुसार भारतातील मोबाईल वापरकर्त्यांचा आकडा १०१.७० कोटीवर पोहोचला आहे. तर इंटरनेट अॅन्ड मोबाईल असोसिएशन ऑफ इंडियाच्या अहवालानुसार २०१५ डिसेंबरमध्ये भारतात मोबाईलद्वारा इंटरनेट वापरकर्त्यांची संख्या ३०६ दशलक्ष इतकी होती. जून २०१६ मध्ये ती २१ टक्के वाढून ३७१ दशलक्षापर्यंत पोहचण्याचा अंदाज वर्तवण्यात आला. इंटरनेट अॅन्ड मोबाईल असोसिएशन ऑफ इंडियाच्या अहवालानुसार मोबाईल इंटरनेट वापरकर्त्यांपैकी २१९ दशलक्ष वापरकर्ते शहरी भागातील होते. २०१४ पेक्षा २०१५ मध्ये ग्रामीण भागातील मोबाईल इंटरनेट वापरकर्त्यांची संख्या दुप्पट झाली.

#### शहरी भागातील मोबाईल वापरकर्ते      ग्रामीण भागातील मोबाईल वापरकर्ते

१. ऑनलाईन संपर्कासाठी	- ८० %	-
२. सोशल नेटवर्किंगसाठी	- ७४ %	३७ %
३. मनोरंजनासाठी	- ३० %	५२ %
४. ऑनलाईन शॉपिंगसाठी	- १३ %	०१ %
५. ऑनलाईन तिकीट बुकिंगसाठी	- ११ %	०४ %

#### कॅशलेस अर्थव्यवस्था :

कॅशलेस अर्थव्यवस्थेनुसार आर्थिक व्यवहारासाठी कॅश/रोख रक्कम वापरण्याऐवजी इतर पर्याय वापरले जातात. जसे प्लॅस्टिक मनी इ. वॉलेट, इंटरनेट बँकिंग ज्यामध्ये छापील नोटांचा अजिबात समावेश नसतो. या प्रकारच्या अर्थव्यवस्थेची भारताला नक्कीच गरज आहे. ही व्यवस्था मोठ्या प्रमाणात आणणसुद्धा शक्य आहे. भारतीयांमधील वाढलेला फोनचा वापर यासाठी अधिक उपयुक्त ठरणार आहेच! यामुळे सर्व व्यवहार बऱ्यापैकी पारदर्शक असतील, सुरक्षित असतील आणि त्यामुळे काळ्या पैशाला/ गैरव्यवहाराला थांबवणं शक्य होईल! ह्या व्यवस्थेनुसार व्यवहार करणं सुद्धा सोप असल्यामुळे लवकरच याचा मोठा प्रसार होईल असं चित्र या चलन बदलाच्या निमित्ताने का होईना पण दिसू लागले आहे.

#### कॅशलेस अर्थव्यवस्थेचे फायदे :

१. छापील नोटांमधून होणाऱ्या गैरव्यवहारांना आळा बसेल!
२. चलन व्यवस्थापन नोटांच्या छपाईचा सरकारी खर्च वाचेल!
३. बनावट नोटा छापण्याचे प्रकार बंद होती!



४. आयकर विभागाकडे प्रत्येक व्यवहाराची नोंद होईल !
५. रोख रक्कम, सुटे पैसे जवळ बाळगण्याची गरज नाही !
६. धनादेश वटवण्याची वाट पहावी लागणार नाही, त्यामुळे सर्व व्यवहार जलद होतील !
७. सुरक्षित व्यवहार आणि गरजेनुसार अनेक पर्याय उपलब्ध !

**१) प्लॅस्टिक मनी :** ह्या पर्यायांमध्ये डेबिट कार्ड / क्रेडिट कार्डचा वापर होतो. खातेदार बँक खात्याशी जोडलेल्या कार्डची बँकेकडे गरजेनुसार मागणी करतो.

**डेबिट कार्ड :** अगोदरच खात्यात असलेल्या रक्कमेतून व्यवहार खरेदीसाठी Pre pay प्रत्यक्ष वापर करताना दोन्ही कार्डचा वापर सारख्याच पध्दतीने होतो. कार्डधारक ATM मध्ये जाऊन त्याचा सुरक्षित ४ अंकी पिन टाकून पैसे काढू शकतो. दुकानामध्ये खरेदी करू शकतो (कार्ड स्वाइपचा वापर करून). यानंतर बँकमधून त्या व्यक्तित्या खात्यातून रक्कम थेट दुकानदाराच्या खात्यात जमा होते.

**२) इंटरनेट बँकिंग :** ह्या पर्यायांमध्ये बँकेकडे अर्ज द्यावा लागतो. त्यानंतर बँक तुम्हाला युजर आयडी व पासवर्ड देते. याला तुमचं Online बँक खातं असही म्हणता येईल. तो आयडी पासवर्ड घेऊन तुम्ही तुमच्या बँकेच्या इंटरनेट बँकिंग वेबसाइटवर जाऊन लॉगिन करायचं की झाल ऑनलाइन खात व्यवहारासाठी तयार ! खरेदी करताना इंटरनेट बँकिंग पर्याय निवडायचा, आपली बँक निवडायची, युजर आयडी पावसर्ड टाकायचाच तुमच्या फोनवर आलेला ओटीपी तिथे टाकायचा की झाली खरेदी. हा पर्याय सर्व पर्यायांमध्ये नक्कीच सर्वात सुरक्षित आहे. तुमच्या खात्यामधून कोणताही व्यवहार झाला की एक ई-मेल आणि SMS सुध्दा येतो. तुम्ही Online, Offline केलेल्या कोणत्याही व्यवहाराची नोंद या वेबसाइटवर कधीही पाहू शकता. ती स्टेटमेंट प्रिंट करू शकता. यालाच Net Banking सुध्दा म्हणतात.

**३) ई-वॉलेट / मोबाईल वॉलेट :** सोप्या शब्दात सांगायचे झाले तर हे एक मोबाईलमध्ये असलेलं आभासी पाकीट होय. जे व्यवहारासाठी खऱ्याखऱ्या पाकीटाची जागा घेऊ पाहतय ! या मोबाईल वॉलेटमध्ये आपण ठरावीक रक्कम साठवू शकतो आणि ती कुठेही व्यवहारासाठी वापरता येते. Online व्यवहार (खरेदी/रिचार्ज/पैसे पाठवणे इ.) तसेच Offline ठिकाणी किराणा विक्रेते, रिश्का, टॅक्सी चालक, दैनंदिन विक्रेते, भाजीवाले, पेपरवाले इ. यांना पैसे देण्यासाठी सहज करता येतो. या वॉलेटमध्ये तुम्ही तुमच्या बँक खात्यामधून क्रेडिट कार्ड/डेबिट कार्ड/ नेट बँकिंगद्वारे पैसे भरायचे आणि ते पैसे वरील प्रमाणे त्या – त्या ठिकाणी Send Money/Receive Money असे पर्याय वापरू शकतो. हा पर्याय पूर्ण सुरक्षित असून तुमचं वॉलेट युजर आयडी, पासवर्ड यांनी सुरक्षित केलेले असून तुमच्या वॉलेटमधून कोणताही व्यवहार झाला की एक ई-मेल आणि SMS सुध्दा येतो.

**४) युपीआय (Unified/United Payment Interface) :**UPI हा एक नवा पर्याय उपलब्ध करून देण्यात आला असून भविष्यात याचा वापर अधिक केला जाईल अशी आशा आहे. या पध्दतीमध्ये युजर आयडी/पासवर्ड/बँक खात्याचा क्रमांक/आयएफएससी यापैकी कशाचीही गरज नाही. युपीआय मध्ये केवळ एका युजरनेमचा वापर होतो. ज्याद्वारे व्यवहार थेट बँकेमधूनच पार पडतात. या युजरनेमला VPA – Virtual Private Address असे म्हणतात. यामुळे पैसे पाठविण्याकरिता केवळ या नावाचाच वापर करून काही क्षणात पैसे पाठवता येतात. UPI व मोबाईल वॉलेट या दोन वेगळ्या गोष्टी असून UPI मध्ये मोबाईल वॉलेट प्रमाणे रक्कम भरावी लागत नाही. यासाठी थेट बँक खात्यामधूनच व्यवहार केला जातो. हे वापरण्यासाठी सध्या तरी तुमचा फोन तुमच्या बँक खात्याला मोबाईल/नेट बँकिंग मार्फत जोडलेला असावा. त्यानंतर तुम्ही तुमच्या बँकेच अधिकृत ॲप फोनमध्ये डाऊनलोड करा. तोच मोबाईल क्रमांक UPI शी जोडा आणि व्यवहारासाठी ते ॲप तयार. याला Offline पर्याय तुमच्या फोनवरून \*99# डायल करून वापरता येईल.

केंद्र सरकारनेच पुढाकार घेऊन एका व्यक्तित्ना दुसऱ्या व्यक्तिला पैसे देण्यासाठी नॅशनल पेमेंट्स कॉर्पोरेशनच्या माध्यमातून युनायटेड पेमेंट्स इंटरफेस UPI हे तंत्र ऑगस्ट २०१६ मध्ये अंमलात आणले.

**५) मोबाईल बँकिंग :** हा पर्याय बेसिक फोन्स म्हणजेच इंटरनेट नसलेल्या फोन्ससाठी तयार करण्यात आला असून यामध्ये दोन उप पर्याय उपलब्ध आहेत. दोन्ही पर्याय वापरण्यासाठी प्रथम तुमचा फोन क्रमांक बँकेमध्ये तुमच्या खात्याला जोडावा लागेल. ज्याद्वारे बँकेच्या निर्देशानुसार IMPS द्वारे खाते क्रमांक आणि IFSC कोडची माहिती SMS द्वारे पाठवून पैसे सहज पाठवता येतात. मोबाईल बँकिंग पध्दतीचे वैशिष्ट्य म्हणजे हा पर्याय अगदी कोणत्याही फोनवर ऑफलाइन म्हणजेच इंटरनेट नसताना वापरता येतो.

SMS द्वारे – IMPS > <Mobile No.> <MMID> <Amount> <User Id> <MPIN> ही SBI ची संज्ञा आहे.

**६) पॉइंट ऑफ सेल POS Point of Sale :** ह्या पर्यायांमध्ये आपण विक्रेत्याकडे वस्तु खरेदी करतो, त्यानंतर विक्रेता बिलची रक्कम सांगून त्याच्याकडील POS मशीनमध्ये कार्ड टाकून पिन दाबायला सांगतो. यावेळी आपण प्लॅस्टिक मशीनमध्ये पाहिलेलेच डेबिट/क्रेडिट कार्डच वापरतो. त्या मशीनमध्ये आपलं कार्ड सरकवून (स्वाइप करून) पिन टाकला की आपल्या बँक खात्यामधून रक्कम लगेच विक्रेत्याच्या खात्यात जमा होते. लगेचच एक पावती प्रिंट करून मिळते. ह्या मशीन्स हल्ली सर्व ठिकाणी पहायला मिळतात. जसे की दुकाने, थिएटर, पेट्रोल पंप इ. मध्ये नवाप्रकार म्हणजे NFC द्वारे फोन टॅप करून पैसे जमा करणे. (भारतात याची उपलब्धता खुप कमी आहे.)

**७) आधार कार्ड बँकिंग AEPS : Aadhaar Enabled Payment System IMPS**

IFSC

SMS

IMPS > <Mobile No.> <MMID> <Amount

SMS

SBI च

**POS Point of Sale**

User Id> <MPIN>

POS

**AEPS :**

### **Aadhaar Enabled Payment**

ह्या प्रकारच्या व्यवस्थेमध्ये आधी तुमचं आधार कार्ड बँक खात्याला संलग्न करावे लागेल. त्यानंतर ज्या ठिकाणी पैसे द्यायचे आहेत तिथे तुमचा आधार क्रमांक टाका व तुमच्या बोटद्वारे फिंगरप्रिंट द्या लगेच कार्डवरील क्रमांक आणि बायोमॅट्रिक पध्दतीने बोटचा स्कॅन याद्वारे पैसे ट्रान्सफर, शिल्लक, पैसे काढणे इ. व्यवहार करता येतात. ही व्यवस्था सध्या तरी खुपच कमी ठिकाणी आहे.

१. तुमचे आधार कार्ड बँक खात्याशी जोडून घ्या.
२. तुमचा आधार नंबर लक्षात ठेवा किंवा त्याची एक प्रत स्वतःजवळ बाळगा.
३. एकापेक्षा अधिक बँकखाती असल्यास आधार कार्डशी जोडलेल्या बँकेचे खाते कोणते ते नीट लक्षात ठेवा.
४. आधार बायोमॅट्रिकसाठी रेकॉर्ड केले गेलेले तुमचे फिंगरप्रिंट खरेदी-विक्री व्यवहारात ग्राह्य धरले जातात.

### **कॅशलेस अर्थव्यवस्थेमध्ये घ्यावयाची काळजी :**

१. तुमचा पासवर्ड कोणालाही सांगु नका.
२. तुमचा पासवर्ड कार्डवर किंवा कोठेही लिहून ठेवू नका.
३. तुमच्या अकाऊंटची माहिती (युजरनेम/पासवर्ड/OTP/CVV) कोणालाही सांगु नका.
४. तुम्हाला दहा लाखाच बक्षीस लागल आहे. बँकेमधून बोलत आहोत. आयडी, पासवर्ड सांगा वगैरे सांगुन फोन करणाऱ्यांना कांहीही सांगु नका. असे फोन केवळ तुमची फसवणुक करण्यासाठी करण्यात आलेले असतात.
५. कार्डचे डिटेल्स कोणत्याही साइटवर Save करु नका.
६. ठरावीक दिवसानंतर पासवर्ड पिन बदलत रहा.
७. नेट बँकिंग करताना Virtual Keyboard चा वापर करा.

### **संदर्भ :**

१. लोकराज्य मासिक
२. माहिती व जनसंपर्क महासंचालनालय, महाराष्ट्र शासन
३. भारतीय बँक प्रणाली — प्रा.डॉ.टी.डी. फर्नांडीस, के.एस.पब्लिकेशन्स, पुणे
४. भारतीय बँक व्यवस्था — प्रा.डॉ. के.पी. बैरागी, के.एस. पब्लिकेशन्स, पुणे
५. बँकिंग — प्रा.डॉ. एकनाथ सावळे, अरुणा प्रकाशन, पुणे

## रोकडविरहित व्यवहारासाठी सरकारी उपाय-योजना

प्रा. नानासाहेब श्रीरंग पटनुरे

जयक्रांती कला वरिष्ठ महाविद्यालय,  
लातूर.

प्रा. डॉ.मनोजकुमार यादवराव सोमवंशी

अर्थशास्त्र विभाग प्रमुख तथा संशोधक मार्गदर्शक  
शिवजागृती महाविद्यालय, शिरूर अनंतपाळ जि. लातूर.

### प्रस्तावना:-

पंतप्रधान नरेंद्र मोदी यांनी ८ नोव्हेंबर २०१६ रोजी अर्थव्यवस्थेला पोखरून टाकणाऱ्या ल्हूप्या-समांतर अर्थव्यवस्थे विरोधात लढ्याचे रणसिंग फुंकल्यानंतर (निश्चलनीकरणानंतर/नोट बंदी) जुन्या दैनंदिन व्यवहाराच्या प्रक्रियेवर निर्बंध घालण्यात जर कशामुळे यश आले असेल तर ते लोकांनी व्यवहार करण्यासाठी रोख रकमेऐवजी वापर केलेल्या इतर पर्यायामुळे खरेदी केलेल्या वस्तू किंवा सेवांची किंमत चुकवण्यासाठी लोकांनी क्रेडिट/डेबिट कार्ड बरोबरच इलेक्ट्रॉनिक वॉलेट, मोबाईल बँकिंग अशा नव्या पर्यायांचा परिणाम कशावर झाला असेल तर तो रोख रकमेच्या ओघावर. नरेंद्र मोदी यांच्या दृष्टिकोनामुळे एका अधिक पारदर्शक आणि कमीत कमी भ्रष्टाचार असलेल्या समाजाच्या निर्मितीच्या दिशेने पुढचे पाऊल टाकता आले.

### अभ्यासाची उद्दिष्टे :-

१. रोकडविरहित व्यवहार समजून घेणे.
२. रोकडविरहित व्यवहारासाठी नवीन ॲपचा व पध्दतीचा अभ्यास करणे.
३. रोकडविरहित व्यवहारांचा लोकांवरिल परिणाम तपासणे.

### संशोधन पध्दती :-

सदर विषयाचा अभ्यास करण्यासाठी दुय्यम साधनाचा व माहितीचा वापर केलेला आहे. तसेच वर्णनात्मक पध्दतीचा वापर केला आहे. विविध नियतकालिके, मासिके, इंटरनेट, विकीपिडिया, राज्य सभा टी.व्ही. विशेष कार्यक्रम इत्यादीची माहितीचा वापर केला आहे.

कॅशलेस म्हणजे रोकडविरहित/रोखविरहित व्यवहारासाठी सरकारने लोकांना प्रोत्साहन दिले आहे. व डिजिटल व्यवहाराकडे लक्ष वेधले आहे. त्यामुळे लोकांना बँका किंवा एटीएम च्या बाहेर लागलेल्या रांगात उभे रहावे लागणार नाही. त्यासाठी सरकारने काही उपाय-योजना केलेल्या आहेत. त्यापुढील प्रमाणे-

**१) वित्तीय साक्षरता अभियान:-** वित्तीय साक्षरता अभियानामध्ये लोकांना डिजिटल अर्थव्यवस्थेची माहिती दिली जाते. कॅशलेस/रोकडविरहित व्यवहारांना उत्तेजन दिले जाईल. मनुष्यबळ विकास मंत्रालयाने लोकांना डिजिटल व्यवहारासाठी प्रोत्साहीत केले आहे. खाजगी संस्थांनी रोखीत/ रोख पैसे स्वीकार नयेत असे आवाहान करण्यात आले आहे. दुकाने, कॅटीन, इतर सेवात कॅशलेस /रोकडविरहित व्यवहारांचा आग्रह आहे. विद्यार्थी, शिक्षक यांनी लोकांना या व्यवहारांचे प्रशिक्षण देण्यास सांगितले आहे. त्यासाठी मनुष्यबळ मंत्रालयाने या सुचनाकरिता वेबपेज सुरु केले आहे.

**२)सिंगल परपज ॲप:-** देशातल्या बाजारपेठेतील काही लहान व्यापाऱ्यांनी आपल्या परिने संगणकाचा वापर सुरु केला असला तरी त्यांच्या संगणक वापरावर मर्यादा आल्या कारण अकाऊंटस् आणि पत्र व्यवहारापलीकडे त्यांना संगणकाचा वापर करता येत नव्हता. बाजारात उपलब्ध असलेले सर्व सॉफ्टवेअर 'पैसे घेणे आणि पैसे देणे' ह्या व्यापारातील मुलभुत व्यवहाराकडे फारसे लक्ष दिले नाही. त्यामुळे संगणकाचा पुरेपुर वापरही नाही. हेही संगळ्यांच्या लक्ष्यात आले, ही व्यापारातील समस्या हळूहळू सॉफ्टवेअर कंपन्यांच्या लक्षात आलीच होती. म्हणूनच वेगवेगळ्या प्रकारच्या कामासाठी ॲप तयार करण्याचा त्यांनी सपाटा लावला. 'पेमेंट देणे आणि पेमेंट घेणे' हे व्यापारातले अत्यंत महत्त्वाचे काम आहे. ह्या कामाची नेमकी गरज लक्षात घेऊन पेमेंट देण्याघेण्याचे तसेच ते पैसे बँकेत जमा करण्याचे अथवा खातेदाराच्या नावे टाकण्याचे 'सिंगल परपज' ॲप तयार करण्यात सॉफ्टवेअर कंपन्या यशस्वी झाल्या. त्यामुळे ब्रॉड बँडविना खात्यात पैसे जमा करण्याची सोय उपलब्ध झाली. हा ॲप स्मार्ट फोनवरच चालत असल्यामुळे एका बँकेतून दुसऱ्या बँकेकडे पैसे ट्रान्सफर करण्याची गरज पूर्ण करणे शक्य आहे. ॲपच्या वापरामुळे पैसे बँकेत जमा करण्याचा वेळी ही आपोआप वाचला. ह्या ॲपमुळे त्याला होलसेल व्यापाऱ्याकडून आणलेल्या मालाचे पैसेही देणे शक्य झाले आहे.

### ३)भीम ॲप-(भारत इंटरफेस फॉर मनी Bharat Interface for Money)

भीम ॲप (BHIM) म्हणजे भारत इंटरफेस फॉर मनी हे एक मोबाईल ॲप्लिकेशन आहे. या ॲप्लिकेशनची निर्मिती 'नॅशनल पेमेंट कॉर्पोरेशन ऑफ इंडिया' (NPCI- National Payment Corporation of India) या भारत सरकारच्या आर्थिक देवाण-घेवाण प्रणाली विकसित व देखभाल करणाऱ्या संस्थेने केली आहे. भारतरत्न डॉ.बाबासाहेब आंबेडकर यांच्या 'भीमराव' या नावावरून या ॲपला भीम (BHIM) हे नाव देण्यात आले आहे. या ॲपचे उद्घाटन पंतप्रधान नरेंद्र मोदींनी दि.३० नोव्हेंबर २०१६ वार शुक्रवार रोजी केले. भीम ॲप हे 'लेस कॅश' मोहिमेसाठी सुरु केले आहे. सध्या हे ॲप ॲन्ड्रॉइड व आयओएस या मोबाईल संगणक प्रणालीवर वापरण्यासाठी उपलब्ध आहे. हे ॲप निरक्षर व्यक्तीलाही वापरता येते. कारण अंगठ्याचा ठसा किंवा आधार क्रमांक लागतो. आतापर्यंत हे ॲप १ कोटी ४० लाख



लोकांनी मोबाईल डाऊनलोड केले आहे. तसेच हे ॲप डाऊनलोड करणाऱ्यांची संख्या दिवसेंदिवस वाढत आहे. हे ॲप युनिफाईड पेमेंट इंटरफेस या प्रणालीवर आधारित आहे. भीम ॲप वरून पैशांची देवाण घेवाण करण्यासाठी खालील पर्याय उपलब्ध आहेत. या पर्यायापैकी कुठल्याही एका पर्यायाचा वापर करून देवाण- घेवाण करता येते.

#### भीम ॲपद्वारे पैसे पाठवण्यासाठी-

१. ज्याला पैसे पाठवयाचे आहेत. त्याचा बँक खाते क्रमांक व आयएफएससी कोड वापरून किंवा
२. ज्याला पैसे पाठवयाचे आहेत. त्याचा मोबाईल क्रमांक वापरून.
३. ज्याला पैसे पाठवयाचे आहेत. त्याचा व्हर्च्युअल पेमेंट अड्रेस वापरून.

#### भीम ॲप द्वारे पैसे स्विकारण्यासाठी-

१. ज्याच्याकडून पैसे स्विकारायचे आहेत, त्याचा व्हर्च्युअल पेमेंट अड्रेस वापरून.
२. ज्याच्याकडून पैसे स्विकारायचे आहेत. त्याचा मोबाईल क्रमांक वापरून.
३. स्वतःचा क्यूआर कोड वापरून.

या पर्यायापैकी कोणत्याही एका पर्यायाचा वापर करून भीम ॲप चा वापर करून रोकडविरहित व्यवहार करता येत आहेत. (UPI) च्या माध्यमातून व्यवहार करणाऱ्या देशातील ४४ राष्ट्रीय आणि खाजगी बँका भीम या ॲप्लिकेशनच्या सभासद आहेत. या ॲप्लिकेशनचा वापर करून आपण ४४ बँकापैकी कुठल्याही बँकेतल्या स्वतःच्या खात्यातून पैशांची डिजिटल देवाण-घेवाण करू शकतो.

#### ४) युपीआय (UPI-Unified Payments Interface):-

एकात्मिक भरणा पध्दती-युनिफाईड पेमेंट इंटरफेस (UPI-Unified Payments Interface) ही एक अत्यंत सोपी, सुरक्षित व तत्काळ पैसे चुकते करता येणारी सुविधा आहे. यामुळे ऑनलाईन भरणा करण्याची सुविधा सरकार तर्फे देण्यात आली आहे. दि.११ एप्रिल २०१६ पासून भारतीय रिझर्व्ह बँक व नॅशनल पेमेंट कॉर्पोरेशन ऑफ इंडिया (NPCI)यांच्या संयुक्त विद्यमाने ही प्रणाली कार्यान्वीत केली आहे. ही सुविधा वापरून एकावेळी किमान रु.५० व एकलाख रुपये इतका भरणा तत्काळ करता येतो. यासाठी लाभार्थ्यांच्या बँकचे नाव, खाते नंबर, आयएफएससी कोड यासारखी कोणतीही माहिती आवश्यक नसते/ गरज भासत नाही.

#### युपीआय चा उपयोग-

UPI-युनिफाईड पेमेंट इंटरफेस सुविधा वापरल्याने कोणत्याही व्यक्तीला कोणालाही पैसे देणे शक्य आहे. तसेच कोणाकडूनही पैसे घेता येणार आहेत. याशिवाय विविध बिले ऑनलाईन देता येणे शक्य आहे. या सुविधेचा उपयोग ऑनलाईन शॉपिंगसाठीही करता येत आहे.

#### युपीआयची माहिती-

UPI युनिफाईड पेमेंट इंटरफेस वापरण्यासाठी फक्त संबंधिताचा व्हर्च्युअल पेमेंट अड्रेस (VPA) माहिती असणे आवश्यक असते.

#### वापराची पध्दती-

UPI-युनिफाईड पेमेंट इंटरफेस वापरासाठी नोंदणी रजिस्ट्रेशन करावे लागते. त्यासाठी युपीआय ॲप उतरवून घ्यावे व आपल्या बँकेशी जोडावे.

UPI- भागीदार बँकेमध्ये खाते असलेल्या अँड्राईड स्मार्ट फोन वापरकर्ता UPI-ॲप डाऊनलोड करू शकतो.

#### UPI नोंदणी करण्याच्या पायऱ्या-

१. वापरकर्ता ॲप स्टोर/बँकेच्या संकते स्थळावरून युपीआय अर्ज डाऊनलोड करणे.
२. वापरकर्त्याचे नाव, आभासी (व्हर्च्युअल) आयडी, पासवर्ड यासारखी माहिती देऊन त्याचे प्रोफाइल तयार करणे.
३. वापरकर्ता “Add/link/manage Bank Account” पर्याय निवडतो आणि बँक खाते क्रमांक, व्हर्च्युअल आयडीशी जोडणे.

#### एम-पीन (M-PIN) तयार करणे-

१. ज्या बँक खात्यावरून व्यवहार करायचा आहे ते बँक खाते वापरकर्ता निवडतो.
२. गरजेची माहिती भरली जाते. जसे ‘डेबिट कार्डचे शेवटचे ६ अंक’ आणि ‘समाप्तीचा दिनांक’.
३. बँकेकडून आलेला ओटीपी (OPT) प्रविष्ट केला जातो आणि ४-६ अंकी एम-पीन तयार केले जातात.

#### युपीआयचे फायदे-

१. सरकारी एकात्मिक भरणा (UPI-युनिफाईड पेमेंट इंटरफेस) पध्दतीचा वापर केला तर दैनंदिन रोखीने व्यवहार कमी होतील.
२. चेक, क्रेडिट कार्ड, डेबिट कार्ड, एटीएम यांचा वापर कमी होतो.
३. अर्थव्यवस्थेतील रोख रकमेचे व्यवहार कमी होऊन जोखीम कमी होते.
४. पैसे आपल्या बँक खात्यात जमा होत असल्याने व्याजाचेही नुकसान होत नाही.

५) (5 A -फाईव्ह ए)- डिजिटल व्यवहारांसंबंधी धोरण ठरविताना यातील अडथळांकडे प्रामुख्याने लक्ष द्यावे लागेल. यातील पहिला अडथळा असा की, व्यवहाराची स्विकारतता आणि दुसरे म्हणजे यातील व्यवहारातील भरावे लागणारे शुल्क या दोन्ही गोष्टींचा अडथळा दूर केला तरी सर्व कॅशलेस व्यवहार सुरळीत पार पडतीलच असे नाही.

आर्थिक साक्षरतेसाठी शिफारस केलेल्या चौकटीमध्ये फाईव्ह ए चे महत्त्व अनन्यसाधारण आहे. त्या पाच ए (5 'A') म्हणजे-

- A -अॅव्हेलॅबिलिटी (उपलब्धता)
- A -अॅक्सेसॅबिलिटी (सुलभता)
- A -अॅक्सेप्टॅबिलिटी (स्विकारार्हता)
- A -अॅफोर्डॅबिलिटी (सामर्थ्य)
- A -अवेरनेस (जागृती)

६) गव्हर्नमेंट ई-मार्केट प्लेस वेबसाईड- केंद्र सरकारने ई-मार्केट प्लेस ही वेबसाईड देशातील विविध सरकारी कार्यालयांनी वस्तू व सेवांची खरेदी करण्यासाठी सुरु केलेली आहे.

७) ई-टोल आकारणी- राष्ट्रीय महामार्गावरील टोलची वसुली ही रोख स्वरूपात केली जात असत. परंतु १ सप्टेंबर २०१७ पासून राष्ट्रीय महामार्गावरील टोल नाक्यावर वाहनाच्या काचेवर लावलेल्या 'फास्टिंग स्टिकर' च्या तंत्रज्ञानावर आधारित ई-टोल आकारणी सुरु केलेली आहे. फास्टिंग लावलेली वाहने टोलनाक्यावर आल्यानंतर त्या वाहनाविषयी संपूर्ण माहिती मिळेल आणि त्या वाहन चालकाच्या बँक खात्यातून टोलचे पैसे ऑनलाईन जमा होतील म्हणजे टोल वसुलीसाठी टोल नाक्यावर लागणाऱ्या यलांब वाहनांच्या रांगा लागणार नाहीत. त्याचबरोबर टोल नाक्यावर रोकडविरहित व्यवहार सुरु झालेले आहेत.

८) डिजिडन व्यापार योजना:- सामान्यांसाठी नशीबवान ग्राहक योजना व व्यापाऱ्यांसाठी डिजिडन व्यापार योजना या योजनेत डिजिटल व्यवहारांना प्राधान्य देण्यात आले आहे. नशीबवान ग्राहक व डिजिडन व्यापार योजनेत अनेक प्रोत्साहनपर बक्षिसे आहेत. त्यामुळे डिजिटल इंडियाला प्रोत्साहन मिळाले आहे. त्यामुळे देशाचा आर्थिक कणा मजबूत होईल. रुपे कार्ड, युएसएसडी, युपीआय व आधार पेमेंट सिस्टिम यांचा उपयोग यामध्ये होत आहे.

९) आधार पेमेंट ॲप:- २५ डिसेंबर २०१६ रोजी सरकारने आधार संचलित पेमेंट ॲप सुरु केले ते आधार कार्ड व खाते क्रमांकाशी जोडले जाते. बायोमेट्रिक रिडरचा त्यात वापर होत असून आधार क्रमांक टाकून व्यवहारासाठी बँकेची निवड करता येते. फोन/मोबाईल शिवाय यामाध्यमातून पेमेंट करता येते.

निष्कर्ष:-

- १.कमी स्पीडच्या इंटरनेट मुळे /नेटवर्कच्या समस्येमुळे पैसे अडकणे.
- २.ऑनलाईन व्यवहार केल्यानंतर अडकेले पैसे ७-९ दिवसात परत मिळतात.
- ३.ग्रामीण भागातील लोकांकडे स्मार्ट असून देखील ऑनलाईन पेमेंट करण्यास तयार नाहीत.

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५. सरकारी योजना मासिक

## कॅशलेस व्यवहार आणि बदलती माध्यमे

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मागील काही दिवसांपासून भारताची अर्थव्यवस्था चलनातून कॅशलेसकडे मार्गक्रमण करत असल्याचे दिसून येत आहे. पाचशे व एक हजाराच्या जुन्या नोटा चलनातून रद्द झाल्यामुळे बिना रोखीचे व्यवहार वाढण्यास मोठ्या प्रमाणावर सुरुवात झालेली आहे. लहान लहान व्यावसायिकांनी आर्थिक व्यवहारासाठी पीओएस मशीन, पे.टी.एम., बडी, इंटरनेट बँकींग या अद्ययावत बँकींगशी संबंधित प्रणालीचा वापर सुरु करून आपल्या व्यवसायाला गतिमान करण्याबरोबरच कॅशलेस अर्थव्यवस्था संकल्पनेचा पाया अधिक मजबूत करण्यास हातभार लावलेला आहे.

माहिती तंत्रज्ञानाच्या युगात ग्राहकांना सुलभ, जलद, कार्यक्षम आणि सुरक्षित आर्थिक सेवा देण्यासाठी प्रत्येक बँक प्रयत्न करीत आहे. या बदलत्या व्यावसायिकीकरणामुळे ग्राहकाला उपलब्ध सेवामधून त्याला हवी असलेली सेवा निवडण्याचे स्वातंत्र्य मिळाले आहे. कोणताही उद्योग, व्यवसाय असो त्याची केवळ माहिती देऊन संबंधीत घटकात त्या उद्योगाची, संस्थेची प्रतिमा आणि विश्वासाहता निर्माण करता येत नाही. त्यासाठी शास्त्रशुद्ध पद्धतीचा वापर व माध्यमांची मदत घेऊन केलेल्या कामाची माहिती जनसंपर्काद्वारे देण्यासाठी विविध माध्यमांचा वापर करून उद्योग व्यवसाय वाढीस लावता येतो.

आजच्या जागतिकीकरण, खाजगीकरण व उदारीकरणाच्या बदलत्या काळाच्या प्रवाहाबरोबरच परिवर्तनासाठी सहकार उद्योगक्षेत्रात जनसंपर्काची जोड दिली तर सहकार उद्योगक्षेत्रात अधिक गतीने परिणामकारक यश मिळविता येईल. वित्तीय संस्थांची स्पर्धेच्या युगात जनसंपर्काच्या प्रभावी माध्यमांचा उपयोग करून बदलत्या सामाजिक माध्यमांच्या युगात प्रगतीसाठी नवी दिशा देणारा ठरू शकतो.

### कॅशलेस अर्थव्यवस्था :

एखाद्या वस्तुचे मुख्य अथवा सेवांचा मोबदला, देयकांचा भरणा डेबिट/ क्रेडीट कार्डद्वारे अथवा इंटरनेटच्या आधारे बँकींग प्रणालीचा वापर करून अथवा मोबाईलवरील विविध ॲप्सच्या माध्यमातून करणे, त्यासाठी कोणत्याही प्रकारे रोख कागदी चलन वापरले नाही तर तो व्यवहार रोकडरहीत म्हणता येईल. संपूर्णपणे रोकडरहीत अर्थव्यवस्था असणारा एकही देश आज जगामध्ये नाही. कॅशलेस व्यवहाराचा अधिकाधिक वापर करणाऱ्यांमध्ये प्रगत राष्ट्रांचा समावेश असला तरी मुख्यतः डेन्मार्क, नार्वे, स्वीडन हे देश वेगाने रोकडरहीत अर्थव्यवस्थेकडे वाटचाल करीत आहेत. अमेरिकेत आजदेखील सुमारे ४५ टक्के व्यवहार रोख रक्कमेत केले जातात.

भारतात रोकडरहीत व्यवहारामध्ये फारशी प्रगती नाही. क्रेडीट अथवा डेबिट कार्डचा वापर करून वस्तु किंवा सेवा खरेदी, देयकांचा भरणा यांचा रोकडरहीत व्यवहारात मुख्यतः समावेश करावा लागेल. कार्डच्या आधारे व्यवहार करण्यासाठी पीओएस यंत्राची (कार्ड स्वाईप यंत्र) गरज असते. कॅशलेस व्यवहार काळा पैसा आणि भ्रष्टाचारविरुद्ध हा उद्देश डोळ्यासमोर ठेवून पंतप्रधानांनी ५०० आणि १००० च्या नोटा बंदीचा निर्णय घेतला. देशात कॅशलेस अर्थव्यवस्था आणण्याचे स्वप्न त्यांनी पाहिले. महाराष्ट्रही याकडे वाटचाल करीत आहे. येत्या तीन महिन्यात संपूर्ण कॅशलेस व्यवहारासाठी प्रयत्न करण्यात येत असून नागरिकांना आर्थिक व्यवहार मोबाईलच्या माध्यमातून करता यावा यासाठी महावॅलेट सुविधा सुरु करण्यात येणार असून असे ई-वॅलेट सुरु करणारे महाराष्ट्र हे देशातील पहिले राज्य ठरणार आहे. व्यवहारासाठी जनधन योजना, आधार क्रमांक आणि मोबाईल या त्रिसूत्रीचा वापर करण्यात येऊन भविष्यात व्यवहार कॅशलेस केले जाणार आहेत. कॅशलेस अर्थव्यवस्थेचा सर्वाधिक फायदा हा गोरगरीबांना होणार असून मजूर, शेतमजूर, शेतकरी यांच्या जीवनात यामुळे परिवर्तन येईल असा विश्वास अर्थतज्ञांनी वर्तविला आहे.

### अद्ययावत तंत्रज्ञान :

आजच्या स्पर्धेच्या युगात देशातील तसेच महाराष्ट्रातील वित्तीय संस्थांचे स्वरूप बदललेले असून 'विकासबँक' ही संकल्पना कालबाह्य झाली असून 'ई-बँकींग ही संकल्पना पुढे आली आहे. इंटरनेट बँकींगमध्ये ग्राहक केंद्रस्थानी मानून बँकांनी आपल्या कार्यपद्धतीत बदल केले आहेत. आपला ग्राहकवर्ग कोणत्या स्वरूपाचा आहे त्याप्रमाणे त्याला कोणत्या सेवा सुविधा दिल्या पाहिजेत याचा अभ्यास करून बँकांनी समाजाभिमुख कार्यपद्धतीचा अवलंब करून आपल्या व्यवसायात पारदर्शकता आणून बदल केले आहेत.

### माध्यमांचे बदलते स्वरूप :

जनसंपर्काचे स्वरूप हे फार व्यापक आहे. काळानुसार जनसंपर्काचे स्वरूप बदलत गेले आहे. जनसंपर्काची सुरुवात गावातील चावडीवरील सभा दवंडी देण्यापासून सुरु होऊन ती आज ई-जनसंपर्कापर्यंत येऊन पाहोचली आहे. आजच्या स्पर्धेच्या युगात आपल्या संस्थेचा किंवा उद्योगाचा व्यवसाय चांगला वृद्धिंगत होण्यासाठी संस्थांनी किंवा उद्योगांनी जनसंपर्काच्या सकारात्मक बाबींचा अवलंब करून संस्थेची प्रतिमा उंचावण्याच्या दृष्टिने कार्य केले पाहिजे. वित्तीय जनसंपर्कासाठी विविध प्रगत माध्यमांचा वापर करून संस्थेची ग्राहकांच्या मनातील विश्वासाहता जपण्याचा प्रयत्न प्रत्येक संस्था, उद्योग करीत आहे. वित्तीय संस्थांनी स्पर्धेच्या युगात आधुनिकतेची कास धरली आहे. माहिती तंत्रज्ञानाच्या युगात बँकांनी आपल्या कार्यपद्धतीत बदल केले असून ग्राहकांनी सुद्धा हे बदल स्वीकारले आहेत. बदललेल्या वित्तीय व्यवहाराची माहिती ग्राहकांपर्यंत पोहोचविण्यासाठी बँकांनी नवमाध्यमांचा वापर सुरु केला आहे.



### नेट बँकींग :

बँकेत जाऊन कागदपत्राच्या आधारे व्यवहार करण्याची पद्धत डिजीटल या माध्यमातून करणे म्हणजेच नेट बँकींग, संगणक साक्षरता आलेल्या ग्राहकांमध्ये ही पद्धत सर्रास वापरली जाते. याला सिटीजन असा दुसरा शब्द आहे. त्या माध्यमातून पैशासंदर्भातील सर्व व्यवहार करता येतात. काही सहकारी आणि सरकारी बँकामध्ये तसेच खाजगी बँकामध्ये नेट बँकींगद्वारे म्हणजेच ऑनलाईन व्यवहार केले जातात. मोबाईल बँकींग, सोशल मिडीयामध्ये स्मार्ट फोन मोबाईलद्वारे बँकेतील आपल्या खात्यासंदर्भातील सर्व व्यवहारांची अद्ययावत स्वरूपात माहिती ग्राहकाला मिळते. यासाठी बँकेत मोबाईल नंबरची नोंद करणे आवश्यक असते. आज ई जनसंपर्काचे युग आले आहे. या युगात जगातील कोणत्याही ठिकाणावरून जनसंपर्क साधला जातो.

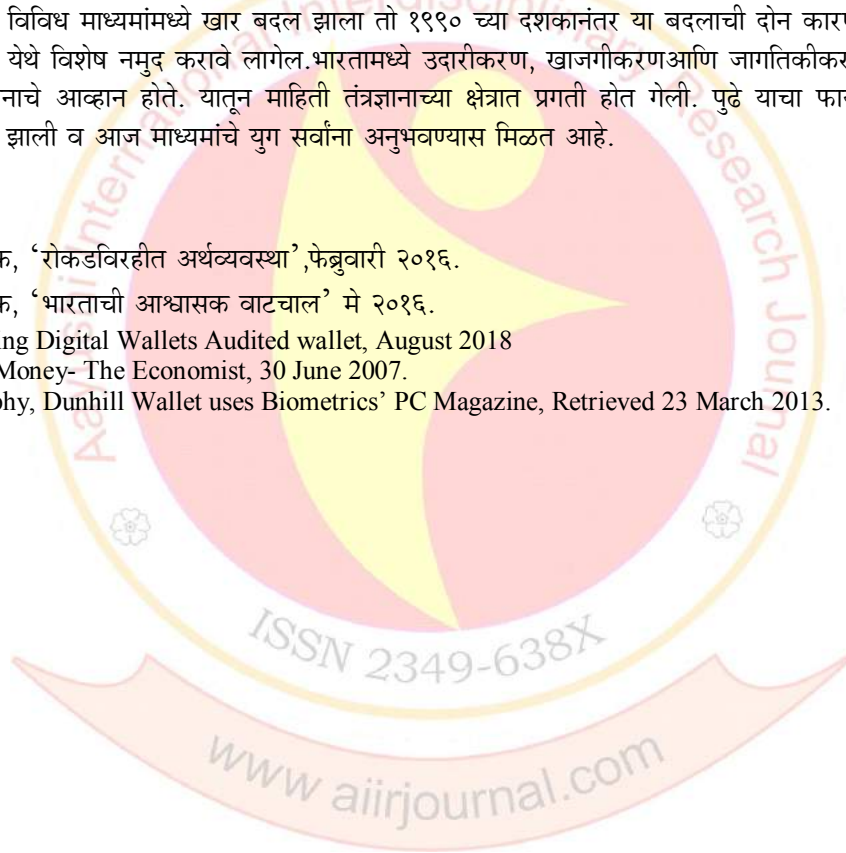
### सारांश :

एकविसाव्या शतकात पदार्पण करित असतांना संवाद क्रांतीमुळे संवाद वहनाचे चित्र झपाट्याने बदलत आहे. जनसंपर्क व्यवसाय सुद्धा याला अपवाद नाही. माहिती तंत्रज्ञानाच्या युगात एका नविन क्रांतीमुळे माध्यमांची गुणवत्ता वाढली आहे. बदलत्या युगात माध्यमे प्रगती करित आहेत. वृत्तपत्रे, दुरदर्शन, आकाशवाणी, सोशल मिडीया या माध्यमांद्वारे जनसंपर्क साधला जात आहे. माध्यम कोणतेही असो दुरदर्शन, आकाशवाणी, वृत्तपत्र असो किंवा इंटरनेट सुविधा या सर्व प्रसार माध्यमांचे मुलभूत कार्य हे माहिती व शिक्षण देणे हे होय. एका ठिकाणावरून दुसऱ्या ठिकाणी माहितीचा प्रसार करण्याचे काम ही माध्यमे सक्षमपणे करतात. सर्व माध्यमांशी संबंधित नव्यानव्या सुधारणामुळे माध्यमांच्या कार्यात एक गती निर्माण झाली आहे. सर्वच क्षेत्रात माध्यमांच्या प्रगतीचा फायदा होतांना दिसतो.

जनसंपर्काच्या विविध माध्यमांमध्ये खार बदल झाला तो १९९० च्या दशकानंतर या बदलाची दोन कारणे आहेत. एक आर्थिक व दुसरे तंत्रज्ञानविषयक हे येथे विशेष नमुद करावे लागेल. भारतामध्ये उदारीकरण, खाजगीकरण आणि जागतिकीकरणाचे आव्हान तर दुसऱ्या बाजूला बदलत्या तंत्रज्ञानाचे आव्हान होते. यातून माहिती तंत्रज्ञानाच्या क्षेत्रात प्रगती होत गेली. पुढे याचा फायदा सर्वच क्षेत्रांना झाला. माध्यमे सुद्धा यात प्रगत झाली व आज माध्यमांचे युग सर्वांना अनुभवण्यास मिळत आहे.

### संदर्भ :

- १) योजना मासिक, 'रोकडविरहीत अर्थव्यवस्था', फेब्रुवारी २०१६.
- २) योजना मासिक, 'भारताची आश्वासक वाटचाल' मे २०१६.
- ३) Understanding Digital Wallets Audited wallet, August 2018
- ४) Dial M for Money- The Economist, 30 June 2007.
- ५) Devid Murphy, Dunhill Wallet uses Biometrics' PC Magazine, Retrieved 23 March 2013.



## रोकडविरहीत व्यवहाराचे फायदे – तोटे

प्रा.डॉ. दैवशाला चत्रभुज रसाळ

अर्थशास्त्र विभाग

कर्मवीर मामासाहेब जगदाळे महाविद्यालय वाशी

### प्रस्तावना :-

आजच्या या धकाधकीच्या जीवनामध्ये प्रत्येक व्यक्तीला आपले काम कमीत कमी वेळेत म्हणजेच तात्काळ व्हावे अशी अपेक्षा असते. मात्र आपण आपल्या आवश्यक कामासाठी बँकेत गेलो तर तेथे रांगेत उभे राहण्यासाठी जाणारा वेळ हा खुप मोठा असतो. एका बाजूला सर्व दैनंदिन कामे बाजूला ठेऊन आपण बँकेत आल्यानंतर बँकेतील कामासाठी जाणारा वेळ आपण डिजीटल बँकिंगचा वापर करून वाचवू शकतो. यामुळे आवश्यक कामही तात्काळ मार्गी लागते. त्यामुळे आपण आपले दैनंदिन कामकाज सुरळीतपणे सुरू ठेऊ शकतो. सध्या परिस्थितीमध्ये आपण आपला अमुल्य असा वेळ वाचवण्यासाठी डिजीटल बँकिंगचा वापर करून अगदी काही मिनीटात आपले विविध व्यवहार मार्गी लाऊ शकतो. इन्शुरन्सचा हप्ता भरणे, घराचा हप्ता भरणे, गॅस सिलेंडरचे पैसे भरणे, लाईट बिल भरणे, बँकेतील पैसे काढणे, विविध बँकेकडे कर्ज मागणीचा अर्ज करणे यासह विविध कर्जाचे हप्ते भरणे ही कामे आपण डिजीटल बँकिंगचा वापर करून अवघ्या काही वेळात पूर्ण केली तर आपणाला यासाठी कुठलाही अतिरीक्त भुवंडही सहन करावा लागत नाही. डिजीटल बँकिंगचा वापर केल्याने आपणाला आपल्या विविध कामासाठी लागणारी रोख रक्कम जवळ बाळगण्याची आवश्यकता नाही. त्यामुळे चोरी, रोख रक्कम गहाळ होणे यासारखा मोठा धोका पत्करण्याची वेळ येत नाही. डिजीटल बँकेच्या माध्यमातून आपण जी पैशाची देवणा – घेवाण करून आपली विविध कामे मार्गी लावतो. त्यालाच आपण रोकड विरहीत व्यवहार म्हणतो.

रोकड विरहीत ही संकल्पना देशातील नागरिकांना ख-या अर्थाने माहित झाली ती पंतप्रधान नरेंद्र मोदी यांनी घेतलेल्या नोटा बंदीच्या निर्णयापासून. अचानक नोटा बंदीचा निर्णय घेतल्यानंतर देशातील नागरिकांनी जास्तीत जास्त दैनंदिन आवश्यक सर्व व्यवहार हे रोकड विरहीत करण्याचे आवाहन केंद्र सरकारकडून करण्यात आले होते. या कालावधीत अनेक व्यापारी वर्गांसह सर्व सामान्य नागरिकांनीही बँकेतून रोख रक्कम न काढता आर.टी.जी.एस., एन.ई.एफ.टी., नेट बँकिंग, एटीएम आदी बँकेच्या असलेल्या विविध सुविधांचा वापर करून आपली कामे मार्गी लावलेली आहेत. काळा पैसा बाहेर आणण्यासाठी व भ्रष्टाचार निर्मुलनासाठी रोकड विरहीत सर्व व्यवहार हा त्यावरील एक उपाय असल्याचा नोटा बंदीच्या कालावधीत सांगितले जात होते. काळा पैसा बाहेर किती आला ? किती भ्रष्टाचार निर्मुलन झाले ? हा भाग वेगळा असला तरी नोटाबंदीच्या कालावधीपासून अनेक नागरिक रोकड विरहीत व्यवहार करण्याकडे वळलेले आहेत. प्रामुख्याने रोकड विरहीत व्यवहार सुरळीतपणे पार पाडणा-या नागरिकांची संख्या ही शहरी भागात जास्त आहे. त्या तुलनेत ग्रामीण भागात अद्यापपर्यंत मोठ्या संख्येतील नागरिक हे रोकड विरहीत व्यवहार करण्यास उत्सुक असल्याचे दिसत नाही. यामागे ग्रामीण भागात असलेल्या विविध अडचणी हे कारण असून शकते. त्यामुळे रोकड विरहीत व्यवहार म्हणजे काय ? याचा उहापोह प्रस्तुत शोध निबंधात करण्यात आला आहे.

उद्दिष्टे :- प्रस्तुत शोधनिबंधाची उद्दिष्ट्ये पुढीलप्रमाणे आहेत.

१) रोकडविरहीत व्यवहार म्हणजे काय ? हे अभ्यासणे.

२) रोकडविरहीत व्यवहारांच्या फायदया / तोट्यांचा अभ्यास करणे.

### संशोधन पद्धती :-

प्रस्तुत शोध निबंधासाठी द्वितीय सामग्रीचा वापर केला आहे. यासाठी विविध मासिके, दैनिक वर्तमानपत्रे, इंटरनेटवरील विविध लेखांचा आधार घेतला आहे.

### रोकडविरहीत व्यवहार :-

पंतप्रधान नरेंद्र मोदी यांनी देशाला पुर्णपणे रोकडविरहीत व्यवहार करायला लावण्याचा ध्यास घेतला आहे. रोकड विरहीत व्यवहार म्हणजे काय ? त्याची व्याख्या पुढीलप्रमाणे सांगता येईल, “ तंत्रज्ञानाच्या साहाय्याने व वेगवेगळ्या साधनांच्या माध्यमातून रोख रक्कम प्रत्यक्ष न देता होणारी आर्थिक देवाण – घेवाण म्हणजे रोकड विरहीत व्यवहार होय.” म्हणजेच रोखीचे व्यवहार न करता वस्तुची खरेदी करणे होय. रोकडविरहीत व्यवहार जगातील सगळ्याच देशात होतात. तसे भारतातपण ते केले जावेत असे पंतप्रधान नरेंद्र मोदींचा मानस आहे. परंतु भारतात आजही लोकसंख्येच्या तुलनेमध्ये रोकडविरहीत व्यवहार करणा-या लोकांचे प्रमाण अतिशय कमी आहे. हे प्रमाण वाढवण्यासाठी व पुर्ण देश रोकडविरहीत व्यवहारांमध्ये विलीन झाला पाहिजे. यासाठी सरकार प्रयत्न करत आहे.

देशातील लोकांना रोकडविरहीत व्यवहाराचे महत्व पटू लागले आहे. यामध्ये ग्रामीण भागापेक्षा शहरी भागातील लोकांचे प्रमाण जास्त आहे. विमुद्रीकरणानंतर लोकांकडील रोख रक्कम अचानक कमी झाली. त्यामुळे ही रोकड खर्च करताना लोक विचार करू लागले. परंतु आजही भाजीपाल्यासारखी किरकोळ खरेदी करत असताना त्यांना रोकड खर्च करावीच लागते. कारण त्यांच्याकडे पेटिएमची सोय उपलब्ध नाही. परंतु शहरामध्ये मोठ्या मॉलमध्ये अशा व्यवस्था असल्यामुळे तेथे कॅशलेस व्यवहार होऊ शकतो.

भारतात रोकडविरहीत व्यवहार होण्यासाठी बँका हा सर्वात मोठा दुवा आहे. कारण रोकडविरहीत व्यवहारात बँका या महत्वाची भूमिका बजावतात. सगळे आर्थिक व्यवहार बँकेमार्फतच करावे लागतात. पण भारतात अजूनही अनेक लोकांची बँकेत खातीच नाहीत. त्यामुळे सरकारने जनधन योजना जाहीर केली व त्याअंतर्गत सर्व भारतीयांना बँकेत खाते उघडण्यात सांगितले. या योजनेअंतर्गत करोडो

लोकांनी आपली बँकखाती उघडली, परंतु त्या खात्यामध्ये रक्कम ठेवण्याइतके उत्पन्न त्या लोकांचे आहे का हा खरा प्रश्न आहे. तसे पाहिले तर या योजनेतील खात्यावर नियमीत व्यवहार झालेले दिसून येत नाही. म्हणजेच या खात्याचा वापर किती लोक करतात ? त्यामुळे किती लोकांना बँकाची सवय झाली ? हे प्रश्न अनुत्तरीतच राहिले. खरे पाहता भारतात बँक ही अजुनही लोकांच्या जीवनाचा अविभाज्य भाग झालेली नाही. हे स्पष्ट होते. लोकांना रोकडविरहीत व्यवहाराची सवय होईल. परंतु त्यासाठी भारताला बराच काळ लागेल आणि विकासाचा बराच मोठा टप्पाही गाठावा लागेल.

#### रोकडविरहीत व्यवहाराची साधने :-

रोकडविरहीत व्यवहारासाठी देशातील बँकानी डेबीट कार्ड, क्रेडीट कार्ड दिली आहेत. नेट बँकिंगची सुविधा दिली आहे, ज्याद्वारे कुठलीही बिल भरण्याची कामे केली जातात. खात्यावरील पैसे दुस-या खात्यावर हस्तांतरीत करता येतात. त्यासाठी ऑनलाईन सोय करून दिली आहे. म्हणजे डिजिटल माध्यमांद्वारे पैशाची देवाण-घेवाण करता येऊ लागली आहे. कार्डांच्या माध्यमातून प्लास्टिक मनीची हताळणी सोपी झाली आहे. आता मोबाईल बँकिंग सुरू झाले. ऑप डाऊन लोड करून पैसे एका खात्यातून दुस-या खात्यात जमा करता येऊ लागले, त्याचबरोबर डिजिटल वॉलेट ही सुद्धा सुविधा सांगितली जाऊ शकते.

**भारतातील रोकडविरहीत व्यवहारासमोरील अडचणी :-** भारत हा संपूर्ण रोकडविरहीत व्यवहारात विलीन करण्यासाठी येणा-या अडचणींचा थोडक्यात आढावा पुढीलप्रमाणे घेता येईल.

- **संरक्षणविषयक अडचणी :-** भारताला ख-या अर्थाने रोकडविरहीत व्यवहारात विलीन करावयाचे असेल तर अगोदर सायबर गुन्हे रोखणे आवश्यक आहे. एटीएम पीन चोरून पैसे काढणे, क्रेडिट कार्ड चोरून त्याचा वापर करणे, हे गुन्हे आता जुने झाले आहेत. त्याची जागा आता डाटा हैक करणे, कॉल सेंटरमधून डाटा लीक करणे असे गुन्हे वाढू लागले आहेत. त्यामुळे हे गुन्हे रोखण्यासाठी सरकारने अगोदर व्यवस्था करणे आवश्यक आहे.
- **तांत्रिक मागासलेपणा :-** स्विडन हा रोकडविरहीत व्यवहारात जगात एक नंबरचा देश आहे. रोकडविरहीत व्यवहारासाठी स्विडनमध्ये अद्यावत तंत्रज्ञानाचा वापर केला जातो. तरी सुद्धा तेथे सायबर गुन्हे वाढलेले दिसून येतात. मग भारतात आजही एटीएम मध्ये १५ वर्षे जुनेच ऑपरेटींग सिस्टम वापरले जाते. म्हणजेच भारतात रोकडविरहीत व्यवहारासाठी लागणारी जी साधने आहेत त्यामध्ये वापरले जाणारे तंत्रज्ञान मागासलेले आहे. त्यामुळे हे व्यवहार करण्यासाठी योग्य नाहीत त्यातून फसवणूक होऊ शकते.
- **कायदेविषयक अडचणी :-** रोकडविरहीत व्यवहारामध्ये विलीन होण्यासाठी तंत्रज्ञान विषयक तयारी बरोबरच कायदेविषयक तयारी पूर्ण झाली पाहिजे ती भारतात दिसून येत नाही. सायबर गुन्हे किंवा ऑनलाईन पैशांच्या फ्रॉड करणा-यांना कडक शासन करणारे कायदे नाहीत. कायदेविषयक तज्ञ म्हणतात की IT ACT 66, 66A, 66C व 66D हि कलमं फसवेगिरी इमेल लिंक, याचे आहेत. परंतु यानुसार पोलिस आरोपीस अटकही करू शकत नाहीत. त्यांना जामिनवर सोडून दिले जाते. त्यामुळे या सगळ्याबाबत कायदेशीर तयारी करणे आवश्यक आहे.
- **इंटरनेट स्पीड :-** देशामध्ये ग्रामीण भागामध्ये इंटरनेट स्पीड फार कमी आहे. रोकडविरहीत व्यवहारासाठी इंटरनेट आवश्यक आहे. परंतु देशातील ग्रामीण भागामध्ये इंटरनेट सुविधा उपलब्ध नाहीत. जेथे आहे तेथे त्याचा स्पीड नाहीच्या बरोबर आहे. रिलायंस जियो या कंपनीने इंटरनेट स्पीड वाढवण्याचा प्रयत्न केला आहे. परंतु ते पुरेसे नाहीत. या सुविधामध्ये खुप मोठ्या प्रमाणात काम होण्याची आवश्यकता आहे.
- अशा अडचणी असल्या तरी भारतीय अर्थव्यवस्था रोकडविरहीत होण्यासाठी पाऊले उचलत आहे, तर त्यासाठी या अडचणी सोडवणे आवश्यक आहे. त्यासाठी लागणारी पार्श्वभूमी अगोदर तयार करावी लागेल. लोकांना रोकडविरहीत व्यवहार हा सुरक्षित आहे. अशी खात्री व्हायला हवी तेव्हाच लोक त्याचा ख-या अर्थाने वापर करतील.

**रोकडविरहीत व्यवहाराचे फायदे :-** भारतात आज जरी मोठ्या प्रमाणात लोक रोकडविरहीत व्यवहार करत नसले तरी रोकडविरहीत व्यवहाराचे फायदे पुढीलप्रमाणे अभ्यासता येतील.

- **वापरण्यास सोपे :-** रोकडविरहीत व्यवहारासाठी लागणारी साधने ही वापरण्यास अतिशय सोपी व सोयीस्कर आहेत. त्यातून आर्थिक व्यवहार सुलभपणे होतात. प्रवासामध्ये, अडचणीच्या काळात आर्थिक व्यवहार तत्परतेने केले जाऊ शकतात. अगदी आर्थिक व्यवहारावेळी आपण तेथे उपस्थित असणेही गरजेचे नाही किंवा सुट्टीच्या दिवशीही आर्थिक व्यवहार केले जाऊ शकतात.
- **रोकडविरहीत व्यवहारावर सवलती :-** रोकडविरहीत व्यवहार वाढावेत म्हणून २००० रुपये पर्यंत व्यवहारावर कोणताही सेवा कर लावला जात नाही. त्याचबरोबर कार्डद्वारे पेट्रोल खरेदी केले तर बिलामध्ये ०.७५ टक्के सवलत मिळते. अशा प्रकारच्या अनेक सरकारी सवलतीचा फायदा रोकडविरहीत व्यवहारावर ग्राहक मिळवू शकतो.
- **खर्चावर नियंत्रण :-** रोकडविरहीत व्यवहार हा बँकामार्फत होत असल्यामुळे त्याचा पूर्ण हिशोब ठेवला जातो. हा हिशोब समोर असल्यामुळे अनावश्यक खर्च टाळणे शक्य होते. अनावश्यक खर्चावर नियंत्रण राहते.



- **अंदाजपत्रक बनवणे शक्य होते :-** जेव्हा ग्राहक इ-वॉलेट कार्डचा वापर करतो तेव्हा त्याच्या पावत्या ग्राहकाला मिळतात . त्यामुळे खर्चावर नियंत्रण राहते. बरेच मोबाईल ॲप तर ग्राहक कोणत्या गोष्टीवर किती खर्च करतो , त्यानुसार त्यांचे अंदाजपत्रक बनवून देवू शकतात व लोकांना अंदाजपत्रकाची सवय लागते.
- **जोखीम कमी :-** रोकडविरहीत व्यवहारात रोख रक्कम चोरीची जोखीम खुप कमी आहे. क्रेडिट कार्ड, मोबाईल, वॉलेट हरवले तर त्यांना बंद करता येते त्यामुळे नुकसान होणार नाही.
- **लहान बचत :-** रोकडविरहीत व्यवहार केल्यानंतर उधारीचे व्यवहार बंद होतील. त्याचबरोबर सुट्टे पैसे वापस देण्याचा वेळ वाचेल. जेवढ्या रकमेची खरेदी केली तेवढेच बिल भरले जाईल. त्यामुळे बचतीस प्रोत्साहन मिळेल व व्यवहारातून छोटे-छोटे होणारे नुकसान टळेल. असे काही फायदे रोकडविरहीत व्यवहाराचे सांगता येतील.

**रोकडविरहीत व्यवहाराचे तोटे :-** रोकडविरहीत व्यवहाराचे फायदे असले तरी तोटे ही आहेत.

- **व्यक्तीगत माहितीची चोरी :-** रोकडविरहीत व्यवहाराचा सर्वात मोठा तोटा म्हणजे यामध्ये वैयक्तिक माहितीची चोरी होऊ शकते. बँकाकडे असणारी व्यक्तीची माहिती इंटरनेट द्वारे चोरी केली जाऊ शकते व त्याचा वापर करून आर्थिक नुकसानही होते. यामध्ये उच्चशिक्षित लोकांना देखील फसवले जाऊ शकते.
- **न्यायालयीन विलंब :-** रोकडविरहीत व्यवहारातील गुन्ह्याची सुनावणीची प्रक्रिया वेळखाऊ आहे. एखाद्या गुन्ह्यांत तर निकाल लागेपर्यंत खुप वेळ जातो. एखाद्याचे आधारकार्ड चोरी झाले तर त्यावरील निकाल लागेपर्यंत अनेक कामे खोळंबून राहतात.
- **मोबाईल हरवला तर नुकसान :-** रोकडविरहीत व्यवहाराच्या सर्व साधनांची माहिती मोबाईलवर असते हे सर्व आर्थिक व्यवहाराची माहिती मोबाईलवर असते. त्यामुळे मोबाईल हरवला तर सर्व आर्थिक माहिती हरवू शकते. त्यामुळे मोबाईलचे महत्व वाढले. त्याचबरोबर जर मोबाईल हरवला तर रोकड जवळ नसल्याने व व्यवहार करण्याचे इतर साधने जवळ नसल्याने ग्राहक संकटात येवू शकतो.
- **इंटरनेट सुविधा नसेल तर धोका :-** रोकडविरहीत व्यवहारासाठी इंटरनेट सुविधा महत्वाची आहे. त्याशिवाय आर्थिक व्यवहार होणार नाहीत. परंतु भारतात आजही ग्रामीण भागात इंटरनेट सुविधा नाहीत. असेल तर त्याचा वेग कमी आहे. त्यामुळे अशा भागात आर्थिक व्यवहार करणे शक्य होत नाही व नुकसान होते.
- **ज्येष्ठ नागरिकांना अडचणी :-** ज्येष्ठ नागरिकांना या साधनाचा वापर करणे अवघड आहे. देशातील ग्रामीण भागातील लोकांकडे इंटरनेट सुविधा नाहीत. २०१५ मध्ये फक्त २६.३ टक्के लोक स्मार्टफोनचा वापर करत होते. त्यामुळे रोकडविरहीत व्यवहार होणे अवघड आहे.
- **खर्चात वाढ :-** रोख रक्कमेने व्यवहार केला तर बिल देताना लोक विचार करतील व खर्च आटोक्यात राहतील. परंतु बिल जर खात्यावरून दिले गेले तर लोक वाढीव खर्च करतील. व लोकांचे अंदाजपत्रक कोलमडेल.

**समारोप :-**

रोकडविरहीत व्यवहाराचे अनेक तोटे असले तरी भारतीय अर्थव्यवस्था आज रोकडविरहीत व्यवहाराच्या बदलाच्या काळातून जात आहे. जगात आज विकसीत अर्थव्यवस्था रोकडविरहीत व्यवहार करत आहेत. त्यामुळे भारतीय अर्थव्यवस्थेत हा बदल घडत आहे. आज भारतात ७८ करोड लोक डेबिट कार्ड वापरतात. मोठ्या प्रमाणात लोक इ-बँकिंग सुविधा वापरतात. मोबाईल द्वारे आर्थिक व्यवहार करणा-याची संख्या ही आज वाढत आहे. त्यामुळे येणा-या काळात देश रोकडविरहीत व्यवहारात विलीन होईल यात शंका नाही.

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## पैसा मुक्त बाजार व्यवहारासमोरील आव्हाने व संधी

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जवाहर महाविद्यालय, अणदूर

### प्रस्तावना :-

प्राचीन काळात मानवाला आपल्या प्राथमिक गरजा भागवण्यासाठी त्याच्याजवळ असलेल्या वस्तूचे अदान प्रदान करणे आवश्यक होते. परंतु त्यानंतर वस्तूची देवाण घेवाण करताना अनेक अडचणी निर्माण होऊ लागल्या. एका वस्तूच्या मोबदल्यात दुस-या वस्तूची देवाण घेवाण निश्चित करणे अवघड होते. त्या अडचणी दूर करण्यासाठी सोणे, चांदी, तांबे अॅल्युमिनियम यांची नानी वापरण्यास सुरुवात झाली. यात देखील अडचणी निर्माण झाल्यास कागदी नोटाचा वापर सुरू झाला. पण हळूहळू कागदी चलणाची जागा काही लिखित किंवा लेखी कागद ज्यात पैसे स्विकारण्याचा उल्लेख आहे. कॅशने, वचनचिठ्ठी, हुंडी, चेक, पे ऑर्डर डी.डी.यांच्याद्वारे व्यवहार होऊ लागले. चलनयोग्य समजले जाऊन त्याच्या सहाय्याने पैशाची देवघेवीचे व्यवहार होत असते. यातून चलणक्षम दस्ताऐवज म्हणून कॅशलेस व्यवहार अस्तित्वात आले. आजच्या आधुनिक युगात म्हणजेच कॅशलेस व्यवहार बँक व्यवसायातील तंत्रज्ञानाला अनन्य साधारण महत्त्व प्राप्त झाले आहे. संगणकाच्या मोठ्या प्रमाणातील वापरामुळे माहिती व तंत्रज्ञान क्षेत्रात क्रांती झालेली दिसून येते. बँका देखील आपल्या ग्राहकांना कॅशलेस व्यवहाराच्या सेवा देत आहेत. पुढील एनएपएस, एनसीएच, आयएमसीएस, रूपे डेबीट कार्ड, युपीआय, बी.एच.एम., भीम अॅप असे मोबाईल अॅप वापरून व्यवहार केले जाऊ लागले. त्यामुळे काळे धन, बनावट नोटा, भ्रष्टाचार आणि दहशतवाद्यांना होणारा वित्त पुरवठा आणि अंतिम आर्थिक होणारी वाढ विकासावर होणारा परिणाम जेव्हा जेव्हा कॅशलेस व्यवहार केले जातील तेव्हा तेव्हा या व्यवहारावर डिजिटल पावले उमटलेली असतील ज्या प्रणालीमध्ये कॅशलेस व्यवहाराला प्रोत्साहित केले जाते आणि जेथे ग्राहकाला प्रोत्साहन वेतन देऊन प्रत्यक्ष रोखीचा (नोटांचा) वापर टाळला जातो. ते व्यवहार पारदर्शी असतात. काळा पैसा व भ्रष्टाचार कमी करण्यास हा एक प्रशस्त मार्ग ठरू शकतो. कॅशलेस अर्थव्यवस्था भल्यासाठी आहे. खुप अडथळे आहेत तरी पण भवितव्य उज्वल आहेत.

### उद्दिष्ट्ये :-

- १) कॅशलेस व्यवहार पध्दती शोधणे
- २) कॅशलेस व्यवहाराचे फायदे व संधी
- ३) कॅशलेस व्यवहारातील अडचणी

### गृहितके :-

- १) कॅशलेस व्यवहार किती सुरक्षीत योग्य आहे.
- २) कॅशलेस व्यवहाराचा प्रसार

संशोधन पध्दती :- उपलब्ध पुस्तके, दैनिके, मासिके व इंटरनेट वरून द्वितीय माहिती पेपर लिहला आहे.

### कॅशलेस व्यवहारांची स्थिती :-

कॅशलेस व्यवहारांना प्रोत्साहन देण्यासाठी पाईट ऑफ सेल (पीओएस) या मशिनच्या उत्पादनासाठी वापरास या मशिनच्या उत्पादनासाठी वापरल्या जाणा-या वस्तूचे उत्पादन शुल्क घटवण्यात आले. कारण रोख रक्कमेची वापर कमी करून व्यवहार पाडण्यात यावेत यासाठी ९२ टक्के उत्पादन शुल्क कमी केले होते.

ग्रामीण भागातील शेतक-यांना त्याचे दैनंदिन व्यवहार पार पाडण्यासाठी किंवा शेतीचा उत्पादन वाढ करण्यासाठी खरीप हंगामातील बियाणे, खते, किटक, नाशके इ. साधणे खरेदी झाली. ज्या शेतक-यांचे सहकारी बँक खात्यात रक्कम जमा आहे. किंवा कर्ज मंजूर झालेले आहे. अशा शेतक-यांना त्यांच्या बँक खात्यातून बियाणे, खते, किटक नाशके खरेदी करण्यासाठी अधिकृत विक्रेत्यांच्या बँक खात्यात पैसे जमा करण्याची सोय बँका उपलब्ध करून देतात. प्रत्येक खातेदाराला ई-वॅलेट द्वारे त्यांच्या मोबाईल किंवा कॉम्प्युटर मधून पैशाचे व्यवहार सहज करता येऊ लागले आहेत.

अ.क्र.	देश	वैयक्तिक संपर्काविना खातेदारांना पाठवलेल्या कार्डची संख्या	नावे पैसा प्रतिमानशी संख्या	पतपत्र पैसा संख्या	ग्राहकांनी कार्डद्वारे केलेले कॅशलेस व्यवहार	मागील पाच वर्षांत कॅशलेस व्यवहारात झालेला विकास	चालू स्थितीत मोबाईलद्वारे व्यवहार करण्याची संख्या
१.	कॅनडा	२६.००	०.००७	२.१६	५७	१६	३९
२.	स्विडन	२५.००	०.९८	१.६४	५९	१३	४७
३.	युके	४१.००	१.४८	०.८८	५२	१५	४७
४.	फ्रान्स	३९.००	०.६५	०.०१	५९	१४	३८
५.	अमेरिका	२३.००	०.९४	२.९	४५	१२	३८
६.	चीन	५६.००	३.२८	०.२३	१०	१००	७७
७.	ऑस्ट्रेलिया	३९.००	१.७५	१	३५	१०	३९
८.	जर्मनी	२६.००	१.२५	०.०६	३३	१०	४८
९.	जपान	२६.००	३.३	०.६७	१४	१२	२७
१०.	रुसा	१८.००	१.३५	०.२२	४	२२	५७

१) Souce- Fourex Bonuses. २) [www.telegraph.co.uk/money/fortru](http://www.telegraph.co.uk/money/fortru)

वरील टेबल नुसार चीन मध्ये ५६ लोकांची वैयक्तिक संपर्क नसतानाही बँकांना खातेदारांना घरपोच पैसा मुक्त व्यवहारासाठी कार्ड (पत पत्र) पाठवले आहेत. पैसा व्यवहाराची संख्या सर्वात नाव पत्र जास्त चीन मध्ये आहे. प्रति मानसी ३.२५ आहे. कॅशलेस व्यवहार क्रेडिट कार्ड वापरण्यासाठी सर्वात जास्त संख्या २.१६ कॅनडा मध्ये आहे. स्वीडन आणि फ्रान्स या दोन्ही देशात ३९ टक्के व्यवहार ग्राहकांनी डेबीट क्रेडिट कार्ड द्वारे काढले आहेत. मागील पाच वर्षांमध्ये चीन मध्ये १०० टक्के कार्ड धारकाची संख्या वाढलेली दिसते. सद्या स्थितीत रुसा या देशात सर्वात जास्त ६७ टक्के लोक बँकिंग द्वारे व्यवहार दिसून येत आहेत.

#### टेबल क्रं.२ निवडक देशातील रोखडविरहित व्यवहारांची स्थिती

अ.क्र.	देश	रोखड विरहित व्यवहार शेकडा प्रमाण	अ.क्र.	देश	प्रमाण
१.	सिंगापूर	५० %	८.	ऑस्ट्रेलिया	३५ %
२.	नेदरलंड	६१ %	९.	जर्मनी	३३ %
३.	फ्रान्स	६० %	१०.	साऊथ कोरिया	२९ %
४.	स्वीडन	५९ %	११.	स्पेन	१६ %
५.	कॅनडा	५९ %	१२.	ब्राझील	१५ %
६.	बेल्जियम	५६ %	१३.	जपान	१४ %
७.	अमेरिका	४५ %	१४.	चीन	१० %
			१५.	भारत	०२ %

संदर्भ :- " Estimated Share of payments one be one cash methods"

वरील आकडेवारी वरून असे दिसून येते की, भारता मध्ये ९८ टक्के व्यवहार हे पैशाच्या सहाय्याने चालतात. त्या नंतर चीन मध्ये ९० टक्के व्यवहार रोख स्वरूपात चालतात. जपान देखील रोख रक्कम व्यवहारात वापरताना दिसून येतो. ८६ टक्के रोख रकमेचा व्यवहार करत



आहे. त्यानंतर जगात स्पेन आणि कोरीयाचा ८४ व ७१ टक्के असा दिसून येतो. सिंगापूरचा कॅशलेस अर्थव्यवस्थेत ६१ टक्के वाटा दिसून येतो. तर केवळ ३९ रोख रक्कम व्यवहार पार पाडले जातात. त्याचा खालोखाल नेदरलंड ४० टक्के व्यवहार ६० पार रोखड पाडले जातात. म्हणजे कॅशलेस ६० टक्के पार पाडले जातात. जगात कॅशलेस व्यवहार हे १५ टक्के देश कमी अधिक प्रमाणात पार पाडत आहेत. जगामध्ये सर्वात कमी सिंगापूर मध्ये पैशाचा वापर व्यवहारात केला जातो. ६१ टक्के व्यक्ती कॅशलेस व्यवहार करतात.

पूर्वी असे मानण्यात येत असे की, ज्या बँकांची बिलडींग ती बँक चांगली व मजबूत, सुरक्षीत सद्या स्थिती आहे की, ज्या बँकेचे बॅलन्स आपल्या ग्राहकांना कमी खर्चाने जास्त सुविधा पुरवते त्याच बँकांचे ग्राहक व्यवहारासाठी निवड करताना दिसतात. ज्या बँकेत व्यवहार करण्यासाठी बँकेत रांगेत थांबावे लागत असे ते देखील कामकाजाच्या वेळेतच बँकेत जावे लागत असे सुद्धीच्या दिवशी व्यवहार होत नसत. परंतु अलीकडच्या काळामध्ये रिझर्व्ह बँक व भारत सरकारने कॅशलेस बँकिंगचा उपयोग वाढावा यासाठी १९९६ मध्ये 'आयडीआरबीटी' ची स्थापना केली ही संख्या बँकींग क्षेत्रामध्ये संशोधन करून माहिती तंत्रज्ञानाचा वापर करून नवनवी 'न सेवा ग्राहकांना पुरवण्याचा प्रयत्न करते.

आरबीआय ने कोअर बँकिंग शोसून व कॅशलेस बँकांना आपल्या सर्व ग्राहकांना अधिक चांगल्या प्रकारे सेवा देता याव्यात. आरबीआय ने कोअर बँकिंग सोल्युशन ही प्रणाली (योजना) राबवण्यात येत आहे. सद्या कोणत्याच बँकेचे ग्राहक न रहाता बँकेचे ग्राह्य झालेले दिसून येतात. ग्राहकामधून कुठल्याही सीबीएस असलेल्या शाखेमार्फत व्यवहार करता येतात. सद्या देशामध्ये ऐंशी हजार बँका 'सीबीएस' ने जोडलेल्या आहेत व व्यवहार करतात. त्यामुळे पैसे वेगाने व कमी खर्चात व सुरक्षीत पणे ट्रान्स्फर करता येतात.

### टेबल क्र.- ३ एटीएम मशीनची संख्या

अ.क्र.	बँक ग्रुप समूह	ग्रामीण	निमशहरी	शहरी	महानगर	एकुण
१.	सार्वजनिक बँक	८.५५२	१८४४५	५२.५७८	२०.१३७	६९.६५२
२.	जुन्या खाजगी बँक	७६८	२७६०	२३५४	१६८४	७५६६
३.	नवीन खाजगी बँक	२२१४	६.४८४	१०.९९५	१५.८४२	३५.५३५
४.	परदेशी बँक	३०	२१	२४४	९६६	१२६१
	एकुण	१५.५६४	२७.७१०	६६.१११	३८.६२९	११४.०१४

संदर्भ :- १) दिव्य मराठी, दै.संचार इ.

वरील तक्त्यातवरून असे दिसून येते की, सार्वजनिक बँकांनी शहरी व भागात एटीएम मशीनच्या सुविधा उपलब्ध करून दिलेल्या आहेत. ग्रामीण भागात एटीएम मशीनच्या सुविधा खुपच कमी आहेत. खाजगी बँकांची एटीएम मशीन बसवण्याची स्थिती खुपच गंभीर दिसून येते. नवीन खाजगी बँकांनी त्या मध्ये वाढ केलेली दिसते. पण ती मशीनची संख्या नगण्य वाटलेली आहे. परदेशी बँकांची स्थिती तशीच दिसते. १२१६ मशीनच्या सुविधा दिलेली आहे. निभिन्न शहरी भागात एटीएम तशीच स्थिती एटीएम मशीन पहावयास मिळते.

यावरून असे दिसते की, शहरी भागात कॅशलेस व्यवहार पार पाडले जातात. ग्रामीण भागात या सुविधा अपु-या पडलेल्या आहेत. बँक कार्ड्स, यु.एस.एस.डी.ई.पी. , यू.पी.आय, मोबाईल वॉलेट्स, बँकांचे प्रीपेड कार्ड, डेबीट कार्ड , मोबाई बँकींग, मायक्रो एटीएम मशीन इ. सुविधांचा व प्रशिक्षणाचा आभाव आहे. त्यामुळे कॅशलेस व्यवहार करण्यात अडचणी निर्माण होतात. तसेच, वरील डिजिटल किंवा कॅशलेस व्यवहार करण्यासाठी ग्रामीण भागातील बँका, मॉल, दुकाने, इ.ठिकाणी या सुविधा कमी पडत आहेत.

भारतीय कॅशलेस व्यवहार भारतामध्ये २४.५ मिलीयन आणि क्रेडिट कार्ड आणि ६६१.८ मिलीयन डेबीट कार्ड आहेत. २ कोटी ४५ लाख लोकांकडे क्रेडिट कार्ड आहेत. ६६ कोटी १५ लाख डेबीट कार्ड आहेत. (२०१५ अखेर ) २०१६ आखेर ७२.२२ मिलीयन क्रेडिट कार्ड वाढले. डेबीट कार्डमध्ये ११२.८७ मिलीयन ची वाढ झाली आहे. क्रेडिट कार्ड वाढले. डेबीट कार्डमध्ये ११२.८७ मिलीयन ची वाढ झाली आहे. क्रेडिट कार्डद्वारे मार्च २०१५-१६ वर्षात २२,६९४ कोटी रू.क्रेडिट कार्ड इतके व्यवहार झाले. डेबीट कार्ड इतके व्यवहार झाले. डेबीट कार्ड द्वारे १३,४६३ कोटी रूपयाचे व्यवहार झाले.

### आव्हाने :-

- १) अपुरी पायाभूत सुविधा
- २) सर्व वाहिण्यांचे कार्ड सक्रिय करणे आव्हानात्मक आहे.
- ३) ग्रामीण भागात मोबाईल इंटरनेट प्रमाण खुपच कमी आहेत.
- ४) भारतीय समाजात पुरेशी पायाभूत सुविधा व तंत्रज्ञानाचा अभाव आहे.
- ५) क्रेडिट, डेबीट कार्डचा मर्यादित वापर
- ६) भारतीय अर्थव्यवस्था रोख पैशाच्या आधारावर अवलंबून आहे.
- ७) सायबर सुरक्षेच्या समस्या आहेत.

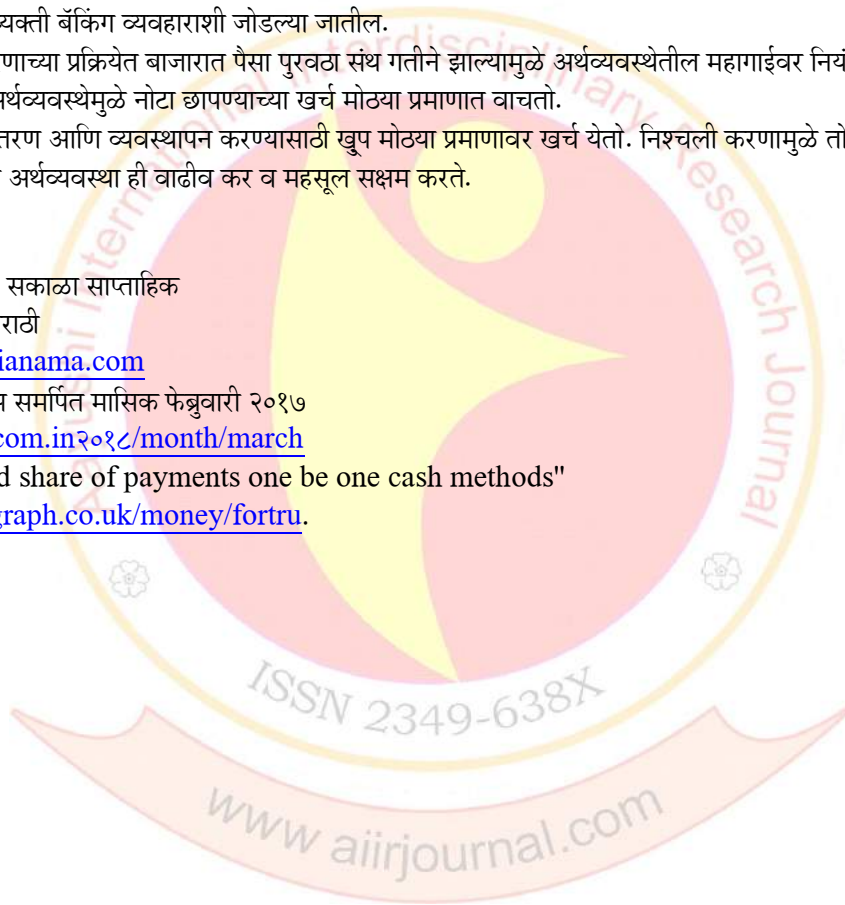
- ८) इंटरनेट साक्षरतेचा अत्यंत कमी प्रमाण
- ९) इंटरनेट साक्षरतेचा अत्यंत कमी प्रमाण
- १०) स्वाइप मशिनच्या महागड्या किंमती
- ११) एटीएमचा वापर प्रामुख्याने रोखी पैसे काढण्यासाठीच केला जातो. इतर ऑनलाईन व्यवहार टाळले जातात.

**संधी :-**

- १) टॅक्स महसूलात वाढ
- २) कॅशलेस अर्थव्यवस्थेमुळे त्वरीत व्यवहारीक कॉईम करण्यास मदत होईल.
- ३) भ्रष्टाचाराला आळा बसण्यास मदत होईल.
- ४) कल्याणकारी योजनाचा निधी लाभार्थ्यांच्या खात्यात सहज लवकर जमा करता येईल.
- ५) बँकिंग शाखांची सुविधा नाहीत अशा ठिकाणी ई पॅमेंट किंवा मोबाईल बँकिंगच्या माध्यमातून सहज व्यवहार करणे सोईचे होईल.
- ६) पैशाच्या साठेबाजीवर नियंत्रण येऊन जास्तीत जास्त पैसा बँकिंग व्यवस्थेत येऊन बचतीला चालना मिळेल व त्यातून भांडवल निर्मिती होईल.
- ७) सर्व सामान्य व्यक्ती बँकिंग व्यवहाराशी जोडल्या जातील.
- ८) निश्चलनी करणाच्या प्रक्रियेत बाजारात पैसा पुरवठा संध गतीने झाल्यामुळे अर्थव्यवस्थेतील महागाईवर नियंत्रण येऊ शकते.
- ९) रोखविरहीत अर्थव्यवस्थेमुळे नोटा छापण्याच्या खर्च मोठ्या प्रमाणात वाचतो.
- १०) चलणाच्या वितरण आणि व्यवस्थापन करण्यासाठी खुप मोठ्या प्रमाणावर खर्च येतो. निश्चली करणामुळे तो खर्च कमी होऊ शकतो.
- ११) रोखड विरहीत अर्थव्यवस्था ही वाढीव कर व महसूल सक्षम करते.

**संदर्भ :-**

- १) ४ मार्च २०१० सकाळा साप्ताहिक
- २) दैनिक दिव्य मराठी
- ३) [www.medianama.com](http://www.medianama.com)
- ४) योजना विकास समर्पित मासिक फेब्रुवारी २०१७
- ५) <http://pbr.com.in/2017/month/march>
- ६) " Estimated share of payments one be one cash methods"
- ७) [www.telegraph.co.uk/money/fortru](http://www.telegraph.co.uk/money/fortru).



## पारंपारिक ग्रंथालयाचा डिजिटल प्रवास: एक अभ्यास

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### प्रस्तावना :

२१ वे शतक हे विज्ञान तंत्रज्ञान व माहितीचे युग म्हणून ओळखले जात आहे माध्यम व संगणक क्रांतीचा प्रभाव मानवी जीवनाच्या सर्वच क्षेत्रात झालेला दिसून येतो. जगातील प्रत्येक राष्ट्राला आपल्या सर्वांगीन विकासासाठी अत्याधुनिक व इलेक्ट्रॉनिक तंत्रज्ञान साधनाचा अवलंब करणे आवश्यक ठरते आहे. आणि ग्रंथालय विभाग हा देखील राष्ट्राच्या विकासामध्ये महत्वाचा घटक आहे. त्यामुळे बदलत्या परिस्थितीनुसार ग्रंथालयामध्येसुद्धा बदल झाले पाहिजेत हे बदल ग्रंथालयांनी आत्मसात केले असून याचा परिणामपारंपारिक ग्रंथालयाची जागा डिजिटल ग्रंथालये घेत आहेत.

### पारंपारिक ग्रंथालयाचा अर्थ :

पारंपारिक ग्रंथालयामध्ये वाचनसाहित्य कागदावर छापिलेले स्वरूपात संग्रहित केलेले असते यामध्ये ग्रंथ, नियतकालिक, वार्षिके, अहवाल, नकाशे, चित्रे इत्यादीचा समावेश होतो. आणि तसेच यामध्ये ग्रंथ, ग्रंथपाल आणि उपभोक्ते मिळून पारंपारिक ग्रंथालयाची संकल्पना पूर्ण होते व ग्रंथालयीन सर्व प्रक्रिया ही ग्रंथपाल व इतर सहकाऱ्यांच्या मदतीने हाताने करावी लागते

### डिजिटल ग्रंथालय व्याख्या :

#### डिजिटल लायब्ररी वर्कशॉप (१९९४) :

नुसार, “पारंपारिक ग्रंथालये करीत असलेले ग्रंथ व तत्सम माहिती साधनांचे संग्रहण तालीकीकरण, माहितीचा शोध आणि वितरण इत्यादी कार्ये डिजिटल गणनप्रक्रिया, डिजिटल माहिती संग्रहण, संप्रेषण तंत्रज्ञान आज्ञावली (Software) यांच्या साहाय्याने करणारी यंत्रणा म्हणजे डिजिटल ग्रंथालय होय.”

**टॅरेन्स स्मिथ** : यांच्या मते, “डिजिटल लायब्ररी म्हणजे शास्त्रशुद्ध पद्धतीने तयार केलेले व डिजिटल तंत्रज्ञानाचा वापर करून त्यांची व्यवस्थित मांडणी करून ते वापरण्यासाठी विविध पद्धतीचे विविध अंगानी वापरण्याजोग्या मार्गासहित उपलब्ध डिजिटल साहित्य संग्रह होय.”

माहिती आणि ज्ञान मिळविण्याची प्रक्रिया सुलभ करण्याची क्षमता डिजिटल ग्रंथालयामध्ये आहे डिजिटल ग्रंथालयामुळे जागा आणि वेळ यांच्यात सेतू बांधला जातोयामध्ये साहित्याला डिजिटल स्वरूपात साठवले जाते आणि ते संगणकाच्या साहाय्याने मिळविता येते व ते एका ठिकाणाहून इतर ठिकाणी सहज घेवून जाता येते.

### ग्रंथालयाचे डिजिटायझेशन :

डिजिटल ग्रंथालयाच्या निर्मितीतील एक महत्वाचा टप्पा म्हणजे ग्रंथालयातील उपलब्ध आवश्यक छापिलेले साहित्याचे डिजिटल माध्यमात परिवर्तन होय. त्यासाठी डिजिटायझेशन प्रक्रिया ही महत्वाची आहे. डिजिटायझेशन प्रक्रियेमध्ये ग्रंथाचे प्रत्येक पान हे स्कॅन करावे लागते. जेणेकरून त्या पानाची डिजिटलाईज्ड प्रतिमा बनवावी लागते. अशा पद्धतीने ग्रंथाची सर्व पाने स्कॅनिंग करून घ्यावी लागतात या पद्धतीने ग्रंथालयातील सर्व ग्रंथाचे व इतर वाचनसाहित्याचे स्कॅनिंग करून ते संगणकामध्ये सठवून ठेवून संगणकाच्या माध्यमातूनच उपयोगात आणली जातात या सर्व प्रक्रियेला डिजिटल लायब्ररी म्हणतात.

अशा पद्धतीने डिजिटायझेशन करण्याचा पुढाकार भारतातील काही संस्थांनी घेतला आहे त्यामध्ये पुढील काही संस्थांचा आग्रह येथे करण्यात येणार आहे.

**डिजिटल लायब्ररी ऑफ इंडिया (DLI)** : डीएलआय हे भारतातील विविध ग्रंथालयातील दुर्मिळ पुस्तकांचा संग्रह करून त्याचे डिजिटायझेशन करून ते डिजिटल स्वरूपात उपलब्ध करून देणारे डिजिटल ग्रंथालय आहे. सन २००० मध्ये या प्रकल्पाची सुरुवात होऊन मानवाने तयार केलेले सर्व महत्वाचे साहित्य, कला आणि शास्त्रीय कार्य संग्रहित करून ते डिजिटल स्वरूपात साठवून ठेवणे आणि ते शिक्षणासाठी व अभ्यासासाठी पुढील पिढीला निःशुल्क उपलब्ध करून देणे हा त्यांचा उद्देश आहे या प्रकल्पाला डिपार्टमेंट ऑफ इलेक्ट्रॉनिक्स अँड इनफॉर्मेशन टेक्नोलॉजी आणि माहिती तंत्रज्ञान व दूरसंचार मंत्रालय भारत सरकारकडून याला निधी प्राप्त करून दिला जातो. अजित मॉडल यांनी सांगितल्यानुसार डीएलआय मध्ये सध्या १९,१९,७७,८२३ पृष्ठे असलेली ५,५०,६०३ पुस्तके आहेत

**इनफॉर्मेशन अँड लायब्ररी नेटवर्क INFLIBNET** : इनफ्लिबनेट हे विद्यापीठ अनुदान आयोगाचे स्वायत्त आंतरविद्यापीठ केंद्र असून ते अहमदाबाद येथे गुजराथ विद्यापीठाच्या परिसरामध्ये आहे. विद्यापीठाची व महाविद्यालयाची ग्रंथालये आधुनिक करण्याचे काम हे केंद्र करते



देशभरातल्या माहिती केंद्रांना वेगवान डेटा नेटवर्कने जोडण्याचा आणि माहितीचा जास्तीत जास्त वापर करता यावा यासाठी अत्याधुनिक तंत्रज्ञानाचा वापर केला जातो.

**इनफ्लिबनेट अंतर्गत खालील प्रोग्राम राबविले जातात.**

**ऑन लाईन युनियन कॅटलॉग ऑफ इंडियन युनिव्हर्सिटी (INDCAT):**

यामध्ये देशातील विविध विद्यापीठ ग्रंथालयातील बिब्लिओग्राफीक डेटाबेसस उपलब्ध असून सध्या १८७ विद्यापीठातील ९११९१३६ ग्रंथ, ४५६ विद्यापीठातील ४३८७३३ थेसिस आणि २२९ विद्यापीठातील ३५२३४ जर्नल्स डिजिटल स्वरूपात उपलब्ध आहेत.

**शोधगंगा :**

०१ जून २००९ रोजी यूजीसीने काढलेल्या अधिसूचनेनुसार विद्यापीठातल्या संशोधकांनी प्रबंध आणि निबंध सादर करताना तो इलेक्ट्रॉनिक स्वरूपात सादर करणे बंधनकारक आहे.त्यानुसार इनफ्लिबनेट या केंद्राने प्रबंध आणि निबंधाचा डिजिटल साठा निर्माण केला आहे. सदरील संस्थेच्या संकेतस्थळावरील माहितीवरून फुल टेक्स्ट प्रबंध २४५६१२, सिनोपसीस (Synopses) ६४५० ई-डेटाबेस शोधगंगेच्या माध्यमातून उपलब्ध असून भारतामध्ये सर्वाधिक ११,९०५ पीएचडी प्रबंध कलकत्ता विद्यापीठाने अपलोड केले आहेत. त्यानंतर पुणे विद्यापीठाने १०४२९ प्रबंध अपलोड केले आहेत. तर डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठाने ५१२४ पीएचडी प्रबंध अपलोड केले आहेत.

**शोध गंगोत्री :**

शोधगंगा या प्रकल्पाला पूरक असलेली शोध गंगोत्री ही नवीन सुरुवात असून शोधगंगा म्हणजे एकूण सादर केलेल्या प्रबंधांसाठी आहे तर पीएचडी नोंदणी करताना संशोधकाने संशोधन विषयाचा सारांश सादर केला जातो त्याचा संग्रह या शोधगंगोत्री मध्ये ई-डेटाबेसच्या स्वरूपात केला जातो. शोधगंगोत्री मध्ये आतापर्यंत ६९२४ सिनोपसीस अपलोड केली असून श्री.जगदीश प्रसाद जाबरमल विद्यापीठाने सर्वाधिक ३२४६ सिनोपसीस अपलोड केली आहेत. तर डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठाने केवळ ८४ अपलोड केली आहेत.

**शोध सिंधू:**

भारत सरकारच्या एमएचआरडी ने इ-शोध सिंधू या प्रकल्पाची निर्मिती केली आहे यामध्ये युजीसी-इन्फोनेट डिजिटल लायब्ररी कन्सॉर्शियम, एन-लिस्ट आणि इंडेस्ट-एआयसीटीई कन्सॉर्शियम यांचा मिलाप आहे. ई-शोध सिंधू मुळे सध्या उपलब्ध असलेली माहिती तसेच पूर्वी साठविलेली माहिती मिळविता येते. याचा लाभ केंद्र सरकार द्वारा निधी प्राप्त तंत्रसंस्था आणि युजीसी कायद्यातील १२ (बी) आणि २ (एफ) कलमां अंतर्गत येणारी विद्यापीठ आणि महाविद्यालये शोध सिंधूचा लाभ घेवू शकतात यामध्ये ६००० ई-जर्नल्स आणि ३१३५००० ई-बुकस उपलब्ध असून ७५ तंत्रनिकेतन संस्था, २१७ विद्यापीठे आणि ३२०० महाविद्यालये शोध सिंधूचे सभासद आहेत

**नॅशनल डिजिटल लायब्ररी (एनडीएल) :**

प्राथमिक शिक्षणापासून ते उच्च पातळीवरील ई-शिक्षण विषयक सर्व माहिती एकाच खिडकीद्वारे मिळविण्याच्या उद्देशाने मनुष्यबळ विकास मंत्रालयाने नॅशनल डिजिटल लायब्ररीची निर्मिती केली आहे. माहिती आणि दूरसंवाद तंत्रज्ञानाद्वारे राष्ट्रीय शिक्षण मिशन या प्रकल्पांतर्गत आयआयटी खरगपूर या संस्थेकडे डिजिटल लायब्ररीची उभारणी केली आहे याठिकाणी डिजिटल स्वरूपात अस्तित्वात असलेली आणि विविध संस्थाकडे असलेली डिजिटल माहिती एकत्रित केली जाते.

आज पारंपारिक ग्रंथालयाचे डिजिटल ग्रंथालय बनविण्यासाठी D-Space, Greenstone या आज्ञावलीच्या माध्यमातून डिजिटल लायब्ररी विकसित केल्या जात आहेत.

**सारांश :** माहिती तंत्रज्ञानातील वेगवान प्रगतीमुळे ग्रंथालयालाही आपल्या स्वरूपात बदल करून माहिती तंत्रज्ञान आत्मसात करावे लागेल आणि शैक्षणिक साधनसंपत्ती उपभोक्त्यापर्यंत अगदी कमी वेळात पोहचविण्यासाठी डिजिटल ग्रंथालय हे प्रभावी साधन आहे हे मान्य करून त्यानुसार बदल केला पाहिजे.

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## कॅशलेस व्यवहार आणि ग्रामीण अर्थव्यवस्था

डॉ.नामानंद गौतम साठे  
राज्यशास्त्र विभाग प्रमुख  
शि.म.ज्ञानदेव मोहेकर  
महाविद्यालय कळंब,  
ता.कळंब जि.उस्मानाबाद

### प्रस्तावना :-

सध्या देशामध्ये कॅशलेस व्यवहाराच्या दिशेने जाण्यासाठी प्रयत्न सुरु आहेत. कॅशलेस इकॉनॉमीचा नारा असला तरी वास्तवेकडे दुर्लक्ष करुन चालणार नाही. आज शहरी भागामध्ये कॅलनी कॅलनीत बँका आणि एटी.एम. सेंटर असली तरी ग्रामीण भागात बँकींग व्यवस्था आजही पुरेशा प्रमाणात पोहचली नाही. तर दुसरीकडे खातेदारांच्या प्रमाणात बँकात कर्मचारी नसल्यामुळे किरकोळ कामासाठीही शेतकऱ्यांना बँकेत अनेक खेडे घालावे लागतात कॅशलेकडे जाण्यापूर्वी ग्रामीण भागात बँकींग व्यवस्थेचे जाळे विस्तारणे आणि बँकींग व्यवस्था सक्षम करणे आवश्यक आहे. सदर शोध निबंधामध्ये कॅशलेस व्यवहार आणि ग्रामीण अर्थव्यवस्था याचा आढावा घेण्यात येणार आहे.

### अभ्यासाची उद्दीष्टे:-

- १) कॅशलेस व्यवहार आणि ग्रामीण अर्थव्यवस्था यांचा सहसंबंध जाणून घेणे.
- २) कॅशलेस व्यवहाराचा ग्रामीण अर्थव्यवस्थेत किती शिरकाव झाला आहे हे समजून घेणे.
- ३) कॅशलेस व्यवहार करताना ग्रामीण भागात येणाऱ्या अडचणीचा मागोवा घेणे.
- ४) सरकारी योजनांचा फायदा घेत असताना कॅशलेस व्यवहार उपयोगी पडतो की तोट्याचा ठरतो हे समजून घेणे.

### गृहीतके

- १) कॅशलेस व्यवहार करताना ग्रामीण भागातील जनतेला शिक्षणाअभावी अनेक अडचणीनां समोर जावे लागते .
- २) कॅशलेस व्यवहार करताना ग्रामीण भागामध्ये बँकेचा तसेच एटी.एम व या संबधी असणाऱ्या सुविधांचा तूटवडा दिसून येतो.
- ३) गॅस सबसिडी, पिक विमा, कृषीच्या योजना तसेच सरकारच्या अनेक योजनांचा लाभ घेत असताना कॅशलेस व्यवहाराचा फायदा ग्रामीण भागातील जनतेला होताना दिसून येतो.
- ४) शेतकरी, कामगार, मजुर, अशिक्षित महिला यांना कॅशलेस व्यवहारांचा फटका बसला आहे.

### कॅशलेस व्यवहार व ग्रामीण अर्थव्यवस्था:-

नोटबंदीच्या निर्णयानंतर अर्थक्षेत्रातील अनेक उणिवा समोर आल्या आहेत. विशेषत ग्रामीण भागात बँकींग व्यवस्था किती तकलादु आहेत. याचा पत्त्यय येत आहे.शहरात एटी.एम आणि बँकेचे प्रमाण खूप असतना खेड्यात मात्र त्याचे प्रमाण नगण्य दिसून येते. ग्रामीण अर्थव्यवस्थेवरच शहरी अर्थव्यवस्था अवलंबून असल्याचे सांगितलेले जात असले तरी ग्रामीण भागातील सक्षमीकरणाकडे आज तर नेहमीच दुर्लक्ष झाले आहे. या सक्षमी करणासाठी केवळ बँका एटी.एम सुरु करुन चालनारी नाही. तर खातेदारांना चांगली सुविधा देणे हे महत्वाचे आहे. खाते उघडण्यापासुन कर्जवाटपर्यंतच्या प्रक्रियेतून जाताना ग्राहकांना मनासीक त्रास सहन करावा लागतो . खेड्या मध्ये तर बँक खाते ओपन करण्यासाठी दहा चकरा माराव्या लागतात परिणामी गावातील माणसे खाते उघडण्यापासुन परावृत्त होतात.

नोटबंदीच्या निर्णयानंतर कॅशलेस व्यवहारांना गती देण्याचे काम करण्यात आले आहे.यात स्पेशल पर्पज व्हेइकल असलेली कॉमन सर्व्हिसेस सेंटर ठिकठिकाणी स्थापन करण्यात आली आहेत. सीएससी ई गव्हर्नस सर्व्हिसेस इंडिया लिमिटेड ही या प्रकल्पाची अमंलबजावणी करणारी मुख्य एजन्सी आहे. नेटवर्क , मुलभूत सुविधा आणि तत्रज्ञान या बळावर संपुर्ण देशभरात कॅशलेस बाबत यंत्रणा राबविण्याची सक्षमता या एजन्सीकडे आहे. आपल्या देशातील ग्रामीण व दुर्गम भागात ई-सेवा केंद्र स्थापन करण्यात आली आहेत.

जनतेमध्ये डिजीटल साक्षरता येण्यासाठी खाते उघडणे, बँकींग सेवा उपलब्ध करुन देणे या सेवावर जास्त भर दिला आला आहे. तसेच जागरुता कार्यक्रमाचे आयोजन समाजासोबत संवाद,प्रबोधन शाळा कॅलेजमध्ये मार्गदर्शन, माहितीचे प्रसारण अशा पध्दतीने लोकांचा सहभाग वाढवून त्यांच्या पर्यंत हि माहिती पोहचवली जाते कॅशलेस व्यवहार करताना बँकेत खाते असणे हि अनिवार्य गोष्ट आहे. त्यामुळेच सरकारने जनधन खाती उघडली आहेत, पाचशे आणि हजारांच्या नोटा बंद केल्यानंतर शहरापेक्षा ग्रामीण भागातील नागरिकांना अधिक आर्थिक अडचणीचा सामना करावा लागला या मागचे महत्वाचे कारण म्हणजे शहरांच्या तुलनेत ग्रामीण भागात बँकाची आणि एटी.एम ची संख्या कमी आहे. रोकड मिळवण्यासाठी गावातील लोकांना खूप त्रास सहन करावा लागला. जिवनावश्यक वस्तूंची खरेदी करण्यासाठी मारामार करावी लागली.

नोटाबंदीनंतर आता सरकारकडुन वारंवार ग्रामीण अर्थव्यवस्था कॅशलेस करण्यात भर दिला जात आहे. हे स्वागताह असले तरी सध्याची स्थिती खूपच बिकट आहे. पण खेड्यामध्ये बँकाचे प्रमाण कमी आहे. एका आकडेवारीनुसार देशातील सुमारे ६.५ लाख गांवापैकी सुमारे ४.९० लाख गांवात बँकींग सुविधा नसल्याचे दिसून येते या बाबतचा खुलासा रिझर्व्ह बँकेने आपल्या २०१४-१५ च्या वार्षिक

अहवालात केला आहे यावरून ग्रामीण भागातील बँकिंगची स्थिती काय आहे. याचा अर्दाज येईल दुसरीकडे महानगरामध्ये एका कॅलनीमध्ये पाच सात बँकेचे एटीएम दिसून येतात. हा विरोधाभास का? खेड्यामध्ये जाण्यास आजही आपल्याकडील बँका तयार नाहीत. बँकेचे राष्ट्रीयकरण झाले, खाजगीकरण झाले, पेमेंट बँका आल्या, मात्र ग्रामीण भाग आजही त्यापासून वंचित आहे. १०-२० हजाराची लोकसंख्या असणाऱ्या गांवात १-२ एटीएम सेंटर का असू नयेत.

नोटबंदीच्या काळात जिल्हा मध्यवर्ती बँकाची कोंडी करण्यात आली. त्याचा फटका ग्रामीण भागाला बसला. नोटा बदलण्यासाठी, पैसे कढण्यासाठी ५०-१०० रुपये खर्च करण्याची वेळ ग्रामस्थांवर आली. वाहतुकीची पुरेशी व्यवस्था नसल्याने वेळेचा अपव्यय झाला. तो वेगळाच शहरामध्ये जिवनाच्या वेग जास्त असेलही परंतु म्हणून ग्रामीण भागातील नागरीकांच्या वेळेला काहीच किंमत नाही असे मानून चालायचे का? आज केंद्र व राज्य सरकार विविध शासकीय अनुदाने, मदत निधी थेट बँक खात्यात जमा करण्याला प्राधान्य देत आहेत. हा निर्णय स्वागताह आहे. मात्र खात्यात जमा झालेला पैसा काढण्यासाठी प्रत्येक वेळी ग्रामीण भागातील शेतकरी, शेतमजूर, यांना तालुक्याच्या ठिकाणी जावे लागते. व अनेक खेपा कराव्या लागतात.

केंद्र सरकारचा विचार करायचा झाल्यास सुमारे दीड कोटी विद्यार्थ्यांना शिष्यवृत्ती, दोन कोटीहून अधिक जेष्ठ नागरिकांना पेन्शन, तीन कोटी कुटुंबांना आरोग्य विमा, पाच कोटीहून अधिक नागरिकांना मनेरगाची मंजुरी तसेच एलपीजी सिलींडरवरील अनुदान इत्यादी. जर देशातील सर्व गांवे बँकींग सुविधानी जोडली जात असतील. तर ग्रामीण भागातील व्यक्तीगत देवण घेवणाऱ्यांच्या व्यवहाराशिवाय सरकारी योजनांचा शंभर टक्के प्रतिसाद मिळेल. विशेष म्हणजे १९६९ मध्ये बँकांच्या राष्ट्रीयकरणाबरोबरच देशातील सर्व गावात बँकींग सुविधा उपलब्ध करून देण्याचे लक्ष्य निश्चित केले होते. मात्र पाच दशकांनंतरही ही सुविधा दुर्गम भागात अजूनही पोहचली नाही. त्यामागे अनेक कारणे सांगितली जातात.

खातेदारांच्या प्रमाणात बँक कर्मचारी संस्था घटत चालली आहे. आणि परिणामी बँकावरील कामाचे ओझे वाढत चालले आहे. गेल्या पाच वर्षात राष्ट्रीयकृत बँकासहित अनेक बँकांमध्ये आपल्या कर्मचारी संस्थेत दोन टक्याहून २० टक्या पक्षा अधिक कपात केली आहे. परंतु सरकारने बँकाना रिक्त पदावर जागा भरण्याची परवानगी दिली आहे. सरकारी बँकानी खाजगी बँकाप्रमाणे सुविधा उपलब्ध करून देणे गरजेचे आहे. पण सरकारी बँका आपल्या व्यवस्थेत सुधारणा करताताना दिसून येत नाहीत सरकारी बँकाकडून कर्ज घेण्यास ग्रामीण भागातील खातेदार नेहमीच उदासीन राहिलेले दिसून येतात. यासाठी बँकानी कागपत्राच्या क्लिस्ट अटही कमी करण्यावर भर दिला पाहिजे व आपल्या कामकाजात सुधारणा घडवून आणली पाहिजे.

#### सारांश:-

कॅशलेस व्यवहार आणि ग्रामीण अर्थव्यवस्था यांचा सहसंबंध अभ्यासला असता हे लक्षात आले की, ग्रामीण भागामध्ये बँका व एटीएमचे प्रमाण कमी आहे व खेड्यामधील जनता निरक्षर असल्यामुळे त्यांच्याकडे डेबीट कार्ड, चेकबुक, क्रेडीट कार्ड, तसेच मोबाईल बँकींग या सुविधा नसतात त्यामुळे सहाजीकच कॅशलेस व्यवहार हे ग्रामीण भागामध्ये यशस्वी होवू शकले नाहीत पण सरकारच्या विविध योजनांच्या लाभाचे पैसे कॅशलेस व्यवहारामुळे थेट लाभार्थ्यांच्या खात्यावर जमा होत आहेत. तसेच या व्यवहारामुळे रोख रक्कम हाताळण्याची गरज राहिली नाही. तसेच सरकारच्या विविध योजनांमधील भ्रष्टाचार यामुळे कमी झाला आहे हे आपणास दिसून येते.

#### संदर्भ ग्रंथ

- १) दैनीक सकाळ, दि. १६- डिसेंबर २०१६.
- २) Demonetization- effect : Flipkart, Amazon, Snapdeal witness- so -spike in undelivered- =cod- orders.
- ३) Dorothy sagayarani : Digital payment in India , to sr journal of Business and management .
- ४) [http:// cashlessindia.gov.in/digitalpaymentmethod](http://cashlessindia.gov.in/digitalpaymentmethod).



## कॅशलेस व्यवहार : लाभ आणि आव्हाने

सहा.प्रा.डॉ. एम.एल. शेळके

अर्थशास्त्र विभाग प्रमुख,

कै. बापूसाहेब पाटील एकंबेकर महाविद्यालय, उदगीर

### प्रास्ताविक :

भारत सरकारने डिजिटल इंडिया ही मोहीम अतिशय गांभीर्याने राबविण्यास सुरुवात केली आहे. त्यामुळे भारताला डिजिटल सशक्त देशात रूपांतरित केले जाऊ शकते. फेसलेस, पेपरलेस व कॅशलेस हे डिजिटल इंडिया या कार्यक्रमाचे महत्वाचे कार्य आहे. विशेष करून २०१६ च्या चलन बदलानंतर कॅशलेस व्यवहाराला विशेष महत्त्व प्राप्त झाले आहे. चलन बदलानंतर आपला देश कॅशलेस होण्याकडे वाटचाल करत असताना दिसून येतो. आधुनिक अर्थव्यवस्थेत पैसा हा इलेक्ट्रॉनिक पध्दतीने वळवला जात आहे. पायाभूत सोयी सुविधांची उपलब्धता झाल्यास भारतात कॅशलेस व्यवहार विस्तारायला फार वेळ लागणार नाही. जगातील अनेक देशांमध्ये कॅशलेस व्यवहार स्विकारण्यात आला असून भारताही त्या दिशेने आपली पावले टाकत आहे. काळा पैसा, भ्रष्टाचार आणि अवैध संपत्ती यांना पायबंद घालण्यासाठी केंद्र सरकारचे चलनबदलानंतर पुढचे पाऊल म्हणून डिजिटल पेमेंट पध्दतीचा मोठ्या प्रमाणात अवलंब करून अर्थव्यवस्थेतील व्यवहार कॅशलेस करण्यासाठी सर्वोत्तम प्रयत्न चालू आहेत. आपल्याकडे जगातील अद्वितीय अशी आधार कार्ड प्रणाली आहे. या आधारकार्डामुळे लोकांची ओळख पटवण्याची जी व्यवस्था उपलब्ध आहे. त्याच्या साहाय्याने आपल्या सर्व बोंटांच्या ठश्यांच्या साहाय्याने भविष्यात सर्व आर्थिक व्यवहार करण्यात येऊ शकतात.

कॅशलेस व्यवहारामध्ये प्रत्यक्ष रोखीचा वापर टाळला जातो, ते व्यवहार पारदर्शक असतात असे मानले जाते. काळा पैसा आणि भ्रष्टाचार यांच्या विरुद्ध लढा देण्याचा कॅशलेस व्यवहार हा कदाचित एक मार्ग ठरू शकेल. कॅशलेस व्यवहाराची आर्थिक पावले उमटणे अनेक अर्थाने फायदेशीर आहे. याचा महत्त्वपूर्ण फायदा असा की यामुळे सार्वजनिक वितरण व्यवस्था अधिक कार्यक्षम होते. २००९ मध्ये वर्तविलेल्या नियोजन आयोगाच्या अंदाजानुसार सार्वजनिक वितरण प्रणालीने केवळ २७ % भाग नियोजित अल्प उत्पन्न बटातील लोकांपर्यंत पोहचवला होता. म्हणून आज कॅशलेस व्यवहार करणे काळाची गरज बनली आहे.

### संशोधनाची उद्दिष्ट्ये :

प्रस्तुत संशोधन लेखासाठी पुढील उद्दिष्ट्ये ठरविण्यात आली आहेत.

१. कॅशलेस व्यवहाराचा अर्थ
२. कॅशलेस व्यवहाराचे लाभ
३. कॅशलेस व्यवहारासमोरील आव्हाने

### संशोधन पध्दती :

प्रस्तुत संशोधन कार्य करण्यासाठी दुय्यम साधन सामग्रीचा उपयोग करण्यात आला आहे त्यामध्ये संदर्भ ग्रंथ, मासिके, नियतकालिके, चर्चासत्रे, वेगवेगळे अहवाज इत्यादी.

भारतीय अर्थव्यवस्था ही जगातील वेगाने वाढणारी अर्थव्यवस्था आहे परंतु भारतीय अर्थव्यवस्थेला भ्रष्टाचार, काळा पैसा दहशतवाद आणि अवैध संपत्ती यांचे ग्रहण आहे. या ग्रहणातून मुक्त व्हायचे असेल तर भारतीय अर्थव्यवस्थेतील सर्व आर्थिक व्यवहार हे कॅशलेस आणि पारदर्शक व्हायला हवेत. संपूर्ण कॅशलेस व्यवहार होणे शक्य नाही. परंतु त्या दिशेने प्रयत्न करता येतील. अधिकाधिक कॅशलेस प्रणाली आणता येईल. अजूनही आपल्या समाजामध्ये रोख व्यवहाराला अधिक महत्त्व दिले जाते.

### कॅशलेस व्यवहाराचा अर्थ :

१. उपभोग्य वस्तू व सेवा यांचा विनिमय करण्यासाठी रोख पैशाचा उपयोग न करता डिजिटल माध्यमाचा वापर करून व्यवहार पूर्ण करणे म्हणजे कॅशलेस व्यवहार होय.
२. कॅशलेस व्यवहार याचा अर्थ जास्तीत जास्त डिजिटल पध्दतीचा वापर आणि आजच्या व्यवहारांत रोख रक्कमेचा कमीत कमी वापर असा होतो. दुसऱ्या शब्दांत सांगायचे तर याचा अर्थ रोख रक्कमेचा तुटवडा किंवा कमी पुरवठा असा नाही तर डिजिटल व्यवहारांचा जास्तीत जास्त उपयोग जसे की डेबिट कार्ड, क्रेडिट कार्ड, इंटरनेट बँकिंग आणि मोबाईल फोनवरील ॲपद्वारे केलेले व्यवहार असा आहे.
३. दररोजच्या आर्थिक व्यवहारांमध्ये रोख पैशाच्या वापराऐवजी चेक, डि.डी., क्रेडिट कार्ड, डेबिट कार्ड, इंटरनेट बँकिंग तसेच इतर अनेक इलेक्ट्रॉनिक पेमेंट पर्यायांचा अधिकाधिक व्यवहारात वापर असणाऱ्या व्यवहाराला कॅशलेस व्यवहार असे म्हणतात.

बदलत्या परिस्थितीत जगाच्या बरोबरीने चालण्यासाठी भारतालाही बदलावे लागत आहे. त्यामुळेच सर्व पातळीवर कॅशलेस व्यवहार होणे गरजेचे बनले आहे. इलेक्ट्रॉनिक व्यवहार जलद आणि सामान्यतः निशुल्क असतात आणि पैशाची देवाणघेवाण अधिक कार्यक्षमतेने होते.

### कॅशलेस व्यवहाराचे लाभ :

१. काळ्या पैशाला किंवा समांतर अर्थव्यवस्थेला पायबंद बसेल.
२. कर चोरीचे प्रमाण कमी होईल.
३. रियल इस्टेटच्या किंमती कमी होती.

४. बनावट चलनाची समस्या संपुष्टात येईल.
५. भ्रष्टाचाराला आळा बसेल.
६. स्थूल राष्ट्रीय उत्पादनामध्ये वाढ होईल.
७. मौद्रिक हस्तांतरणात पारदर्शकता येईल.
८. पैसा व वेळेची बचत होईल.
९. आरोग्य सुरक्षा वाढते.
१०. पत्र मुद्राचे निर्गमन व व्यवस्थापन यावरील खर्च कमी करता येतो.

११. पर्यावरण संरक्षण
१२. गुन्हेगारीचे प्रमाण कमी होईल.
१३. साठारूपी रोख पैसा चलनात येईल.
१४. कराचे दर कमी होतील.
१५. हवाला व्यवहाराला पायबंद बसेल.
१६. संतुलीत विकास
१७. सामाजिक कल्याणात वाढ होईल.

कॅशलेस व्यवहार केल्यामुळे वरील प्रकारचे लाभ मिळू शकतात.

#### कॅशलेस व्यवहारासमोरील आव्हाने :

स्वीडनपासून भारतापर्यंत चलनातून कागदी चलन गायब होऊन डिजिटल व्यवहारांची गंगा वाहू लागली. तरीही ही गंगा सर्वापर्यंत पोहोचणे आवश्यक आहे कॅशलेस व्यवहाराची ही गंगा फक्त काहीच लोकांपर्यंत मर्यादीत राहू नये.

१. सायबर गुन्हेगारी
२. सुरक्षेची चिंता
३. निरक्षरता व अज्ञान
४. दारिद्र्य
५. कॅशलेस व्यवहारावरील चार्जस
६. आर्थिक समानतेत वाढ
७. व्यक्तिगत गुप्ततेचा भंग

कॅशलेस अर्थव्यवस्थेच्या संवर्धनासाठी अत्यावश्यक घटकांपैकी एक घटक म्हणजे सुरक्षित कॅशलेस व्यवहार होय. डिजिटल व्यवहाराच्या सुरक्षेसाठी पुरेशी व्यवस्था असावी लागते. सायबर गुन्हांना प्रतिबंध करण्यासाठी जोरदार कृती करण्याची गरज असून सायबर गुन्हांमुळे सामान्य माणसाचा पैसा गेल्यास त्याला त्वरित भरपाई दिली गेली पाहिजे.

#### सारांश :

शंभर टक्के समाज हा कॅशलेस व्यवहार करील हे शक्य नाही परंतु त्या दिशेने पावले उचलता येतील. अधिकाधिक कॅशलेस व्यवहार करण्याची प्रणाली आणता येईल. अजूनही आपल्या भारतात रोखीला महत्व दिले जाते. आजही ग्रामीण भागातील ९० % व्यवहार हे रोखीने केले जातात. फार मोठ्या प्रमाणातील असंघटीत क्षेत्रात काम करणाऱ्या व्यक्तीला त्याचा रोजगार हा रोखीनेच दिला जातो.

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## डिजिटल प्रशासन पारदर्शकता आणि जनसहभाग

प्रा. अलका विठ्ठल शिंदे

संशोधन विद्यार्थिनी,

स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड

### प्रस्तावना :-

भारतीय इतिहास अनेक सामाजिक आणि आर्थिक क्रांतीचा साक्षीदार आहे. सुरुवातीला कृषी क्रांती, त्यानंतर औद्योगिक क्रांती आणि मग तंत्रज्ञानाच्या क्रांतीमुळे मानवी जीवन व्यवस्थेत बदल झाला आहे. सध्या सुरु असलेल्या डिजिटल क्रांतीमुळे विकासाची गती, प्रचंड मोठ्या प्रमाणात वाढली आहे. डिजिटल करणाची सुरुवात खूप वर्षांपूर्वीच झाली होती. मात्र याचा वेग कमी असल्यामुळे होत असलेले बदल लक्षात येत व्हते. माहिती तंत्रज्ञानाच्या सहाय्याने भारतात सर्वांगीण विकास घडविण्यासाठी देशाचे पंतप्रधान माननीय श्री. नरेंद्र मोदी यांनी डिजिटल भरत ही योजना आखली. जगातील 80 देशांमध्ये 200 पेक्षा जास्त शहरांमध्ये जम बसविलेल्या माहिती तंत्रज्ञान क्षेत्राला एक समृद्ध उद्योग व बाजारपेठ लाभलेला देश म्हणून भारताचा उल्लेख केला जातो.

सुरुवातीला डिजिटल म्हणजे नोंदी ठेवणे, कार्यालयाचे व्यवस्थापन करणे, माहितीवर प्रक्रिया करणे इ. कामे केली जात होती. मात्र मागच्या काही वर्षांपासून डिजिटल क्रांतीमध्ये झालेल्या संशोधनामुळे नव्या संधी निर्माण झाल्या आहेत. त्यामुळेच विकासाची पुनरचना आवश्यकता आहे. डिजिटल तंत्रज्ञानाचा वापर केल्याशिवाय सध्या कोणतेही शासन व प्रशासन आपली जबाबदारी पार पाडू शकत नाही हे वास्तव आहे. प्रशासकीय कार्यात गती, कार्यक्षमता व पारदर्शकता निर्माण करण्यासाठी डिजिटल तंत्रज्ञान खूप महत्त्वपूर्ण भूमिका पार पाडते.

डिजिटल प्रशासन व्यवस्थेमुळे जनतेला हवी असलेली माहिती ऑनलाईन पध्दती सहजपणे मिळविता येते. तसेच शासकीय योजना, कार्यक्रम, शासनाचे महत्त्वाचे प्रकल्प यासंबंधी माहिती जनतेपर्यंत पोहचविणे शक्य झाले आहे. शासकीय व्यवस्थेतील डिजिटल तंत्रज्ञानामुळे लोकांमध्ये शासकीय उपक्रमांप्रती आवड निर्माण होऊन जनसहभागास चालना मिळाली आहे.

### डिजिटल प्रशासनाचे महत्त्व व जन सहभाग :-

प्रशासन चालविण्यासाठी चार महत्त्वपूर्ण घटकांची आवश्यकता आहे. पारदर्शकता, सर्वसमावेशकता, कार्यक्षमता आणि जनसहभाग या चतुःसुत्रीच्या आधारावर शासनाचे सुशासनात रूपांत होते यासाठी माहिती तंत्रज्ञानाचा वापर महत्त्वाचा आहे आणि त्यासाठी शासन सतत प्रयत्नशील आहे.

राज्यशासनाने ऑनलाईन प्रशासनाकडे वाटचाल सुरु केली आहे. आणि या माध्यमातून भ्रष्टाचाराला पायबंद घालून पारदर्शक प्रशासन राबविण्यास सुरुवात केली आहे. त्यामुळे प्रशासकीय कार्यातील विलंब टाळून प्रशासनात कार्यक्षमता निर्माण झाली आहे आणि या सर्व बाबींचा परिणाम म्हणून सर्व नागरिकांना समान न्याय मिळत आहे. शासनाने कार्यक्षम कार्यप्रणाली राबविण्यासाठी डिजिटल इंडिया, मेक इन इंडिया या नवसंकल्पनाची निर्मिती केली. शासनाद्वारे दिली जाणारी प्रत्येक सेवा ही डिजिटल प्रशासनाच्या माध्यमातून तत्परतेने देण्यासाठी अशा नवनवीन संकल्पना राबवल्या जात आहेत.

भारताने लोकशाही शासन पध्दती स्विकारली आहे तसेच भारतीय प्रशासन व्यवस्थेचा लोककल्याण हा मुख्य उद्देश आहे. म्हणून देशातील सर्वसामान्य नागरिकांचा सामाजिक, शैक्षणिक, आर्थिक असा सर्वांगीण विकास करण्यासाठी प्रशासन आपल्या कार्यपध्दतीत सतत बदल करत आहे. शासकीय योजना, कार्यक्रम हे लोकांपर्यंत सहजपणे पोहचविण्यासाठी प्रशासन सतत प्रयत्नशील आहे. आणि म्हणूनच शासकीय योजनांची सर्वसमावेशक अंमलबजावणी करण्यासाठी व प्रशासन कार्यात गती आणि कार्यक्षमता वाढविण्यासाठी डिजिटल तंत्रज्ञानाचा उपयोग मोठ्या प्रमाणात केला जात आहे. प्रशासनाच्या डिजिटल व तांत्रिक कार्यपध्दतीमुळे शासनाची नवनवीन धोरणे लोकांपर्यंत पोहचविणे सहज शक्य झाले आहे. तसेच डिजिटल प्रशासन तंत्रज्ञानामुळे शासकीय धोरणांची माहिती जनतेपर्यंत पोहचते आणि यातून शासकीय कामकाजात जनतेचा सहभाग वाढण्यास मदत होत आहे.

### महाराष्ट्रातील डिजिटल प्रशासन :-

महाराष्ट्र हे आजच्या डिजिटल तंत्रज्ञानाच्या युगातील अग्रेसर राज्य म्हणून ओळखले जाते. महाराष्ट्रात प्रशासकीय विकासासाठी व लोककल्याण साध्य करण्यासाठी विविध प्रकल्प राबविले जात आहेत.

**1) सरिता :-** सरिता हा प्रकल्प असून याचा उद्देश महाराष्ट्रात राज्य दस्तऐवज नोंदणी विभाग, पुणे यांच्या अधिपत्याखालील सर्व सह-जिल्हा नोंदणी अधिकारी व त्यांची कार्यालये यांना वेळोवेळी पुरविल्या जाणाऱ्या तसेच उप-नोंदणी अधिकाऱ्यांच्या कार्यालयातून आलेल्या आधार सामग्रीचे नोंदणीकृत दस्तऐवजासाठी संगणकीकरण करण्याच्या प्रक्रिया तयार करणे, त्याचा विकास करणे व त्याची अंमलबजावणी करणे हा आहे. हा प्रकल्प संपूर्ण महाराष्ट्रातील उप-नोंदणी अधिकारी कार्यालये, सर्व जिल्हा कार्यालये यांना लागू आहे.

**2) सेतु-सुविधा :-** राष्ट्रीय ई-शासन योजना अंतर्गत सर्व सरकारी सेवा सामान्य नागरिकांना घरपोच मिळण्याच्या दृष्टीने विविध योजनांची अंमलबजावणी करण्यात येत आहे. विविध क्षेत्रातील 27 मिशन मोड प्रोजेक्ट (MMP) संकल्पनेच्या माध्यमातून देशात ग्रामपातळीवर सेतु केंद्राची स्थापना करण्यात आली आहे.

**3) आपले सरकार आणि पोर्टल :-** जनतेला शासनाच्या सोयी सुविधा व योजनांचा लाभ होण्यासाठी ई-सेवेच्या माध्यमातून आपले सरकार सेवा केंद्र सुरु करण्यात आले आहे. ग्रामीण, शहरी आणि उपनगरीय पातळीवरील सर्व नागरिकांना केंद्रिय सेवा देण्यासाठी



महाराष्ट्र शासनाने 47000 सी.एस.सी. आपले सरकार केंद्राची स्थापना केली आहे. ग्रामीण लोकांसाठी ग्रामपंचायत स्तरावर 27000 केंद्रे, उपनगरीय पातळीवर 15000 केंद्रे आहेत आणि शहर पातळीवर 5000 केंद्रे स्थापन केली आहेत.

महाराष्ट्र शासनाने माहिती तंत्रज्ञान प्रकल्पांच्या अंमलबजावणीला गती व गुणवत्ता वाढविण्यासाठी महाराष्ट्र तंत्रज्ञान महामंडळाची स्थापना केली आहे. या महामंडळांमार्फत, IT Hardware, तांत्रिक मनुष्यबळ, महापरिक्षा, महावास्तू, भारत नेट, S.D.C., M.S.W.A.N., Smart cities, e-procurement, Smart Village, IOT/IOE, DBT, Application Development इ. प्रकल्प हाताळले जातात.

**सारांश :-**

देशाचा सर्वांगीण विकास घडवून आणणे हा डिजिटल प्रशासनाचा मुख्य उद्देश आहे. या विकासातून भारत देश जगातील आर्थिक केंद्र होणार आहे. डिजिटल प्रशासन व्यवस्थेमुळे सर्वसामान्य माणसाच्या जीवनात परिवर्तन घडले आहे. या डिजिटल क्रांतीमुळेच सामान्य माणसाचे जीवन सुसह्य झाले आहे.

डिजिटल तंत्रज्ञान पध्दतीमध्ये जबाबदारीचे भान ठेवल्यास प्रशासकीय कार्यात पारदर्शकता, कार्यक्षमता निर्माण होते. शासकीय कार्यात लोकांचा सहभाग वाढतो आणि यामुळे मानवी जीवन सुंदर होण्यास मदत होते.

**संदर्भ :-**

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## आंतरराष्ट्रीय व्यापारावर परिणाम करणाऱ्या घटकांचा अभ्यास

प्रा.डॉ. महेबुबपाशा बाबूमियाँ शिरमाळे

भूगोल विभाग

शरदचंद्र महाविद्यालय, शिराढोण

ता.कळंब जि.उस्मानाबाद

### प्रस्तावना

मानव भूतलावर जन्माला आल्यापासून व्यापार सुरू आहे. विशेषतः जेव्हा मनुष्य समुहाने राहू लागला तेव्हापासून व्यापाराची निर्मिती झाली. त्यावेळी मानवाच्या गरजा मर्यादित असल्याने जीवनाला आवश्यक असणाऱ्या गरजा तो स्वतः तयार केलेल्या वस्तूपासून पूर्ण करित असे. कालांतराने मानवी वस्ती वाढली. दळणवळणाची साधने वाढली, लोक प्रवास करू लागले. मानवाची स्वयंपूर्णता कमी-कमी होऊ लागली आणि त्याला आपल्या गरजा पूर्ण करण्यासाठी दुसऱ्यावर अवलंबून राहणे आवश्यक झाले. त्यातूनच व्यापाराला सुरुवात झाली.

जगातील निरनिराळ्या भागामध्ये निरनिराळ्या प्रकारचा कच्चा माल व पक्का माल, आर्थिक आणि व्यापारी सेवांच्या संदर्भात होणाऱ्या परस्पर देण्याघेण्याच्या क्रियेला व्यापार असे म्हणतात. व्यापारामध्ये निरनिराळ्या वस्तुंची देवाण-घेवाण होत असते. ही देवाणघेवाण दोन देशातील त्या वस्तूंना असलेली मागणी व त्या-त्या देशाची आर्थिक स्थिती यावर अवलंबून असते.

### गृहितके

- 1) प्रादेशिक भिन्नतेमुळे आंतरराष्ट्रीय व्यापारास चालना मिळेल.
- 2) जगातील सर्व देशांची आर्थिक विकासाची पातळी भिन्न आहे.

### उद्दिष्ट

- 1) आंतरराष्ट्रीय व्यापारावर परिणाम करणाऱ्या विविध घटकांचा अभ्यास करणे.

### माहितीस्रोत

सदरील शोधनिबंध द्वितीयक स्वरूपाच्या माहितीवर आधारलेला आहे. आंतरराष्ट्रीय व्यापारावर परिणाम करणाऱ्या घटकांचा अभ्यास करताना आर्थिक भूगोल, भारताचा भूगोल, कृषी भूगोल, सुगम आर्थिक भू-विज्ञान, Economic and Commercial Geography, Economic Geography of World इत्यादी ग्रंथांचा उपयोग करून माहिती संकलीत केली आहे.

### विषय विवेचन

“वेगवेगळ्या राष्ट्रात परस्परात होणाऱ्या वेगवेगळ्या प्रकारच्या मालाची व वस्तुंची होणारी देवघेव म्हणजे आंतरराष्ट्रीय व्यापार होय.” किंवा “वस्तू आणि सेवा यांची आंतरराष्ट्रीय पातळीवर होणारी आयात-निर्यात म्हणजे आंतरराष्ट्रीय व्यापार होय.”

पृथ्वीवर साधन संपदा व मानव यांचे वितरण सर्वत्र विषम असल्याने या भौगोलिक विविधतेचा व व्यापाराचा निकटचा संबंध आहे. आंतरराष्ट्रीय व्यापारावर भौगोलिक, आर्थिक व राजकीय घटकांचा परिणाम होत असतो. म्हणून जगात व्यापाराची प्रगती सर्वत्र सारख्या प्रमाणात झाली नाही.

### आंतरराष्ट्रीय व्यापारावर परिणाम करणारे घटक

#### १) भौगोलिक घटक

जगात प्रत्येक भागात एकाच प्रकारची भौगोलिक परिस्थिती आणि एकाच प्रकारची साधन संपत्ती आढळत नाही. या भिन्नतेमुळे व्यापाराची निर्मिती होते व पुढे त्याची प्रगती होते.

#### अ) हवामान

हवामानावर वनस्पती, प्राणी व पिकांचे प्रकार अवलंबून असतात. उदा. उष्ण कटिबंधातील देशात भाताचे व मळयाच्या शेतातील पिकांचे उत्पादन होते. तर समशितोष्ण कटिबंधात गव्हाचे उत्पादन मोठ्या प्रमाणात होते. त्यामुळे समशितोष्ण देशात उष्ण कटिबंधातील चहा, कॉफी, रबर, मसाल्याचे पदार्थ इत्यादी निर्यात होते. तसेच विशिष्ट प्रकारची फळे व भाजीपाल्याचे उत्पादन समशितोष्ण हवामानात होते. अशा प्रकारे हवामानाच्या प्रकारावर वेगवेगळ्या पदार्थांचे उत्पादन अवलंबून असते, यातून व्यापाराची उत्पत्ती होते.

#### ब) खनिज संपत्ती

जगात विविध प्रकारची खनिजे सापडतात. ही खनिज संपत्ती सर्वत्र सारख्या प्रमाणात उपलब्ध नाहीत. उदा. नैऋत्य आशियातील देशात खनिज तेलाचे बरेच साठे आहेत. याउलट भारत आणि जपानमध्ये खनिज तेलाचे उत्पादन कमी होते. त्यामुळे भारत व जपानला खनिज तेलासाठी नैऋत्य आशियातील राष्ट्रावर अवलंबून रहावे लागते. अशा प्रकारे नैसर्गिक वनस्पती, प्राणी, पीके यातील प्रादेशिक भिन्नतेमुळे आंतरराष्ट्रीय व्यापारास चालना मिळते.

#### २) आर्थिक घटक

जगातील सर्व देश आर्थिक विकासाच्या एकाच अवस्थेत नाहीत. त्यांच्या विकासाची पातळी भिन्न-भिन्न आहे. अवििकसीत देशात पक्क्या मालाचे उत्पादन मर्यादित होते. या देशाने एखाद्या उद्योगात विशेषीकरण केलेले असते. त्या उद्योगातील माल निर्यात करून त्याच्या मोबदल्यात ते यंत्रसामुग्री, रसायने, पक्का माल इत्यादी आयात करतात. विकसीत आणि विकसनशील किंवा अवििकसीत देशातील व्यापार

प्रामुख्याने कच्चा किंवा शेती माल आणि पक्का माल किंवा यंत्रसामुग्री यांचा असतो. अ विकसीत देशात यंत्र सामुग्री व भांडवल कमी प्रमाणात असल्याने त्यांना पक्क्या मालाच्या आयातीशिवाय पर्याय नसतो. अशा प्रकारे आर्थिक विकासातील तफावत ही राष्ट्रीय कुवत, लोकांची क्रयशक्ती, दरडोई उत्पादन, राहणीमानाचा दर्जा, भांडवल संपदा, बाजारपेठ, वाहतूक सुविधा, विकास अशा गोष्टींवरून ठरविले जाते. त्यानुसारच व्यापाराचा विकास झालेला आहे.

### ३) सामाजिक घटक

जगात लोकसंख्येची विभागणी विषम स्वरूपाची आहे. जगातील बऱ्याच भागात अन्नधान्याचे मोठ्या प्रमाणात उत्पादन होते, परंतु अशा भागात लोकसंख्या जास्त असल्याने अन्नपाण्याचा खप तेथेच होतो. म्हणून त्या भागातून अन्नधान्याची निर्यात होत नाही. याउलट काही देशात अन्नधान्याची आयात करावी लागते. त्यामुळे जगाच्या वेगवेगळ्या भागात लोकसंख्या कमी अधिक असून त्या-त्या भागात कमी-अधिक प्रमाणात विकास झालेला आहे. त्यामुळेच व्यापाराची प्रगती झालेली दिसून येते.

वेगवेगळ्या देशात वेगवेगळ्या पद्धतीचे लोक वास्तव्य करतात. देशाच्या वातावरणानुसार मानवाच्या वेगवेगळ्या सवयी असतात. बऱ्याच देशात चहा व कॉफीची विशिष्ट चव असते. म्हणून चहा व कॉफी घेतली जाते. अमेरिकन लोक कॉफी पसंत करतात. एखाद्या वस्तूविषयी राष्ट्रीय भावना चांगली असेल तर वस्तूविषयी व्यापार घडून येतो.

### ४) सांस्कृतिक घटक

जगातील अनेक देशात सांस्कृतिक विकासाची पातळी उच्च दर्जाची असते. वेगवेगळ्या देशातील वेगवेगळ्या संस्कृतीचे लोक विलासी वस्तुची मागणी मोठ्या प्रमाणावर करतात. त्यामुळे त्या त्या देशात व्यापार चालतो. याउलट जे देश मागासलेले आहेत अशा देशातील लोकांची बौद्धिक पातळी कमी असते. राहणीमान निकृष्ट दर्जाचे असते. दरडोई उत्पन्न कमी असते. त्यामुळे त्यांच्या गरजा मर्यादित असतात. अशा देशात व्यापार आीक होत नाही. समाजातील कौशल्य, महत्त्वकांक्षा, चैतन्य यांचा परिणाम उद्योगावर आणि उत्पादनावर होत असतो.

### ५) राजकीय घटक

अ) सरकारी धोरण प्रत्येक देशाच्या सरकारच्या धोरणावर आंतरराष्ट्रीय व्यापार अवलंबून असतो. देशातील निर्यात वाढविण्यासाठी सरकार निर्यात कर कमी करून विविध सवलती देते. काही देशात आयात-निर्यातीवर निर्बंध ठेवत नाहीत. त्यामुळे व्यापारात वाढ होते. वेगवेगळ्या देशातील राजकीय संबंधावर व्यापार अवलंबून असते. देशादेशातील संबंध सलोख्याचे असतील तर देशामध्ये आंतरराष्ट्रीय व्यापार वाढतो.

ब) वसाहतीचे धोरण श्रीमंत देश परराष्ट्रात भांडवल गुंतवणूक मोठ्या प्रमाणावर करतात. ते इतर देशातील मळ्याच्या शेतीत भांडवल गुंतवितात. मलेशिया, भारत, इंडोनेशिया हे देश त्यांच्या मळ्यातील उत्पादन निर्यातीवर अवलंबून असतात. परराष्ट्रांनी या देशात भांडवल गुंतवणूक केलेली आहे. मध्य पूर्वेतील राष्ट्रात संयुक्त संस्थाने व इंग्लंडने खनिज तेल उत्पादनासाठी भांडवल गुंतवणूक केलेली आहे. त्यामुळे व्यापाराची प्रगती होऊ शकत नाही.

क) कर आयात-निर्यात मालावर किती कर लादला जातो यावर व्यापार अवलंबून असतो. आयातीवर कर नसेल तर माल एका देशातून दुसऱ्या देशात सहज नेता येतो. जर एखाद्या देशाने परदेशातून आयात होणाऱ्या मालावर जबरदस्त कर लादला असेल तर करामुळे वस्तू महागात पडतात व आंतरराष्ट्रीय व्यापार कमी प्रमाणात चालतो.

ड) शांतता व युद्ध देशात शांतता असेल तर आंतरराष्ट्रीय व्यापार वाढतो तर युद्धामुळे व्यापार अडचणीत येतात. अंतर्गत शांततेमुळे व्यापार सुरळीत चालतो. व्यापार सुरळीत चालण्यासाठी व नियमित व नवा व्यापार किंवा बाजारपेठा निर्माण होण्यासाठी जगात सर्वत्र शांतता व सुव्यवस्था, कायदा कानून इ. चे राष्ट्र असावे लागते. त्यामुळे उत्पादन व व्यापारात वाढ होते.

### निष्कर्ष

आंतरराष्ट्रीय व्यापारावर परिणाम करणाऱ्या घटकांचा अभ्यास करताना असे दिसून आले की, पृथ्वीवर नैसर्गिक साधनसंपदा व मानव यांचे वितरण सर्वत्र विषम असल्याने या भौगोलिक विविधतेचा व व्यापाराचा निकटचा संबंध आहे. आंतरराष्ट्रीय व्यापारावर भौगोलिक, आर्थिक, सामाजिक, सांस्कृतिक आणि राजकीय यात सरकारी धोरण, वसाहतीचे धोरण, करपद्धती, शांतता व युद्ध इत्यादी घटकांचा परिणाम प्रत्यक्ष किंवा अप्रत्यक्षरित्या होत असतो. म्हणून जगात व्यापाराची प्रगती सर्वत्र सारख्या प्रमाणात झाल्याचे आढळून येत नाही.

### संदर्भ ग्रंथ

- १) प्रा.बी.एन. नागलगावे, प्रा.कांदे, प्रा.शेळके, आर्थिक भूगोल, अभिजीत पब्लिकेशन, लातूर
- २) डॉ.विठ्ठल घारपुरे, आर्थिक भूगोल, पिंपळापुरे पब्लिकेशन, नागपूर
- ३) डॉ.ताठे, डॉ.जाधव, डॉ.देशमुख, भारताचा भूगोल, चिन्मय प्रकाशन, औरंगाबाद
- ४) डॉ.शेटे, डॉ.कणकुरे, डॉ.बिराजदार, भारताचा भूगोल, अभिजीत पब्लिकेशन, लातूर
- ५) दाते सुरेश व दाते संजीवनी, सुगम आर्थिक भूविज्ञान
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- ७) Jones C.G. & Daren Wald, Economic Geography of World



## डिजीटल पेमेंट पद्धतीचा पंचायतराज संस्थांवरील परिणामांचा अभ्यास

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जिजामाता कनिष्ठ महाविद्यालय,  
एम. आय. डी.सी. लातूर.

प्रा. डॉ. एस. एस. मुळे  
कै. व्यंकटराव देशमुख महाविद्यालय  
बाभळगाव ता. जि. लातूर

### प्रास्तावना :

नॅशनल पेमेंट कॉर्पोरेशन ऑफ इंडिया या संस्थेच्या माध्यमातून भारतातील सर्व प्रकारचे पेमेंट व्यवहार केले जातात या दशकात नॅशनल पेमेंट कॉर्पोरेशन ऑफ इंडियाने पेमेंट पद्धतीमध्ये डिजीटल पेमेंट संकल्पना पुढे आणली मोदी सरकारच्या पहिल्या पंचवर्षिक काळात डिजीटल पेमेंट पद्धतीला खऱ्या अर्थाने खुप मोठे प्रोत्साहन मिळाले. तसे पाहता मोदी सरकारच्या पुर्वीच भारतात पेटीएम नावाच्या कंपनीचे ॲप अस्तित्वात होते, त्या माध्यमातून भारतात डिजीटल पेमेंट पद्धती काही प्रमाणात सुरु झाली होती. मोदीजीच्या काळात कागदी नोट चलन बदलण्याची प्रक्रिया राबवली गेली. या नोट बंदीच्या काळात खऱ्या अर्थाने भारतात डिजीटल पेमेंट पद्धतीचा उदय झाला. मोदी सरकारने याला भरभक्कम पाठिंबा दिल्यामुळे भारतात सर्व कारच्या व्यवहारात डिजीटल पेमेंट पद्धतीचा स्वीकार होवू लागला पंचायत राज संस्थामध्ये जिल्हा परिषद, पंचायतसमित्या व ग्रामपंचायत या संस्था येतात डिजीटल पेमेंट पद्धतीचा वापर पंचायतराज संस्थामध्ये देखील मोठ्या प्रमाणात होवू लागला त्याचे अनेक फायदे समोर येवू लागले

### संशोधन शिर्षक :

“डिजीटल पेमेंट पद्धतीचा पंचायतराज संस्थांवरील परिणामांचा अभ्यास”

### संशोधनाचे उद्देश :

1. भारतातील डिजीटल पेमेंट पद्धतीचे स्वरूप अभ्यासणे.
2. डिजीटल पेमेंट पद्धतीचे पंचायतराज संस्थांवरील परिणाम अभ्यासणे

### संशोधनाचे गृहीतके :

1. भारतात डिजीटल पेमेंट पद्धती स्वीकारण्यात आलेली आहे.
2. भारतातील पंचायतराज संस्थांवर डिजीटल पेमेंट पद्धतीचे अनेक परिणाम झालेले आहेत

### संशोधन सामग्री :

प्रस्तूत संशोधनासाठी दुय्यम सामग्रीचा उपयोग करण्यात आला आहे

### डिजीटल पेमेंट पद्धतीचे स्वरूप

भारतात स्वतंत्र्यानंतर नॅशनल पेमेंट कॉर्पोरेशन ऑफ इंडिया या संस्थेच्या माध्यमातून विविध प्रकारची पेमेंट पद्धती सली जात होती. या मध्ये प्रत्यक्ष चलन, धनादेश (चेक), डिमांड ड्रॅफ्ट या सारख्या माध्यमातून भारतात अर्थिक व्यवहार होत होते जगातील अनेक देशामध्ये डिजीटल पेमेंट पद्धतीचा वापर होवू लागला होता, त्याचाच परिणाम म्हणून नॅशनल पेमेंट कॉर्पोरेशन ऑफ इंडिया या संस्थेच्या पुढाकाराने डिजीटल पेमेंट पद्धतीमध्ये पेटीएम नावचे ॲप लॉच केले गेले, दरम्यानच्या काळात भारतात मोदी सरकार सत्ते आले. त्यांनी भारतीय चलनी नोटा बदलण्याचा निर्णय घेतला त्याच काळात नोटबंदी लागू झाल्यामुळे रोख व्यवहार होणे कठिण झाले चलनी नोटांची कमतरता भासू लागली यातून मार्ग काढण्यासाठी मोदीजींनी भारतात डिजीटल पेमेंट पद्धतीला खुप मोठे प्रोत्साहन दिले डिजीटल पेमेंट पद्धतीचा प्रसार व प्रचार करण्यासाठी अनेक प्रकारचे ॲप तयार केले गेले उदा. भिम ॲप, युपीआय ॲप, गुगल पे ॲप, पे फोन, मोबी क्विक, ॲमॅझॉन पे, इत्यादी प्रकारच्या ॲपच्या माध्यमातून लोकांना अर्थिक व्यवहार सहज सोप्या पद्धतीने करता येवू लागले लोकांनी देखील या डिजीटल पेमेंट पद्धतीला स्वीकारले आणि डिजीटल पेमेंट पद्धतीचा उपयोग दैनंदिन जीवनामध्ये मोठ्या प्रमाणात करू लागले. उदा. विज बील भरणे, पाणी पट्टी भरणे, पेट्रोल डिजेल भरणे, किराणा माल भरणे, ऑनलाईन खरेदी विक्री करणे, या सारख्या अनेक दैनंदिन वस्तू साठी डिजीटल पेमेंटचा वापर होवू लागला

डिजीटल पेमेंट पध्दतीमध्ये मोबाईल मध्ये विविध प्रकारचे ॲपस् डाउनलोड करून घ्यावे लागतात. यामध्ये भिम ॲप, युपीआय ॲप, गुगल पे ॲप, पे फोन, मोबी क्विक, ॲमॅझॉन पे, या सारख्या ॲपस् मध्यून आपण डिजीटल पेमेंट करू शकतो त्यासाठी आपणाला या ॲपची के. वाय. सी. करून घेतले पाहिजे त्यानंतर आपले एटीएम कार्ड किंवा बँक खाते या ॲपस् जोडले जातात त्यानंतर वरील विविध ॲपसच्या माध्यमातून हव्या त्या वस्तूंची खरेदी विक्री करू शकतो खरेदी केलेली रक्कम देण्यासाठी वरिल प्रकारच्या ॲपच्या माध्यमातून आर्थिक व्यवहार केले जातात. आपला मोबाईल क्रमांक बँकेला जोडला पाहिजे. आर्थिक व्यवहार केल्यानंतर मोबाईल क्रमांकावर सुरक्षित असा OTP येत असतो. हा OTP क्रमांक टाकल्यानंतर आपल्या खात्यावरील रक्कम कमी होवून, ज्याच्याकडून वस्तू खरेदी केली आहे त्याच्या खात्यावर ही रक्कम वर्ग होत असते. याशिवाय डिजीटल पेमेंट पध्दतीमध्ये स्वाईप मशीनच्या माध्यमातून देखील प्रचंड मोठ्याप्रमाणात आर्थिक व्यवहार होताना दिसत आहेत

भारत सरकारने डिजीटल पेमेंट पध्दतीचा वापर मोठ्या प्रमाणात होण्यासाठी व ग्राहकांना प्रोत्साहन मिळावे म्हणून डिजीटल पेमेंट करणाऱ्या ग्राहकांसाठी लकी ग्राहक योजनाची सुरवात केली आहे. तसेच व्यापाऱ्यांनी देखील डिजीटल पेमेंट पध्दतीचा वापर करावा म्हणून डिजीटल व्यापार योजना सुरू केली आहे या योजनेच्या माध्यमातून लकीडॉच्या सहाय्यने निवडक व्यपारी व ग्राहकांना बक्षिस दिले जाते.

### डिजीटल पेमेंट पध्दतीचे पंचायतराज संस्थावरील परिणाम :

भारतात केंद्र सरकारच्या माध्यमातून सुरुवात केलेली डिजीटल पेमेंटची योजना भारतातील पंचायतराज संस्थांनी देखील स्विकारली आणि पंचायतराज संस्थांच्या माध्यमातून देखिल मोठ्याप्रमाणात आर्थिक व्यवहार हे डिजीटल पेमेंट पध्दतीच्या माध्यमातून होवू लागले देशातील सर्व ग्रामपंचायतीने डिजीटल पेमेंट पध्दतीचा स्विकार केल्यामुळे लोक आपले घरभाडे भरण्यासाठी, पाणीपट्टी भरण्यासाठी, जमीन हस्तांतर करून घेण्यासाठी डिजीटल पेमेंट पध्दतीच्या माध्यमातून आर्थिक व्यवहार करू लागले ग्रामपंचायतीमधील डिजीटल पेमेंट पध्दतीमुळे ग्रामपंचायतीमध्ये होणारा काळा बाजार, भ्रष्टाचार मोठ्या प्रमाणात कमी झाला. आणि ग्रामपंचायतीच्या अर्थिक व्यवहारमध्ये पारदर्शकता आली. त्याचा परिपाक म्हणून लोकांनी विविध कराच्या माध्यमातून भरलेली रक्कम ग्रामपंचायतीच्या बँक खात्यावर जमा होवू लागली बँकेकडे मोठ्या प्रमाणात कराच्या माध्यमातून निधी जमू लागला या निधीच्या माध्यमातून गावामध्ये विविध विकास कामे होवू लागले पिण्याचे पाणी, विज, नाली, रस्ते, स्वच्छालये, या सारख्या मुलभूत गोष्टी ग्रामपंचायतीच्या निधीतून होवू लागल्या आणि देशातील अनेक गावे स्वच्छ व सुंदर होवू लागले. देशातील अनेक ग्रामपंचायतीतील डिजीटल पेमेंट पध्दती स्विकारली. भारतसरकारने त्याला खुप मोठे प्रोत्साहन दिले. भारतातील “हरीसाल” हे पहिले डिजीटल व्हीलेज म्हणून नावारूपाला आले. या गावातील सर्वप्रकारचे अर्थिक व्यवहार हे डिजीटल पेमेंट पध्दतीतून होवू लागले.

### संशोधनाचे निष्कर्ष :

प्रस्तूत संशोधनामधून पुढील निष्कर्ष निघाले आहेत

1. डिजीटल पेमेंट पध्दतीने पंचायतराज संस्थांचे आर्थिक व्यवहार सोपे व सरळ झाले
2. डिजीटल पेमेंट पध्दतीने पंचायतराज संस्थामधील भ्रष्टाचार व काळाबाजार कमी झाला
3. भारतात डिजीटल पेमेंट पध्दतीचा वापर मोठ्या प्रमाणात होवू लागला आहे.

### संदर्भ ग्रंथ

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## रोकड विरहीत व्यवहार व शासकीय योजना - एक अभ्यास

सुमित शिवाजी सातपुते  
संशोधक विद्यार्थी

### प्रस्तावना :-

भारतासारख्या विकसनशील देशात वाढत्या लोकसंख्येमुळे दारिद्र्य, बेकारी, महागाई, अज्ञान, कर्जबाजारीपणा, जिवन आवश्यक वस्तुंचा अभाव अशा विविध समस्या निर्माण झाल्या आहेत. यातून समाजात आर्थिक व सामाजिक विषमता मोठ्या प्रमाणात निर्माण झाली आहे. ही विषमता दूर करण्यासाठी सरकार मार्फत समाजातील दुर्बल व उपेक्षित घटकांना विविध सरकारी योजना आणि अनुदाने यांचे लाभ दिले जातात. मात्र या योजना आणि अनुदाने यांचा प्रत्यक्ष लाभ दुर्बल घटकांना मिळू शकत नाही. कारण समाजातील वाढता भ्रष्टाचार, काळा बाजार, नोकरशाहीतील अप्रमाणिकपणा, वितरण व्यवस्थेतील दोष, लाचखोर अधिकारी इत्यादी अनेक कारणांमुळे दुर्बल व उपेक्षित घटकांपर्यंत १०० टक्के लाभ पोहचत नाही. १९८० च्या दशकात राजीव गांधी म्हणाले होते की, सरकार गरीबांवर एक रुपया खर्च करत असेल तर त्यातील केवळ १५ पैसे प्रत्यक्ष लाभार्थीपर्यंत पोहचतात. २० ऑक्टोबर २०१२ रोजी शासनाने असे जाहीर केले की, सरकारी योजनांचे लाभ व अनुदाने आधार कार्डच्या माध्यमातून लाभार्थींचे अनुदान थेट बँकेतून देशातील दुर्बल घटकांपर्यंत अधिक सक्षमपणे पोहचतील असे जाहीर केले.

देशाचा आर्थिक विकास हा खऱ्या अर्थाने देशातील लोकांचा विकास असतो. देशातील लोकांचा विकास होण्यासाठी सामाजिक सुरक्षिततेचे जाळे आणि आर्थिक सुरक्षा निर्माण करणे गरजेचे असते. अर्थव्यवस्थेत सामाजिक सुरक्षेबरोबरच आर्थिक समानता असणे गरजेचे असते. अनेक वर्षांपासून दारिद्र्याच्या दुष्ट चक्रातून बाहेर काढणे गरजेचे आहे. त्यामुळे शासकीय स्तरावर काही योजना राबविल्या जातात. त्या योजनांमध्ये रोकडविरहित व्यवहाराची भूमिका कशा पध्दतीने आहे ते आपण खालील पध्दतीने अभ्यासणार आहोत.

### गृहितके :-

- १) ग्रामीण भागातील साक्षरतेत वाढ झाली आहे.
- २) आधुनिक माहिती तंत्रज्ञान व जनसंपर्क याबद्दल समाजात जागृती निर्माण झाली आहे.

### उद्दिष्टे :-

प्रस्तुत शोध निबंधाच्या माध्यमातून रोकडविरहित व्यवस्था म्हणजे काय, त्याची शासकीय योजना राबवित असताना काय भूमिका असते आणि त्यासाठी आवश्यक असणारे घटक कोणते, याचा अभ्यास करण्याचा प्रयत्न केला व तसेच रोकडविरहित व्यवस्थेचा शासकीय योजना राबवित असताना काय फायदा होतो याचा चिकित्सक अभ्यास संशोधकाने करण्याचा प्रयत्न केला आहे.

### रोकडविरहित योजना म्हणजे काय ?

केंद्र शासन आणि राज्य शासनाच्या मार्फत ज्या विविध योजना राबविल्या जातात त्या शासनाच्या अधिकृत ऑनलाईन पोर्टलवर एकत्र घेवून त्या योजना ऑनलाईन पध्दतीने थेट लाभार्थ्यांना त्यांचा लाभ मिळवून देणे म्हणजे रोकडविरहित सरकारी योजना राबविणे होय.

### १) राज्यांचा योजनांचा समावेश :-

रोकडविरहित योजना शासकीय स्तरावर राबवत असताना शासनाने केवळ केंद्र सरकारच नव्हे तर राज्य सरकारच्या सुध्दा विविध सरकारी योजना शासनाच्या शासकीय अधिकृत संकेतस्थळावर एकत्र आणून त्या प्रभावीपणे राबवाव्यात. राज्य शासनांचे योजनांचे अनुदान वाटप सुध्दा थेट लाभार्थींच्या बँक खात्यात जमा करण्यात यावा.

### २) राष्ट्रीय स्वरूपाची योजना :-

सध्या ही योजना देशातील काही निवडक जिल्हयांना लागू केली असली तरी टप्पा टप्पाने ही योजना देशातील सर्व राज्यातील सर्व जिल्हयात राबविली जावी. या योजनेतून एकही गरजू किंवा पात्र व्यक्ती वंचित राहणार नाही याची या शासनाने काळजी घ्यावी.

### ३) गरीबिमुख योजना :-

ही योजना गरीबीभिमुख योजना असून या योजनेत देशातील गरीब जनतेला मध्यवर्ती किंवा महत्वाचे स्थान देण्यात आले आहे. ही योजना गरीबीभिमुख आणि कल्याणकारी योजना आहे असेच म्हटले पाहिजे.

### ४) लाभार्थ्यांना मिळणारी रक्कम :-

या योजनेच्या अंतर्गत लाभार्थी व्यक्तींना वस्तु व सेवा मिळणार नाहीत. तर रोख रक्कम त्यांच्या स्वतःच्या बँक खात्यात जमा होणार आहे. वर्षाला एका दारिद्र्य रेषेखालील कुटूंबाला ३० ते ४० हजार रुपये मिळणार आहेत.

### ५) ग्रामीण भागाला महत्त्व :-

या योजनेचे अत्यंत महत्वाचे वैशिष्ट्य म्हणजे या योजनेत देशातील ग्रामीण भागाला महत्त्व देण्यात आले आहे. आजही भारतातील ग्रामीण भागातील कोटयावधी जनता आर्थिक विकासाच्या लाभापासून वंचितच राहिलेली आहे. अशा लोकांना विविध योजना अत्यंत उपयुक्त ठरतात. या योजना रोकडविरहित व्यवहाराच्या माध्यमातून राबविल्यास त्या अत्यंत प्रभावीपणे राबविल्या जातात.



## रोकडविरहित अनुदान वाटप योजनेसाठी आवश्यक घटक

### १) आधारकार्डचे महत्त्व :-

आधारकार्डच्या माध्यमातून त्या योजना राबविल्या जाणार आहेत. त्यामुळे प्रत्येक लाभार्थी व्यक्तीकडे आधारकार्ड असणे आवश्यक आहे. त्यामुळे बोगस लाभार्थी व्यक्तींना या योजनेचा फायदा मिळू शकत नाही.

### इंटरनेट व संगणकाची भूमिका :-

थेट अनुदान वाटप योजनेत संगणक आणि इंटरनेट यांची महत्त्वपूर्ण भूमिका आहे. ही योजना राबविण्यासाठी सक्षमपणे इंटरनेट आणि संगणकाचे जाळे देशभरात असणे गरजेचे आहे. आधुनिक माहिती तंत्रज्ञानाचा पुरेपुर वापर केल्याशिवाय या योजना यशस्वी होवू शकत नाहीत.

### बँकेचे महत्त्व :-

या योजनेचा लाभ थेट ग्रामीण भागापर्यंत योग्यपणे द्यावयाचा असेल तर बँकांच्या शाखा किंवा बँक प्रतिनिधी ग्रामीण भागापर्यंत पोहचणे गरजेचे आहे. तरच ही योजना सक्षमपणे राबविली जाईल.

## रोकडविरहित योजनेचे फायदे

### बनावट लाभार्थी संपुष्टात :-

रोकडविरहित व्यवहारामुळे बनावट लाभार्थी संपुष्टात येतील. कारण ही योजना आधारकार्डशी संलग्न असल्यामुळे बनावट लाभार्थी पूर्णपणे संपुष्टात येऊ शकतात. महाराष्ट्रात तर असे हजारो बनावट लाभार्थी आहेत. अशा बनावट लाभार्थ्यांना लगाम घालण्यासाठी रोकडविरहित व्यवहाराचा वापर शासकीय योजनांमध्ये करण्यात यावा.

### वेळेची बचत :-

यामुळे योजनांच्या लाभार्थ्यांना मिळणारा आणखी एक फायदा म्हणजे त्यांच्या वेळेची खूप मोठी बचत होणार आहे. कारण शासनांच्या सर्व योजनांचे लाभ हे आता ऑनलाईन झाल्यामुळे लाभार्थी घरी बसून त्या सर्व योजनांचा लाभ घेवू शकतो, त्यामुळे वेळेची बचत होते.

### बँकिंग सोयीमध्ये वाढ :-

देशात सर्वत्र बँक शाखांचे जाळे पसरले असेलच असे नसते. त्यामुळे रोकडविरहित व्यवहाराचा वापर जर शासकीय योजनेत केला तर प्रत्येक लाभार्थी त्याच्या घरात बसून योजनेचा लाभ घेवू शकतो आणि त्या माध्यमातून बँकिंग सेवा प्रत्येक घरात पोहचेल.

### लोकांना ऑन लाईन व्यवहाराची सवय लागेल :-

शासकीय स्तरावर जर शासनाने प्रत्येक योजनेचा लाभ देण्यासाठी अधिकृत ऑनलाईन पोर्टल सुरु केले तर देशातील तळागाळातील जनतेला ऑनलाईन आणि रोकडविरहित व्यवहाराची सवय लागू शकते. रोकडविरहित व्यवहार करणाऱ्यांची संख्या वाढेल.

### शासनाच्या विविध खात्यात समन्वय :-

जर सर्व शासकीय योजना ऑनलाईन शासनाच्या अधिकृत वेब पोर्टलवर आल्या तर शासनाच्या वेगवेगळ्या खात्यामध्ये सुसंवाद प्रस्थापित होऊ शकतो. त्यातून पारदर्शकता निर्माण होईल आणि प्रत्येक योजना सक्षमपणे राबविता येईल. यातून शासनाच्या विविध खात्यात समन्वय निर्माण होईल.

### बँकेकडून कर्जाची सुविधा :-

रोकडविरहित व्यवहाराचा वापर जर समाजात वाढला तर समाजातील गरजू आणि गरीब लोकांना बँका सहज कर्ज उपलब्ध करून देवू शकतात. कारण हा ऑनलाईन पैसा असल्यामुळे तो सहज उपलब्ध होऊ शकतो आणि बँक सहज कर्जाची सुविधा उपलब्ध करून देवू शकते.

### लाभार्थी व्यक्तीच्या दृष्टीने सोईचे :-

रोकडविरहित व्यवहार हे लाभार्थी व्यक्तींच्या दृष्टीने सोयीस्कर होऊ शकते. कारण शासकीय योजनेत याचा वापर केला तर लाभार्थी व्यक्तीला डिजिटल पैसा मिळतो. ज्यातून लाभार्थी स्वतः ई.पेमेंट ॲप च्या माध्यमातून या सोयीचा लाभ घेऊ शकतात. यामुळे लाभार्थी व्यक्तीच्या दृष्टीने ते सोईचे होऊ शकते.

### दलालाचे उच्चाटन :-

अनेक शासकीय योजना राबवित असताना ग्रामीण भागात दलाल कार्य करत असल्याचे आपणांस दिसते किंवा ग्रामीण भागात पाटील, सरपंच, ग्रामसेवक, तलाठी इत्यादी सरकारी अधिकारी, कर्मचाऱ्यांकडून सुध्दा शासकीय योजनांची व्यवस्थित अंमलबजावणी केली जात नाही. त्यामुळे योजनांचे लाभ प्रत्यक्ष लाभार्थी पर्यंत पोहचण्यासाठी वेळ लागतो किंवा प्रत्यक्ष १०० टक्के फायदा लाभार्थ्यांना मिळत नाही. जर शासकीय योजनेत रोकडविरहित व्यवहाराचा उपयोग केला तर अशा दलालांचे समुळ उच्चाटन होईल व सर्व शासकीय योजनांचा लाभ थेट लाभार्थ्यांना १०० टक्के मिळेल.

### शासकीय कर्मचाऱ्यांच्या भ्रष्टाचारास आळा :-

रोकडविरहित व्यवहाराचा वापर जर शासकीय योजनेत केला तर शासकीय आणि प्रशासकीय स्तरावर जो भ्रष्टाचार होत असतो अशा भ्रष्टाचारास आळा बसेल आणि योजनेचा १०० टक्के लाभ हा लाभार्थी व्यक्तीला मिळेल म्हणून रोकडविरहित व्यवहार शासकीय योजना राबवित असताना करावा.

### सरकारी खात्यातील दफ्तर दिरंगाईस आळा बसेल :-

कित्येक वेळी शासकीय योजना राबवित असताना सरकारी अधिकारी आणि कर्मचारी यांच्या काम चुकार वृत्तीमुळे शासकीय योजनेचा लाभ मिळण्यासाठी वेळ होतो. अशा वेळी या सर्व शासकीय योजना जर शासनाच्या अधिकृत पोर्टलवर एकत्र आणल्या तर सर्व व्यवहार ऑनलाईन होतील. यातून योजनेची अंमलबजावणी लवकरात लवकर करता येऊ शकते आणि सरकारी खात्यातील काम चुकार वृत्तीला आळा घालता येवू शकतो.

### वंचित लोकांचा विकास :-

सर्व शासकीय योजनेची अंमलबजावणी ही ऑनलाईन होत असल्यामुळे आणि त्या योजनेचा लाभ रोकडविरहित मिळत असल्यामुळे वंचित घटक हे इंटरनेट आणि संगणक यांच्या संपर्कात येतील आणि त्यातून त्यांचा आधुनिक माहिती तंत्रज्ञान व जनसंपर्क यांच्याशी संपर्क येईल आणि त्यातून आधुनिक जगाशी हे वंचित घटक जोडल्या जातील. या सर्व प्रक्रियेतून वंचित व उपेक्षित घटक विकासाच्या दिशेने प्रगती करतील.

### फसवणूक थांबण्यास मदत :-

शासकीय योजनांच्या नावाखाली समाजातील अनेक समाजकंटक सामान्य जनतेची फसवणूक करत असतात. यामुळे सर्व शासकीय योजना या एका अधिकृत ऑनलाईन पोर्टलवर एकत्र आणाव्यात आणि त्याचा लाभ सुध्दा रोकडविरहित व्यवस्थेतून जनतेपर्यंत पोहचवावा. त्यामुळे सामान्य जनतेची फसवणूक होणार नाही.

### विद्यार्थी मित्रांना फायदा :-

आजच्या आधुनिक जगात तरुण / तरुणी संगणक आणि माहिती तंत्रज्ञानाच्या संपर्कात खुप मोठ्या प्रमाणात आली आहेत. त्यामुळे विद्यार्थ्यांसाठी असणाऱ्या शासकीय योजना सरकारी संकेतस्थळावर आणल्यास आणि त्याचा लाभ रोकडविरहित पोहचविला तर योजना प्रभावीपणे राबविली जाऊ शकते आणि प्रत्यक्ष लाभ त्या विद्यार्थ्यांला मिळेल. त्यामुळे रोकडविरहित व्यवस्था ही या ठिकाणी प्रभावीपणे कार्य करू शकते.

### सारांश :-

समाजात रोकडविरहित व्यवहाराला चालना दिली आणि त्यातून जर शासकीय योजनेचा लाभ दिला गेला तर त्या सर्व शासकीय योजना प्रभावीपणे राबविल्या जातील. ज्यातून शासकीय स्तरावर होत असलेला भ्रष्टाचार मोठ्या प्रमाणात कमी होईल आणि लाभार्थी व्यक्तीला त्याचा सरळ आणि जलदगतीने फायदा होईल. त्याच बरोबर समाजात माहिती तंत्रज्ञान आणि इंटरनेटच्या बाबतीत जनजागृती निर्माण होईल. त्यातून वंचित व उपेक्षित घटकांचा विकास होईल.

सबब शासनाने त्यांच्या शासकीय योजना राबवित असताना आधुनिक माहिती तंत्रज्ञान व जनसंपर्क साधनांचा वापर करून त्यांच्या सर्व योजना प्रभावीपणे राबवाव्या आणि त्या योजनांचा लाभ सुध्दा माहिती तंत्रज्ञान व इंटरनेट च्या माध्यमातून डिजिटल पेमेंट चा उपयोग करून जनतेपर्यंत पोहचवावा. जेणेकरून योजना जलद गतीने राबविता येतील व शासन व जनतेतील अंतर कमी करून शासन व जनतेत थेट संबंध प्रस्थापित होईल यातून विविध शासकीय योजना लाल फितीच्या भोंगळ कारभारात अडकणार नाहीत. यामुळे योजना प्रभावीपणे राबविली जाईल म्हणून शासनाने त्यांच्या कारभारात संगणक, इंटरनेट, आधुनिक माहिती तंत्रज्ञान यांचा वापर करावा.

### संदर्भ :-

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## डिजिटल पेमेंट व्यवस्था :- फायदे आणि अडचणी

डॉ. दीपक व्ही भुसारे,  
सहाय्यक प्राध्यापक तथा  
संशोधन मार्गदर्शक,  
अर्थशास्त्र विभाग,  
प्रतिष्ठान महाविद्यालय, पैठण, औरंगाबाद.

जयश्री आसाराम तळेकर  
संशोधक विद्यार्थिनी,  
अर्थशास्त्र विभाग,  
डॉ.बाबासाहेबआंबेडकर  
मराठवाडा विद्यापीठ, औरंगाबाद.

भारत सरकारने दिनांक ८ नोव्हेंबर २०१६ रोजी पाचशे व एक हजार रुपयांच्या जुन्या नोटा रद्द केल्या होत्या. भारतातील एकूण चलनामध्ये या नोटांचे प्रमाण जवळपास ८५ टक्के होते. शासनाने अचानक घेतलेल्या या निर्णयामुळे रोख नोटांची टंचाई निर्माण झाली. त्यामुळे शासनाला डिजिटल / इलेक्ट्रॉनिक पेमेंटला प्राधान्य द्यावे लागले.

निश्चलीकरणाचा निर्णय घेण्यामागे एक हेतू असा देखील होता की, कमीत कमी रोकड वापरणारी अर्थव्यवस्था (कॅशलेस अर्थव्यवस्था) निर्माण करणे. ज्यामध्ये सर्व आर्थिक व्यवहार रोखीमध्ये न होता त्यातील बरेचसे व्यवहार डिजिटल पद्धतीने होणे अपेक्षित आहे.

### उद्दिष्टे :-

१. डिजिटल अर्थव्यवस्था म्हणजे काय ? हे अभ्यासणे.
२. डिजिटल पेमेंटचे फायदे अभ्यासणे.
३. डिजिटल पेमेंट मध्ये उद्भवणाऱ्या अडचणींचा अभ्यास करून त्यावर उपाय सूचविणे.

### डिजिटल अर्थव्यवस्था :-

भारत सरकारने १ जुलै २०१५ रोजी डिजिटल इंडिया कार्यक्रम सुरु केला. हा भारत सरकारचा एक महत्त्वाचा कार्यक्रम आहे. जो भारतास एक सक्षम अर्थव्यवस्था घडवून आणण्यास साहाय्यभूत ठरत आहे. डिजिटल इंडिया कार्यक्रमांतर्गत भारतात कॅशलेस अर्थव्यवस्था निर्माण करण्यासाठी प्राधान्य दिले जात आहे. कॅशलेस अर्थव्यवस्था म्हणजे रोकडविरहित व्यवहार म्हणजेच सर्व आर्थिक देवाण घेवाण कोणत्याही रकमेशिवाय करणे होय. यात सर्व आर्थिक व्यवहार हे डिजिटल स्वरूपात करण्यात येतात. डिजिटल स्वरूपात करण्यात येणारे व्यवहार हे फक्त कार्ड, चेक, डी.डी, नेटबँकिंग, फोन बँकिंग, इ-बँकिंग इत्यादींचा वापर करून केले जातात. या सर्वांच्या माध्यमातून डिजिटल अर्थव्यवस्था निर्माण करण्याचा सरकारचा हेतू आहे.

### डिजिटल व्यवहाराचे विविध पर्याय :-

१. **युनिफाईड पेमेंट इंटरफेस (UPI) :-** प्रत्येक बँकेचे स्वतःचे मोबाईल ॲप आहेत. त्यामुळे स्मार्ट फोनवरून व्यवहार करणे शक्य आहे.
२. **ई-वॉलेट (E-Wallet) :-** ई-वॉलेट द्वारे तुमच्या मोबाईल मधून वा कॉम्प्युटरमधून पैशाचे व्यवहार करणे शक्य आहे. बँकेद्वारे खाजगी सेवा पुरविणाऱ्या वॉलेट कंपन्या, टेलीफोन कंपन्यासुद्धा असे अनेक पर्याय यामध्ये उपलब्ध आहेत.
३. **कार्डस (POS) :-** POS म्हणजे पॉईंट ऑफ सेल म्हणजेच विक्रीचे ठिकाण. आपले डेबिट किंवा क्रेडिट कार्ड वापरून पेमेंट करण्याची ही सुविधा असते.
४. **आधार सक्षम पेमेंट सिस्टीम (AEPS) :-** आधार कार्ड द्वारे बँकिंग व्यवहार करण्याकरीता आपले आधार कार्ड खात्याशी जोडून व्यवहार केले जातात. या व्यवहारासाठी आधार बायोमॅट्रीक्स साठी रेकॉर्ड केले गेलेले फिंगरप्रिंट खरेदी विक्रीच्या व्यवहारात ग्राह्य धरले जातात.
५. **अविस्तृत पूरक सेवा माहिती (USSD) :-** अनस्ट्रक्चर्ड सप्लीमेंट्री सर्विस डेटा या प्रणालीद्वारे कोणत्याही मोबाईलच्या इंटरफेस मधून पैसे पाठवता येतात. यासाठी स्मार्ट फोनची आवश्यकता नाही.
६. **डेबिट / क्रेडिट कार्ड :-** यामुळे ग्राहकांना कोणत्याही बँकेच्या एटीएम द्वारे आपले व्यवहार पार पाडता येतात. याशिवाय आपल्या क्रेडीटवर खरेदीही करता येते.
७. **नेट बँकिंग :-** ही एक नेटवर्क आधारित बँकिंग प्रणाली आहे. या बँकिंग सेवेद्वारे ग्राहक घरबसल्या किंवा आपल्या संगणकाद्वारे बँकेच्या संपर्कात राहून खात्यातील रक्कम तपासणे, अर्ज करणे, विविध योजनांची माहिती घेणे व इतर आर्थिक व्यवहार पार पाडू शकतो.
८. **मोबाईल बँकिंग :-** ही देखील एक नेटवर्क आधारित बँकिंग प्रणाली आहे. या बँकिंग सेवेद्वारे ग्राहक आपल्या स्मार्ट फोनद्वारे बँकेच्या संपर्कात राहून खात्यातील रक्कम तपासणे, अर्ज करणे, विविध योजनांची माहिती घेणे व इतर आर्थिक व्यवहार पार पाडू शकतो.

### डिजिटल पेमेंटचे फायदे :-

१. **सुलभता :-** डिजिटल व्यवहार करणे सुलभ आणि सोयीचे असते. तसेच ते रोख रक्कम हाताळण्यापेक्षा अधिक सुरक्षित देखील असतात.



२. **कर महसूलात वाढ** :-भारतात कर चुकवेगिरीचे प्रमाण सर्वाधिक आहे. तसेच काळा पैसा आणि भ्रष्टाचाराच्या समस्येमुळे सरकारला कर जमा करण्यात अनेक अडचणी येतात. डिजिटल व्यवहारांमुळे सर्व आर्थिक व्यवहारांची नोंद होत असल्यामुळे कर चोरीचे प्रमाण कमी होईल. त्यामुळे आपोआपच कर महसूलामध्ये वाढ होईल.
३. **त्वरित व्यवहार** :-डिजिटल व्यवहारांमुळे त्वरित व्यावहारिक काम करण्यास मदत होते. तसेच शेतकरी, कामगार, लघु व्यवसायिक आणि उद्योजक अनेक व्यवहार जलदगतीने करू शकतात.
४. **भ्रष्टाचार व काळ्या पैशाला पायबंद** :-भारतामध्ये मोठ्या प्रमाणात भ्रष्टाचार रोख स्वरूपात होतो. डिजिटल व्यवहारांमुळे सर्व आर्थिक व्यवहारांची नोंद ठेवणे, असे व्यवहार ट्रॅक करणे सोपे जाते. त्यामुळेच भ्रष्टाचार व काळ्या पैशाला आपोआपच पायबंद घातला जाईल.
५. **चलन छपाई व वितरण खर्चात बचत** :-चलनी नोटांच्या छपाई व वापरात भारताचा जगात चीननंतर दुसरा क्रमांक लागतो. डिजिटल व्यवहारांमुळे चलन छपाई व वितरण खर्चात बचत होते.
६. **आर्थिक समावेशकता** :-डिजिटल अर्थव्यवस्थेमुळे दूरस्थ प्रदेशांमध्ये ही केवळ मोबाईल व इंटरनेटच्या माध्यमातून बँकिंग सेवा पोहोचविता येतात. त्यामुळे भौगोलिक आव्हानांवर मात करीत आर्थिक समावेशकता साधणे शक्य होते.
७. **पैसा व वेळेची बचत** :-डिजिटल व्यवहारांमुळे सर्व आर्थिक व्यवहार अत्यंत कमी वेळेत कुठेही न जाता पार पाडता येतात, त्यामुळे पैशाची व वेळेची बचत होते.
८. **रियल इस्टेटच्या किंमती कमी होण्यास मदत** :-रियल इस्टेटच्या क्षेत्रात मोठ्या प्रमाणात रोख रकमेचे व्यवहार बेकायदेशीरपणे होत असतात.डिजिटल व्यवहारांमुळे सर्व व्यवहारात पारदर्शकता येऊन रियल इस्टेटच्या किंमती कमी होण्यास मदत होईल.
९. **नकली चलनाची समस्या संपुष्टात येईल** :-भारतामध्ये शेजारील राष्ट्रांमधून मोठ्या प्रमाणात नकली चलन येते. या नकली चलनामुळे आतंकवाद, दहशतवाद यांना खतपाणी मिळते. डिजिटल व्यवहारांमुळे नकली चलनाला थारा राहत नाही व नकली चलनाची समस्या संपुष्टात येते.
१०. **पर्यावरण संरक्षण** :-डिजिटल व्यवहारांमुळे कागदी चलन छापण्याची आवश्यकता कमी होऊन कागदाची मागणी घटते. परिणामतः झाडे कमी कापली जातात. साहजिकच पर्यावरण संरक्षणाला आणि संवर्धनाला हातभार लावता येतो.

**डिजिटल पेमेंटमध्ये उद्भवणाऱ्या अडचणी** :- डिजिटल व्यवहारांसाठी केंद्र सरकारने मोठ्या प्रमाणावर पुरस्कार केलेला असला तरी या व्यवहारांमध्ये युजर्स (वापरकर्ते) व बँकिंग क्षेत्र या दोन्हींच्याही समस्या मोठ्या प्रमाणात आहेत. या व्यवहारांमध्ये उद्भवणाऱ्या अडचणी पुढीलप्रमाणे आहेत.

१. **सायबर गुन्हेगारी** :- डिजिटल व्यवहारांमध्ये सायबर गुन्हेगारीमध्ये वाढ होत आहे. बँक खाते हॅक होणे, खात्यातील रक्कम परस्पर काढून घेणे असे प्रकार दिवसेंदिवस वाढत आहेत.
२. **इंटरनेट सुविधेचा अभाव** :- भारतात आजही अनेक भागांमध्ये इंटरनेट सुविधेचा अभाव आहे. ग्रामीण भागात आजही इंटरनेटची सुविधा उपलब्ध नाही. त्यामुळे डिजिटल व्यवहार करतांना अनेक अडचणी येतात.
३. **असंगठित क्षेत्र** :- भारतात ९०% हून अधिक रोजगार असंगठित क्षेत्रात कार्यरत आहेत. या क्षेत्रातील लोकांना डिजिटल व्यवहार करण्यासाठी आवश्यक असणाऱ्या पायाभूत सुविधा घेणे शक्य नसते. त्यामुळे ते रोख व्यवहारांना प्राधान्य देतात.
४. **अपूरी बँक संख्या** :- भारतात आजही अनेक भागांमध्ये बँकांची संख्या अपुरी आहे. तसेच **ATM** ची संख्या देखील पुरेशी नाही. त्यामुळे डिजिटल व्यवहार करण्यामध्ये अनेक अडचणी येतात.

**उपाययोजना :-**

१. डिजिटल व्यवहार करतांना अनेक प्रकारच्या अडचणी निर्माण होतात. त्यावर पुढील प्रकारच्या उपाययोजना करून अशा व्यवहारांमध्ये वाढ घडवून आणणे गरजेचे आहे.
२. सर्वसामान्य लोकांपर्यंत डिजिटल व्यवहारांची माहिती पोहोचविणे आवश्यक आहे. लोकांना डिजिटल ज्ञान देवून त्यांना अशा व्यवहारांसाठी प्रोत्साहन देणे आवश्यक आहे.
३. सायबर गुन्हांना आळा घालणे आवश्यक आहे, अशा गुन्हेगारांवर कडक कारवाई करून असे गुन्हे घडू नये यासाठी सक्षम यंत्रणा व उपाययोजना करणे आवश्यक आहे.
४. प्रत्येक व्यक्तीचे व्यवहार गुप्त राहतील याची बँकांनी काळजी घेणे आवश्यक आहे.
५. ग्रामीण भागात मोठ्या प्रमाणात इंटरनेट सुविधा, विजेच्या सुविधा पोहोचविणे आवश्यक आहे.
६. मोठ्या प्रमाणात बँकांची, **ATM** ची संख्या वाढविणे आवश्यक आहे.
७. अशा प्रकारच्या उपाययोजना करून डिजिटल व्यवहारांमध्ये वाढ घडवून आणणे शक्य आहे.

**संदर्भ ग्रंथ :-**

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## रोकड विरहीत अर्थव्यवस्था

### प्रा.जगन्नाथ टोंपे

सहाय्यक प्राध्यापक समाजशास्त्र विभाग  
स्वातंत्र्य सैनिक सुर्यभानजी पवार  
महाविद्यालय, पूर्णा जं जि.परभणी

### प्रा.डॉ.प्रभाकर किरतनकार

सहयोगी प्राध्यापक ,तत्त्वज्ञान विभाग  
स्वातंत्र्य सैनिक सुर्यभानजी पवार  
महाविद्यालय, पूर्णा जं जि.परभणी

### प्रस्तावना

भारतीय अर्थव्यवस्था ही जगातील वेगाने वाढणारी अर्थव्यवस्था आहे. पण त्याला काळा पैसा ,भ्रष्टाचार,दहशतवाद,बेकायदेशीर मालमत्ता यांचे ग्रहण आहे. पंतप्रधानांनी ०८ नोव्हेंबर २०१६ रोजी ५०० व १०० रुपयांच्या नोटा चलनातून बाद करण्याचा निर्णय जाहीर केला तेव्हा सगळ्यांनाच मोठा धक्का बसला. भ्रष्टाचार ,काळ्या पैशाला आळा घालणे आणि बनावट नोटांच्या समस्येला पायबंद घालणे आदी मुख्य हेतूनेच निश्चलीकरणाचा हा निर्णय घेण्यात आला होता. निश्चलीकरण म्हणजे अशी कृती की, ज्या द्वारे एखाद्या देशाचे सरकार एक किंवा एका पेक्षा अधिक चलनाचे वैध द्वारे एखाद्या देशाचे सरकार एक किंवा एका पेक्षा अधिक चलनाचे वैध स्वरूप काढून घेते. भ्रष्ट मार्गाने जमा केलेला काळा पैसा उघड करण्याच्या हेतूने सहसा निश्चलीकरणाची ही प्रक्रिया राबवली जाते. केवळ भारतातच नव्हे तर अनेक देशांनी उदाहरणार्थ अमेरिकेने १९४९ मध्ये डॉलरने १९९० मध्ये ऑस्ट्रेलिया ने,१९९६ मध्ये उत्तर कोरीया व झिम्बाब्वेने २०१० मध्ये निश्चलीकरणाचा पर्याय वापरला आहे. भारतात प्रथम निश्चलीकरण १९४६ मध्ये तर दुसरे निश्चलीकरण १९७८ मध्ये करण्यात आले या मागचा महत्त्वाचा हेतू असा की, अर्थव्यवस्थेतील काळापैसा उघड करणे भ्रष्टाचार वर नियंत्रण व बनावट नोटाचा डाव हाणून पाडणे हा होय.

नोव्हेंबर २०१६ मध्ये घेतलेल्या नोटाबंदीच्या निर्णया नंतर सरकारने रोखीने होणारे व्यवहार कमी करून डिजिटल व्यवहारांना चालना दिली. कॅशलेस इंडिया ही नुकतीच सुरु झालेली घटना आहे. जी भारत सरकारने अर्थव्यवस्थेत आमूलाग्र बदल घडवून आणण्याचे लक्ष्य ठेवले आहे.

### रोकड विरहीत व्यवहार

रोकड विरहीत अर्थव्यवस्था याचा अर्थ जास्तीत जास्त डिजिटल पध्दतीचा वापर आणि रोजच्या व्यवहारात रोख रक्कमेचा कमीत कमी वापर असा होतो. दुसऱ्या शब्दांत सांगायचे तर याचा अर्थ रोख रक्कमेचा तुटवडा किंवा कमी पुरवठा असा नाही तर डिजिटल व्यवहारांचा जास्तीत जास्त उपयोग डेबीट ,क्रेडिट कार्ड,इंटरनेट बँकिंग ,ईवॉलेट ,कार्डस पेमेंट आधार समक्ष पेमेंट सिस्टीम आणि मोबाईल फोन वरील ॲपद्वारे केलेले व्यवहार असा आहे. शंभर टक्के रोकड विरहित समाज अशक्य आहे. हे खरे परंतु आपण कमी रोखीच्या दिशेने वाटचाल करू शकतो. तरच रोकड विरहीत समाज व्यवस्था शक्य आहे.रोकड विरहीत अर्थव्यवस्था क्रेडिट कार्ड व डेबिट कार्डवर चालते. रोखी ऐवजी ऑनलाईन शॉपीगला महत्त्व आले आहे. कॅशलेस व्यवहाराला चालना देण्यासाठी अनेक सवलती जाहीर केल्या आहेत.कॅशलेस व्यवहाराला प्रोत्साहित केले जाते आणि ग्राहकाला प्रोत्साहन वेतन (इंसेटीव) देवून प्रत्यक्ष रोखीचा (नोटांचा ) वापर टाळला जातो.कॅशलेस व्यवहारामध्ये झालेली वाढ ही प्रामुख्याने जनतेने दैनंदिन वापराच्या वस्तूंच्या खरेदीसाठी डिजिटल व्यवहारांचा ,विक्रीत देशांच्या पंगतीत नेवून बसवण्यासाठी कॅशलेस अर्थव्यवस्थेच्या दिशेने वाटचाल करणे गरजेचे आहे .

### रोकड विरहीत व्यवहारासाठी नवीन पर्याय :-

प्लॉस्टिक मनी (डेबिट कार्ड,क्रेडिट कार्ड,) इंटरनेट बँकिंग इवॉलेट/मोबाईल वॉलेट, युपीआय UPI ,मोबाईल बँकिंग व USSD, POS ऑफ सेल , आणि आधार कार्ड इ. चा पर्यायी वापर केला जातो.

### रोकड विरहीत व्यवहारांचे फायदे :

१. रोकड विरहीत व्यवहारांमुळे भ्रष्टाचारास आळा बसेल.
२. व्यवहार जलद गतीने होतील.
३. कळ्या पैशावर अवलंबून असणारे अवैध व्यवहार बंद होतील.
४. आयकर प्रणालीमध्ये सुत्रबद्धता येईल.
५. आयकर चुकवणाऱ्यांची माहिती ऑनलाईन पाहता येईल.
६. आतंकवादी आणि नक्षली कारावयांना चोप बसले.

### रोकड विरहीत व्यवहारां समोरील आव्हाने

१. भारतामध्ये फार मोठ्या प्रमाणात रोखीने चलन फिरत असते चलनातील या रकमेचे प्रमाण भारताच्या राष्ट्रीय उत्पन्नाच्या १३ टक्के आहे.
२. जवळ जवळ ९५ टक्के व्यवहार रोखीने केला जातो फार मोठ्या प्रमाणातील असंघटीत क्षेत्रातील रोजगार हा रोखीनेच दिला जातो.
३. एटीएमचा वापर प्रामुख्याने रोखीने पैसे काढण्या करीता केला जातो आणि इतर ऑनलाईन व्यवहार टाळले जातात .
४. डिजिटल व्यवहारांसाठी इंटरनेट जोडणी आवश्यक असते भारतात काही भागात अल्प इंटरनेट जोडल्या आहेत.

### सारांश

रोकडविरहीत व्यवहारासाठी शासनाने महत्त्वाची भूमिका बजावली आहे. अनेक ठिकाणी कॅशलेस व्यवहारासाठी रोकडविरहीत व्यवहारांना महत्त्व वाढले असून त्यामुळे पारदर्शकता वाढत आहे.ई बँकिंग ,इवॉलेट इ चा वापर काळा पैसा रोखण्यासाठी सकारात्मक बाब

आहे. देश भ्रष्टाचार मुक्त करण्यासाठी, विकसीत देशांच्या पंगतीत नेऊन बसवण्यासाठी रोकड विरहीतअर्थ व्यवस्थेच्या दिशेने वाटचाल करणे गरजेचे आहे.

**संदर्भ :**

- १.गोडबोले अच्युत,अर्थात,राजहंस , प्रकाशन प्रा.लि.पुणे सप्टेबर -२०१४
- २.योजना -फ्रेबुवारी २०१७
- ३.साप्ताहिक सकाळ -४ मार्च २०१७





## डिजीटल देयक प्रणाली वस्तुस्थिती आणि विपर्यास

प्रा.डॉ. अनिल दि.वाडकर

अर्थशास्त्र विभाग प्रमुख

श्री कुमारस्वामी महाविद्यालय, लातूर

“भारतीय वित्तीय क्षेत्रात अमुलाग्र, पारदर्शक व गतीमान बदल करण्यासाठी भारत सरकारने ‘डिजीटल देयक प्रणाली’ या उपक्रमावर अधिक भर दिला आहे. भारत हा एक विकसनशील देश असून सुमारे १२५ कोटींच्या या देशात गरीबांची संख्या आजही प्रचंड प्रमाणात आहे. सार्वजनिक क्षेत्रातून वितरीत केल्या जाणाऱ्या राशीमध्ये प्रचंड भ्रष्टाचार होत असून, योग्य लाभार्थी त्यापासून मोठ्या प्रमाणात वंचित राहिल्याचे विविध सर्वेक्षणांवरून समोर आले. केंद्र व राज्यसरकारद्वारे भारतामध्ये सामाजिक व आर्थिक समानता प्रस्थापित करण्यासाठी व गरीबांचे जीवनमान उंचावण्यासाठी विविध आदर्शप्रत योजना राबविल्या जातात. परंतु भ्रष्टाचारी व्यवस्था यामुळे या योजनांची परिणामकारकता लाभप्रद ठरत नाही. यासाठी काळापैसा विरहीत, भ्रष्टाचार विरहित पारदर्शक वित्तीय प्रणाली विकसीत करणे, वित्तीय व्यवहारांची गतीमानता वाढविणे व अचूक लाभार्थ्यांना लाभांकित करणे यासाठी भारत सरकारने अनेक तंत्रज्ञानात्मक प्रयोग सुरू केले आहेत. यामध्ये मोठ्या प्रमाणात सुधारणात्मक बदल झालेले असून, सर्वसामान्यांना वित्तीय व्यवहार डिजीटल प्रणालीद्वारे करण्यासाठी निश्चित प्रेरणा मिळत आहे. परंतु हॅकिंग व असुरक्षित व्यवहारांच्या घटनाही मोठ्या प्रमाणात आहेत त्या नियंत्रणात आणणे गरजेचे ठरते.”

### प्रस्तावना :

१९३५ ला मध्यवर्ती बँकेच्या निर्मितीनंतर देशभरातील वित्तीय व्यवहारावर अचूक नियंत्रण ठेवणे, त्यात पारदर्शकता आणणे, बँकामध्ये संख्यात्मक व गुणात्मक वृद्धी करणे, बहुक्षेत्रीय विकास साध्य करण्यासाठी नियोजनाच्या आर्थिक उद्दिष्टांच्या लक्षपूर्तीवर भर देणे, विविध बँकांचे राष्ट्रीयकरण करणे, बँकांचे अचूक अंकेक्षण करणे, तंत्रज्ञानात्मक वित्तीय क्षेत्राचा विकास करणे यावर अधिक भर देण्यात आला. तरी परंतु वित्तीय क्षेत्रात मोठ्या प्रमाणात भ्रष्टाचार व काळ्या पैशाची निर्मिती होत असलेली थांबविता आली नाही.

देशामध्ये जास्त मूल्यांच्या नोटांची छपाई आर.बी.आय.कडून मोठ्या प्रमाणात करण्यात आली. आर.बी.आय वर सातत्याने भ्रष्ट राजकारण्यांचा प्रभाव परिणामतः मौद्रिक धोरणाची अचूक परिणामकारकता अर्थव्यवस्थेत साध्य करणे शक्य होत नाही. परिणामी देशात सातत्याने होणारी भाववाढ, काळ्या पैशाची निर्मिती, सार्वजनिक क्षेत्रातून मिळणाऱ्या निधीचे बहुस्तरीय क्षेत्रातील लाभार्थ्यांपर्यंत होणारे अविवेकी वितरण या घटनांमध्ये दिवसेंदिवस वाढ होत गेली. परिणामतः अर्थव्यवस्थेत व्यापार चक्राच्या निर्मिती बरोबरच गरीब व श्रीमंतामधील असमानताही वाढत गेली. कार्पोरेट क्षेत्र, बिल्डर्स, लॉटरी, जुगार, अनाधिकृत मद्य व्यवसाय, कुंटुखाने यासारख्या विविध क्षेत्रातून वित्तीय व्यवहारात संशयी व्यवहार निर्माण झाले. परिणामतः मौद्रिक व राजकोषीय धोरणाची काठिण्यपातळी घसरून अर्थव्यवस्थेच्या विकासदरावर अनेक प्रतिकूल परिणाम निर्माण झाले.

भारतातील वित्तीय क्षेत्रात पारदर्शक व गतीमान बदल करण्यासाठी, संख्यात्मक व गुणात्मक वृद्धी साध्य करण्यासाठी व सार्वजनिक क्षेत्रातील निधीचे परिणामकारक वितरण योग्य लाभार्थ्यांपर्यंत होण्यासाठी भारत सरकारने डिजीटल वित्तीय प्रणाली या कार्यक्रमावर भर दिला. यासाठी सरकारने बहुस्तरीय धोरण आखून डिजीटल योजना, आधार-पे, भीम अॅप, डिजीलॉकर, दिशा, थेट लाभ हस्तांतरण, ई-पंचायत इत्यादींचा डिजीटल प्रणालीत समावेश केला आहे. देशात डिजीटल पेमेंट वाढविण्यासाठी आणि ग्रामीण भागात इंटरनेट जोडणीसाठी ऑप्टिकल फायबर नेटवर्कला चालना मिळण्यासाठी काही धाडसी व ठोस निर्णय घेतले आहेत.

UPI, USSD, Adhar Pay, RTGS, CTS, ECCS, ECS NACH, IMPS, NEFT, NETC, AEPS, क्रेडिट कार्ड, डेबिट कार्ड, मोबाईल बँकिंग, ईटरनेट बँकींग, ई वॉलेट, पेटियम, फ्रिचार्ज, मोबीविक, ऑक्सिजन सर्व्हिस, फोन पे, गुगल पे, यासारखे विविध तंत्रज्ञानात्मक घटक भारतातच नव्हे तर जगभरामध्ये वित्तीय सेवा पारदर्शकपणे देण्यात अग्रेसर ठरत आहेत. यामुळे वित्तीय व्यवहारांची संख्या वाढून पारदर्शक व गतिमानपणे व्यवहारात वाढ होत आहे.

भारतीय अर्थव्यवस्थेत डिजीटल देयक प्रणालीचे अस्तित्व काय आहे? याद्वारे होणाऱ्या व्यवहारांची संख्या व परिणामकारकता किती आहे व याप्रणालीद्वारे भारतीय वित्तीय क्षेत्रात झालेले अनूकूल व प्रतिकूल परिणाम याचा अभ्यास प्रस्तुत शोध निबंधात करण्यात आला आहे.

### संशोधन पध्दती :-

प्रस्तुत शोध निबंधासाठी प्रामुख्याने द्वितीय सामग्रीचा आधार घेण्यात आला आहे. यामध्ये विविध शासकीय व निमशासकीय प्रकाशनाद्वारे प्रकाशित ग्रंथ, मासिके, पाक्षिके, साप्ताहिके, वर्तमानपत्र इत्यादींचा आधार घेण्यात आला आहे.

### शोध निबंधाची उद्दिष्ट्ये :-

प्रस्तुत शोध निबंधाला योग्य दिशा मिळण्यासाठी काही उद्दिष्ट्ये निश्चित करण्यात आले आहेत ती पुढील प्रमाणे

- १) जागतिक डिजीटल देयक प्रणालीच्या परिणामकारकतेचा अभ्यास करणे.
- २) भारतातील डिजीटल देयक प्रणालीच्या उपयुक्ततेचा आढावा घेणे.
- ३) डिजीटल देयक प्रणालीच्या साधनांचा आणि त्याद्वारे झालेल्या व्यवहारांचा शोध घेणे.
- ४) डिजीटल देयक प्रणालीच्या अनुकूल व प्रतिकूल बाबींचा शोध घेणे.
- ५) महत्वपूर्ण निष्कर्ष काढणे व शिफारसी करणे.

१) जागतिक डिजीटल देयक प्रणालीच्या उपयुक्ततेचा आढावा घेणे : जगभरामध्ये विविध देशांनी रोकड विरहीत व्यवहारासाठी डिजीटलदेयक प्रणालीचा अवलंब खूप पूर्वीपासून सुरू केला आहे. यामुळे विकसीत राष्ट्रात स्वच्छ व पारदर्शी वित्तीय व्यवहार होऊन प्रगतीचा उच्चांक गाठला गेला आहे. तेथील दरडोई रोकड विरहीत व्यवहारांची संख्या मोठ्या प्रमाणात आहे. याची माहिती पृढील सारणीद्वारे लक्षात येते.

**जागतिक दरडोई रोकडविरहीत व्यवहार**

देश	२०१५	२०१६	२०१७
सिंगापूर	७२७.९	७५९.०	७८२.४
स्विडन	४२८.८	४८१.४	४९७.९
युएसए	४२०.९	४४२.६	४७३.६
युरो देश	१५६.९	१७२.६	१८६.८
रशिया	९९.५	१३२.८	१७८.५
ब्राझिल	१३७.६	१३९.४	१४८.५
चीन	४८.९	७०.४	९६.७
द. अफ्रिका	६८.७	७८.०	७९.२
इंडोनेशिया	२३.४	२८.४	३४.०
भारत	४.६	५.४	१०.७

वरील सारणीवरून जागतिक दरडोई रोकडविरहीत व्यवहारांची संख्या लक्षात येते. सन २०१७ सिंगापूर, स्विडन व युएसए यांचे दरडोई रोकड विरहीत व्यवहारांची संख्या अनुक्रमे ७८२.४, ४९७.९ व ४७३.६ हे जागतिक क्रमवारीतील उच्चांक आहेत. तर चीन, दक्षिण अफ्रिका व इंडोनेशिया या देशांतील दरडोई रोकड विरहीत व्यवहारांची संख्या अनुक्रमे ९७.७, ७९.२ व ३४.० आहे. तर जागतिक रोकडविरहीत व्यवहारांच्या तुलनेत भारतातील दरडोई रोकडविरहीत व्यवहार २०१७ मध्ये १०.७, २०१८ मध्ये १३.१५ व २०१९ मध्ये २२.४२ इतके अत्यल्प असल्याचे दिसून येते.

२) भारतातील डिजीटल देयक प्रणालीच्या उपयुक्ततेचा आढावा घेणे :- भारत हा विकसनशील देश असून भारतामध्ये अजूनही वित्तीय साक्षरतेचे प्रमाण अत्यंत अत्यल्प आहे. केंद्र सरकारने सेबीच्या माध्यमातून वित्तीय साक्षरता वाढविण्यासाठी जोरदार प्रयत्न सुरू केला आहे. या माध्यमातून काही सकारात्मक बदलही घडून येत आहेत. १२५ कोटी लोकसंख्येच्या देशात अॅन्ड्रॉइड मोबाईल वापरकर्त्यांची संख्या २६ टक्के आहे. परंतु या साधनाचा उपयोग करमणूक व मनोरंजनासाठी मोठ्या प्रमाणात केला जात असून, अशिक्षित तरुणाबरोबरच सुशिक्षित तरुण व शाळकरी मूले या साधनांचा विविध पबजी सारखे गेम खेळण्यासाठी, मनोरंजनात्मक गाणे व चित्रपट पाहण्यासाठी, सोशल मिडिया इत्यादीसाठी वापर मोठ्या प्रमाणात करत आहेत. परिणामतः डिजीटल देयक प्रणाली व्यवहारांच्या बाबतीत भारतातील साक्षरतेचे प्रमाण अजूनही केवळ १ ते २ टक्के आहे. तसेच ज्यांना तंत्रज्ञानात्मक माहिती असूनही या प्रणालीद्वारे व्यवहार करणाऱ्यांची संख्या अतिशय नगण्य आहे. तसेच या प्रणालीच्या व्यवहारातील धोके व अनिश्चितता याबाबतीत असणारी असुरक्षितता व अडकलेल्या व्यवहारांचे निर्मूलन करणे इत्यादी बाबत तसेच हॅकर्स पासून सावध राहणे बाबत आरबीआय व सायबर सेल द्वारे विविध सूचना देण्यात येत असल्या तरी तंत्रज्ञानात्मक अल्प शिक्षण असलेल्या भारतीय वापरकर्त्यांन त्यातील धोके अजूनही ओळखता येत नाहीत. त्यामुळे मोठ्या प्रमाणात डिजीटल देयक प्रणालीद्वारे होत असलेल्या व्यवहारातील धोक्यांच्या घटनाही मोठ्या प्रमाणात आहेत हे नाकारता येत नाहीत.

३) डिजीटल देयक प्रणालीची वस्तुस्थिती :- भारतामध्ये रोख स्वरूपात व्यवहार करण्याचे प्रमाण सर्वाधिक आहे. भारतीय अर्थव्यवस्थेत चलनाचे प्रमाण काही विकसीत व विकसनशील राष्ट्रापेक्षा जास्त आहे. २०१५ मध्ये भारतात जेडीपीच्या १२.३टक्के चलनाचे प्रमाण होते. हेच प्रमाण ब्राझिल मध्ये ३.८ टक्के, दक्षिण कोरियात ५.६ टक्के व स्विडनमध्ये १.७टक्के होते. सन २०१६ मध्ये भारतात ६८टक्के व्यवहार रोख चलनात झाले. हे प्रमाण इंडोनेशिया आणि रशियापेक्षा सर्वात जास्त होते. भारतात क्रेडिट कार्डचा वापर खूप कमी प्रमाणात केला जातो. पर्यायाने काळ्या धनाची निर्मिती होते. नकली नोटांचे प्रमाण वाढते. दहशतवाद्यांना / आंतकवाद्यांना अवैध चलन पुरवठा होतो. हे सर्व थांबविण्यासाठी डिजीटल देयक प्रणालीचा सुरक्षित वापर वाढणे खूप गरजेचे आहे.

भारतीय अर्थव्यवस्थेत डिजीटल देयक प्रणाली राबविण्यासाठी त्यासंबंधीची पायाभूत संरचना किती मजबूत आहे हे ही अभ्यासने महत्वपूर्ण ठरते. भारतामध्ये २०१५ मध्ये जवळपास ७५ कोटी लोकांकडे बँक कार्ड होते. हेच प्रमाण स्विडनमध्ये २.५टक्के, दक्षिण कोरियात ५.५ टक्के, ब्राझिल मध्ये ४.१ टक्के आणि चीनमध्ये ४.० टक्के असे होते. भारतातील लोकसंख्येचे प्रमाण पाहता जगातील सर्वात कमी पीओएस मशीनचे प्रमाण भारतात आहे. तसेच उच्च दर्जाची इंटरनेट जोडणी व ब्रॉड बँडचेही प्रमाण खूप कमी आहे. तसेच अॅन्ड्रॉइड मोबाईल वापरकर्त्यांचीही संख्या २६ टक्केच्या जवळपास आहे. भारतात २०१६ मध्ये १७ टक्के वयस्क लोकांकडे मोबाईल फोन होते, हेच प्रमाण दक्षिण कोरियात ८८ टक्के व केनियात २६ टक्के होते. इंटरनेट वापरणाऱ्यांचे प्रमाण भारतात २०१५ मध्ये ५० टक्के स्विडन आणि दक्षिण कोरियात ९० टक्के होते. भारतात ब्रॉड बँडचे प्रमाण १०० व्यक्तीमागे १.३४ टक्के आहे. हेच प्रमाण स्विडनमध्ये ३६.७टक्के आणि दक्षिण कोरियात ४०.२५ टक्के आहे. निश्चितच भारतात तंत्रज्ञानावर आधारित पायाभूत सुविधांची कमतरता आहे. यासाठी भारत सरकार जोरदार प्रयत्न करत असून डिजीटल देयक प्रणालीला प्रोत्साहन देत आहे.

भारतात चलन हस्तांतरणाचा वेग २०१५-२०१६ मध्ये जीडीपीच्या १२ टक्के इतका होता. २०१६-१७ मध्ये ९टक्के तर २०१७-१८ व २०१८-१९ या वर्षात ११ टक्के राहिला आहे. डिजीटल देयक प्रणालीद्वारे व्यवहार करणाऱ्यांचे प्रमाण सन २०१८-१९ मधील एकूण

व्यवहार करणाऱ्यांच्या तुलनेत पुढील प्रमाणे आहे. आरटीजीएस ग्राहकांची संख्या ७ टक्के, पेपर क्लेरिंग ५ टक्के, डेबिट कार्ड १८ टक्के, क्रेडिट कार्ड १९ टक्के, एनएसीएच १२ टक्के, युपीआय २२ टक्के, एनईएफटी ९ टक्के आयएमपीएस ७ टक्के असल्याचे दिसून येते. म्हणजेच भारतात डिजीटल देयक प्रणालीच्या वापरकर्त्यांची संख्या व याद्वारे होणाऱ्या व्यवहारांची संख्या वाढत असली तरी इतर विकसीत देशांच्या तुलनेत व लोकसंख्येच्या तुलनेत हे प्रमाण अल्प असल्याचे दिसून येते.

**४) डिजीटल देयक प्रणालीचा विपर्यास :-** देशातील रोख चलनी नोटांचे प्रमाण कमी करण्यासाठी, व्यवस्थेतील अनागोंदी व काळ्या पैशाला आळा घालून पारदर्शक गतीमान व्यवहार करण्यासाठी, ही प्रणाली भारतात सुरू करण्यात आली असली तरी, त्यासाठीची पायाभूत तंत्रज्ञानात्मक व्यवस्था मुबलक प्रमाणात भारताकडे उपलब्ध नाही. सेबीद्वारे वित्तीय साक्षरतेसाठी अनेक प्रयत्न करण्यात येत असले तरी, तसेच भारतीयांकडे अॅन्ड्रॉईड मोबाईल वापरकर्त्यांची संख्या वाढत असली तरी डिजीटल देयक प्रणाली अंतर्गत व्यवहारांचे प्रमाण अपेक्षित प्रमाणात वाढत नाही. यासाठी विविध भौतिक आणि तांत्रिक पायाभूत सुविधा, उच्च दर्जाची इंटरनेट जोडणी, हॅकर्स विषयीची माहिती, फेककॉल, विविध सर्च सर्व्हर वरील डेटाचे व्यापारिकरण यामुळे या प्रणालीतून व्यवहार करणे व भारतीयांच्या दरडोई उत्पन्नानुसार या व्यवहारातील गती वाढेल का? या बाबतीत असुरक्षितता व अनिश्चितता दिसून येते.

**निष्कर्ष व शिफारशी :-** प्रस्तुत शोध निबंधाच्या अभ्यासातून काही महत्वपूर्ण निष्कर्ष काढले आहेत ते पुढील प्रमाणे.

१. जागतिक आर्थिक परिस्थितीच्या अभ्यासावरून स्विडन, सिंगापूर, ब्राझिल, युरोदेश, रशिया, दक्षिण आफ्रिका, इंडोनेशिया यांच्या तुलनेत भारतात रोकड विरहीत व्यवहार करणाऱ्यांचे प्रमाण अत्यल्प आहे. सन २०१७ मध्ये जगात सर्वाधिक रोकड विरहीत व्यवहार सिंगापूर मध्ये (दरडोई ७८२.४) करण्यात आले. तर याच वर्षी भारतामध्ये केवळ १०.७ टक्के दरडोई रोकड विरहीत व्यवहार झाल्याचे दिसून येते.
२. भारतामध्ये चलनी नोटांचे जीडीपीच्या १२.३ टक्के इतके प्रमाण आहे हे सर्वाधिक असून तुलनेत ब्राझिलमध्ये जीडीपीच्या ३.८ टक्के, दक्षिण कोरियात ५.६ टक्के, तर स्विडनमध्ये हेच प्रमाण केवळ १.७ टक्के इतके आहे. यामुळे भारतात काळा पैसा वाढत असून अर्थव्यवस्थेत व्यापारचक्रेही नियंत्रणात येत नाहीत.
३. स्वच्छ व पारदर्शी गतीमान आर्थिक व्यवहार करणे यासाठी डिजीटल देयक प्रणाली उपयुक्त असून, त्याबाबत लोकसंख्येच्या प्रमाणात तंत्रज्ञानात्मक पायाभूत सुविधा भारतामध्ये उपलब्ध नाहीत. तसेच याप्रणाली द्वारे होत असलेल्या व्यवहारात हॅकर्सकडून काही धोके निर्माण झाले. याची पुनरावृत्ती होऊ नये यासाठी भारत सरकार प्रयत्न करत असले तरी वापरकर्त्यांमध्ये याबाबतीत योग्य प्रमाणात साक्षरता नाही.
४. देशातील एकूण वित्तीय व्यवहाराच्या तुलनेच डिजीटल देयक प्रणालीद्वारे झालेल्या व्यवहारांचे प्रमाण फारसे वाढलेले नाही. यामध्ये आरटीजीएस, पेपर क्लेरिंग व डेबिट कार्ड द्वारे व्यवहार करणाऱ्यांचे प्रमाण अनुक्रमे ७ टक्के, ५ टक्के व १८ टक्के इतके होते. तसेच क्रेडिट कार्ड, एनएसीएच, युपीआयद्वारे व्यवहार करणाऱ्यांचे प्रमाण अनुक्रमे १९ टक्के, १२ टक्के व २२ टक्के इतके होते. तर एनईएफटी व आयएमपीएस द्वारे व्यवहार करणाऱ्यांचे प्रमाण अनुक्रमे ९ टक्के व ७ टक्के असल्याचे निदर्शनास आले.
५. डिजीटल देयक प्रणालीच्या प्रभावी अंमलबजावणीसाठी सरकारद्वारे प्रयत्न करण्यात येत असले तरी या व्यवहारासाठी लागणारी उच्च तंत्रज्ञानात्मक पायाभूत सुविधांची निर्मिती भारतामध्येच होणे अपेक्षित आहे व भारतीय लोकसंख्येची वित्तीय साक्षरता वाढणे अजूनही खूप गरजेचे आहे.

जगभरातील अर्थव्यवस्थामध्ये डिजीटल देयक प्रणालीचा प्रभावी वापर सुरू असून त्याद्वारे निश्चितच पारदर्शक व गतीमान आर्थिक व्यवहार होत आहेत. भारताचे सुध्दा भ्रष्टाचार मुक्त, काळा पैसा विरहीत, दहशतवाद व आंतकवाद विरहीत स्वच्छ व पारदर्शी भारतीय अर्थव्यवस्था बनविण्यासाठी डिजीटल देयक प्रणालीद्वारे महत्वपूर्ण प्रयत्न सुरू आहेत. परंतु इलेक्ट्रॉनिक व्यवहाराच्या माध्यमातून ग्राहकांचा डेटा सुरक्षित राहत नाही व गोपनीयतेचा भंग होतो. बँकावरील दरोड्यांचे प्रमाण कमी होत असून, ऑनलाईन गैरव्यवहार मात्र वाढत असल्याचे दिसून येतात. यासाठी लागणाऱ्या तंत्रज्ञानाचे टेंडर विदेशी कंपन्यांना देण्याऐवजी भारताच क्रेडिट कार्ड, डेबिट कार्ड, पीओएस यासारखी अन्य साधने बनविणाऱ्या उच्च तंत्रज्ञान असलेल्या व कमालीची सुरक्षितता बाळगणाऱ्या कंपन्या स्थापन कराव्यात व लोकसंख्येच्या प्रमाणात या सुविधांचा पुरवठा करावा व लोकांमध्येही आणखीन वित्तीय साक्षरतेचे बळ द्यावे, तरच डिजीटल देयक प्रणाली प्रभावीपणे यशस्वी होईल.

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## चिरंतन शेती आणि अन्नसुरक्षा यामध्ये 'डिजिटल देयकाची' भूमिका

प्रा. सुकुमार दत्तापाटील

डॉ. सी.डी. देशमुख वाणिज्य

सौ. कुसूमताई ताम्हणे कला महाविद्यालय

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प्रा.डॉ. एल.एच. पाटील

शिवाजी महाविद्यालय उदगीर

### प्रस्तावना -

ऐतिहासिकदृष्ट्या आज शेतीमध्ये क्रांतीची मालिका सुरू झाली आहे त्यामुळे शेतीची कार्यक्षमता, उत्पादनक्षमता, उत्पन्न आणि नफा हा पूर्वीपेक्षा वाढला आहे. पुढील दशकातील बाजारपेठ अंदाजानुसार "डिजिटल कृषी क्रांती" ही सर्वात नवीन सुधारणा असेल की ज्यामुळे जागतिक लोकसंख्येची अन्नधान्याची गरज भागविण्यास मदत होईल. अन्नसाखळीचा प्रत्येक भाग हा डिजिटल मध्ये बदलून जाईल. डिजिटल साधनांच्या आधारे संसाधनांचे व्यवस्थापन अधिक कार्यक्षम, अधिक पर्याप्त आणि समाधानकारक होवू शकेल. डिजिटल शेती ही अशी प्रणाली तयार करेल की जी हवामान बदलामुळे उद्भवणाऱ्या समस्यांच्या पलिकडे जावून उत्पादनक्षम, अधिक स्वीकारार्थ आणि उत्पादन वाढीस अनुकूल असणारी ठरेल. चिरंतन विकासाच्या उद्दिष्टांच्या संदर्भात डिजिटल शेतीमध्ये कृषी उत्पादकतेद्वारे, बाजार संधींच्या द्वारे तसेच कमी खर्चाच्या द्वारे अधिक लाभ देण्याची क्षमता आहे. कृषी अन्नक्षेत्राचे डिजिटलायझेशन करण्याचे संभाव्य फायदे आहेत. पण त्यासाठी शेतीप्रणाली, ग्रामिण अर्थव्यवस्था तसेच समुदाय आणि नैसर्गिक संसाधन व्यवस्थापनाचे मोठे परिवर्तन आवश्यक आहे. आज भारत देशामध्ये शेतीव्यवसायाची परिस्थिती सुधारावयाची असल्यास शेतीमध्ये डिजिटल क्रांती झाल्याशिवाय पर्याय नाही. यामध्ये विशेषतः 'डिजिटल देयके' या संकल्पनेचा स्वीकार कृषी क्षेत्रासाठी केल्यास निश्चितच शेतकऱ्यांना त्याचा फायदा होईल. कारण शेतकऱ्यांना सरकारकडून वेळोवेळी मिळणाऱ्या रकमा, देयके, अनुदाने, आपत्कालीन मदत तसेच पीक विम्याची रक्कम ही सरळ शेतकऱ्यांच्या बँक खात्यात जमा होईल आणि निश्चितच शेतकऱ्यांना त्याचा फायदा होईल. तसेच ही मदत थेट शेतकऱ्यांच्या बँक खात्यात जमा होत असल्याने यामध्ये कोणताही मध्यस्थ किंवा सरकारी अधिकारी यांचा हस्तक्षेप होणार नाही आणि त्यामुळे भ्रष्टाचाराला आळा बसेल. कृषी अन्नपध्दतीच्या डिजिटलायझेशनमध्ये ग्रामिण आणि शहरी भाग, स्त्री आणि पुरुष तसेच तरुण लोकसंख्या इत्यादींना होणारा संभाव्य लाभ असमानरित्या वाटला जाण्याचा धोका आहे. एखादा भाग डिजिटल होण्यासाठी त्या भागात इंटरनेट तसेच इंटरनेट टॉवर्स इत्यादींचा विकास होणे गरजेचे आहे. आणि ही सर्व व्यवस्था शहरी भागात मोठ्या प्रमाणावर असते त्यामुळे शहरी भागाला डिजिटल यंत्रणेचा फायदा अधिक होण्याची शक्यता असते.

संशोधनातील कूट शब्द- डिजिटल देयक, चिरंतन शेती व अन्नसुरक्षा

### ३) संशोधनाची उद्दिष्टे-

- डिजिटल देयक ही संकल्पना समजून घेणे.
- चिरंतन शेतीची संकल्पना समजून घेणे.
- चिरंतन शेती आणि अन्नसुरक्षा यामध्ये डिजिटल देयकाची भूमिका अभ्यासणे.

### ४) संशोधनाची गृहितके-

- डिजिटल देयकामुळे पैसा वेळ आणि श्रम यामध्ये बचत होते.
- डिजिटल देयकामुळे भ्रष्टाचाराला आळा बसतो.
- डिजिटल देयकामुळे योग्य व्यक्तींकडे त्यांची योग्य देणी पोहोचतात.

५) डिजिटल परिवर्तनासाठी अटी आणि डिजिटल देयकाची गरज - शेती क्षेत्रामध्ये डिजिटल परिवर्तनासाठी कांही महत्वाच्या अटी आहेत त्या पुढीलप्रमाणे.

i) पहिली अट म्हणजे डिजिटल तंत्रज्ञानाचा वापर करण्यासाठी मूलभूत परिस्थिती आवश्यक आहे त्यामध्ये या तंत्रज्ञानाची उपलब्धता तसेच परवडणारी क्षमता आणि माहिती तंत्रज्ञान उपलब्धता व माहिती तंत्रज्ञान सहाय्यक आणि धोरणात्मक कार्यक्रम राबविले पाहिजेत.

ii) दुसरी अट म्हणजे इंटरनेट, मोबाईल फोन, डिजिटल कौशल्य आणि सोशल मिडियाचा उपयोग कसा करून घ्यावा याची माहिती व्यक्तीला असणे गरजेचे आहे.

## शेतीसाठी डिजिटल देयाकांची गरज का आहे हे खालील बाबींवरून स्पष्ट होईल

i) कृषी संधी आणि उत्पादकतेमध्ये लैंगिक भिन्नता आहे. आणि ही कमी करण्यासाठी डिजिटल देयके मदत करतात :- कृषी उत्पादकतेमध्ये पुरुष आणि महिला असे दोन्हीही घटक कार्यरत आहेत. एकूण कृषी कमगारांपैकी ४३% महिला आहेत. परंतू त्या गरीब असून उदरनिर्वाहापुरती शेती करणाऱ्या आहेत भारतामध्ये पुरुष आणि महिला ही असमानता नेहमी भौतिक साधनांपेक्षा पुढेच राहिली आहे महिलांना शेतीव्यतिरिक्त इतर आर्थिक सेवांमध्ये प्रवेश मिळण्याची शक्यता फार कमी आहे. भारतातील ४३% महिलांचे बँक खाते आहे. जर महिला शेतकऱ्यांना शेतीव्यतिरिक्त इतर साधनांमध्ये किंवा इतर ठिकाणी पुरुषांच्याबरोबरीने नोकरी व्यवसाय करण्याची संधी मिळाली तर त्यामुळे डिजिटल देयक क्रांतीला चालनाच मिळेल कारण या सर्व महिला नोकरी व्यवसायांमध्ये आल्यामुळे आपोआपच त्या डिजिटल देयक या संकल्पनेने जोडल्या जातील. दुसरी महत्वाची गोष्ट अशी की जरी या सर्व महिला शेतीक्षेत्राकडून औद्योगिक क्षेत्राकडे वळल्या तरी शेतीचे उत्पादन काहीच कमी होणार नाही.

ii) डिजिटल देयक तंत्रज्ञानामध्ये कृषी अर्थव्यवस्थेत परिवर्तन घडविण्याची प्रचंड क्षमता आहे. डिजिटल देयक तंत्रज्ञानामुळे शेतकऱ्यांना त्यांच्या शेतमालाचे पैसे, अनुदाने, विमा योजनांचे लाभ, शेतकरी कल्याण योजनांपासून मिळणारे लाभ तसेच नैसर्गिक आपत्ती काळात शेतकऱ्यांना दिली जाणारी मदत हे सर्व शेतकऱ्यांच्या बँक खात्यामध्ये थेट जमा होतात तसेच यामध्ये होणारा विलंब टाळला जातो. यामुळे नोकरशाही आणि मध्यस्थ व्यक्ती यांच्याकडून होणाऱ्या भ्रष्टाचाराला मोठ्या प्रमाणात आळा बसतो आणि एकूणच ग्रामीण अर्थव्यवस्थेला याचा मोठ्या प्रमाणावर फायदा होतो आणि शेतकऱ्यांचे कल्याण होण्यास मदत होते.

भारतीय शेती व्यवसायात प्रमुख तीन अडथळे आहेत त्यामुळे शेतीची उत्पादकता आणि अन्नसुरक्षा यांमध्ये सुधारणा होत नाही आणि हे सर्व डिजिटल देयक पध्दतीने सुधारता येईल.

## रोखीने व्यवहार करण्यात येणाऱ्या व्यवहारात पुढील अडचणी येतात.

### १) रोख पैसा आधारित किंमत साखळी आणि अकार्यक्षम बाजारपेठ -

अ) शेतमाल किंमत साखळीच्या माध्यमातून शेतकरी, शेती आदानांचे विक्रेते, धनको, स्थानिक ग्राहक आणि इतर अनेकांबरोबर व्यवहार होत असतात आणि या मोठ्या प्रमाणावर होणाऱ्या रोख व्यवहारांमुळे अनेक अकार्यक्षमतांचा गुणाकार तयार होतो थोडक्यात रोखीने व्यवहार केल्यामुळे अनेक समस्या निर्माण होतात.

ब) बरेच शेतकरी त्यांचा शेतमाल विकताना त्यांना योग्य बाजारपेठ, योग्य किंमत, योग्य साठवणूक व्यवस्था याबद्दल ते अनभिज्ञ असतात. त्यांना काहीच माहिती नसते आणि शेतमाल विकताना त्यांचे नुकसान होते.

क) वरील सर्व दोष दूर करण्यासाठी 'डिजिटल देयक' हा सर्वात उत्तम उपाय आहे. कारण डिजिटल देयकांमुळे सर्व व्यवहार कमीत कमी वेळेत आणि कमीत कमी खर्चात पारदर्शकपणे होतात. शेतकऱ्यांना त्यांच्या मालाची योग्य किंमत मिळण्यास मदत होते. तसेच शेतकऱ्यांना त्यांचे उत्पादन थेट उपभोक्त्यांना विकण्याची परवानगी दिली जाते आणि मोठ्या खरेदीदारांच्या बाजारातील वर्तनाचा मागोवा घेता येतो.

### २) छोट्या शेतकऱ्यांना योग्य अशा अर्थिक सेवांचा अभाव -

अ) आपल्या देशात छोट्या आणि गरीब शेतकऱ्यांना ताबडतोब पैशाची गरज असते. तसेच गुंतवणूकीसाठी त्यांना वित्तपुरवठा करणे गरजेचे असते. पण त्यासाठी शेतकऱ्यांची पत असणे गरजेचे आहे अशा वेळी बचती आणि विमा शेतकऱ्यांना त्यांचे धोके कमी करणे आणि संपत्ती निर्माण करण्यास मदत करतात.

ब) डिजिटल देयकांमुळे लहान शेतकऱ्यांना वित्तीय सेवा कमीत कमी वेळात व कमीत कमी खर्चात पारदर्शकपणे उपलब्ध होतात.

### ३) सामाजिक सुरक्षितता कार्यक्रम आणि पैशाचे अयोग्य वितरण -

अ) सामाजिक सुरक्षितता मग ती खाजगी वितरणाच्या स्वरूपात असो की सार्वजनिक हस्तांतरणाच्या स्वरूपात असो त्यामध्ये अन्नसुरक्षा ही अतिशय महत्वाची आहे. अन्नसुरक्षा म्हणजे समाजातील सर्व थरातील लोकांना जीवनावश्यक गरज म्हणून अन्नधान्य आणि इतर जीवनावश्यक वस्तूंचा पर्याप्त पुरवठा होय.

ब) दुर्दैवाने जगातील ७३% लोकांना अन्नटंचाईच्या वेळी त्यांना मदत करण्यासाठी आवश्यक असणारी सामाजिक आधारभूत संरचना आणि व्यवस्था यांचा अभाव आहे. ३/४ दुर्बल लोकांना कोणतीही सामाजिक सुरक्षा योजना श्लब्ध नाही.

क) डिजिटल देयकांमुळे गरीबांचे कल्याण होईल. कारण सरकारने त्यांच्यासाठी राबविलेले सामाजिक कार्यक्रम आणि देवू केलेली अर्थिक मदत कमीत कमी वेळेत आणि कमीत कमी खर्चात त्यांच्यापर्यंत पोहोचेल.

६) कृषी क्षेत्रात डिजिटल देयके सक्षम होण्यासाठी केलेल्या शिफारशी -

१) डिजिटल देयकांद्वारे कृषी क्षेत्राला बळकटी देण्यासाठी सरकार, शेतकरी, व्यापारी, देणगीदार आणि देणी सेवा प्रदाता इत्यादींकडून खालील कृती त्वरीत केल्या जावू शकतात.

अ) सरकार, विशेष करून वित्त आणि कृषी मंत्रालय - डिजिटल देयकांमध्ये देण्यात येणारी अनुदाने, सामाजिक सुरक्षा रक्कम हस्तांतरण आणि अन्नासाठी आर्थिक मदत इत्यादींचा समावेश होतो. ही मदत अगदी तळागाळापर्यंतच्या गावातील गरीबांपर्यंत पोहोचते आणि त्यांचे कल्याण होते. त्यामुळे डिजिटल देयक पध्दतीला आणखी उत्तेजन मिळते.

ब) कृषी विस्तार सेवांचा मुख्यभाग म्हणून डिजिटल देयक वापर प्रशिक्षण सेवांचा समावेश करणे आवश्यक आहे.

२) मोठ्या प्रमाणावरील शेतमाल व्यापार -

उत्पादन खर्च कमी करणे, उत्पादकता सुधारणे आणि मूल्यसाखळीमध्ये पारदर्शकता निर्माण करण्याचे साधन म्हणून डिजिटल देयक या संकल्पनेकडे पाहिले पाहिजे. तसेच सर्व आर्थिक व्यवहारात पैशाचा रोखीने वापर हा कमीत कमी कसा होईल हे पाहिले पाहिजे.

३) देयक सेवा प्रदाता आणि भ्रमणध्वनी मुद्रा प्रदाता - विशेषतः ग्रामिण बाजारपेठेमध्ये कृषी खरेदीदार आणि कृषी पतपुरवठा करणारे यांचे संबंध वाढविण्यासाठी डिजिटल देयक तसेच मोबाईलद्वारे पैशांचे हस्तांतरण इत्यादीसाठी सुविधा निर्माण करणे आवश्यक आहेत. ग्रामिण लॉकसंख्येसाठी नवीन व्यवसायासाठी प्रारूप शोधून काढणे आणि त्यांना सेवा उपलब्ध करून देणे आणि या सेवा Better than cash alliance म्हणजेच रोख व्यवहारांपेक्षा चांगले या तत्वावर डिजिटल देयक प्रक्रियेच्या माध्यमातून निर्माण करून देणे आवश्यक आहे.

अन्न सुरक्षा आणि शेतीविषयक कार्यक्रम सुधारण्यासाठी डिजिटल देयके वापरण्याची प्रमुख प्रक्रिया पुढीलप्रमाणे आहे

१) सरकार - कृषी क्षेत्रातील विस्तार अधिकाऱ्यांना कृषी विषयक शिक्षणाबरोबरच डिजिटल देयकांच्या फायद्यांविषयी प्रशिक्षण देवून सर्वांना डिजिटल देयकांचा अवलंब करण्यास प्रोत्साहित करण्याबद्दल सांगावे. तसेच याची माहिती शेतकऱ्यांनाही द्यावी जेणेकरून ते या पध्दतीचा अवलंब करतील.

२) देयक प्रदाते, सरकार, मदत संस्था- सध्याची अन्नसुरक्षेसाठी केली जाणारी मदत सामाजिक सुरक्षा योजनांना केली जाणारी मदत आणि कमी जमिनी असणाऱ्या शेतकऱ्यांना मदत मिळवून देण्यासाठी डिजिटल देयक पध्दतीचा वापर करून आणि सर्वांनी एकत्र येवून काम करणे गरजेचे आहे. तरच गरीब शेतकऱ्यांचा आणि गरिबांचा फायदा होईल

७) डिजिटल देयके आणि चिरंतन विकास उद्दिष्टे -

२५ सप्टेंबर २०१५ मध्ये संयुक्त राष्ट्रसंघाच्या १९४ सदस्य देशांनी एकत्र येवून चिरंतन विकासाची ध्येये निश्चित केली. आणि येणाऱ्या १५ वर्षांकरिता संपूर्ण जगासाठी आणि जागतिक विकासासाठी काही ध्येये ठरविली. त्यामध्ये प्रामुख्याने दारिद्र्य निर्मूलन आणि उपासमार थांबविणे व सर्वांना अन्न मिळवून देणे ही काही महत्वाची उद्दिष्टे होती. तसेच राष्ट्रीय अन्नसुरक्षा कार्यक्रमांतर्गत ८०० दशलक्ष लोकांना अन्नसुरक्षा पुरविण्याचे ध्येय ठरविण्यात आले. दारिद्र्य निर्मूलन हे चिरंतन विकासाचे सर्वात महत्त्वचे उद्दिष्ट आहे. यासाठी भारताने महात्मा गांधी राष्ट्रीय ग्रामीण रोजगार हमी योजना राबविली आणि ही योजना म्हणजे ग्रामीण भागातील लोकांना रोजगार मिळवून देणारा जगातील सर्वात मोठा कार्यक्रम ठरला आहे. तसेच दिनदयाळ अंत्येद्वय योजनेमार्फत समाजातील अत्यंत कमी उत्पन्न असणाऱ्या लोकांकरिता कौशल्य विकास कार्यक्रमाची अंमलबजावणी करण्यात आली. शेतकऱ्यांचे जीवन सुधारण्यासाठी आणि त्यांची आर्थिक स्थिती सुधारण्यासाठी 'शेतकरी सन्मान योजना' सुरू केली तसेच नरेंद्र मोदी पंतप्रधान झाल्यांतर ज्या गरीब लोकांची बँकेत खाती नव्हती त्यांच्यासाठी जन-धन योजने अंतर्गत बँकेत खाती उघडण्यात आली.

थोडक्यात डिजिटल विकासाची काही महत्वाची ध्येये भारत सरकारने स्वीकारली पण ती साध्य करण्यासाठी सरकारने 'डिजिटल देयके' या तंत्राचा अवलंब केला त्यामुळे सर्वांचाच फायदा झाला. डिजिटल देयक मोहिमे अंतर्गत भारत सरकारने पुढील उपाय योजले

अ) रेशनिंग कार्डास आधार कार्ड नंबर जोडण्यात आला त्यामुळे खरा लाभार्थी कोण याची माहिती मिळण्यास मदत झाली.

ब) बँकेत खात्यासाठी आधार कार्ड नंबर जोडण्यात आला आणि सर्वांची बँकेत खाती ऑनलाईन करण्यात आली आणि गरीब शेतकरी आणि खरे लाभार्थी यांना त्यांची मदत त्यांच्या बँकेत खात्यावर पोहोचविण्यात आली त्यामुळे अशा योजनांमध्ये सरकारी यंत्रणांचा भ्रष्टाचार कमी होण्यास मोठ्या प्रमाणात मदत झाली.

क) तसेच शेतकरी सन्मान योजने अंतर्गत शेतकऱ्यांना त्यांच्या पीक विम्याची रक्कम, पूरग्रस्त मदत तसेच कर्जमाफी यांचा फायदा थेट झाला आणि यासाठी डिजिटल देयके ही संकल्पना उपयुक्त ठरली. कारण या संकल्पनेमुळे सरकारला खरे लाभार्थी कळण्यास मदत झाली आणि त्यांच्या बँकेत खात्या ही मदत देण्यास सुलभ झाले आणि लाभार्थ्यांची परिस्थिती सुधारली.

ड) शेतमाल बाजारपेठांच्या संगणकीकरणाचे काम हाती घेतले त्यामुळे देशातील २५० बाजारपेठांचे संगणकीकरण करण्यात आले. त्यामुळे शेतकऱ्यांना त्यांच्या मालविक्रीचे पैसे थेट त्यांच्या बँकेत खात्यामध्ये घेता आले.



इ) तसेच सरकारने शेतकऱ्यांसाठी शेतमालाची ऑनलाईन विक्री सुविधा मोबाईल ॲपच्या माध्यमातून उपलब्ध करून दिली. परिणामी शेतकऱ्यांना त्यांचा माल थेट ग्राहकांना विकता आला. आणि मध्यस्थांचे उच्छाटन झाले. यामध्ये ग्राहक आणि शेतकरी या दोघांनाही मोठा फायदा झाला.

अशा प्रकारे डिजिटल देयकांच्या माध्यमातून दारिद्र्य निर्मूलन उपासमार थांबविणे आणि शेतकऱ्यांचा विकास ही उद्दिष्टे साध्य करण्यात सरकार यशस्वी झाले.

### लहान शेतकरी आणि शेती साखळ्यांचे वर्गीकरण -

डिजिटल देयकांमुळे लहान शेतकऱ्यांच्या शेती उत्पादनामध्ये कशी सुधारणा होते हे समजण्यासाठी लहान शेतकऱ्यांचे विविध समूह आणि त्यांच्या विविध गरजा काय आहेत हे समजावून घ्यावे लागेल. सध्या जगामध्ये ५७० दशलक्ष शेतकरी आहेत आणि त्यापैकी ८४% शेतकऱ्यांकडे दोन हेक्टरपेक्षा कमी जमिन आहे. या सर्वांना एकत्रितरित्या अल्पभूधारक किंवा लहान शेतकरी किंवा सिमांत शेतकरी असे म्हणतात. आणि हे शेतकरी जगातील अब्जावधी लोकांच्या अन्नधान्याच्या गरजा भागवितात. आशिया आणि अफ्रिका खंडातील ८०% अन्नधान्य उत्पादन करतात. लहान शेतकरी हे एकूण जागतीक उत्पादनाच्या ५०% तृणधान्य, ६०% मांस आणि ७५% दुग्धजन्य पदार्थांचे उत्पादन करतात. कमी जमिन धारण करण्याच्या शेतकऱ्यांचे वर्गीकरण प्रामुख्याने तीन गटात होते.

#### १) उदरनिर्वाहक शेती करणारे शेतकरी -

उदरनिर्वाहक शेती करणारे शेतकरी हे अतिशय गरीब असतात तसेच त्यांचेकडे एकदम कमी जमिन असल्याने ते स्वतःच्या उदरनिर्वाहापूरती शेती करतात. या शेतकऱ्यांचे जगातील एकूण प्रमाण ६०% आहे.

#### २) दुबळ्या मूल्यसाखळीतील व्यापारी शेती करणारे शेतकरी -

अ) हे शेतकरी मोठ्या प्रमाणावर मुख्यपिकांचे उत्पादन करतात आणि स्थानिक पातळीवर त्यांची विक्री करतात, परंतु कोणत्याही एका विशिष्ट विक्रेत्याला ते आपला माल विकत नाहीत.

ब) तसेच हे शेतकरी काही पैशांच्या पिकांची लागवड करतात. यामध्ये ऊस, कापूस आणि कॉफी यांचा समावेश होतो यामुळे अशा शेतकऱ्यांना बऱ्यापैकी पैसा मिळतो.

क) अशा शेतकऱ्यांचे जगातील प्रमाण ३३% आहे.

#### ३) सशक्त मूल्यसाखळीतील व्यापारी शेती करणारे शेतकरी -

अ) हे शेतकरी विशिष्ट विक्रेत्याशी करार करून व्यापारी पिकांचे उत्पादन करतात. यामध्ये ऊस, कापूस आणि कॉफी यांचा समावेश होतो तसेच फळबागांचाही समावेश होतो.

ब) या शेतकऱ्यांचे जगातील प्रमाण ३३ टक्के इतके आहे.

सर्वसामान्यपणे बोलावयाचे झाल्यास उदरनिर्वाह शेती करणारे शेतकरी हे व्यापारी तत्त्वावर शेती करणाऱ्या शेतकऱ्यांपेक्षा गरीब असतात तर दुबळ्या मुले साखळीतील व्यापारी तत्त्वावर शेती करणारे शेतकरी हे सशक्त मूल्य साखळीतील व्यापारी तत्त्वावर शेती करणाऱ्या शेतकऱ्यांपेक्षा गरीब असतात आणि हे सर्व शेतकरी या वर्गीकरणाच्या अधीन राहून शेतीचे उत्पादन करतात

कमीत कमी सुरुवातीला डिजिटल देयकाचा वापर हा मूल्य साखळी चालविणाऱ्या एखाद्या शेतकऱ्याच्या नात्याचा परिणाम असू शकतो. एखाद्या योग्य संस्थेकडून थेट देयक घेणारा शेतकरी हा कदाचित दुसऱ्या एखाद्या स्थानिक बाजारात आपला माल विकणाऱ्या इतर शेतकऱ्यांपेक्षा ज्यादा फायदा मिळू शकतो.

### रोख पैशांचे वर्चस्व असणाऱ्या अर्थव्यवस्थेत खालील दोष आहेत

१) ही पद्धती खर्चिक आहे. कारण यामध्ये देणी देणे, पैशांचे हस्तांतरण करणे आणि बँकेकडून पैसे काढणे यामध्ये आपला बराच वेळ पैसा आणि श्रम वाया जातात.

२) ही पद्धती असुरक्षित आहे कारण आपणास रोखीने व्यवहार करण्यासाठी सतत आपल्या जवळ रोख पैसे ठेवणे गरजेचे असते. आणि रोख रक्कम जवळ बाळगणे हे धोक्याचे आहे. कारण रोख रक्कम ही गहाळ होण्याची किंवा चोरीस जाण्याची भीती असते.

३) ही पद्धती पारदर्शक नाही. कारण बऱ्याच वेळा रोख पैसा जवळ बाळगल्यास गैरव्यवहार किंवा भ्रष्टाचार होण्याची शक्यता असते.

कारण बऱ्याच वेळा जेव्हा आपण रोखीने व्यवहार करतो तेव्हा प्रवास, व्यक्तीची उपलब्धता या कारणास्तव ही पद्धती अतिशय धीमी आहे. यात पटकन व्यवहार होत नाहीत.

#### ४) ही पद्धती अतिशय धीमी आहे.

अर्थात वरील सर्व अडचणी या दूरवरच्या अंतरमुळे निर्माण होतात रोख रक्कम इतक्या दूरच्या अंतरावर वाहून न्यावयाची असेल तेवढे ते खर्चिक असते तसेच ते वेळखाऊ आणि अधिक असुरक्षित असते तसेच बऱ्याच वेळा भाषा संस्कृती आणि लिंग भिन्नता इत्यादी अडथळ्यांमुळे सुद्धा रोख व्यवहारात बऱ्याच अडचणी निर्माण होतात बऱ्याच वेळा ग्रामीण भागातील शेतकऱ्यांना अशाच प्रकारच्या सर्व

अडचणी रोखीने व्यवहार करताना निर्माण होतात. उदाहरणार्थ शेती अवजारांची खरेदी बियाण्यांची खरेदी व शेतमालाची विक्री, रासायनिक खतांची खरेदी इत्यादीसाठी जर शेतकऱ्याने रोख व्यवहार केले तर त्याचा फार मोठा खर्च होऊन शेतकऱ्यांचे मोठ्या प्रमाणात नुकसान होते त्यामुळे शेतकऱ्यांनी या सर्व व्यवहारात डिजिटल देयक पद्धतीचा वापर केल्यास त्यांचा पैसा श्रम आणि वेळ इत्यादीमध्ये बचत होते. आणि शेती व्यवसाय मोठ्या प्रमाणात फायदेशीर ठरतो यासाठी शेतकऱ्यांनी डिजिटल देयक तंत्र अमलात आणून त्याद्वारे आपले व्यवहार करावेत असे सुचविले जाते

शेती क्षेत्रातील सर्वाधिक प्रमाणात देयकांचे प्रवाह बदलणे, तसेच शेतकऱ्यांना त्यांच्या पिकाचे पैसे देणे आणि यासाठी ग्रामीण भागात डिजिटल वित्त पुरवठा करण्यासाठी आवश्यक त्या सुविधा निर्माण करून शेतकऱ्यांना त्यांची सर्व देयके ही डिजिटल देयक तंत्राने दिल्यास ग्रामीण भागासाठी ती पायाभूत सुविधा ठरेल यात शंका नाही  
खाली दिलेल्या टेबलमध्ये शेती व्यवसायातील अडचणी त्यांचे परिणाम व अडचणी सोडविण्यात डिजिटल देयकाची भूमिका दर्शविली आहे.

अ.क्र.	शेती व्यवसायातील अडथळे	परिणाम	डिजिटल देयकाची भूमिका
१.	रोख रकमेवर आधारित मूल्य साखळी आणि कार्यक्षम बाजारपेठपैसा वितरणाचा ज्यादा खर्च आणि अपारदर्शक किमती व भौतिक अडथळे	सबसहारा-, आफ्रिका आणि दक्षिण आशियातील २६% ते ३७% अन्नधान्य त्याचा उपयोग घेतला जात नाही मध्यस्थामार्फत शेतकऱ्यांची तसेच ४०विकसनशील देशांमध्ये पिळवणूक होईल% अन्नधान्याची नासाडी ही मळणी आणि अंतिम उत्पादन यादरम्यान होते.	डिजिटल देयक तंत्राचा स्वीकार केल्यास रोख रकमेचे व्यवहार कमी होऊन शेतकऱ्यांचा फायदा होईल . शेतकऱ्यांचा खर्च कमी होऊन शेतीची क्षमता सुधारते व शेतकऱ्यांना कार्य सोयीचे होते
२.	जादा वित्तीय आतिरिक्त / सेवांची कमतरता, कर्ज मिळविण्यात आपुऱ्या संधी व धोक्या विरुद्ध तोंड देण्यास अपात्र.	जागतिक पातळीवर लहान व गरीब शेतकऱ्यांची कुवत कमी होते .परिणामी त्यांची पत कमी होते . मा संरक्षण मिळण्यासाठी तातडीची बचत आणि वि .अडचणी येऊन उत्पादनातील धोके वाढतात	पूर्ण सेवा प्रदाता साठी वित्तीय सेवा पुरवण्यास खर्च कमी येतो लहान . शेतकरी हे डिजिटल बचती आणि .विमा संधीचा लाभ घेऊ शकतात
३.	सामाजिक कार्यक्रम आणि पैसे पाठविण्यातील अकार्यक्षमता. महागड्या सेवा सुविधा द्याव्या लागतात तोतया प्राप्तकर्ते आणि .गळत्या	जगातील ३गरीब आणि लहान शेतकरी आजही ४/ .सामाजिक सुरक्षा कार्यक्रमात समाविष्ट नाहीत जगातील ७३% लोकसंख्येला अपुरे सामाजिक संरक्षण कवच आहे.	सामाजिक सुरक्षितता कार्यक्रमाची कार्यक्षमता वाढते मधील गळत्या . कमी खर्चात पैसे .निघून जातात पाठविण्याची व पैसे मिळवण्याची सोय .होते

या ठिकाणी हे ही लक्षात घेणे महत्त्वाचे आहे की या अडथळ्यांचा सामना केवळ शेतीक्षेत्रात करावा लागत नाही तर अन्नधान्याचे दर व अन्नधान्य राजकीयकरण मातीची कमी होणारी सुपीकता असुरक्षित जमीन अधिकार ही इतर मोठी आव्हाने आहेत. जी पूर्णपणे डिजिटलायझेशन मार्फत पार केली जाऊ शकत नाहीत.

#### डिजिटल मूल्य साखळी आणि कार्यक्षम बाजार निर्मिती -

कृषी मूल्य साखळीतील शेतकरी आणि व्यावसायिकांना वस्तू बाजारात आणताना लक्षणीय अडथळे आणि जादा किंमतीचा सामना करावा लागतो. व्यवहारातील रोखीमुळे बाजारात अकार्यक्षमता निर्माण होईल. व त्यामुळे वस्तू व भांडवलाची गती कमी होते आणि आपुऱ्या माहितीच्या अभावी लहान शेतकऱ्यांमध्ये अनिश्चिततेचे वातावरण निर्माण होते. डिजिटल देयक पद्धतीमुळे शेतमालाची किंमत साखळीतील कार्यक्षमता वाढेल तसेच पारदर्शकता ही वाढेल. तसेच खर्च कमी होईल आणि शेतकरी व व्यापारी यांच्यातील अनिश्चिततेचे वातावरण संपून जाईल तसेच शेती उत्पादनात नवप्रवर्तन आल्याने शेतकऱ्यांना त्यांच्या उत्पादनाच्या किंमतीचा मोठा वाटा मिळू शकतो

#### डिजिटल देयके आणि कृषी विषयक दृष्टीकोन -

कृषी खरेदीदाराकडून यांच्या लहान पुरवठा धारक शेतकऱ्यांसाठी मोठ्या प्रमाणात देयके निश्चित करणे ही डिजिटल वित्तीय सेवांना कमी मूल्य साखळीत समाविष्ट करण्यासाठी पहिली पायरी म्हणून पाहिले पाहिजे. वितरित पुरवठादारांच्या मोठ्या गटांकडून खरेदी करणाऱ्या कृषी व्यावसायिकांसाठी डिजिटल देयकांमध्ये रोखीच्या व्यवहारात नसणाऱ्या दोन गुणधर्मांची खात्री दिली जाते ती म्हणजे डिजिटल देयकामधील सुरक्षा आणि त्याचा वेग, आणि हे अतिशय महत्त्वाचे आहे. कारण डिजिटल देयकांमध्ये सुरक्षितता असते ती कोठेच गहाळ होत नाहीत. आणि ही देयके लवकर मिळतात. कारण त्यांचा वेग जास्त आहे रोख रकमेशी संबंधित खालील वर्णन खूप महत्त्वाचे आहे. युगांडामध्ये ग्रामीण भागातील दुर्गम परिसरात कॉपी उत्पन्नांसाठी हेलिकॉप्टर आणि बख्तरबंद वाहनांमधून नियमितपणे कोट्यावधी डॉलर्स

रकम रोख स्वरूपात ठेवतात. ग्रामीण भागामध्ये छोट्या कोकोआ (एक प्रकारचे फळ) खरेदीसाठी दर आठवड्याला त्यांच्या प्लास्टिक पिशवीतून २०००० डॉलर्स रोख रकम ही त्यांच्या मोटारसायकल वरून किरात करत असत.

अशाप्रकारे रोख रकमेचे वाटप हे धोकादायक, खर्चिक आणि वेळखाऊपणाचे आहे. कारण यामध्ये कंपनीचे अधिकारी आपल्यासोबत मोठी रकम घेणार, त्यानंतर दूरवरचा प्रवास करून हे पैसे शेतकऱ्यांना देणार तसेच आपण योग्य शेतकऱ्यास योग्य रकम दिली काय, याची खात्री करून घेणार, तसेच खरेदीदार पैसे घेऊन ज्या ठिकाणी थांबत आहे तिथपर्यंत शेतकरी चालत येणार आणि हा शेतकरी कंपनी अधिकाऱ्याला वेळ व श्रम वाया गेल्याबद्दल त्याची भरपाई म्हणून जादा रकम मागणार या सर्व अडचणी निर्माण होतात.

मोठ्याप्रमाणात देयके डिजिटल करण्याचा संभाव्य परिणाम महत्त्वपूर्ण आहे संयुक्त राष्ट्रसंघाच्या भांडवल विकास निधीने असा निष्कर्ष काढला आहे की, कृषी मोबाईल वित्त पुरवठ्याच्या माध्यमातून अधिक स्वस्त कार्यक्षम आणि पारदर्शक देयक पद्धती ही मोठ्या आणि छोट्या प्रमाणावरील कृषी व्यापारासाठी उपयुक्त ठरते. आणि त्यामुळे किंमत साखळीमध्ये वाढीव गुंतवणुकीस प्रोत्साहन मिळू शकते ग्लोबल सिस्टीम फॉर मोबाइल असोसिएशनचा अंदाज आहे की २०२० सालापर्यंत डिजिटल किंमत साखळी देयकांसाठी संभाव्य बाजार हा ३९० अब्ज डॉलर पर्यंत पोहोचेल. आणि ते ३७० दशलक्ष शेतकऱ्यांना दिले जाईल.

### शेती आणि डिजिटल इंडिया -

आमच्या भारतीय शेतकऱ्यांसाठी एक चांगली बातमी आहे शेतकऱ्यांचे उत्पादन चांगल्या किंमतीस विकायला मदत व्हावी म्हणून भारत सरकारने डिजिटल इंडिया योजना आखण्याचे ठरविले आहे पंतप्रधान नरेंद्र मोदी यांनी म्हटले आहे की २०२२ पर्यंत भारतीय शेतकऱ्यांचे उत्पन्न दुप्पट होईल भारत सरकारला एक सामान्य इलेक्ट्रॉनिक प्लॅटफॉर्म बनवायचा आहे. ज्यामुळे देशातील शेतकऱ्यांना कोठेही त्यांचे उत्पादन विकता येईल. केंद्राने कृषी बाजार ऑनलाइन पोर्टल तयार करण्यासाठी २०० कोटी रुपये दिले आहेत. देशातील ५८५ बाजार समित्यांना एकत्र जोडण्याचे उद्दिष्ट आहे. तसेच केंद्रीय मंत्रिमंडळाने जानेवारीमध्ये पंतप्रधान पिक योजनेस मंजूरी दिली आहे

डिजिटल देयकांच्या माध्यमातून भारतीय शेतीचा विकास मोठ्या प्रमाणावर होईल यात शंका नाही कारण या पद्धतीमुळे शेतकऱ्यांना कमीत कमी वेळेत आणि कमीत कमी खर्चात मोठ्या प्रमाणात लाभ मिळणे शक्य होते. शेतकऱ्यांना आपले सर्व आर्थिक व्यवहार हे कोणाच्याही माध्यमाशिवाय आणि दलाला शिवाय करता येतात. भ्रष्टाचारास मोठ्या प्रमाणात आळा बसतो. आज भारतात डिजिटल देयकांची नितांत गरज आहे

### निष्कर्ष -

भारत हा विकसनशील देश आहे. तसेच आपल्या देशातील मुख्य व्यवसाय हा शेती आहे भारतात जवळजवळ ६५ टक्के लोक शेती हा व्यवसाय करतात. म्हणजेच एवढ्या लोकांना रोजगार पुरविण्याचे काम शेती व्यवसाय करतो परंतु आज आपल्या भारतीय शेती व्यवसायामध्ये अनेक अडचणी आहेत. उदाहरणार्थ- शेतीमालाची खरेदी विक्री, शेतकऱ्यांना विमा संरक्षण त्यांच्या शेतीस वेळोवेळी मिळणारी अनुदाने तसेच नैसर्गिक आपत्तींच्या काळात शेतकऱ्यांना मिळणारी मदत आज भारतात डिजिटल देयकाची व्यवस्था बऱ्यापैकी विकसित झाल्याने शेतकऱ्यांना वरील सर्व मदती या थेट शेतकऱ्यांच्या बँक खात्यात जमा होतातपण एक काळ असा होता की जेव्हा हे व्यवहार रोखीने केले जायचे. अशावेळी सरकारी अधिकारी शेतकऱ्यांना ही मदत देताना भ्रष्टाचारी मार्गाने पैसे मिळविण्यासाठी शेतकऱ्यांकडून काही रोख रकमेची मागणी करत असत त्यामुळे सगळीकडे भ्रष्टाचार बोकळत होता. परंतु जेव्हा डिजिटल देयके ही संकल्पना पुढे आली तेव्हापासून या भ्रष्टाचाराला आळा बसला आहे त्यामुळे शेतकऱ्यांना मिळणारी सर्व मदत ही कोणाच्याही मध्यस्थी शिवाय त्यांच्या बँक खात्यात जमा होते. आणि त्यामुळे शेतकऱ्यांच्या मनात शेतीविषयी आवड निर्माण होऊन अन्नधान्य उत्पादनवाढीस चालना मिळून चिरंतन शेती आणि अन्नसुरक्षा या उद्दिष्टांना नक्कीच चालना मिळत आहे यात शंका नाही.

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## डिजिटल इंडिया आणि निश्चलनीकरण अर्थव्यवस्था :- एक अभ्यास

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वसंतराव काळे महाविद्यालय,  
ढोकी, ता.जि.उस्मानाबाद

### प्रस्तावना :-

भारतीय अर्थव्यवस्था गतिमान करण्यासाठी व काळ्या पैशाला आळा घालण्यासाठी निश्चलनीकरण / विमुद्रीकरण / नोटाबंदी करण्यात आले. पंतप्रधानांनी ८ नोव्हेंबर २०१६ रोजी ५०० आणि १००० रुपयांच्या नोटा चलनातून बाद केल्या. भ्रष्टाचार, काळ्या पैशाला आळा घालणे आणि बनावट नोटांच्या समस्येला पायबंद घालणे हा नोटा बंदीचा मुख्य हेतू होता.

भारतामध्ये यापूर्वीही दोनदा निश्चलनीकरण करण्यात आले. सर्वप्रथम १९४६ साली आणि दुसऱ्यांदा १९७८ मध्ये त्यावेळी निश्चलनीकरण झालेल्या नोटा खूपच अधिक मुल्याच्या होत्या. त्यामुळे सामान्य लोकांना त्याचा फारसा त्रास झाला नाही. पण नुकत्याच करण्यात आलेल्या निश्चलनीकरणामुळे मात्र खूप जणांना त्रास सहन करावा लागला. मोठ्या प्रमाणावर वापरात असलेल्या ५०० आणि १००० रुपयांच्या नोटा अचानक चलनातून बाद झाल्यामुळे लोकांना धान्य, भाजीपाला, दूध अशा दैनंदिन वापराच्या वस्तू घ्यायलाही जवळ पैसा उरला नव्हता. ८ नोव्हेंबर पासून अशी परिस्थिती निर्माण झाली होती की, मुलांच्या शाळेची फिस कशी भरणार व पगाराचा पैसा कसा मिळणार अशा अनेक प्रश्नांनी सामान्य लोकांना भंडावून सोडले होते.

### निश्चलनीकरणामागचा उद्देश :-

ते काळा पैसा बाहेर काढणे आणि दहशतवादासाठी होत असलेला अर्थपुरवठा थांबवणे.

### निश्चलनीकरणाबद्दल सरकारचा उद्देश :-

तो म्हणजे कमीत कमी रोकड वापरणारी अर्थव्यवस्था (कॅशलेस) निर्माण करणे. सर्व आर्थिक व्यवहार तपासता येणार असल्यामुळे कॅशलेस अर्थव्यवस्थेद्वारे पारदर्शकता जोपासता येते.

### लेस कॅश :-

लेस कॅश अर्थव्यवस्था म्हणजेच न्यून रोकड अर्थव्यवस्था निर्माण करण्याचा प्रयत्न आहे. ज्यामध्ये सर्व व्यवहार रोखीमध्ये न होता त्यातील बरेचसे व्यवहार डिजिटलद्वारे केला जातो.

डिजिटल व्यवहारामध्ये अनेक धोके आहेत त्यामध्ये सायबर गन्ह्याचा धोका असतो. सायबर गुन्हे टाकण्याचे निश्चित उपायही आहेत.

### डिजिटायजेशनचे प्रयोग :-

काही प्रयोग यशस्वीही ठरली आहेत. त्यातील काही तितकेसे यशस्वी ठरले नाहीत. यातील सर्वात यशस्वी प्रयत्न स्वीडनमध्ये झाला. भारतात त्याला किती यश मिळाले हे अवलंबून असणार आहे. अशिक्षित असलेल्या मोठ्या जनसमुदायामध्ये विशेषतः ग्रामीण भागामध्ये आपण किती जनजागृती करतो यावर सायबर गुन्ह्याचा मुकाबला करण्यासाठी परिणामकारक सरकारी धोरणे आणि तितकाच परिणामकारक जनजागृती नोटीस हाती घेतल्यास डिजिटल अर्थव्यवस्थेबाबत भारत जगात अग्रेसर राहीला आहे.

### रोकडविरहित अर्थव्यवस्थामध्ये डिजिटल पध्दतीचा वापर :-

रोकडविरहित अर्थव्यवस्था म्हणजे जास्तीत जास्त डिजिटल पध्दतीचा वापर आणि रोजच्या व्यवहारांत रोख रक्कमेचा कमीत कमी वापर असा होतो.

दुसऱ्या भाषेत सांगायचे तर याचा अर्थ रोख रक्कमेचा कमी पुरवठा असा नाही तर डिजिटल व्यवहारांचा जास्तीत जास्त उपयोग जसे की डेबिट कार्ड, क्रेडिट कार्ड, इंटरनेट बँकिंग आणिमोबाईल फोनवरील ॲपद्वारे केलेले व्यवहार असा आहे. सर्व विकसित देशांत वस्तु व सेवा खरेदी करताना डिजिटल व्यवहार हीच मुख्य पध्दती वापरली जाते.

विकसित देश हे मोठ्या प्रमाणावर कागदी चलनाच्या साधनांकडून इलेक्ट्रॉनिक साधनांकडे विशेषतः पेमेंट काडर्सकडे वळत आहेत.

जागतिक बँकेने जागतिक विकास अहवाल (२०१६) मध्ये म्हटले आहे की, अनेक प्रसंगात डिजिटल तंत्रज्ञानामुळे विकास वाढीला चालना मिळाली. विकसित अर्थव्यवस्थेत डिजिटल अर्थव्यवस्थेचा आकार मोठा असल्याने विकसनशील देशांच्या तुलनेत तेथे भ्रष्टाचार कमी होण्याचा हा घटक ठरला आहे.

रोकडविरहित समाज सरकारवरील नोटा छापण्याचा आणि लोकांवरील नोटा बाळगण्याचा बोजा तर कमी करेलच परंतु काळा पैसा, भ्रष्टाचार, लुटमार, पाकिटमार, करबुडवेगिरीला यांचे निर्मुलन करून अनौपचारिक अर्थव्यवस्थेच्या आकारावर मर्यादा आणणार आहे. रोख रक्कमेचा वापर हा काळ्या पैशाला मदत करणारा आहे. कारण रोख रक्कमेतील व्यवहार ऑडिटमधून सहज सुटू शकतात. याउलट बँक डेबिट कार्ड आणि क्रेडिट कार्ड वापरल्याने काळा पैसा व बेहिशोबी व्यवहारांना पायबंद बसणार आहे. कारण त्यांना ऑडिटच्या कसोटीतून जावे लागते व म्हणून काळा पैसा निर्मितीला प्रतिबंध केला जातो.

निश्चलनीकरणामुळे काळा पैसा व त्याचे स्रोत उघड होणार असताना डिजिटल व्यवहारांमुळे समाजात काळ्या पैशाच्या वाढीला खीळ बसणार आहे.

भ्रष्टाचार कमी असणाऱ्या देशांच्या यादीत स्वीडन तिसऱ्या स्थानावर आहे. तर भारतात नो कॅश व्यवहारांचे प्रमाण २२ टक्के असून भारत या यादीमध्ये ७६ व्या क्रमांकावर आहे. या फरकावरून असे सिध्द झाले की रोखविरहित व्यवहार आणि भ्रष्टाचार यांच्यात प्रबळ असा नकारात्मक सहसंबंध आहे. याचा अर्थ असा की रोख विरहित व्यवहार जितके जास्त तितका भ्रष्टाचार कमी आणि त्या उलट रोख विरहित व्यवहारांचा आणखी एक महत्त्वाचा फायदा असा चलन कार्यान्वित करताना नोटा छापणे, वाहतूक आणि इतर खर्चाचा बोजा मोठ्या प्रमाणावर कमी होतो.

#### नोटाबंदीनंतर महाराष्ट्रातील पहिले गाव कॅशलेस :-

केंद्र सरकारकडून नोटाबंदी जाहीर झाली आणि ५०० व १००० रुपयांच्या नोटा चलनातून बाद झाल्या. मध्यरात्रीपासूनच नोटा चलनातून बाद झाल्याच कॅशलेस झाले. अनेकांकडे असलेल्या या नोटा कागदाचे तुकडे ठरले. कॅशलेस इंडियाच्या दिशेने पाऊल टाकल्याचा दावा सरकारच्या प्रतिनिधींनी केला. नोटाबंदीनंतरचे ५० दिवस सर्वसामान्यांसाठी कसोटीचे ठरले. सकाळी उठून बँका आणि एटीएम समोर रांगेत जाऊन उभे राहू लागले. काही लोकांनी हा निर्णय स्विकारला तर काहींनी या निर्णयाला विरोध केला. पण त्याचवेळी एका गावाचे नांव अचानक बातमीमध्ये झळकू लागलं. त्याच कारणही तसंच होतं. गाव कॅशलेस झाले होते. देशातील दुसरे आणि महाराष्ट्रातील पहिले कॅशलेस गाव या गावातील दुकानामध्ये कार्ड स्वाईप मशीन बसविण्यात आल्या होत्या. सर्व व्यवहार डिजिटल होत होते. पण १० महिन्यांनी या गावातील चित्र पुर्णपणे बदलून गेले. कॅशलेस गाव पुन्हा रोखीच्या व्यवहाराकडे वळला आहे. अनेक दुकानामधील स्वाईप मशीन कुठे ठेवलेय हेही माहित नाही.

मुंबईपासून साधारण १०० कि.मी. वर असलेले ठाणे जिल्ह्यातील धसई गाव या गावाजवळ रेल्वे स्थानक नाहीच, पण महामार्गापासून ते बऱ्याच अंतरावर आहे. नोटाबंदीनंतर हे गाव अचानक चर्चेत आलं. धसई हे गाव देशातील दुसरे आणि महाराष्ट्रातील पहिले कॅशलेस गाव अशी या गावची ओळख झाली. स्टेशनरीपासून ते ब्युटी पार्लर आणि किराणा पासून सर्वच दुकानामध्ये कार्ड स्वाईप मशीन बसविण्यात आली आहे. या ठिकाणी रोखीचे व्यवहार होत नाहीत असं बातम्यांमध्ये जाहीर झालं. या कॅशलेस गावांनी अवघ्या देशाचं लक्ष वेधून घेतलं. या कॅशलेस गावातील १० महिन्यांनंतरचे वास्तव स्क्रोल डॉट इन समोर आणलं आहे. हे कॅशलेस गाव आता रोखीच्या व्यवहाराकडे वळलं आहे.

डिजिटल व्यवहारांसाठी आकारण्यात येणारे शुल्क नेटवर्कच्या अडचणी आणि ग्राहकांकडे असलेली डेबिट कार्डची कमतरता या कारणांमुळे येथे डिजिटल व्यवहारांना खीळ बसलीय. धसई गाव व्यापारी असोसिएशनच्या साधारण ७० ते १०० सदस्यांनी डिसेंबरमध्ये बँक ऑफ बडोदाच्या सहकार्याने मशीन घेतल्या होत्या अशी माहिती अध्यक्ष स्वप्नील पाटकर यांनी स्क्रोल डॉट इन ला दिली. पण सध्या स्थितीत केवळ २५ मशीनच कार्यरत आहेत.

#### सारांश :-

भारतामध्ये नोटाबंदीनंतर देशभर जाणवू लागलेल्या नोटाटंचाईवर मात करण्यासाठी डिजिटल पेमेंट प्रणालीचा स्वीकार करण्यात आला आहे. यातूनच डिजिटल पेमेंटला महत्त्व देण्याचे मुख्य कारण नोटा छापण्याचे काम दिवसेंदिवस अवघड होत चालले आहे. जगात आजही अनेक प्रगत देशांनाही अन्य देशांकडून नोटा छापून आणाव्या लागतात. भारत सरकारने काळ्या पैशाला लगाम घालण्यासाठी निश्चलीकरण / नोटाबंदी केली व डिजिटल पेमेंटला चालना दिली. मोबाईलद्वारे ॲप्लीकेशन द्वारे व्यवहार करण्यात येऊ लागले यातूनच बाजारातील काळ्या पैशाला लगाम बसला.

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## डिजिटल पेमेंट पध्दतीचा सामाजिक जीवनावर होणारा परिणाम

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धक्का-धक्कीच्या आणि घाई गडबडीच्या जीवनामध्ये डिजिटल पेमेंटचा फार मोठ्या प्रमाणात परिणाम सामाजिक जीवनावर होताना दिसून येत आहे. आज आपण पहात आहोत. मानसाला या दिवसभराच्या बिजी शडुलमध्ये थोडा सुध्दा वेळ इतर गोष्टी करायला मिळत नाहीत. त्यामुळे डिजिटल पेमेंटचा फार मोठा फायदा आजच्या जगण्यात झाल्याचा दिसतो. आपण पाटीमागे वळून पहायचे म्हटले तर फार वेगळीच परिस्थिती दिसून येते. आपण ठेवलेला स्वतःचा पैसा बँकमधून काढायचा म्हटले तर फार मोठी कसरत करावी लागायची तासान-तास बँकाच्या लाईनमध्ये उभा ठाकून रहावे लागायचे. पण आज आपण पाहत गेलो तर डिजिटल पेमेंट पध्दतीमुळे एका चुरकीसरसी आपण आपले पैसे हवे त्या ठिकाणी पाटवू शकतो या मुळे फार मोठ्या प्रमाणात माणसामागचा ताण कमी होण्यास मदत झाली असल्याचे दिसून येते. फक्त एका किल्लकवर, एका वटनावर आपण आपला पैसा इतरांच्या खात्यावर पाठू शकतो. हा फार मोठा बदल म्हणावे लागेल.

1990 च्या दशकानंतर भारतात मोठ्या प्रमाणात मोबाईलचा वापर होवू लागला परंतु 2005 च्या शेवट पर्यंत मोबाईलचा वापर फक्त संपर्कासाठी होवू लागला पण 2005 च्या नंतर मोबाईलचा वापर मोठ्या प्रमाणात इतर कारणासाठी वापरला जावू लागला, जात आहे. आणि आजच तर त्याचा फारच मोठ्या प्रमाणात वापर होताना दिसून येत आहे. प्रत्येक मानसाच्या जीवनाचा तो एक अविभाज्य घटकच बनला आहे. आजच्या माणसाच्या जगण्या मध्ये मोबाईलचा वापर अनिवार्य झाल्याचे दिसून येते जसे आपण ऐकले आहे. की, मानवाच्या मुलभूत तीन गरजा त्यामध्ये अन्न वस्त्र आणि निवारा पण आपणास असे म्हणावे लागेल की, मानवाचा प्रमुख चार गरजा आहेत. त्यामध्ये अन्न, वस्त्र निवार भारतात 1990 च्या दशकामध्ये जरी मोबाईलचा वापर मोठ्या प्रमाणात सुरु झाला असला तरी पाश्चिमात्या देशामध्ये याचा वापर खुप आगोदर पासून होता. त्यामध्ये काही दिवसापूर्वी एका देशातील नागरीकांनी अशी एक स्पर्धा ठेवली की, आपल्या जवळचा आपला मोबाईल सर्वात लाब जो फेकिल त्याला प्रथम बक्षीस देण्यात येईल. सांगण्याचे तात्पर्य असे की, मोबाईल मुळे मानुस खुप सुखी झाला, पण दुःखी सुध्दा त्याच पटीतच झाला. मोबाईलमुळे किंवा डिजिटल पध्दतीमुळे आज फार मोठ्या प्रमाणात मानसाचे जिवन सुखी तर झालेच पण त्याचा वाईट परिणाम आपणास दिसून येतो.

केंद्र सरकारने घोसीत केलेल्या नोटा बंदीमुळे व चलन बदलामुळे डिजिटल पेमेंट मध्ये फार मोठ्या प्रमाणात वाढ दिसून येते. आनेक रिटेल दुकानदारांना व व्यापाऱ्यांना विना रोखड व्यवहार पार पडता येवू लागले. या आगोदर कंपन्यासाठी कंपनीसाठी विना रोखड ईलेक्टॉनिक पध्दती वापरली जात असे मात्र आता सरसगट भौवतास ठिकाणी डिजिटल पेमेंट पध्दती वापरली जात आहे. नागरिकांना तसेच व्यावसायिकांना मिळणाऱ्या सरकारी सेवांमध्ये सुधारणा घडवण्याच्या उद्देश्याने राष्ट्रीय डिजिटल पेमेंट योजनेचा शुभारंभ खालील दृष्टिकोण लक्षात घेऊन केला आहे.

समाईक सेवा प्रदान करणाऱ्या केंद्राच्या माध्यमातून सामान्य मनुष्याकरिता सर्व नागरी सेवा त्याच्या विभागात सुलभ बनविण्यासाठी आणि कमी खर्चात अशा सेवांच्या लाभावरील विश्वासनीयता आणि परदर्शकता आणण्यासाठी जेणे करुन सामान्य माणसाच्या मूलभूत गरजा भागविण्यात येतील.

दृष्टिकोणदर्शक विवरणात चांगल्या शासनाला पाठिंबा देण्यासाठी सरकारने शासनाचे प्राधान्यक्रम स्पष्टपणे अधोरेखित केले आहेत. पोहोच ग्रामीण लोकसंख्येचा विचार केला गेला आहे जे भाग सरकारी योजनांपासून काही कारणास्तव दूर आहेत अशा भागांमध्ये पोहोचण्याची गरज आहे. राष्ट्रीय ई- शासन योजना स्टेट वाइड एरिया नेटवर्क साठी विभाग पातळी आणि ग्रामीण भागापर्यंत पोहोचण्यासाठी सामान्य सेवा केंद्रापर्यंत (सीएससी) सर्व सरकारी कार्यालयांना जोडण्याची एक सोय केली आहे.

सामान्य सेवा देणारी केंद्र आतापर्यंत ग्रामीण भागात राहणाऱ्या गावकऱ्यांना एका सरकारी विभागाचा किंवा अपल्या स्थानीय कार्यालयांच्या माध्यमातून सेवेचा लाभ देण्यासाठी फार दूरवर जावे लागत असे अशा सेवांचा लाभ घेण्यासाठी सामान्य माणसाचा वेळ आणि पैसा दोन्हीही खर्च होत असे ह्या समस्येवर तोडगा काढण्यासाठी राष्ट्रीय ई शासन योजनेच्या दृष्टीने एक भाग म्हणून एक कंप्यूटर आणि एक सक्षम इटरनेट सामान्य सेवा केंद्र प्रत्येकी सहा गावांसाठी स्थापित करण्याची संकल्पना केली गेली आहे जेणे करुन गावकऱ्यांना त्याचा लाभ सहजपण घेता येईल या संकल्पित सामान्य सेवा केंद्रातून कधीही. कुठेही तत्वावर ऑनलाईन सेवा देण्याची सोय केली आहे.

जगातील अनेक देशामध्ये कॅशलेस अर्थ व्यवस्था स्वीकारण्यात आली असून भारत ही त्या दिशेने पावले टाकत आहे. भ्रष्टाचार काळा पैसा, अवैध संपत्ती यांना आळा घालण्यासाठी केंद्र सरकारने पाचशे आणि हजार रुपयांच्या जुन्या नोआ चलनातून बाद ठरविल्या आणि आता त्या पुढचे पाऊल म्हणून डिजिटल पेमेंट पध्दतीचा मोठ्या प्रमाणात अवलंब करुन अर्थ व्यवस्था कॅशलेस करण्यासाठी सर्वतोपरी प्रयत्न केले जात आहेत. भारतात ग्रामीण भागातील जनतेमध्ये असलेली डिजिटल आर्थिक साक्षरता जाणिवेची कमतरता हे एक देशापुढील महत्वाचे आव्हान आहे डिजिटल आर्थिक सेवांच्या बाबतीत नागरीकांमध्ये आणि त्यातही ग्रामीण आणि निमशहरी भागामध्ये ही जाणीव निर्माण करणे आणि त्याचबरोबर डिजिटल सेवांसंदर्भातील पर्यायाबाबतीत सक्षम बनविणे/ साहाय्य करणे ही एक तातडीची गरज बनलेली आहे. देशभरातील 2 लाख 50 हजार पंचायतीमध्ये असलेल्या 2 लाख सीएससीच्या साहाय्याने 25 लाख व्यापारी आणि 1 करोड नागरीकांची नोंदणी डिजिटल आर्थिक साक्षरतेसाठी करुन घेणे आणि त्यांना ती देऊ करणे हा या प्रकल्पाचा उद्देश आहे. ग्रामीण नागरीकांसाठी उपलब्ध असलेल्या सरकारच्या धोरणाबाबत आणि डिजिटल आर्थिक पर्यायाबद्दल जाणीव करुन देणाऱ्या कार्यक्रमांचे आयोजन करुन आणि डिजिटल आर्थिक सेवांबाबतीत असलेल्या आयएमपी. युपीआय. बँक पीओएस यंत्रे इ. सारख्या निरनिराळ्या यंत्रणांचा वापर करण्यासाठी निरनिराळ्या संबंधितांना साहाय्य करुन डिजिटल आर्थिक केंद्र



व्हावीत यासाठः सीएससीना सक्षम बनविणे हा याचा उद्देश आहे. देशातील दुर्गम ग्रामीण आणि निम शहरी भागातील लोकांना ई गव्हर्नस आणि व्यावसायिक सेवा उपलब्ध करून देणारी केंद्रे म्हणजेच कॉमन सव्हिसेस सेंटर आपण यांना आपले सरकार केंद्र या नावाने ओळखतो या सीएससी मार्फत बँक व्यवहारापासून वंचित समाज घटकांना डिजिटल मार्गाने आर्थिक सेवा मोठ्या प्रमाणावर उपलब्ध होऊ लागल्या आहेत. डिजिटल आर्थिक सेवा या प्रामुख्याने कार्डस युएसएसडी, ईपीएस, युपीआय, वॉलेट या मुख्य प्रकारात उपलब्ध करून देण्यात आल्या आहेत.

### कार्डस-कार्डसचे तीन प्रकार प्रामुख्याने पडतात (डिजिटल पेमेंट)यामध्ये

**अ. प्रिपेड कार्डस-** ग्राहकाच्या बँक खात्यातून ही कार्डस प्रि.लोड केलेली असतात याचा वापर मर्यादित रकमांच्या व्यवहारासाठी केला जाऊ शकतो. मोबाईल रिचार्जसारखेच यांचेही रिचार्ज करता येऊ शकते. याचा वापर सुरक्षित असतो.

**ब. डेबिट कार्डस -** ज्या बँकेमध्ये ग्राहकाचे खाते असते तेथून हे देऊ केले जाते आणि तेथील बँक खात्याशी ते जोडलेले असते खातेधारकांना डेबिट कार्डस जारी केली जातात आणि ग्राहकाने त्याद्वारे केलेल्या कोणत्याही खर्चाचे त्याच्या खात्यात लगेचच डेबिट टाकले जाते त्याच्या / तिच्या बँक खात्यामध्ये जेवढी रक्कम शिल्लक आहे. त्या मर्यादिपर्यंतच खातेदार या कार्डचा वापर करून रोख पैसे काढून घेऊन शकतो या कार्डसचा वापर केवळ एका व्यक्तीकडून दुसऱ्या व्यक्तीपर्यंत पेश्यांच्या देशांतर्गत हस्तांतरणासाठीही केला जाऊ शकतो.

**क. क्रेडीट कार्डस -** बँक्स /आरबीआयने अधिकृत केलेल्या संस्थांकडून ही कार्डस जारी केली जातात याचा वापर देशांतर्गत आणि आंतरराष्ट्रीय स्तरावरह केला जाऊ शकतो. डेबिट कार्डच्या विरुद्ध क्रेडीट कार्डद्वारे ग्राहक त्यांच्या बँक खात्यात शिल्लक असलेल्या रकमेहून अधिक रक्कमही काढू शकतो परंतु ही अतिरिक्त रक्कम किती प्रमाणात काढता येऊ शकेल याची एक विशिष्ट मर्यादाही प्रत्येक क्रेडीट कार्डसाठी निश्चित करून दिलेली असते. काढलेली ही अतिरिक्त रक्कम कशाप्रकारे परत करता येईल याबद्दलही एक विशिष्ट मर्यादा या कार्डससाठी निश्चित केलेली असते .

### डिजिटल पेमेंट अंमलबजावणी साठी धोरण

म्हणून एक विवेकपूर्ण दृष्टिकोण राष्ट्रीय ई शासन योजनेसाठी प्रस्तावित केला गेला आहे. जे मागील सफल ई शासन अनुप्रयोगाच्या अनुभवांवर आधारित आहेत जे राष्ट्रीय आणि आंतरराष्ट्रीय स्तरावर लागू केले गेले आहेत राष्ट्रीय टू- शासन योजनेसाठी लागू केलेला दृष्टिकोण आणि पध्दतीत खालील घटक आहेत.

सर्वसामान्य संरचना राष्ट्रीय ई शासन योजना ही सर्वसामान्यपणे आयटी संरचनेच्या अंमलबजावणीच्या स्थापनेत आणि समर्थनात सामील आहे उदा. स्टेट वाइड एरिया नेटवर्क राज्य डाटा केंद्र सर्वसामान्य सेवा केंद्र (सीएससी) आणि ईलेक्ट्रॉनिक सेवा वितरण गेटवे शासन सक्षम अधिकाऱ्यांच्या निर्देशनात स्थापन केलेल्या गेलेल्या राष्ट्रीय ई शासन योजनेची देखरेख आणि व्यवस्थापनाच्या योग्य सोयी निर्धारित केल्या गेल्या ह्या योजनेत कार्यक्रम तयार करणे/ त्याचे स्थिर आणि नितिगत दिशा निर्देश ठरविणे. तांत्रिक सहाय्य देणे. क्षमता निर्माण करण्याचे उपक्रम घेणे. अनुसंधान आणि विकास इ समाविष्ट आहे. माहिती तंत्रज्ञान विभाग स्वतःला मजबूत करते आणि त्याबरोबरच इतर संस्थांना उदा राष्ट्रीय माहिती तंत्रज्ञान केंद्र (एन आयसी) मानकीकरण आणि प्रगत संगणन विकास केंद्र नेशनल इस्टिट्यूट ऑफ स्मार्ट गव्हर्नस इ. च्या भूमिका प्रभावी ढगाने चालविण्यासाठी कार्यन्वित आहे.

केंद्रीकृत पुढाकार, विकेंद्रकृत अंमलबजावणी नागरिक केंद्रिय कार्यपध्दती सुनिश्चित करण्यासाठी केंद्रीकृत पुढाकाराच्या माध्यमातून ई-शासनाचा पुरस्कार झाला ज्यात असा उद्देश आहे की विभिन्न ई शासन अनुप्रयोगाचे आंतर्गत कामकाज आणि माहिती आणि दळणवळण तंत्रज्ञान मुलभूत सुविधाचे अधिकतम उपयोग सुनिश्चित करण्यासाठी एक विकेंद्रीकृत अंमलबजावणी मॉडेलसाठी अनुमति द्यावी. सफल परियोजनांचा शोध घेणे आणि त्याचे आवश्यकते प्रमाणे जेथे गरज आहे तेथे अनुकूलन करणे असाही त्याचा उद्देश आहे.

सार्वजनिक खाजगी भागीदारी मॉडल (पीपीपी) जेव्हा सुरक्षेच्या पैलुवर वाटाघाटी शिवाय संसाधन पूल बांधण्याची गरज आहे तेव्हा ह्याचा उपयोग केला गेला पाहिजे.

### एकीकृत तत्वः

एकीकरणाच्या सुद्धेसाठी आणि अस्पष्टतेपासून बचाव होण्यासाठी नागरिक व्यावसाय आणि मालमत्ता यासाठीच्या अद्वितीय ओळख क्रमांकाच्या ग्रहणास प्रोत्साहन दिले गेले पाहिजे.

### संदर्भ

1. महाराष्ट्र स्टेट बोर्ड - स्टेक्स बुक
2. ग्रामपंचायत
3. सरकारी नौकरी रोजगार समाचार
4. डिजिटल महाराष्ट्र

## भारतातील रोकड विरहित अर्थव्यवस्था : आव्हाने आणि उपाय

प्रा.डॉ. शैलजा भारतराव बरुरे,  
सहाय्यक प्राध्यापक, राज्यशास्त्र विभाग  
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अंबाजोगाई जि. बीड

### प्रस्तावना :

भारताने संसदीय लोकशाहीचा स्विकार केलेला आहे. लोकशाहीमध्ये जनता सार्वभौम असते. एकुण निर्णय प्रक्रियेमध्ये सामान्य माणूस केंद्रस्थानी असतो. सर्वसामान्य लोकांच्या हिताची काळजी घेणे हे शासन व्यवस्थेचे आद्य कर्तव्य असते. भारतात भ्रष्टाचार, काळापैसा, अकार्यक्षमता, संपत्तीचे केंद्रीकरण, भांडवलाचे केंद्रीकरण इ. मुळे सामान्य माणूस नैराश्याच्या गर्तेत अडकलेला आहे. भारताचे पंतप्रधान नरेंद्र मोदी यांनी या सर्वांवरील उपाय म्हणून दिनांक ८ नोव्हेंबर २०१६ रोजी निश्चलीकरणाचा निर्णय घेतला. यामुळे अर्थव्यवहारात, प्रशासनात व एकुणच पारदर्शकता निर्माण होण्याची शक्यता वर्तवत या निश्चलीकरणाचे समर्थन केले व रोकड विरहित अर्थव्यवस्थेची सुरुवात करण्यासाठी प्रोत्साहन दिले. रोकड विरहित अर्थव्यवस्थेमध्ये कमीत कमी रोख रकमेचा वापर व अधिकाधिक ई बँकींगला प्राधान्य दिले जाते.

### शोधनिबंधाची उद्दिष्टे :

१. रोकड विरहित अर्थव्यवस्था ही संकल्पना स्पष्ट करणे.
२. रोकड विरहित अर्थव्यवस्थेचे महत्त्व विशद करणे.
३. रोकड विरहित अर्थव्यवस्थे समोरील आव्हानांचा अभ्यास करणे.
४. रोकड विरहित अर्थव्यवस्था यशस्वी होण्यासाठी उपाय सुचविणे.

### संशोधन पध्दती :

सदरील शोध निबंधासाठी द्वितीय साधन स्रोतांचा वापर करण्यात आलेला आहे. यामध्ये संदर्भग्रंथ, मासिके, नियतकालीके याद्वारे तथ्य व माहिती संकलीत करण्यात आलेली आहे. शोध निबंधासाठी केवळ वर्णनात्मक संशोधन पध्दतीचा वापर करण्यात आलेला आहे.

### रोकड विरहित अर्थव्यवस्थेची संकल्पना व महत्त्व :

आर्थिक व्यवहारांमध्ये जास्तीत जास्त डिजीटल पध्दतीचा वापर करून कमीत कमी रोख रकमेचा वापर करून अर्थ व्यवहार करणे म्हणजे रोकड विरहित अर्थव्यवस्था होय. यामध्ये इंटरनेट बँकींग, मोबाईल बँकींग, विविध डिजीटल अॅप, डेबीट कार्ड, क्रेडीट कार्डचा वापर करणे अपेक्षित आहे. याद्वारे वेळ, श्रमाची बचत करणे व आर्थिक व्यवहारातील क्लिष्टता दूर करून सुलभीकरण करणे आर्थिक पारदर्शकता या हेतूने मा. प्रधानमंत्री मोदी यांनी रोकड विरहित अर्थव्यवस्थेचा निर्णय घेतलेला आहे.

भारतातील सर्व व्यवहारांमध्ये केवळ ५ टक्केच व्यवहार इलेक्ट्रॉनिक पध्दतीने होतात. सन २०१६ च्या अर्थसंकल्पीय भाषणामध्येच काळ्या पैशाला व काळ्या पैशामुळे निर्माण होणाऱ्या परिणामांना प्रतिबंध करण्यासाठी रोकड विरहित अर्थव्यवस्थेची संकल्पना मांडली गेली. या संकल्पनेच्या अंमलबजावणीसाठी "पेमेंट्स अॅन्ड सेटलमेंट सिस्टीम इन इंडिया- व्हीजन २०१८" या नावाने रिझर्व्ह बँकेने संकल्प पत्र जारी करून रोकड विरहित अर्थव्यवस्थेच्या दिशेने वाटचाल करण्यासाठी मध्यम व दीर्घकालीन उपाययोजनांचा आराखडा ही सादर केला होता. यामध्ये डिजीटल व्यवहारांना प्रोत्साहन देणे, करदात्यांची संख्या वाढविणे, काळा पैसा व पैशाचा साठा यांचे निर्मूलन करणे, निवडणुकांमधील गैरप्रकार व दहशतवादाचे उच्चाटन करणे इ. बाबींचा उल्लेख करण्यात आलेला होता. भारतामध्ये व विशेषतः अर्थव्यवस्थेमध्ये चलनाचे प्रमाण हे इतर विकसीत व विकसनशील राष्ट्रापेक्षा जास्त असल्यामुळे काळापैसा, करबुडवेगीरी, निवडणुकांमधील गैरव्यवहार, भ्रष्टाचार, लूटमार इ. चे प्रमाण अधिक होते. या सर्वांच्या समूळ नाशासाठी भारत सरकारने रोकड विरहित अर्थव्यवस्थेच्या दिशेने पाऊले उचलली आहेत.

१. रोकड विरहित अर्थव्यवस्थेमुळे पैशाच्या साठेबाजीवर नियंत्रण निर्माण होऊन अधिकाधिक पैसे बँकींग व्यवस्थेत चालू अथवा बचत खात्यांच्या मार्फत वापरात येईल. यामुळे अप्रत्यक्षरित्या बचतीला, गुंतवणुकीला आणि अर्थव्यवस्थेतील भांडवल निर्मितीला प्रोत्साहन मिळणार आहे.
२. भारतातील सामान्य लोकांना बँकींग विषयी माहिती मिळविणे अत्यावश्यक होणार असून त्यामुळे आर्थिक साक्षरतेचे प्रमाण वाढले जाईल.
३. अप्रत्यक्षरित्या महागाईवर नियंत्रण प्रस्थापित होईल. काळापैसा व भ्रष्टाचारावर नियंत्रण प्रस्थापित झाल्यास आर्थिक विषमता, दारिद्र्य कमी होण्यास या रोकड विरहित अर्थव्यवस्थेचा फायदा होईल.
४. पारदर्शी अर्थव्यवहार व भ्रष्टाचारमुक्त आर्थिक व्यवस्थेमुळे परकीय गुंतवणुकदार भारताकडे आकर्षिते जातील. रोकड विरहित अर्थव्यवस्थेमुळे अनौपचारिक अर्थव्यवस्थेचा आकार मर्यादित करण्यास सहकार्य प्राप्त होईल.

५. रोकड विरहित अर्थव्यवस्थेमूळे सामाजिक आणि सांस्कृतिक पर्यावरणही निरोगी आणि निकोप राहिल. भारतात विवाह, धार्मिक सण-समारंभ, कर्मकांड, धार्मिक संस्था यांना काळ्या पैशातून भरघोस देणग्या दिल्या जातात व त्यामधून सामाजिक व सांस्कृतिक पर्यावरण प्रदुषित होण्यासाठी प्रोत्साहन मिळते.
६. रोकड विरहित अर्थव्यवस्थेमूळे आपोआपच येणाऱ्या पैशाच्या स्रोतांबद्दलची पारदर्शकता दर्शविणे बंधनकारक होईल त्यामुळे अंधश्रद्धा, कर्मकांड, धर्मांधता, सांस्कृतिक व सामाजिक कुप्रथांना आपोआप आळा बसेल.

### रोकड विरहित अर्थव्यवस्थेसमोरील आव्हाने :

भारतीय राज्यव्यवस्थेमध्ये प्रशासनाला पारदर्शक, भ्रष्टाचार विरहित व परिणामकारक बनविण्यासाठी रोकड विरहित अर्थव्यवस्थेची संकल्पना मांडली यासाठी निश्चलीकरण केले गेले मात्र निश्चलीकरणाचा रोकड विरहित अर्थव्यवस्था निर्मितीसाठी लाभ होण्यापूर्वी अनेक आव्हाने निर्माण झाली आहेत ती पुढीलप्रमाणे :

#### १. सामान्य व्यवहारांवर परिणाम :

निश्चलीकरणाच्या आकस्मात निर्णयाने सर्वसामान्य लोकांचे दैनंदिन व्यवहार ठप्प झाले. हा तत्कालीन परिणाम असला तरी दोन वर्षांनंतरही ग्रामीण भागातील निरक्षर लोकांचे आर्थिक व्यवहार अजूनही सुरळीत झालेले नाहीत.

#### २. अज्ञान व निरक्षरता :

भारतासारख्या प्रचंड लोकसंख्या असणाऱ्या राष्ट्रांमध्ये अजूनही अज्ञान व निरक्षरतेचे प्रमाण जास्त आहे. त्यामुळे बँकेचे व्यवहार व त्यातही रोकड विरहित व्यवस्थेच्या बाबतीत सामान्य लोक अनभिज्ञ आहेत. त्यामुळे निरक्षर असलेल्या लोकांमध्ये रोकड विरहित अर्थव्यवस्थेच्या संदर्भात संदिग्धता निर्माण झालेली आहे. तसेच चलनी व्यवहाराला पर्याय म्हणून सरकारने तात्काळ कोणतेही उपाय दिले नाही त्यामुळे निश्चलीकरण हे केवळ नोटबदलीपर्यंतच मर्यादित राहिले. रोकड विरहित अर्थव्यवस्थेऐवजी न्युन लोकरकमेच्या वापरावर भर दिला गेला.

#### ३. आर्थिक साक्षरतेचा अभाव :

भ्रष्टाचार, काळ्या पैशाला आळा घालण्याच्या संदर्भात मोदी सरकारने घेतलेल्या रोकड विरहित अर्थव्यवस्थेच्या निर्णयाने सर्वात मोठे आव्हान म्हणजे भारतातील आर्थिक साक्षरतेचा अभाव. भारतातील ग्रामीण निरक्षर जनतेबरोबरच शहरातील सुशिक्षित नागरी समुदाय ही आर्थिक व्यवहाराच्या बाबतीत निरक्षर आहे. यामुळेच नोटाबंदीनंतर मोदी सरकारवर शहरी व नागरी समुदायाकडून टिका झाली. डिजिटल व्यवहारामध्ये कमीत कमी रक्कम वापरणे आवश्यक असते व जास्तीत जास्त डेबीट कार्ड, क्रेडीट कार्ड, इंटरनेट बँकींग, मोबाईल फोनवरील ॲपद्वारे आर्थिक व्यवहार करणे अपेक्षित आहे. मात्र अजूनही ग्रामीण व शहरी भागात सामान्य लोक, शिक्षित लोक बँकामध्ये रोख रकमांच्या स्वरूपातच आपले व्यवहार पूर्ण करतांना आढळून येतात. कारण रोकड विरहित अर्थव्यवस्थेच्या संचलनासाठीचे पध्दतशीर प्रशिक्षण व जागृती अजूनही भारतात झालेली नाही.

#### ४. डिजिटल व्यवहारांमध्ये सायबर गुन्ह्याचा धोका :

आधुनिक युग तंत्रज्ञानाचे युग मानले जाते. तंत्रज्ञानाच्या सहाय्यानेच आज आर्थिक गुन्हेगारी वाढलेली आहे. आर्थिक व्यवहारातील घोट्याळे किंवा गुन्हे टाळण्यासाठी अर्थातच पारदर्शकता आणण्यासाठी रोकड विरहित अर्थव्यवस्था निर्माण करण्याचा प्रयत्न केला गेला तरी डिजिटल व्यवहारांमध्ये आर्थिक गैरव्यवहारांचे गुन्हे होण्याचा धोका सर्वाधिक आहे.

#### ५. सद्दोष बँकींग व्यवस्था :

भारतातील बँकींग व्यवहारांमध्ये अत्यावश्यक भौतिक सुविधा, विजेची अनुपलब्धता, बँक अधिकाऱ्यांचे ग्रामीण व निरक्षर जनतेसमवेतचे उदासिन व्यवहार इ. मुळे रोकड विरहित अर्थव्यवस्थेसमोर सद्दोष बँकींग व्यवस्था हे मोठे आव्हान आहे.

#### ६. रिझर्व्ह बँकेने सामान्यांचा विश्वास गमावला :

पाकीटमार, लुटमार, करबुडवेगिरी यांच्या समुळ उच्छाटनासाठी निश्चलीकरणाचा व रोकड विरहित अर्थव्यवस्थेचा आग्रह धरत पंतप्रधान मोदी यांनी स्वतः नोटबंदीचा निर्णय जाहिर केला. ही उद्घोषणा रिझर्व्ह बँकेचे सर्वोच्च अधिकारी गव्हर्नर यांनी करणे अपेक्षित होते मात्र मा. प्रधानमंत्री यांच्या घोषणेमुळे सरकारचे रिझर्व्ह बँकेवर अधिपत्य वर्चस्व निर्माण झाल्याचा समज सामान्य लोकांमध्ये दृढ झाला. त्यानंतर रिझर्व्ह बँकेचे गव्हर्नर रघुराम राजन यांच्या राजीनाम्यानंतर रिझर्व्ह बँकेने सरकारशी अनुकूल राहण्याचे धोरण स्विकारल्याची खात्री झाली. एक प्रकारे उच्चधेयांसाठी नोटबंदी, रोकडविरहित अर्थव्यवस्था निर्माण करण्याच्या हेतुने सरकारने मतदारांचा पाठिंबा मिळवला मात्र रिझर्व्ह बँकेने सामान्य जनतेचा विश्वास गमावला.

#### ७. काळा पैसा व साठेबाजीवर नियंत्रण प्रस्थापित झाले नाही :

निश्चलीकरणामुळे विदेशी बँकामधील काळापैसा बाहेर येणार व भारतातील साठेबाजीवरही नियंत्रण प्रस्थापित करणार अशी खात्री देत नोटबंदी करण्यात आली मात्र दुसऱ्या बाजूने काळापैसा निर्माण होण्याचे विविध मार्ग उपलब्ध झाले आहेत व पैशाच्या साठेबाजीवरही नियंत्रण प्रस्थापित झाले नाही. भ्रष्टाचार व काळापैसा आजही भारतात पूर्वीच्याच स्थानी आहेत.

#### ८. सत्ताधारी व विरोधी पक्षांमधील तीव्र मतभेद :

दिनांक ८ नोव्हेंबर २०१६ रोजी केलेल्या नोटबंदीने भारतातील निश्चलीकरण व रोकड विरहित अर्थव्यवस्थेचा मानस जाहिर झाल्याबरोबर देशातील विरोधीपक्षांनी सत्ताधारी पक्षावर तीव्र स्वरूपाची टिका केली. यामुळे या निर्णयाचे व रोकड विरहित अर्थव्यवस्था या संकल्पनेचे आर्थिक महत्त्व कमी होऊन त्याला राजकीय संदर्भ प्राप्त झाले.



## रोकड विरहित अर्थव्यवस्थेच्या यशस्वीतेसाठीचे उपाय :

### १.आर्थिक साक्षरता :

भारतातील ग्रामीण भागातील निरक्षर लोकांसमवेतच शाळांमधील शिक्षक, आरोग्य खात्यातील कर्मचारी, ग्रामविकास अधिकारी, अंगणवाडी सेविका आदि लोकांना आर्थिक साक्षरतेचे प्रशिक्षण दिले पाहिजे तरच ते रोकड विरहित अर्थव्यवस्थेत सक्रिय सहभाग घेऊ शकतील व त्यांच्या सहवासातील इतरांना आर्थिक साक्षरतेचे महत्त्व पटवून देऊ शकतील. त्यामुळे अपेक्षित प्रशासन आर्थिक पारदर्शकतेचे लक्ष्य गाठता येईल.

### २.राजकीय इच्छाशक्ती :

निश्चलीकरण आणि रोकड विरहित अर्थव्यवस्था यशस्वी करण्यासाठी राजकीय पक्षातील मतभेद व सत्तेचे राजकारण सोडून भारतातील आर्थिक विकासासाठी सत्ताधारी व विरोधी पक्षांमध्ये राजकीय इच्छाशक्ती व रोकड विरहित अर्थव्यवस्थेसाठी ऐक्य निर्माण होण्याची गरज आहे.

### ३.अधिकाधिक रोकड विरहित आर्थिक व्यवहारांसाठी प्रोत्साहन देणे :

रोख रकमेचा वापर करण्याऐवजी डिजीटल पेमेंट्सला प्रोत्साहन देण्यासाठी सरकारने डेबीट व क्रेडीट कार्ड वापरण्यावरील व्याज कमी करण्याचे धोरण आखले पाहिजे.दारिद्र्य रेषेखालील व्यक्तींसाठी बीपीएल आधारकार्ड जोडणीतून कमी व्याज दरामुळे दारिद्र्य रेषेखालील लोकांचा डेबीट व क्रेडीट कार्डचा वापर वाढेल. यामुळे रोकड विरहित अर्थव्यवहार सुरळीत पार पडू शकतील.

### ४.बँकामध्ये पायाभूत सुविधांची वाढ करणे :

ग्रामीण भागामध्ये अधिकाधिक बँका व या बँकामध्ये डिजीटल अर्थव्यवस्थेसाठी पुरेशा भौतिक सुविधा उपलब्ध करून देणे आवश्यक आहे. यामुळे सामान्य लोकांना बँकांमध्ये व्यवहाराची भिती कमी होईल व होणारी दूरावस्था टढेल. बँकांच्या पुढाकाराने स्मार्ट फोन, इंटरनेट व ब्रॉड बँड जोडणीसाठीचा पुढाकार आवश्यक आहे.तसेच सरकारनेही प्रयत्नपूर्वक बँकांच्या भौतिक सुविधा वाढविण्यासाठी अधिकची तरतूद करणे आवश्यक आहे.

### ५.सुरक्षित डिजीटल व्यवहार :

रोकड विरहित अर्थव्यवस्थेमध्ये आर्थिक सायबर गुन्हे टाळण्यासाठी विशेष सुरक्षितता उपलब्ध करणे आवश्यक आहे. वारंवार होणाऱ्या डिजीटल गुन्ह्यांना प्रतिबंध करणे, झालेल्या गुन्ह्यांच्या संदर्भात त्वरीत चौकशी करणे, गुन्ह्यांची नुकसान भरपाई भरून देणे इ. उपायांमुळे डिजीटल व्यवहारांची सुरक्षितता वाढेल व त्यामुळे बँका व अर्थव्यवस्था सामान्य माणसांचा विश्वास कमावू शकेल.

### ६.ग्रामीण भागात मोबाईल व इंटरनेट च्या सेवासुविधा :

रोकड विरहित अर्थव्यवस्थेसाठी इंटरनेट जोडणी आवश्यक असते. अजूनही भारतात याचे प्रमाण नगण्य आहे. भारतामध्ये मोठ्या प्रमाणात दारिद्र्य व निरक्षरता असल्यामुळे रोकड विरहित अर्थव्यवस्थेसमोर आव्हान निर्माण होत आहे. जर मोबाईल व इंटरनेटच्या वेगवान सेवासुविधा सर्वत्र उपलब्ध करून दिल्या तर ग्रामीण भारतातील नागरिकांना रोकड विरहित व्यवहार करणे सुलभ होईल.

### ७.साक्षरता व संगणक साक्षरता वाढविणे :

भारतात प्रसार माध्यम, मनोरंजनाची साधने वापरणाऱ्या लोकांची संख्या सर्वाधिक आहे. मात्र आर्थिक व्यवहारांसाठी आवश्यक असणारी साक्षरता व विशेषतः संगणक अथवा मोबाईल साक्षरता यांचा आभाव असल्याने रोकड विरहित अर्थव्यवस्थेच्या संचलनासाठीची तांत्रिक अडचण निर्माण होते. त्यामुळे जास्तीत जास्त लोकांना बचतगट, स्वयंसेवी संस्था व सरकारी शाळा व विविध माध्यमाद्वारे साक्षरता व संगणक साक्षरता यांचे प्रशिक्षण देणे आवश्यक आहे.

### ८.व्यवहारांसाठीची तटस्थता :

रोकड विरहित अर्थव्यवस्थेमध्ये कार्ड पेमेंट्सना अधिक महत्त्व आहे. रोख चलनातील वापर व विविध कार्डस् च्या माध्यमातून केले जाणारे व्यवहार यांच्यामध्ये अधिभाराच्या संदर्भात अधिक तफावत असू नये. ऑनलाईन व्यवहार किंवा इलेक्ट्रॉनिक हस्तांतरणासाठी काही बँका अधिभार स्विकारतात. यामुळे ग्राहकांना रोख चलन हा सोईचा मार्ग वाटतो. त्यामुळे रोकड विरहित अर्थव्यवहारांपेक्षा चलनी व्यवहारांकडे त्यांच कल असतो म्हणून या दोन्ही व्यवहारांमध्ये अधिव्यवहारासंदर्भात तटस्थता आवश्यक आहे.

### ९.आर्थिक व्यवहारांची गोपनीयता राखणे :

ऑनलाईन अथवा कार्डस् द्वारे होणाऱ्या आर्थिक व्यवहारांमुळे त्या व्यक्तीच्या खाजगी जीवन व आर्थिक स्थितीचा अभ्यास करणे सहज शक्य आहे. अनेक गुन्ह्यांमध्ये आर्थिक व्यवहारांवरून गुन्हेगारांचा तपास काढला जातो. त्यामुळे सामान्य माणसालाही आपले आर्थिक व्यवहार गोपनीय अथवा सुरक्षित आहेत असे वाटत नाहीत. त्यामुळे बँका अथवा संबंधित आर्थिक संस्थांनी आपल्या ग्राहकांची आर्थिक व्यवहारांची गोपनीयता राखणे आवश्यक आहे. अन्यथा रोकड विरहित व्यवहारांपेक्षा चलनी व्यवहारांवर लोक भर देतील.

### १०.सक्षम ई-कॉमर्स धोरण :

भारतामध्ये रोकडरहित व्यवहारांसाठी देशाचे सक्षम ई-कॉमर्स धोरण नियोजन व अंमलबजावणी असली पाहिजे. यासाठी शासकीय अर्थसंस्था आणि उद्योगजगतातील व्यापारी वर्गाने एकत्रित येऊन ध्येय, धोरण, नियोजन व अंमलबजावणी करणे आवश्यक आहे.

### ११.काळापैसा व भ्रष्टाचारावर नियंत्रण :

नोटबंदी च्या माध्यमातून काळापैसा व भ्रष्टाचारावर नियंत्रण ठेवण्यासाठी रोकड विरहित अर्थव्यवस्थेचे समर्थन केले गेले मात्र काळापैसा असणाऱ्या व्यक्ती, भ्रष्टाचारी व्यक्ती पैशांचे साठेबाज यांच्या संदर्भात सत्ताधारी पक्षाने कोणत्याही कठोर कार्यवाही केल्या नाहीत. त्यामुळे ज्या उद्देशांसाठी नोटबंदी करण्यात आली ते उद्देश सफल झाले नाहीत यामुळे रोकड विरहित अर्थव्यवस्थेकडे साशंक

नजरेने पाहिले जाते. जोपर्यंत भ्रष्ट बँकांचे संचालक उजळ माथ्याने परदेशात वावरत राहतील तोपर्यंत काळा पैशावर नियंत्रण प्रस्थापित झाले आहे असे म्हणता येणार नाही. रोकड विरहित अर्थव्यवस्थेसाठी कर चुकवेगिरी करणाऱ्या व्यक्तीपासून ते बँकाचे घोटाळे करणाऱ्या संचालकावरती कडक स्वरूपाची कार्यवाही केल्याशिवाय रोकड विरहित अर्थव्यवस्था यशस्वी होणार नाही.

### १२. जागतिक अनुभव व आदर्शांचा प्रचार :

केनीया व नैरोबी सारखे राष्ट्र रोकड विरहित अर्थव्यवस्थेचे यशस्वीरित्या संचलन करित आहेत. या जागतिक अनुभवातून तसेच भारतातील तेलंगणा राज्यातील इब्राहीमपूर या खेड्यातील आदर्शांचा प्रचार प्रसार केला पाहिजे. इब्राहीमपूर हे खेडे पुर्णतः रोकडरहित झाले आहे. ऑनलाईन बँकींग आणि कार्डस् च्या माध्यमातून लोक व्यवहार करतात हे आदर्श उपक्रम इतरांनी प्रेरणा म्हणून स्विकारले पाहिजे. तशाच प्रकारचे गुजरात मधील अकोदरा हे गावही डिजिटल केले गेले आहे. गावातील बँकेने वायरलेस इंटरनेट व पेमेंट टर्मिनल्स इ. सुविधा उपलब्ध करून दिलेल्या आहेत. या सर्व उदाहरणांचा ग्रामीण व शहरी नागरिकांनी आदर्श व प्रेरणा घेऊन आपले व्यवहार ऑनलाईन करण्यासाठी मोबाईल पेमेंट, वॉलेटस्, मोबाईल ॲप इ. चा अधिकाधिक वापर केला पाहिजे व त्यासाठी बँका व सरकारने लघु उद्योजक, किरकोळ विक्रेते, फेरीवाले यांना पीओएस कार्ड रिडर व ऑनलाईन बँकींगसाठीचा एम-पैसे, इ. सारख्या साधनांच्या वापरावर भर देऊन रोकड विरहित व्यवहारांसाठी प्रोत्साहन दिले पाहिजे. भारतातील शेती व्यवसायात असणारे शेतमजूर, असंगठित क्षेत्रातील कामगार यांना दिले जाणारे वेतनसुध्दा ऑनलाईन पध्दतीने केले तर भारतातील व्यसनाधिनता सुध्दा कमी होण्यासाठी अप्रत्यक्षरित्या मदत होऊ शकेल. यासर्व सकारात्मक बाबी व्यवहारात यशस्वी होण्यासाठी भारतात रोकड विरहित अर्थव्यवस्था आवश्यक आहे.

### समारोप :

भारतीय अर्थव्यवस्था ही आंतरराष्ट्रीय स्तरावरील विकसित होणारी वेगवान अर्थव्यवस्था आहे. पण भारतातील काळापैसा, भ्रष्टाचार, करचुकवेगिरी, बेकायदेशीर आर्थिक व्यवहार यामुळे भारतीय अर्थव्यवस्था हवे ते उद्दिष्ट प्राप्त करू शकत नाही. त्यामुळे नोटबंदी, निश्चलीकरण इ. मार्फत रोकड विरहित अर्थव्यवस्था निर्माण करणे हा उपाय योजिला गेला. मात्र याच्यासमोर अनेक आव्हाने आहेत. या आव्हानांवर मात करून भारतात विश्वासाहार्य, सुरक्षित व सामान्य लोकांचे हित साधणारे आर्थिक व्यवहार होणे आवश्यक आहे. रोख मुक्त अर्थव्यवस्था ही चलनी अर्थव्यवस्थेपेक्षा शासन व जनतेसाठी अधिक लाभाची असते. यासंदर्भात साक्षरता, संगणक साक्षरता, पायाभूत सुविधा, राजकीय इच्छाशक्ती इ. माध्यमातून रोकड विरहित अर्थव्यवस्था निर्माण करून अवैध आर्थिक व्यवहारांवर नियंत्रण प्रस्थापित करून लोकशाहीसाठी आवश्यक असणारी पारदर्शकता व विश्वासाहता कमावणे आवश्यक आहे.

### संदर्भग्रंथ :

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## अंकात्मक देणी पध्दत : फायदे व अडचणी

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दयानंद कला महाविद्यालय, लातूर.

### प्रस्तावना

मानवी समाजाच्या उत्क्रांतीबरोबरच जगात चलनव्यवस्थेचा विकास होत गेला. मानव हा रानटी अवस्थेत असतांना त्याच्या गरजाही अत्यंत मर्यादित होत्या, तो पुर्णतः निसर्गावर अवलंबून होता. त्यानंतर तो समूह करून राहू लागला त्याच्या गरजाही वाढत गेल्या. त्यातूनच विनिमयासाठी वस्तू विनिमय पध्दत अस्तित्वात आली, पण या पध्दतीने वस्तू देवाण-घेवाण करत असताना काही तांत्रिक व व्यवहारिक अडचणी आल्या त्यावर मात करण्यासाठी वस्तू पैसा ही उत्क्रांतीच्या टप्प्यातील पुढील अवस्था आली, पण वाढत्या मानवी गरजाबरोबर या अवस्थेतही कांही अडचणी आल्या व यावर मात करण्यासाठी धातू पैसा आला. धातूच्या तुकड्यांचा चलन म्हणून वापर होवू लागला. मानवी गरजा व आर्थिक व्यवहाराच्या कक्षा वाढत गेल्यामुळे धातू पैसातही अडचणी येवू लागल्या विशेषतः धातू पारखण्याची अडचण होय. यातून धातू नाणी पैसा अस्तित्वात आणला. या नाणी पैसाचे वहन करण्यावर व विशिष्ट धातूच्या उपलब्धतेवर मर्यादा येत असल्याने यावर मार्ग म्हणून मानवाने कागदाच्या चलनी नोटा अस्तित्वात आणल्या. जगात २० व्या शतकाच्या शेवटापर्यंत ही चलन पध्दत मोठ्या प्रमाणात अस्तित्वात होती व आहे. पण या पध्दतीतही नकली नोटा, काळा पैसा, भ्रष्टाचार व कर चुकवेगिरी ही मोठ्या प्रमाणात होवू लागल्यामुळे यावर उपाय म्हणून प्लास्टिक पैसा हा अस्तित्वात आला, जो अंकात्मक देणी पध्दतीच्या अविभाज्य असा भाग आहे.

गरज ही शोधाची जननी आहे असे मानवी जीवनाशी निगडित विधान केले जाते. मानवी गरजांच्या विविध टप्प्यात चलनाच्या अवस्था या विकसित होत गेल्या. आजची अंकात्मक देणी पध्दती System (Digital Payment) हा त्याचाच एक भाग आहे. विज्ञानाची कास धरलेल्या मानवी समाजाने आपल्या उत्क्रांतीच्या विविध टप्प्यात विविध शोध लावले व या शोधावर आधारित नवीन तंत्रज्ञान त्याने विकसित केले, या तंत्रज्ञानाचा वापर मानवी समाजाने आपले जीवन अधिक सुखकर करण्यासाठी केला. इलेक्ट्रॉनिक शाखा व संगणकीय शाखा यांच्या झालेल्या विकासातून या क्षेत्रात जगात अनेक शोध लागले व मानवाने त्यावर आधारित तंत्रज्ञानही विकसित केले म्हणजे इलेक्ट्रॉनिक, संगणक व महासेवा जाल (Internet) या तिघांच्या माध्यमातून आजची अंकात्मक देणी पध्दत (Digital Payment System) विकसित झालेली आपण पाहतो. आज जगात या पध्दतीचा फार झपाट्याने व वेगात विकास होताना आपण पाहतो.

भारतात सरकारने ८ नोव्हेंबर, २०१६ रोजी केलेल्या निश्चलनीकरणानंतर अंकात्मक देणी पध्दत (Digital Payment System) ही जास्त चर्चेत आली. निर्माण झालेल्या चलनटंचाईवर उपाय म्हणून देशातील लोकांनी नगदी विनिमयाऐवजी नगदविरहीत आर्थिक व्यवहारावर भर द्यावा असे आवाहन करण्यात आले. या काळात बरेच लोक डिजीटल पेमेंट पध्दतीचा वापरही करू लागले.

सद्याच्या धावपळीच्या जीवनात लोकांकडे वेळेची फार मोठी अडचण आहे अशा वेळी वेळ काढून बँकेत जा, रांगेत उभे रहा या समस्येवर चांगला उपाय म्हणजे डिजीटल पेमेंट पध्दती होय. कारण या पध्दतीच्या माध्यमातून श्रम व वेळेची बचत होऊन कोणत्याही ठिकाणावरून बँकींग व पैसाची देणी- घेणी हे व्यवहार आपण सहज करू शकतो.

भारत व महाराष्ट्रातील विनिमयातील असणारी सद्यस्थिती पाहिल्यास ही नवीन डिजीटल पेमेंट पध्दती रूजवण्यासाठी व तिचा अमल करण्यासाठी नक्की कांही अडचणी आहेत. पण या अडचणीवर इच्छाशक्तीच्या माध्यमातून नक्की मात करता येवू शकते. डिजीटल पेमेंट पध्दतीच्या अडचणीपेक्षा त्यापासून मिळणारे फायदे जास्त असल्यामुळे ही पध्दत अर्थव्यवस्थेत कशी रूजेल याकरिता सरकार समाज, स्वयंसेवी संस्था यांच्या प्रयत्नांची गरज आहे. या सर्वांच्या प्रयत्नातून या पध्दतीमध्ये निर्माण होणाऱ्या अडचणी नक्की दूर करता येतील.

### डिजीटल पेमेंट पध्दत म्हणजे काय ? (What is Digital Payment System?)

#### व्याख्या:-

- 1) आपल्याजवळ असणाऱ्या बहुपयोगी (Smart) भ्रमणध्वनी किंवा संगणकीय साधनाच्या सहाय्याने बँकींग व्यवहारापासून ते दैनंदिन गरजेच्या वस्तू खरेदी करण्यासाठी द्यावी लागणारी देणी देणे म्हणजेच डिजीटल पेमेंट पध्दत होय.
- 2) आर्थिक विनिमयाचे व्यवहार करण्याकरिता पारंपारिक चलन व्यवस्थेचा त्याग करून नव्याने विकसित होऊ घातलेल्या संगणकीय तंत्रज्ञानावर आधारित साधनांच्या (ई-वॉलेट, जमा-पत्र, नावेपत्र, यु.पी.आय., मोबाईल वॉलेट, मोबाईल बँकींग, इंटरनेट बँकींग) साहयाने आर्थिक व्यवहाराची पुर्तता म्हणजे डिजीटल पेमेंट पध्दत होय.



### अभ्यासाची उद्दिष्टे (Objectives of Study):-

- 1) अंकात्मक देणी पध्दती (Digital Payment System) समजून घेणे.
- 2) अंकात्मक देणी पध्दतीचे फायदे समजून घेणे.
- 3) अंकात्मक देणी पध्दतीतील अडचणी व प्रत्यक्ष अमलबजावणीतील उणिवा समजून घेणे.

### अभ्यासातील गृहितके (Hypothesis of Study):-

- 1) लोकांच्या पारंपारिक मानसिकतेमुळे ही पध्दत रूजवण्यासाठी अनेक अडथळ्यांना सामोरे जावे लागेल.
- 2) डिजीटल पेमेन्टसाठी वापरण्यात येणारी साधने हाताळणे देशातील बऱ्याच लोकांना कठीण जाते.
- 3) महासेवाजालसारखी सुविधा भारताच्या ग्रामीण, दुर्गम व आदिवासी भागात पोहचवणे हे फार मोठे आव्हान आहे.
- 4) सायबर गुन्हातील वाढत्या प्रमाणामुळे डिजीटल पेमेन्ट पध्दत वापरण्याबद्दल लोक साशंक आहेत.

आर्थिक व्यवहार व बँकींग व्यवहाराकरिता आज लोकांसमोर अतिशय गतिमान व वेगवान अहू डिजीटल पेमेन्ट पध्दत उपलब्ध आहे. जी पुर्णतः इलेक्ट्रॉनिक संगणकीय तंत्रज्ञानावर आधारित आहे. या आधुनिक पध्दतीत ई-वॉलेट, जमापत्र (Credit Cards), नावे पत्र (Debit Cards), युपीआय, मायक्रो एटीएम, भ्रमणध्वनी वॉलेट, मोबाईल बँकींग, इंटरनेट बँकींग यासारखी साधने अतिशय माफक किंमतीत व सहज उपलब्ध होतात. या साधनांच्या वापरातून आर्थिक व्यवहार तर गतिमानपणे पुर्ण होतात, पण त्यातून अर्थव्यवस्था गतिमान होण्यासाठी मदत होते, आर्थिक विकास व वृद्धी यास चालना मिळून अर्थव्यवस्थेत सर्वच क्षेत्रात रोजगाराच्या नवनवीन संधी उपलब्ध होतात. म्हणून या पध्दतीचे व्यक्ती, समाज व देशाच्या अर्थव्यवस्थेला कोणते फायदे होतात आणि ही आधुनिक विनिमय व्यवस्था रूजवण्यातील अडचणी कोणत्या आहेत त्याचे अवलोकन करणे अपरिहार्य होते म्हणून याचा आढावा पुढील प्रमाणे घेण्यात आला आहे.

### डिजीटल पेमेन्ट पध्दतीचे फायदे :- [Advantages of Digital Payment System ]

या आधुनिक विनिमय पध्दतीचा स्वीकार केल्यास व्यक्तीपासून अर्थव्यवस्थेपर्यंत सर्व घटकांना खुप मोठया प्रमाणात फायदे होताना दिसून येतात. समाज व अर्थव्यवस्था वेगवान होवून पारंपारिक विनिमय व्यवस्थेतील त्रुटी दूर होवून अर्थव्यवस्थेची कार्यक्षमता वाढीस लागते. कोणत्याही अर्थव्यवस्थेतील विनिमय व्यवस्था ही शरीरातील रक्ताप्रमाणे काम करत असते म्हणून डिजीटल पेमेन्ट पध्दतीमुळे विनिमय व्यवस्था मजबूत होवून अर्थव्यवस्थेच्या वृद्धीस चालना मिळते.

### फायदे :-

**मानवी श्रम व वेळेची बचत:-** या पध्दतीमुळे बँकेत जावून पैसे भरण्यासाठी व काढण्यासाठी रांगा लावाव्या लागत नाहीत. बँकेत जाण्याची गरज पडत नाही, आपण जेथे असू तेथून बँकींग व्यवहार करू शकतो. त्यामुळे मानवी श्रम व वेळेची मोठया प्रमाणात बचत होवून आर्थिक व बँकींग व्यवहारातील कार्यक्षमता वाढीस लागते.

**मेरा मोबाईल ... मेरा बँक ... मेरा बटूआ :-** आपला मोबाईल सध्या पुर्ण बँकेचे काम करतो आहे. मोबाईल बँकींगमुळे जगात कोठेही पैसे पाठवणे व मागवणे अत्यंत सोपे, कमी खर्चिक झाले आहे. म्हणून बँकेपेक्षा वेगात बँकेची सर्व कामे आपला मोबाईल करतो. आज वस्तू खरेदी करण्यासाठी खिशात रोख रक्कम ठेवण्याची गरज नाही कारण स्वाईप मशीन, गुगल पे, फोन पे यासारख्या माध्यमातून आपण दुकानदाराचे पेमेन्ट तात्काळ करू शकतो.

**लोकांसाठी उत्तम सोय:-** आजच्या गतिमान मानवी जीवनात वेळेला फार महत्व आहे. डिजीटल पेमेन्ट पध्दतीमुळे लोकांच्या आर्थिक व्यवहार करण्यातील वेळेत खुप बचत होते. जेव्हा वाटेल, वाटेल तेथून तत्काळ विनिमय व्यवहाराची पुर्तता या पध्दतीत होत असल्यामुळे लोकांची उत्तम सोय होते.

**व्याजदरात घट होण्यासाठी मदत :-** डिजीटल पेमेन्ट पध्दतीमुळे बँकेची रोखता वाढून ठेवीच्या प्रमाणातही मोठया प्रमाणात वाढ होते. विशेषतः प्राथमिक ठेवी वाढून कर्ज वाटपासाठी मोठी रोखता बँकेकडे जमा होते. त्यातून व्याजाचे दर कमी होण्यास नक्कीच हातभार लागतो.

**हिशोब ठेवण्यासाठी योग्यस्कर :-** या पध्दतीत पैसे देणी व घेण्याच्या दैनंदिन नोंदी दीर्घकाळापर्यंत सेव्ह राहतात. तसेच वस्तू खरेदी करण्यासाठी केलेल्या व लहानसहान पेमेन्टच्या नोंदीही राहत असल्याने प्रत्येक व्यक्तीला आपला दैनंदिन, मासिक व वार्षिक हिशोब ठेवण्यासाठी ही पध्दती अतिशय सोयीस्कर आहे.

**वैयक्तिक अंदाजपत्रक करणे सोपे जाते. :-** डिजीटल पेमेन्ट पध्दतीमुळे प्रत्येक व्यक्तीस स्वतःला उत्पन्न व खर्चाचा अंदाज येतो, वैयक्तिक उत्पन्न व खर्चाच्या प्रवृत्ती लक्षात येतात, उत्पन्न व खर्चातील गळती लक्षात येतात, अनॉदी खर्च लक्षात येवून त्यावर नियंत्रण मिळवता येते म्हणजेच उत्तमरित्या वैयक्तिक अंदाजपत्रक तयार करण्यासाठी या पध्दतीमुळे अत्यंत सोपे जाते.

**कमी जोखीम:-** नगदी किंवा रोख पैसा बाळगण्यामध्ये चोरीची माठी जोखीम असते. पण डिजीटल पेमेन्टमध्ये अत्यंत कमी जोखीम असते. क्रेडिट कार्ड, डेबीट कार्ड किंवा मोबाईल हरवल्यास तत्काळ बँकेला कळवून व्यवहार थांबवता येतात.

**आर्थिक व्यवहारात कार्यक्षमता व गतिशीलता येते :-** डिजीटल पेमेन्टमुळे कमी वेळेत, कमी श्रमात व कमी खर्चात प्रचंड आर्थिक व्यवहार पूर्ण करता येतात. त्यामुळे आर्थिक व्यवहाराची दैनंदिन संख्या कितीतरी पटीने वाढते व अर्थव्यवस्थेच्या सर्व क्षेत्रात गतिशीलता येवून त्यातून आर्थिक कार्यक्षमता व गतिशीलता वाढीस लागून त्यास चालना मिळते.

**पारदर्शक व उत्तरदायी व्यवहारास चालना :-** आर्थिक व्यवहारात पारदर्शकता व उत्तरदायित्व यास अनन्यसाधारण महत्व असते. पारदर्शकता व उत्तरदायित्व यामुळे रकमेचा अपहार, आर्थिक अनागोंदी यांना आळा बसत असतो. डिजीटल पेमेन्टमुळे चोरी, अपहार किंवा आर्थिक अनागोंदी करण्यास कसलाच वाव मिळत नाही. त्यामुळे पारदर्शक व उत्तरदायी आर्थिक व्यवहारास चालना मिळते.

**डिजीटल पेमेन्ट करा व सवलत मिळवा :-** भारत सरकारने नगदविरहीत व्यवहाराना चालना देण्याकरीता म्हणजेच डिजीटल पेमेन्टला चालना देण्यासाठी पुढील सूट व सवलती दिल्या आहेत.

**डिजीटल पेमेन्ट साधनांचा वापर केल्यास.....**

1. पेट्रोल व डिझेलवर ०.७५ सवलत
2. मुंबई व उपनगर भागात रेल्वेच्या मासिक पाससाठी ०.५ सवलत
3. ऑनलाईन तिकीट खरेदी केल्यास त्यास १० लाखाचे विमा सुरक्षा कवच दिले गेले आहे.
4. ग्रामीण भागासाठी POS [Point of Sell] मशीनची सोय. १०,००० पेक्षा जास्त लोकसंख्या असणाऱ्या १ लाख गावासाठी ही सुविधा सुरू करण्यात आली आहे.
5. शेतकऱ्यांसाठी आता रूपे क्रिडीट कार्ड, देशातील सहकारी बँकेत ४ कोटी ३२ लाख शेतकऱ्यांकडे किसान क्रेडिट कार्ड उपलब्ध आहे, त्याचे रूपांतर आता रूपे क्रिडीट कार्डमध्ये करण्यात आले आहे.
6. जीवन विमा व सामान्य विमा ऑनलाईन खरेदी केल्यास त्यास अनुक्रमे व १० सुट दिली जाते.
7. २००० पर्यंतच्या होणाऱ्या ऑनलाईन व्यवहारासाठी सेवा कर पूर्ण माफ करण्यात आला आहे.
8. टोलप्लाझावर फास्ट टॅग कार्ड किंवा IFRD द्वारे डिजीटल पेमेन्ट केल्यास त्यावर १० सुट देण्यात येते.

**डिजीटल पेमेन्ट पध्दतीतील अडचणी (Difficulties in Digital Payment System):-**

भारतासारख्या विकसनशील देशात डिजीटल पेमेन्ट व्यवस्था रूजवण्यासाठी अर्थव्यवस्थेत रचनात्मक उणिवा आहेत, कांही तांत्रिक व विश्लेषणात्मक अडचणी आहेत. त्यांचा आढावा पुढीलप्रमाणे घेता येईल.

- 1) **इंटरनेट सुविधेचा अभाव :-** भारताच्या ग्रामीण व दुर्गम भागात जिथे रस्त्यांचा पत्ता नाही तेथे इंटरनेट सुविधा पुरवणे दूरच, डिजीटल पेमेन्टसाठी इंटरनेट अत्यावश्यक आहे म्हणून डिजीटल पेमेन्टमधील ही महत्वाची अडचण आहे.
- 2) **स्मार्ट मोबाईल फोनचा अभाव :-** डिजीटल पेमेन्ट करण्यासाठी स्मार्ट मोबाईल फोन आवश्यक आहे. देशातील ६५ लोकांजवळ आजही स्मार्ट मोबाईल फोन नाहीत.
- 3) **विविध डिजीटल पेमेन्ट साधनांचा अभाव :-** डिजीटल पेमेन्ट करण्यासाठी विविध प्रकारची संगणकीय इलेक्ट्रॉनिक साधने लागतात. ग्रामीण भारताच्या ९३ जनतेजवळ अशा प्रकारचे कोणतेही संगणकीय इलेक्ट्रॉनिक साधन उपलब्ध नाहीत.
- 4) **ओळख चोरीची भिती :-** आज आपण फिशींग ट्रॅपमध्ये सुशिक्षित लोक अडकलेले पाहतो. सातत्याने वर्तमानपत्र व टेलिव्हिजनवर डिजीटल ट्रांजेक्शन प्लॉटफॉर्म हॅक होण्याच्या बातम्या येतात. त्यातून अब्जावधी रुपयांची चोरी होताना आपण पाहतो. हे घडते ते आपल्या डिजीटल ओळख चोरीतून म्हणून ही डिजीटल पेमेन्ट व्यवस्थेतील फार मोठी कमजोरी आहे.
- 5) **लोकांची मानसिकता :-** पाईच्या मते, लोकांना डिजीटल आर्थिक व्यवहाराकडे वळवण्यातील महत्वाची अडचण म्हणजे त्यांची पारंपारिक व्यवहाराची मानसिकता होय, आपण एकाच वेळी तीन पिढ्यांना डिजीटल बनवत आहोत. जे कांहीसे कठीण वाटते.
- 6) **संगणक साक्षरतेच्या अभाव :-** डिजीटल पेमेन्ट सहज व सुखकर होण्यासाठी प्राथमिक पातळीचे तरी संगणक ज्ञान किंवा साक्षरता असणे गरजेचे आहे. पण भारतात आजही बहुतांशी लोक हे संगणक निरक्षर असल्यामुळे ही पेमेन्ट व्यवस्था रूजवण्यामध्ये मोठ्या प्रमाणात अडचणी येतात.

**निष्कर्ष :-**

- 1) डिजीटल पेमेन्ट पध्दतीमुळे आर्थिक व्यवहारातील पारदर्शकता व उत्तरदायित्व वाढेल.
- 2) या पेमेन्ट व्यवस्थेमुळे मानवी श्रम, वेळ यात मोठी बचत होईल.
- 3) आर्थिक व्यवहारातील कार्यक्षमता व गतिक्षमता वाढवण्यासाठी या पेमेन्ट व्यवस्थेचा नक्की फायदा होईल.
- 4) या व्यवस्थेमुळे बँकांची रोखता वाढून अर्थव्यवस्थेतील व्याजाचे दर कमी होण्यास मदत होईल.

- 5) रोख रक्कम बाळगण्यातील धोके कमी होऊन लोकांना आर्थिक व्यवहारात सुरक्षितता प्रदान होईल.
- 6) भारतासारख्या देशात डिजीटल पेमेन्ट पध्दत रूजवण्यामध्ये नक्की काही अडथळे आहेत. पण लोकांच्या इच्छा शक्तीच्या आधारे यावर खात्रीशीरपणे मात करता येईल.

#### सारांश

२१ व्या शतकात भारतासारखी विकसनशील अर्थव्यवस्था जी विकसीत होवू पाहत असताना विनिमयासाठी व इतर आर्थिक व्यवहारांच्या पुर्ततेसाठी डिजीटल पेमेन्ट पध्दत ही मैलाचा दगड ठरणार आहे. अर्थव्यवस्थेची कार्यक्षमता, गतिक्षमता तिचा विकास व वृद्धी यास या नव्या डिजीटल पेमेन्ट पध्दतीमुळे चालना मिळून बेरोजगारी, गरिबी, आर्थिक विषमता या अर्थव्यवस्थेसमोरील महत्वाच्या प्रश्नांचा सामना करण्यासाठी या पध्दतीचा नक्कीच हातभार लागणार आहे.

#### संदर्भसूची :-

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## रोकड विरहीत व्यवहार व भारतीय अर्थव्यवस्था

प्रा. अमोल अरूण पगार  
अर्थशास्त्र विभाग  
शिवजागृती महाविद्यालय नळेगाव

चलन किंवा रोख रकमेशिवाय आधुनिक तंत्रज्ञानाचा वापर करून केलेल्या व्यवहारांना रोकडविरहीत व्यवहार असे म्हणतात. म्हणजे देशातील होणारे जास्तीत जास्त व्यवहार डिजिटल माध्यमांद्वारे पूर्ण केले जातात. प्रत्यक्ष व्यवहार करतांना चलनाचा वापर न करता इ. वॉलेट, क्रेडीट कार्ड, डेबीट कार्ड, युपी आय, मोबाइल बँकींग, इंटरनेट बँकींग, आरटीजीएस, आधारकार्ड सलगनीत पेमेंट सेवा इ. वापर करून पैशा संबंधीचे सर्व व्यवहार पैश्याशिवाय पार पाडले जातात. जगाचा विचार केला तर कॅनडा हा देश कॅशलेस व्यवहारांच्या बाबतीत जगात प्रथम असून स्वीडन या देशाचा जगात दुसरा क्रमांक लागतो तर युनायटेड किंग्डम चा तृतीय क्रमांक लागतो. कॅनडा मध्ये तर एका व्यक्तीकडे दोनपेक्षा अधिक क्रेडीट कार्डस असतात. तेथील लोक डेबीट कार्डाचाही वापर करतात. भारतातही ८ नोव्हें-२०१६ रोजी केंद्र सरकारने केलेल्या नोटबंदी नंतर भारतीय अर्थव्यवस्था रोखीकडून नगद विरहीत अर्थव्यवस्थेकडे वाटचाल करीत आहे भारत हा विकसनशील देश असून भारतात नगदविरहीत व्यवहारांसाठीचे परीपूर्ण यंत्रणा अगदी तळागाळापर्यंत उपलब्ध नसतांना व सर्व सामान्य जनतेला याबाबत परीपूर्ण माहिती नसताना सरकारने अत्यंत धाडसी पाऊल टाकले आहे. त्यामुळे नगद विरहीत अर्थव्यवस्थेचे भारताला काय लाभ होऊ शकतील व प्रस्तुत परीस्थितीत भारतीय अर्थव्यवस्थेसमोर या व्यवस्थेमुळे कोणती आव्हाने उभी राहतील याबाबत संशोधन करण्याची उणीव भासत होती म्हणून प्रस्तुत शोधनिबंधात नगदविरहीत व्यवहारांचे फायदे व भारतीय अर्थव्यवस्थे समोरील आव्हानांवर प्रकाश टाकण्यात आला आहे.

फायदे :-

### १) अवैध व्यवहारांना आळा :-

नगद विरहीत व्यवहारांमुळे अवैध व्यवहारांना आळा बसू शकतो कारण भारतात अनेक अवैध व्यवहार रोखीने केले जातात. सर्व सामान्य माणसाला पाऊला पाऊलावर लाच द्यावी लागते त्याशिवाय त्याची कामे सरकार दरबारी होत नाही. मग रोख पैश्या ऐवजी डिजिटल पध्दतीने जेव्हा पैसे अदा केले जातात तेव्हा नक्कीच त्याची नोंद होईल त्यामुळे शक्यतो लाच घेण्याचे प्रमाण कमी होईल व अवैध व्यवहारांना आळा बसेल.

### २) कर चोरी थांबेल:-

असंख्य व्यापारी, व्यवसायिक, उद्योजक, दुकानदार आपले व्यवहार रोखीने करतात. व्यवहार करोडो रूपायांचा असतो मात्र असे लोक सरकारला कर देत नाहीत. व्यवहार रोखीत करून कर बुडवतात. त्यामुळे कॅशलेस व्यवहार जर केले गेले तर कर कुणालाच बुडवता येणार नाही त्यामुळे मोठ्या प्रमाणावर कर चुकवेगिरीला आळा बसेल.

### ३) सरकारी महसूलात वाढ :-

रोखीच्या व्यवहारांमुळे व्यापारी व्यावसायिक, उद्योजक मोठ्या प्रमाणावर कर चुकवू शकत होते पण कॅशलेस व्यवहारांमुळे कर चुकवेगिरी थांबून सरकारला मोठ्या प्रमाणावर महसूल मिळेल व यातून जन कल्याणाची असंख्य कामे सरकारला हाती घेता येतील व इच्छित उद्दीष्टे सरकारला प्राप्त करता येईल.

### ४) गुन्हेगारी प्रवृत्तीला आळा बसेल :-

मोठ्या प्रमाणावर लोक कॅश स्वतः जवळ बाळगत असल्याने चोरी, खुन, दरोडे असे गुन्हेगारी कृत्य मोठ्या प्रमाणात होतात. परंतु सर्वच रक्कम डिजिटल स्वरूपात आल्यास वरील प्रकारचे गुन्हे होणार नाहीत म्हणून कॅशलेस व्यवहारांमुळे गुन्हेगारी प्रवृत्तीला ही आळा बसू शकेल.

### ५) पर्यावरण संवर्धन व सरकारी खर्चात बचत:-

नोटांच्या माध्यमातून व्यवहार करण्यासाठी सरकारला मोठ्या प्रमाणावर कागदी चलनाची निर्मिती करावी लागते त्यासाठी खूप कागद लागतो व कागद निर्मिती साठी वृक्षतोड करावी लागते कॅशलेस व्यवहारांमुळे नोटा छापण्याची आवश्यकता राहणार नसल्याने वृक्षतोड होणार नाही यामुळे पर्यावरणाचे संवर्धन तर होईल व नोटा छापण्यासाठीचा सराकरचा खर्च ही वाचेल.

### ६) पारदर्शक व गतिशील व्यवहारांना चालना :-

रोख रकमेतील व्यवहार बहुधा पारदर्शक असतात असे नाही बऱ्याचदा रोख रक्कम घेवून फसवणूक होण्याची शक्यता असते परंतु डिजिटल पध्दतीने व्यवहार केल्यास त्याची नोंद होते व व्यवहार पारदर्शकच होतात. तसेच रोखीने व्यवहार करतांना वेळेचा खूप, अपव्यय होतो. परंतु डिजिटल किंवा नगदविरहीत व्यवहार अत्यंत जलद होतात. म्हणून वेळ व श्रमाची बचत होते.

### ७) थेट शासकीय मदतीचा लाभ :-

नगद विरहीत व्यवहारांमुळे शासन देशातील गरीब, पीडित, वंचित, आपत्तीग्रस्त, विविध योजनांचे लाभार्थी यांना जो लाभ द्यायचा असतो तो तात्काळ त्यांच्या बँक खात्यावर त्यांना देवू शकते अलिकडे मोठ्या प्रमाणात शासकीय योजनांची मदत लोकांना थेट त्यांच्या बँक खात्यात मिळत आहेत म्हणून खऱ्या लाभार्थ्यांपर्यंत पूर्ण शासकीय मदत नगदविरहीत व्यवहारांमुळे पोहचेल.

### ८) बनावट नोटा व दहशतवादी कार्यवाहीना आळा :-

चलन किंवा नोटांच्या माध्यमातून व्यवहार करतांना बनावट किंवा खोट्या चलनी नोटा मिळण्याचा धोका असतो. त्यामुळे अर्थव्यवस्थेत चलन पुरवठा होवून महागाई वाढण्याची भीती असते. बऱ्याचदा दहशतवादी संघटनांकडून बनावट नोटा छापून त्या चलनात आणल्या जातात व देशविघातक कृत्य घडण्याचा धोका असतो. पण नोटांचे व्यवहारातले अस्तित्व जर कमी केले तर बनावट नोटा व दहशतवादी कृत्यांना आळा बसेल.

वरील प्रकारचे फायदे भारतीय अर्थव्यवस्थेला मिळू शकतात. परंतू ही व्यवस्था स्विकारत असतांना काही आव्हाने ही भारतीय अर्थव्यवस्थेसमोर आहेत. ती थोडक्यात पुढील प्रमाणे

- १) भारत ही खेड्यांची भूमी आहे भारतातील जवळ पास ६६.४६% लोक ग्रामीण भागात राहतात. त्यातील ७७.६३% लोकांपर्यंतच वीज पोहचली आहे अजूनही अशी काही खेडे आहेत की ज्याच्या पर्यंत जाण्यासाठी चांगले रस्ते नाहीत काही आदीवासी जमातींना रूपया हे भारताचे चलन आहे हे माहित नाही म्हणून ग्रामीण भागातील सर्व जनतेला यात सामावून घेणे फार मोठे आव्हान आहे.
- २) भारतात आजही २०.५ % लोक निरक्षर आहेत फक्त ७९.५% लोक साक्षर आहेत नगदविरहीत व्यवहार करण्यासाठी लोक साक्षर असणे अत्यंत जरूरीचे आहे म्हणून भारतातील कमी साक्षरता दर हे नगदविरहीत अर्थव्यवस्थेसमोरील आव्हान आहे.
- ३) भारतातील बऱ्याच ग्रामीण भागात बँका पोहचल्या नाहीत म्हणून लोकांचा बँकाशी संबंधच येत नाही भारतात फक्त ८०% लोकांकडेच बँक खाती आहेत तसेच यातील सातत्याने बँकेशी व्यवहार करणाऱ्यांचे प्रमाण फक्त ५०% आहे तर बरेच लोक बँकेशी व्यवहार करायला घाबरतात. डिजिटल साधनांची त्यांना भीती वाटते. म्हणून लोकांचे अज्ञान व भीती हे मोठे आव्हान आहे.
- ४) नगदविरहीत व्यवहारासाठी मोठ्या प्रमाणावर इंटरनेट, स्मार्ट मोबाईल, ATM, POS मशिन यांची आवश्यकता असते. भारतात सर्वत्र इंटरनेट उपलब्ध असतेच असे नाही तर स्मार्ट फोन धारकांची संख्या भारतात खूप आहे पण त्यांच्यातून नगद विरहीत व्यवहार न होतो मनोरजनासाठीच त्यांचा वापर जास्त होतो म्हणून भारतात तंत्रज्ञान सर्वदूर पोहचले पाहिजे व ते लोकोपयोगी झाले पाहिजे तरच नगद विरहीत व्यवहारांची संख्या वाढेल.
- ५) नगद विरहीत केले जाणारे बहुतांश व्यवहार इंटरनेटचा, स्मार्ट फोनचा वापर करून केले जातात तसेच ATM मशीन्स, POS मशीन्स यासाठीही आधुनिक तंत्रज्ञानाचा वापर केला जातो परंतू अलिकडील काळात सायबर सुरक्षितता भेदून लोकांच्या बँक खात्यातील रक्कम परस्पर काढून घेण्याचे प्रकार वाढत आहेत. त्यामुळे भारतात सायबर सुरक्षितता अधिक मजबुत करण्याची गरज आहे.

अश्या प्रकारे वरील काही आव्हाने नगदविरहीत अर्थव्यवस्थेला सामोरे जातांना भारतीय अर्थव्यवस्थे समोर उभी आहेत.

#### निष्कर्ष :-

- १) नगदविरहीत व्यवहारांमुळे अर्थव्यवस्थेतील भ्रष्टाचार कमी होऊन कर संकलन वाढेल.
- २) गुन्हेगारी प्रवृत्तीला आळा बसून वेळ, श्रम, पैसा यांची बचत होईल.
- ३) भारतातील नगदविरहीत व्यवहार प्रणाली समोर अनेक आव्हाने आहेत. त्यासाठी आर्थिक साक्षरता वाढवणे तंत्रज्ञानाचा सर्वदूर प्रसार करणे, लोकांना बँकीगच्या सवयी लावणे आवश्यक आहे.

#### संदर्भ :-

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४) अर्थसंवाद, जुलै ते सप्टेंबर २०१८,

५) योजना फेब्रु-२०१७

## भारतीय अर्थव्यवस्थेतील रोखरहित व्यवहारांची उपयुक्तता -एक अभ्यास

सागर शरद कुलकर्णी

संशोधक विद्यार्थी

वाणिज्य व व्यवस्थापनशास्त्र

स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ नांदेड

### प्रस्तावना :-

भारतीय अर्थव्यवस्था जगातील बलाढ्य अर्थव्यवस्था आहे. एक विकसनशील देश म्हणून आपण आर्थिक विकासाचा विचार करतो तेव्हाही भारताचे नाव अग्रस्थानी येते. भारतीय अर्थव्यवस्थेने नुकतेच जागतिकीकरणाचे २५ वे वर्ष साजरे केले . या पार्श्वभूमीवर सद्यस्थितीत भारतात अनेक प्रमुख बदल झालेले आपल्याला पाहायला मिळतात. याचे सारे श्रेय आपले माननीय पंतप्रधान श्री नरेंद्र मोदी आणि सरकारला जाते. मागील काही वर्षांचा विचार करताना सर्वांगीण विकासाला पोषक अशा प्रभावी तरतुदी, योजना, प्रस्ताव प्रत्येक अर्थसंकल्पात मांडले गेलेले आहेत आणि त्याची प्रभावी अंमलबजावणी सुध्दा होताना दिसतेय. दीर्घकाळासाठी शाश्वत विकास आणि विकासदरातील होणारी वाढ या मूलभूत मुद्द्यांचा विचार सरकार प्रत्येक योजनेत करताना दिसतेय. या सर्वसमावेशक विकासाच्या दृष्टिकोनाशी सुसंगत योजना नव्याने सुरु होताना दिसतात. या योजना जनतेला आर्थिक दृष्ट्या सक्षम तर करतातच त्याबरोबरीने त्यांचे जीवनमान उंचावण्याचे कामही करतात. आपले सरकार नेहमीच जनतेच्या दूरगामी कल्याणासाठी अनेक आशादायी पावले उचलत आहे. देशाला विकासाच्या दिशेने नेण्यासाठी तसेच प्रत्येक भारतीयाच्या आयुष्यात सकारात्मक बदल घडवण्यासाठी सरकार मुलभूत कार्य करतेय. एक दृढ इच्छाशक्ती आणि उज्ज्वल भविष्य निर्माण करणारे सरकार भारतीयांना खरे आर्थिक स्वातंत्र्य मिळवून देत आहे. आठ नोव्हेंबर २०१६ रोजी केंद्र सरकारने देशातील उच्च मुल्यांच्या चलनी नोटा रद्द करून एका नव्या पर्वाची , युगाची , नव्या बदलाची नांदी ठरणारी प्रचिती आपल्याला आली आहे. या निर्णयाचे सर्वत्र स्वागत झालेले आहे मात्र आता आपण रोखी कडून कमी रोखीच्या अर्थव्यवस्थेकडे जात आहोत . भ्रष्टाचार , काळ्या पैशाला आळा घालण्यासाठी हे सारं गरजेचे आहे हे सरकारने जाणलं होतं. हा निर्णय लोकांसाठी नक्कीच सुखकारक आहे. या निश्चलनीकरणामागे सरकारचा आणखी एक हेतू होता तो म्हणजे कमीतकमी रोख व्यवहार करणारी अर्थव्यवस्था अर्थात रोकडरहित अर्थव्यवस्था किंवा कॅशलेस अर्थव्यवस्था निर्माण करणं. रोखरहित अर्थव्यवस्था निर्माण करण्याचा प्रयत्न आहे. ज्यामध्ये सर्व व्यवहार रोखीमध्ये न होता त्यातील बरेचसे व्यवहार डिजिटल पध्दतीने होतील.

### शोधनिबंधाची उद्दिष्टे :-

१. भारतीय अर्थव्यवस्थेतील रोखरहित व्यवहाराची ओळख करून घेणे
२. भारतीय अर्थव्यवस्थेची सद्यस्थिती आणि रोखरहित व्यवहार यांचा सहसंबंध प्रस्थापित करणे
- ३ . भारतीय अर्थव्यवस्थेतील रोखरहित व्यवहारांची उपयुक्तता जाणून घेणे
४. भारतीय अर्थव्यवस्थेच्या सर्वांगीण विकासासाठी रोखरहित अर्थव्यवस्थेचे महत्व विशद करणे.

### संशोधन पध्दती :-

प्रस्तुत शोधनिबंधाचे लिखाण करण्यासाठी द्वितीयक सामग्रीचा वापर करण्यात आला आहे. यासाठी विविध संदर्भ ग्रंथ, लेख, मासिके, नियतकालिके याद्वारे तथ्य, माहिती संकलित करण्यात आली असून हा शोधनिबंध मांडण्यासाठी वर्णनात्मक संशोधन पध्दतीचा अवलंब करण्यात आला आहे.

### भारतीय अर्थव्यवस्था आणि रोखरहित व्यवहार :-

सर्वप्रथम आपण रोकडरहित व्यवहार म्हणजे काय ते समजून घेऊया, जे व्यवहार करताना कुठल्याही स्वरूपात रोख रकमेची देवाण घेवाण होत नाही त्या व्यवहारांना कॅशलेस व्यवहार म्हणतात तसेच एखादया वस्तूची किंमत, बील, हे डेबिट ,क्रेडिट कार्ड याद्वारे किंवा इंटरनेट बँकेच्या आधारे देणे. समजा ५००० रुपये आपल्याला दुकानदाराला द्यायचे आहेत तर यामध्ये आपण चेक दिला किंवा ते पैसे ऑनलाइन ट्रान्सफर केलेत तर हा व्यवहार कॅशलेस असेल. रोजच्या व्यवहारात रोख रकमेचा कमीतकमी वापर करणे यामध्ये अपेक्षित असते. याचा अर्थ रोख रकमेचा तुटवडा किंवा कमी पुरवठा असा नसून डिजिटल व्यवहारांचा जास्तीत जास्त वापर करणं हा आहे. कपडे विकत घेणं, सगळ्या प्रकारची बील भरणं, हॉटेल मधली बील भरणं अशा कित्येक व्यवहारासाठी एकतर चेक हे माध्यम आहे किंवा ऑनलाईन वा मोबाईल पॅमेंटचा पर्यायही आज उपलब्ध आहे. त्यामुळे चेकच्या माध्यमातून , बँकेच्या वेबसाईटवरून ऑनलाईन ट्रान्सफरच्या माध्यमातून किंवा मोबाईल मधल्या ॲप्सच्या मदतीने आपण हे सगळे कॅशलेस व्यवहार करू शकतो. याचा सगळ्यात मोठा फायदा असा आहे की प्रत्येक व्यवहाराच्या पाऊलखुणा राहतात. त्यामुळे काळापैसा निर्माण होत नाही तसेच बनावट नोटा चलनात येण्याला संधीच मिळत नाही त्याशिवाय रोख रकमेच्या हस्तांतरणासाठी माणसाची फारशी गरज लागत नाही. हे सर्व व्यवहार तपासता येणार असल्याने अर्थव्यवस्थेमध्ये पारदर्शकता येते. यामुळे आपण रोखमुक्तीच्या अर्थव्यवस्थेकडे जातो आहोत असे म्हटले तरी वावगे ठरणार नाही. कॅशलेस व्यवहारात पैसे जवळ बाळगावे लागत नाहीत. उलट इ-वॉलेट, भीम ॲपचा वापर केला जातो . बँकेच्या खात्यातून रक्कम थेट घेतली जाते. भीम ॲप, इंटरनेट, मोबाईल बँकींग तसेच युपीआय युनिफाईड पेमेंट इंटरफेस यांचाही आता मोठ्या प्रमाणात वापर होतो आहे. या व्यवहारात अधिकाधिक प्रमाणात रोख व्यवहार कमीतकमी करणे याला अत्यंत महत्व आहे. कॅशलेस व्यवहारामुळे काळा पैसा परत येतो. या व्यवहारात पैसा जवळ बाळगावा लागत नाही. उलट इवॉलेटचा वापर केला जातो. बँक खात्यातून थेट रक्कम घेतली जाते. आगामी काळात क्रेडिट कार्ड, डेबिट कार्ड कालबाह्य होतील , स्मार्टफोन, मोबाईल , बोटोचं



तसे , तसेच आधारकार्ड क्रमांक यावरूनच डिजिटल व्यवहार होतील असेही तज्ञांचे मत आहे मग एटीम मशीनचीही फारशी गरज भासणार नाही. एटीममुळे लहानमोठ्या बँकांचे काम पुष्कळच सोपे झाले. आता लहानशा रकमादेखील मोबाईलवरून ट्रान्सफर करण्याच्या कामासाठी छोट्या पेमेंट बँका आणि त्यांच्या अॅपमुळे कामात लक्षणीय फरक पडतो आहे. ह्या जादा वेळेचा उपयोग करून घेऊन बँकिंग सेवेचा विस्तार करता येतो. लहान लहान दुकानदार मंडळी ही अत्यंत महत्त्वपूर्ण असा भाग आहेत. त्यांचा पैसा बँकेत येऊ लागल्यावर अर्थव्यवस्थेचा विस्तार नक्कीच होऊ शकेल. मोबाईल पेमेंटच्या सुविधेमुळे त्यांचे बँक विवरण, स्टेटमेंट त्यांना आपोआप मिळून जाते. हिशोब वहयांतून त्यांची सुटका होऊ शकेल.

#### इंटरनेट बँकिंग आणि रोखरहित व्यवहार:-

रोखरहित व्यवहार म्हटले की सर्वात प्रथम दिसणारा पर्याय म्हणजे इंटरनेट बँकिंग . यामध्ये आपण एकाच्या खात्यातून दुसऱ्याच्या खात्यात पैसे पाठवू शकतो. असे व्यवहार करण्यासाठी तीन प्रकारच्या सेवा उपलब्ध आहेत RTGS ,NEFT,IMPS इंटरनेट बँकिंग किंवा मोबाईल बँकिंग यापेक्षा सर्वात सोपा पर्याय म्हणून प्लास्टिक मनीची ओळख आहे. यामध्ये डेबिट कार्ड, क्रेडिट कार्ड यांचा समावेश होतो. यामध्ये आपण कार्ड स्वाइप केल्यावर आपला पिन क्रमांक टाकल्यावर पैसा जमा होतात. क्रेडिट कार्डाच्या बाबतीतही असच असून यामध्ये ठराविक मुदतीच्या आता आपल्याला पैशांचा परतावा करावा लागतो.

#### स्मार्टफोन आणि रोखरहित व्यवहार :-

स्मार्टफोनचा वापर करून बँक खात्यात पैसे पाठविण्याचा सर्वात सोपे माध्यम म्हणून युपीआयकडे पाहिले जाते. बँकिंग क्षेत्रात एटीमनंतर झालेले हे सर्वात मोठे संशोधन मानले जाते. यामध्ये आपण विक्रेत्याला थेट पैसे देऊ शकतो. यासाठी ऑनलाइन तसेच ऑफलाइन असे दोन्ही पर्याय आहेत. ही सुविधा वापरण्यासाठी आपल्याला डेबिट कार्डनंबर किंवा आयफएसी कोड किंवा पासवर्ड इ. गोष्टी लक्षात ठेवण्याची गरज नसते. ही सुविधा वापरण्यासाठी बँकेत खाते असणे आणि मोबाईल क्रमांक नोंदणीकृत असणे आवश्यक आहे. हे अॅप वापरण्यासाठी बँकेच्या ग्राहकाला आपल्या स्मार्टफोनमध्ये युपीआय आधारित अॅप डाऊनलोड करावे लागते. या अॅपमधून व्यवहार पूर्ण करण्यासाठी तुम्ही आभासी वापरकर्ता क्रमांक तयार करू शकता. असे व्यवहार करताना वापरकर्त्याची आभासी ओळखच गृहित धरली जाते. यामुळे हे अॅप अत्यंत सुरक्षित असे आहे. याच्या साह्याने एका वेळी एक लाख रुपयांचे व्यवहार करता येतात.

मोबाईल पाकिटे ही सुध्दा अशीच व्यवहार पूर्ण करणारी सुविधा आहे. पूर्वी ही सेवा केवळ ऑनलाइन व्यवहारासाठी वापरली जाणारी ही सुविधा आता अनेक दुकानदांनीही स्विकारली आहे. यामुळे अगदी भेळ-पाणीपुरी वाल्यापासून ते रेल्वेचे तिकीट खरेदी करण्यापर्यंत सर्वच स्तरांवर मोबाईल पाकिटांचा अर्थात इ-वॉलेट चा वापर होऊ लागला आहे. डेबिट किंवा क्रेडिट कार्डासारखी स्वाइप करण्याची गरज नसते .या पाकिटांमध्ये आपण काही रक्कम भरून ठेवू शकतो. ही रक्कम भरल्यानंतर आपण आपले व्यवहार करू शकतो. जर रक्कम भरून ठेवायची नसेल तर अॅपच्या माध्यमातून आपण डेबिट कार्ड किंवा इंटरनेट बँकिंगच्या आधारे व्यवहार करू शकतो. या मोबाईल पाकिटांमध्ये आपण अगदी दहा रुपयांपासून ते दहा हजार रुपयांपर्यंत पैसे भरून ठेवू शकतो.

#### भारत सरकार आणि रोखरहित अर्थव्यवहार :-

केंद्र सरकारनेही भीम भारत इंटरफेस फॉर मनी हे नवीन अॅप तयार केले असून हे अॅप वापरणाऱ्यांची संख्या आता प्रचंड झाली आहे यातील सोपेपणा, सुलभरित्या व्यवहाराची शक्यता इत्यादी वैशिष्ट्यांमुळे हे अॅप सध्या लोकप्रिय आणि वापरण्यास सहज असे उपलब्ध झाले आहे. भीम अॅप ३० डिसेंबर २०१६ रोजी आपल्या देशाचे माननीय पंतप्रधान श्री नरेंद्र मोदी यांनी सुरु केलेले आहे. त्यामुळे ऑनलाईन व्यवहार सुलभ होताहेत आधार कार्डशी निगडीत हे अॅप डिजिटल पेमेंटसाठी उपयुक्त आहे. बँक खात्यातून पैसे थेट हस्तांतरित करता येतील हे अॅप युपीआय सक्षम बँक खात्यांशी संबंधित आहे पण त्यामध्ये एकच खाते त्याच्याशी जोडता येईल.

रुपे कार्ड हे डेबिट व क्रेडिट कार्डचे भारतीय रुप आहे व व्हिसा व मास्टर कार्डसारखे त्याचे स्वरुप आहे . जनधन योजनेत प्रत्येक खातेधारकाला ते देण्यात आले आहे. रुपे कार्ड तीन मार्गाने चालते त्यात एटीम, पीओएस व ऑनलाइन यांचा समावेश आहे. कोटयावधी लोक रुपे कार्ड वापरतात व अल्प उत्पन्न गटातील लोकांना कॅशलेससाठी ते उपयोगी आहे . आर्थिक समावेशकतेसाठी त्याची गरज आहे. २५ डिसेंबर २०१६ रोजी आपल्या सरकारने आधार संचलित पेमेंट अॅप सुरु केले ते आधार कार्ड व खातेक्रमांकाशी जोडलेले आहे. बायोमॅट्रिक रीडरचा त्यात वापर असून आधार क्रमांक टाकून व्यवहारासाठी बँकेची निवड करता येते फोन शिवाय यातून पेमेंट करता येते. कॅशलेस व्यवहारांचा अधिकाधिक वापर करणाऱ्यांमध्ये प्रगत राष्ट्रांचा समावेश असला तरी मुख्यतः डेन्मार्क , नार्वे , स्विडन हे देश वेगाने रोख रहित अर्थव्यवस्थेकडे वाटचाल करत आहेत.

कॅशलेस व्यवहारांचे अनेक फायदे झालेले आपल्याला दिसतात, जसे की आपली बनावट नोटांपासून मुक्तता झाली आहे. चोरी , लुटमार, हरवणं, पाण्यात पैसे भिजणे असे अनेक धोके रोख पैशांच्या बाबतीत असतात डिजिटल पैशांच्या बाबतीत सायबर फ्रॉड हा एकच धोका असतो. पण जगभरात सायबर फ्रॉड टाळण्यासाठी विविध उपाययोजना करण्यात येत आहेत आणि एकूण फायदयाच्या तुलनेत होणारे नुकसान अगदीच कमी आहे असे तज्ञ सांगतात. सगळे कॅशलेस व्यवहार हे नोंदले जातात आणि ते कधीही बघण्यासाठी संबंधित संकेतस्थळांवर उपलब्ध आहेत. त्यामुळे आर्थिक साक्षरतेबरोबर आर्थिक सक्षमता, स्वयंपूर्णता आणि आर्थिक शिस्तीच्या दृष्टीने हे डिजिटल पेमेंट अत्यंत उपयुक्त ठरते. नोटा छापणं, त्यांचे वाटप , त्यांच्या वितरणासाठी मनुष्यबळ वापरणे असे अनेक खर्च नोटांच्या अस्तित्वाबरोबरच तयार होतात. डिजिटल पैशामध्ये यातले बरेचसे खर्च निघून जातील आणि यंत्रणेसाठी लागणाऱ्या पैशाची बचतच होईल हे निश्चित.

#### समारोप :-

रोखरहित साधनांचा वापर सोपा, विश्वासार्ह, सुरक्षित व फायदेशीर करणे आवश्यक आहे. कर्ज, विमा, यात त्याचा वापर सहजरित्या होवू शकतो. यासाठी बँकामध्ये पायाभूत सुविधाही आता निर्माण केल्या जात आहेत. रोखरहित समाजाने सरकारला आणि लोकांना अनेक फायदे

होतात. कुठल्याही व्यवहारात पैसे देण्याची पध्दत आता रोखरहित होत आहे. रोखरहित अर्थव्यवस्था कमी उत्पन्न गटापासून सर्वांनांचा फायदयाची ठरली आहे. त्यामुळे व्यवहार शुल्क कमी होते , कमी जोखीम व सुरक्षित असे व्यवहार होतात. डिजीटल व्यवहारांमुळे नोटा बाळगाव्या लागणार नाहीत त्यामुळे इतर गुन्हे तर कमी होतीलच पण अंमली पदार्थ, तस्करी, दहशतवादाला अर्थपुरवठा, काळ्या पैशाला पाठिंबा हे सुध्दा गुन्हे नाहीसे होतील. जेव्हा देशातील लोक डिजीटल पेमेंट करतील तेव्हा रोखीची गरज कमी होऊन बँकामध्ये मोठया प्रमाणात पैसे राहतील त्यामुळे बचतीचा दर वाढेल. रोखरहित व्यवहारांवर सरकार सहज लक्ष ठेवते. त्यामुळे करचुकवेगिरी होणार नाही यामुळे महसुल वाढून विकासाला पोषक वातावरण निर्माण होण्यास मदत मिळेल .

सरकारने लोकांना यासाठी खुप उत्तेजन दिले आहे. डिजीटल व्यवहारांकडे लक्ष वेधले आहे. त्यामुळे लोकांना बँका किंवा एटीमच्या रांगेत उभे राहावे लागणार नाही. सामान्यलोकांसाठी नशीबवान ग्राहक योजना व व्यापाऱ्यासाठी डिजीधनव्यापार योजना आणली आहे. या योजनेत डिजीटल व्यवहारांना प्राधान्य दिलेले आहे. नशीबवान ग्राहक व डिजीधन व्यापार योजनेत अनेक प्रोत्साहनपर बक्षिसे आहेत. त्यामुळे डिजीटल इंडिया, मेक इन इंडिया यांना प्रोत्साहन मिळेल. देशाचा आर्थिक कणा मजबूत होईल . वित्तीय साक्षरता अभियानामध्ये तर लोकांना रोखरहित अर्थव्यवस्थेची माहिती दिलेली आहे. दुकाने, कॅटीन, इतर सेवात रोखरहित व्यवहारांचा आग्रह धरला आहे. विद्यार्थी , शिक्षक, पालक यांनी लोकांना या व्यवहारांचे प्रशिक्षण देण्यास सांगितले आहे .नवे तंत्रज्ञानाची ओळख, प्रशिक्षण आणि त्याचा अधिकाधिक वापर करणे हेच सर्व लोकांकडून अपेक्षित आहे. नवे तंत्रज्ञान अवगत करण्याची क्षमता आपल्या सर्वांमध्ये आहे असा विश्वास माननीय पंतप्रधान मोदींना आहे. देशहिताच्या निर्णयामध्ये आपणही योगदान देऊन कॅशलेस अर्थव्यवस्था तयार करण्याच्या कार्याला हाताभार लावणं म्हणजेच जास्तीत जास्त रोखरहित व्यवहार करणं, अडचण आलेल्या इतर व्यक्तींना समंजसपणे जागरुक करणं आता गरजेचे आहे. तरच आपली अर्थव्यवस्था विस्तार पावू शकेल आणि देशातील नागरिकही अर्थपूर्ण असे सामाजिक जीवन जगू शकेल.

#### संदर्भ सूची :-

१. योजना मासिक
२. लोकराज्य मासिक
३. लोकसत्ता वर्तमानपत्रातील विविध लेख
४. लोकप्रभा मासिक
५. व्यापारी मित्र मासिक



## भारतातील बँकींग क्षेत्रातील डिजीटल आर्थिक व्यवहार पध्दतीचा अभ्यास

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### प्रस्तावना :

भारतात बँकींग क्षेत्रात इलेक्ट्रॉनिक माध्यमांच्या आधारे आर्थिक व्यवहार संगणक साधनांच्या सहाय्याने केले जाऊ लागले. परंतु पैशांची देवाण-घेवाण ही रिझर्व बँक ऑफ इंडिया यांचा डिसेंबर 2007 च्या अधिनियमांच्या आधारे खऱ्या अर्थाने वित्तीय देवाण-घेवाणीचे व्यवहार सुरु झालेले आहेत.

**उदा.** RTGS (Real time gross settlement) NEFT (National electronic fund transfer)  
UPI (Unified payments interface) ECS (Electronic clearing services)

यासोबतच क्रेडिट कार्ड, डेबिट कार्ड, नॅशनल इलेक्ट्रॉनिक फंड यांच्या समावेश होतो. भारतीय रिझर्व बँक या विविध माध्यमांना किंवा साधनांचा वापर वाढवा यासाठी बँकाना व ग्राहकांना पूर्णपणे प्रयत्न करीत आहे व प्रोत्साहित करीत आहे. भारतात यापूर्वी कागदांचा वापर होत होता परंतु आता पेपरलेस व्यवहार मोठ्या प्रमाणावर होत असल्याचे दिसून येते. इंटरनेट व मोबाईल सारख्या साधनांच्या वापरामुळे हे सर्व शक्य होत आहे. आशिया खंडातील डिजीटल व्यवहार पध्दती चा वापर करणारे हे भारत हे राष्ट्र वरच्या स्थानावर आहे. 21व्या शतकातील दुसऱ्या दशकाच्या अखेर सुमारे 32 मिलीयन संगणकाचे वापरकर्ते आहेत. त्यातील 68% वापरकर्ते संगणकाचा वापर करतात. रिझर्व बँक यांच्या प्रयत्नामुळे व उपलब्ध सेवा सुविधांमुळे एकूण व्यवहाराच्या 75% व्यवहार हे इलेक्ट्रॉनिक व्यवहार होत आहेत. यामध्ये 98 % व्यवहार हे मोठ्या रकमेच्या वेळेस होतात. लहान किंवा कमी रकमेचे व्यवहार हे आजही रोख रकमेच्या आधारेच केले जात आहेत हे सुधारणे आवश्यक आहे. डिजीटल व्यवहार केल्यामुळे व्यवहारामध्ये पारदर्शकता येते त्याचबरोबर पैसे देणारा व घेणारा यांच्या खात्यावर नोंद होते त्यामुळे वेगळी नोंद करण्याची आवश्यकता नाही.

### संशोधनाची उद्दिष्टे :-

1. भारतीय बँकींग क्षेत्रातील डिजीटल आर्थिक व्यवहाराच्या पध्दतीचा अभ्यास करणे.
2. बँकींग क्षेत्रातील डिजीटल व्यवहाराच्या प्रकारांचा अभ्यास करणे.

### संशोधनाची गृहितकृते :-

1. सद्दस्थितीत भारतीय बँकींग क्षेत्रातील आर्थिक व्यवहारामध्ये इलेक्ट्रॉनिक साधनांचा वापर वाढत आहे.
2. बँकामध्ये डिजीटल व्यवहारामुळे वेळ, श्रम व पैशाची बचत होत आहे.

### डिजीटल आर्थिक व्यवहाराचे प्रकार :

भारत सरकारने डिजीटल इंडिया कार्यक्रमातर्गत भारतीय अर्थव्यवस्थेला सक्षम बनविण्यासाठी 'फेसलेस, पेपरलेस, कॅशलेस' यासाठी डिजीटल इंडियाची महत्वाची भूमिका आहे. यामुळे ज्ञान व समाज यांच्या संगमामुळे अर्थव्यवस्थेला नविन आयाम प्राप्त होईल. रोकडविरहित व्यवहार वृद्धीगंत होण्यासाठी व भारतीय समाजात नगदी व्यवहार कमी करण्यासाठी डिजीटल व्यवहार विविध प्रकार पुढील प्रमाणे आहेत.

1. **डेबिट /क्रेडिट कार्ड** : या कार्डद्वारे इतर व्यवहाराच्या तुलनेत सर्वाधिक सुरक्षित व्यवहार करता येतो. यासाठी सुरक्षित पिनकोड वापरला जातो. त्यासोबतच ओटिपी च्या माध्यमातून प्रमाणित केले जाते. या कार्डमध्ये उदा. Rupay, Visa, Master-card इत्यादी. या आधारे पैशाचे व्यवहार, खरेदी, ऑनलाईन वस्तुंची खरेदी करता येते. यामुळे ग्राहकांचा वेळ, श्रम, पैसा ची बचत होते. दिवसाकाठी आर्थिक व्यवहाराच्या रक्कमेवर विविध बँकानुसार मर्यादा आहेत.
2. **आधार सक्षम देय पध्दती (AEPS)** : आधार क्रमांक व त्याच्या प्रमाणीकरणतुन आधार लिंक असणाऱ्या कोणत्याही बँकेच्या संबंधीत व्यक्तीच्या खात्यातून पैसे काढता येतात. यासाठी रक्कम मर्यादा त्या-त्या बँकेनुसार आहे. यासाठी मायक्रोएटीएमच्या माध्यमातून ऑनलाईन वित्तीय व्यवहार करता येतात.
3. **मोबाईल वॉलेट** : याच्या माध्यमातून नगद व्यवहार करता येतात. क्रेडिट कार्ड किंवा डेबिट कार्ड मोबाईलद्वारे ऑनलाईन पैसे पाठविणे किंवा खरेदी करणे उदा. Paytm, Airtel money, Mrupee, Freecharge, Mobikwink, Oxygen, Jio Money, SBI Buddy, its cash. BHIM, Citrus Pay, Vodafone M-pesa, Axis Bank Lime, ICICI Pockets, Speed Pay. इत्यादी. याकरिता स्मार्टफोन मध्ये संबंधीत ॲप असणे आवश्यक आहे.
4. **विक्री केंद्र** : ज्या ठिकाणी विक्री केंद्र असतात उदा. मॉल, बाजारातील किंवा शहरातील विक्री केंद्र याठिकाणी ऑनलाईन व्यवहार केले जातात. यासाठी इंटरनेट जी.पी.आर.एस प्रणाली सोबत बायोमेट्रिक रिडर साधनांची आवश्यकता असते. यासाठी कोणतीही मर्यादा नाही. यासाठी संबंधीत व्यक्तीला काही प्रमाणात ही साधने वापरण्यासाठी प्रशिक्षण आवश्यक आहे.
5. **मोबाईल बँकींग** : बँकींग सेवा मोबाईलच्या माध्यमातून ग्राहक कोणत्याही वेळी तसेच कोणत्याही ठिकाणावरून आर्थिक व्यवहार करू शकतो. तसेच बँकेच्या इतर सुविधांप्राप्त करू शकतो. यासाठी स्मार्टफोन, इंटरनेट व संबंधीत बँकेचे ॲप घेणे आवश्यक आहे.



6. **अनस्ट्रक्चर्ड सप्लीमेंट्री सर्विस डेटा (USSD) :** अभिनव व्यवहार सेवा \*99# माध्यमातून या पध्दतीने आर्थिक व्यवहार केले जातात. यासाठी स्मार्टफोन ची आवश्यकता असते. सर्वसामान्य ग्राहकसुध्दा याचा लाभ घेवु शकतो. ही सेवा भारतातील 51 अग्रणी बँकेत चालु आहे. यामध्ये पैशाचे व्यवहार, मिनी स्टेटमेंट, पिन बदलणे इ. सुविधांचा लाभ घेता येतो.
7. **एकत्रित पेमेंट्स इंटरफेस (UPI):** हि एक असी प्रणाली आहे की, मोबाईल ॲप्लीकेशन मध्ये विविध बँकिंग सुविधांचा लाभ घेता येतो. यासाठी इंटरनेट सुविधा सोबत स्मार्टफोनची आवश्यकता असते. यासाठी मोबाईल नोंदणीकृत आवश्यक आहे.
8. **बँक प्री-पेड कार्ड :** इंटरनेट बँकिंगचा उपयोग करुन आर्थिक व्यवहार केले जातात. शिल्लक रक्कम तपासता येते. पासबुकची इन्ट्री व चौकशी पैसे पाठवणे व काढणे इ. यासाठी बारकोड च्या माध्यमातून सेवा प्राप्त करता येते.
9. **इंटरनेट बँकिंग :** यालाच ऑनलाईन बँकिंग असे देखील म्हटले जाते. ई-बँकिंग किंवा व्हर्चुअल बँकिंग या नावाने देखील ओळखतात. इलेक्ट्रॉनिक पध्दतीच्या आधारे वित्तीय व्यवहार केले जातात. NEFT, RTGS, ECS, IMPS हे सर्व प्रकारामध्ये येतात.
10. **मायक्रो एटीएम :** हे असे यंत्र आहे की त्याचा वापर बँकिंग सेवा देण्यासाठी केला जातो. आज ज्या ठिकाणी बँकेची शाखा कार्यरत नाहीत किंवा आवश्यकतेपेक्षा कमी आहेत अशा ठिकाणी ग्राहक सेवा केंद्र स्थापन केली जात आहेत व त्या ठिकाणी मायक्रो एटीएम च्या माध्यमातून ग्राहकांना बँकिंग सेवा पुरविल्या जातात. यासाठी इंटरनेट सुविधा आवश्यक आहे.

### डिजिटल पेमेंट चे लाभ :

डिजिटल पेमेंट चे लाभ पुढील प्रमाणे असल्याचे दिसून येते.

1. अत्यंत सोपे व सुविधाजनक व्यवहार.
2. घरबसल्या आर्थिक व्यवहार करता येतात.
3. वेळ, श्रम व पैसा ची बचत होते.
4. वेगळ्या नोंदीची गरज नाही, खात्यावर नोंद होते.
5. यामध्ये कमीत-कमी जोखीम आहे.

### डिजिटल पेमेंट मधील दोष :

1. तंत्रज्ञानाचा वापर न करणाऱ्या व्यक्तीला याचा लाभ घेता येत नाही.
2. डेटा चोरी होण्याचा धोका वाढला आहे, किंवा खाते हॅक होण्याचा धोका आहे.
3. काटकसर करण्याची सवय बंद होत आहे. पैशाची उधळपट्टी वाढत आहे.
4. खाते क्रमांकातील एखादा आकडा चुकला तर पैसे इतरत्र जावु शकतात.

### संाराश :

भारतामध्ये डिजिटल आर्थिक व्यवहार मोठ्या प्रमाणात होत आहेत. 2016- 17 मध्ये 1.5 मिलियन चे व्यवहार झाले होते. 2026 पर्यंत 10.07 ट्रिलियन पर्यंत हे व्यवहार जातील असी सरकारला अपेक्षा आहे. 2016- 17 च्या तुलनेत 2018- 19 या वर्षात 246% व्यवहार वाढले आहेत. भारतात 10 बिलियन व्यापारी डिजिटल पध्दतीने आर्थिक व्यवहार करीत आहेत. एप्रिल 2017 मध्ये 909.6 मिलियन डॉलर आर्थिक व्यवहार तसेच युपीआय च्या माध्यमातून 7 मिलियन आणि क्रेडिट व डेबिट कार्ड च्या माध्यमातून 231.1 मिलियन डॉलरचे आर्थिक व्यवहार झालेले आहेत. डिजिटल व्यवहारामध्ये स्मार्टफोनच्या माध्यमातून होणारे आर्थिक व्यवहार एकुन व्यवहाराच्या 70% म्हणजेच 886 मिलियन युजर्सनी केलेले आहेत. यावरून असे स्पष्ट होते की भारतामध्ये प्रचंड प्रमाणात डिजिटल व्यवहार प्रणाली वाढलेली आहे. त्याचबरोबर येणाऱ्या भविष्याकाळात त्यावरील विश्वासहार्थता वृद्धीगत होत राहणार आहे. त्यामुळे शासनाने आवश्यकत्या पायाभुत सुविधा उदा. उपलब्ध विज सुविधा, इंटरनेट सुविधा व दळणवळणाच्या आवश्यकत्या सोयी गरजेनुसार वाढविणे आवश्यक आहे. त्यामुळे डिजिटल प्रणालीचा भविष्यात मोठ्या प्रमाणात वापर होणार आहे.

### संदर्भग्रंथ सूची :

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## आर्थिक साक्षरता काळाची गरज

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आर्थिक साक्षरता ही एक अत्यंत महत्वाची संकल्पना आपल्यात रूजण्याची आवश्यकता आहे. कारण प्रत्येक गोष्टीसाठी पैसा हा लागतोच आणि प्रत्येक गोष्टीमधून पैसा कमावला जाऊ शकतो, जोपर्यंत पैशाचे महत्त्व समजत नाही तोपर्यंत पैसा कमावण्यापेक्षा खर्च करण्यात जास्त मजा येते. व्यक्तीला उत्पन्न प्राप्त झाल्या नंतर तो पैसा अल्पावधीत खर्च केला जातो. प्रत्येक गोष्टीची किंमत आपण पैश्यामध्ये करतो पण पैशाची किंमत कशात मोजायची हे कोणी समजावून सांगितलेले नसते. त्यामुळे पैसे हे कसे खर्च करावयाचे? कोणत्या बाबीवर खर्च करावयाचे? व का खर्च करावयाचे ? तसेच त्यापासून किती समाधान मिळते ? याचा गांभिर्याने विचार केला जात नाही. खर्च केलेला पैसा मिळविण्यासाठी आपण किती कष्ट केले आहेत याचाही विचार केला जात नाही. मनुष्य आपल्या अथक परिश्रमाने मिळवलेला पैसा अविवेकाने खर्च करत असतो. त्यामुळे त्यांच्या समोर असंख्य समस्या निर्माण हात असतात. अर्थिक साक्षरतेच्या अभावामुळे त्याची अर्थिक फसवणूक होत असते व परिणामी ते कर्जबाजारी सुद्धा होतो. भारतासारख्या दारिद्र्य, बेकारी व अर्थिक विषमता असणाऱ्या देशात अर्थिक परिस्थितीनुसार अर्थिक नियोजन करणे गरजेचे आहे. कारण मानवाच्या गरजा अमर्याद असल्यातरी त्या सर्व गरजा एक सारख्या महत्वाच्या नसतात. आपल्या उत्पन्नानुसार गरजांचा क्रम ठरवून आपल्या अर्थिक परिस्थितीप्रमाणे अर्थिक नियोजन व व्यवस्थापन करणे गरजेचे आहे. आपण आपल्या गरजा मर्यादित ठेवून पैसे कसे वाचवू शकतो किंवा पैशाची सिमांत उपयोगिते कशी सर्वाधिक ठेवता येईल याची जाणीव करून देणे गरजेचे आहे. पैशाची बचत कशी करावी, कमीत कमी पैश्याच्या सहाय्याने एकूण उपयोगिता वाढ करून पैशाची बचत करून तो पैसा बचतीत परिवर्तित कसा करावा या सर्व गोष्टी अर्थिक साक्षरते शिवाय शक्य नाहीत. प्रस्तुत शोध निबंधात अर्थिक साक्षरतेचा आढावा घेण्याचा प्रयत्न केला आहे.

### उद्दिष्टे :-

- १) अर्थिक साक्षरतेचा अर्थ जाणून घेणे.
- २) अर्थिक साक्षरतेचे महत्त्व स्पष्ट करणे.

अर्थिक साक्षरता ही संकल्पना आपल्याला सर्वसाधारण वाटत असली तरी ती लोकांमध्ये रुजवावी लागते. बहुतांश लोक म्हणतील की, 'आता आम्हाला काय व्यवहारज्ञान पण येत नाही का?' गुंतवणुकीची अनेक साधने उपलब्ध आहेत. पण त्यामुळेच खरी समस्या निर्माण होत आहे. पूर्वी ३०-३५ वर्षांपूर्वी अतिशय मर्यादित अशी गुंतवणुकीची साधने उपलब्ध होती. परंतु आज गुंतवणुकीची अमर्याद साधने उपलब्ध आहेत. या साधनामुळे नफ्याचे प्रमाण वाढले आहे. तर काही लोक यामुळे लो देशोधडील लागले आहेत. नवीन पर्याय जसे बाजारात उपलब्ध व्हायला लागले आहेत त्यासोबत खोट्या, फसव्या, ग्राहकांना लुबाडणाऱ्या अनेक कंपन्या व लोकांनी यात शिरकाव केला. यात अनेकदा अनेकांनी आयुष्यभर मेहनतीने कमावलेला पैश्याचा अपव्यय होतो त्यामुळे पश्चातापाची पाळी येते की, आपण हा विचार आधी का केला नाही. या सगळ्याकरिता अर्थिक साक्षरता वाढवणे ही काळाची गरज आहे. आता यात अर्थिक साक्षरता म्हणजे बँकेचे व्यवहार करता येणे अथवा एखादी विमा पॉलिसी खरेदी केली असणे एवढेच अपेक्षित नाही.

आज अनेकदा आपल्याला कर्ज घेण्याशिवाय पर्याय राहत नाही आणि मुख्य म्हणजे ते कर्ज देणाऱ्या संस्था उपलब्ध व तयार असतात. परंतु येथे सुद्धा अर्थिक साक्षरतेची गरज असते. येथे आपल्याला कर्जाच्या व्याजाचा दर, छुपे खर्च, प्रोसेसिंग खर्च व फोरक्लॉसिंग दरांचा सुद्धा विचार करावा लागतो. आपल्या गरजेच्या तिनत्रतेत आपण त्याकडे दुर्लक्ष करतो. याठिकाणी या सगळ्या बाबी जाणून घेणे म्हणजे अर्थिक साक्षरता होय.

आजही भारतात ७०% लोकांना डीमॅट अकाउंट म्हणजे काय हे माहित नाही. आजघडीला गुंतवणुकीची अनेक साधने उपलब्ध आहेत. परंतु त्यासाठी अर्थिक साक्षरतेची आवश्यकता आहे. आजच्या अर्थिक जगात ही अपरिहार्य बाब आहे.

### आर्थिक साक्षरतेचा अर्थ :

"अर्थिक साक्षरता म्हणजे आपल्या उत्पन्नाचा व खर्चाचा मेळ घालून योग्य ठिकाणी गुंतवणुक करणे आणि आपल्या कुवतीनुसार जोखीम घेऊन चांगला परतावा मिळविणे होय."

"अर्थिक साक्षरता म्हणजे आपल्या पैश्यासंबंधीचे व्यवहार स्वतंत्रपणे निर्णय घेवून करता येणे होय."

"आपल्याकडे उपलब्ध असलेल्या अर्थिक संसाधनाचा योग्य वापर करण्याची क्षमता म्हणजे अर्थिक साक्षरता होय."

भारतात लोकसंख्येचा एक मोठा भाग अजूनही संस्थात्मक वित्तीय सेवांच्या परिघाबाहेर आहे. निरोगी व जोखीममुक्त गुंतवणुकीच्या संधीसाठी काय करावे आणि काय करू नये याचे ज्ञान आणि त्यांचे कर्जाचे सापळे आणि बेईमान सावकाराद्वारे निर्दय शोषण होण्यापासून संरक्षण हे अर्थिक साक्षरता कार्यक्रमाचे पहिले उद्दिष्ट ठरते. साधे बँकेत खाते सुद्धा नाही तेथे वित्तीय सेवांमध्ये त्यांचा सहभाग दूरचाच अर्थिकदृष्ट्या वंचित घटकांची अर्थिक साक्षरता हे भारतात परिणामकारक अर्थिक समावेशकतेच्या दृष्टीने पहिले पाऊल ठरेल. वंचित घटकांची अर्थिक साक्षरता झाल्याशिवाय खऱ्या अर्थाने अर्थिक साक्षरता साध्य होणार नाही. वित्तीय संस्थांनी ग्राहकांना वित्तीय सेवा देण्याबरोबरच त्यांच्या अर्थिक साक्षरतेवर लक्ष केंद्रित करणे आवश्यक आहे. अल्प उत्पन्न कुटुंबातील लोकांचे एकतर उत्पन्न कमी असल्यामुळे ते आवश्यक वस्तु व सेवांपासून वंचित राहतात. उपलब्ध उत्पन्नाचा ही मोठा भाग अनावश्यक बाबीवर खर्च होतो तेव्हा त्यांना अर्थिक साक्षर केले पाहिजे. त्यासाठी त्यांना बचत करणे, अर्थिक जोखीम कमी करणे आणि वित्तीय निर्णय पूर्ण माहितीनिशी घेणे सोपे करणारे आवश्यक ज्ञान आणि माहिती देणारे साधन उपलब्ध

करून दिले पाहिजे. अर्थिक साक्षरता कार्यक्रमाच्या माध्यमातून ग्राहकांमध्ये कायम स्वरूपी बचतीच्या सवयी निर्माण करणे, बचतीचे उत्तम व्यवस्थापन करणे तसेच त्यांना भविष्यात अर्थिकदृष्ट्या सक्षम नागरिक बनविण्यासाठी आवश्यक ते शिक्षण द्यावे. कारण शिक्षण हे चांगल्या जीवनमानाची पायाभरणी करते.

अर्थिक साक्षरतेच्या माध्यमातून छुप्या बचतीचे रूपांतर प्रभावी बचतीत करता येते त्यासाठी बँकिंग सुविधांची उपलब्धता व विस्तार करणे आवश्यक आहे. अर्थिकदृष्ट्या सक्षम परंतु तरीही अभावग्रस्त विभागामध्ये चांगले अर्थिक शिक्षण हे त्यांच्यात बचतीच्या चांगल्या सवयी विकसित करू शकेल. जेणेकरून, अर्थिक सुरक्षिततेसह घरातील मुलांना चांगले शिक्षण मिळविण्यास मदत होईल.

भारतातील बँक प्रणालीत व्याजदराबाबत कमालीची भिन्नता आढळून येते. असंघटीत क्षेत्रात तर व्याजाचे दर अवाजवी आकारले जातात. एक विरोधाभास किंवा दुर्दवी योगायोग म्हणा, परंतु परतफेडीबाबत टाळाटाळीच सर्वात कमी शक्यता असलेल्या ग्राहकांनाच आज सर्वाधिक व्याजदराने कर्ज उलच करावी लागते. कारण हे लोक औपचारिक आणि परवडणाऱ्या बँकिंग प्रणालीपासून वंचित आहेत. बँक आपल्यासाठी नाहीत ही चुकीची धारणा किंवा अशा प्रकारच्या संस्थामध्ये आपला पैसा ठेवावा हे आजवरच्या अर्थिकदृष्ट्या भेदभावाच्या गृहीत भावनेने त्यांच्यात निर्माण झालेली अनिच्छा यामागे आहे. परिणामी ते आपला कष्टार्जित पैसा धोकादायक असंघटीत संस्थाकडे ठेवतात. आजवर बँक सेवांपासून वंचित राहिलेल्या बऱ्याच ग्राहकांमध्ये अर्थिक संस्था आणि बँकाबद्दल चुकीची धारणा आहे. त्यांना असे वाटते की, श्रीमंत उच्चभ्रू आणि सुशिक्षित लोकांसाठीच बँका आहेत त्या आपणास स्विकारनाहीत ही मानसिकता बदलावी लागेल. अशा ग्राहकांना बचत खाते, मुदत ठेवी, आवर्ती ठेवीचे वेळ नाहीत तर बायोमेट्रीक, एटीएम आणि निधी हस्तांतरण सेवा कशा वापराव्यात याबद्दलही त्यांना विस्ताराने सांगितले जावे.

औपचारिक शालेय शिक्षण आणि अर्थसाक्षरता यांचा अर्थाअर्थी संबंध नसला तरी, लोकसंख्येचा मोठा भाग एकंदर साक्षरतेचे निम्न प्रमाण असलेल्या भारतात अर्थसाक्षरता व परिणामाने अर्थिक समावेशकतेला आणखी मोठे महत्त्व प्राप्त होते. म्हणूनच रिजर्व बँकेने "प्रोजेक्ट फायनान्शियल लिटरसी" नावाचा प्रकल्प हाती घेतला आहे. या प्रकल्पाचा उद्देश विविध सुशिक्षित अशिक्षित ग्राहकांमध्ये सामान्य बँकिंगची संकल्पना रूजविणे व तिचा प्रसार करणे, सुरक्षितता, विश्वास, प्रवेश सुलभता, सुविधा आणि सहयोग हे असे पाच स्तंभ आहेत जे ग्राहकांमध्ये वित्तीय संस्थाबद्दल सकारात्मक भावना निर्माण करतात आणि या स्तंभाना जोडणारा दुवा म्हणजे अर्थिक साक्षरतेचे वेगवेगळे सातत्यपूर्ण कार्यक्रम होय.

घरागुती बचतीचा बहुतांश भाग बँकामधील एफडीत किंवा जोखीममुक्त सरकारी रोख्यामध्ये जेथे व्याजदर कमी असतात तेथे किंवा बिगर अर्थिक संपत्तीत गुंतविले जाते. भारतात आजही अर्थिक अज्ञान मोठ्या प्रमाणात आढळून येते. जर संपूर्ण अर्थिक स्वातंत्र्य काय हे जाणून घेण्यासाठी उत्पन्न व संपत्ती यातील मुलभूत फरक लक्षात आला पाहिजे. केवळ १२ तास काम करून प्राप्त झालेले उत्पन्न आपल्या गरजा पूर्ण करू शकत नाही तर त्यासाठी हा कमावलेला पैसा योग्य बाबीवर खर्च करून शिल्लक पैशाच्या गुंतवणीकीच्या माध्यमातून पोर्टफोलिओ वाढवत नेऊन आपण काम न करता ही जे उत्पन्न कमावत आहोत ती आपली संपत्ती होय. अशी संपत्तीच अर्थिक गुलामीच्या जोखडातून मुक्ती देऊ शकते. बाजारात अनेक गुंतवणूक योजना उपलब्ध असल्या तरी आपल्या गरजेनुसार योजना निवडून त्यामध्ये दिर्घकालीन गुंतवणूक करणे, अर्थिक क्षेत्राचे सर्वकष ज्ञान वाढविण्यासाठी अर्थिक क्षेत्रात नेटवर्किंग वाढविणे आणि कर्जाचे प्रमाण नगण्य ठेवून बचतीवर लक्ष केंद्रित करणे या गोष्टी कोणत्याही गुंतवणुकदाराला संपत्ती वाढविण्यास सहाय्यभूत ठरतात. संपत्ती ही फुकटच्या सल्यावर कधीही मिळविता येत नाही. त्यासाठी स्वतःचा वेळ आणि पैसा घालवून अभ्यास व संशोधन करावे लागते. गुंतवणूक अशाच क्षेत्रात करावी ज्या क्षेत्राचे आपणास पूर्ण ज्ञान आहे. पूर्वीच्या काळी सोने व जमीन यातच गुंतवणूक केली जात असे. ज्याच्या जवळ जेवढी जास्त जमीन व सोने तो सर्वाधिक श्रीमंत अशी व्याख्या फार पूर्वापार चालत आली आहे. सोने हा गुंतवणीकीचा नाही तर हॅजिंगचा एसेट क्लास आहे हे ९३% भारतीयांना माहित नाही. आपल्या अर्थव्यवस्थेची प्रगती जोमाने होत असल्याने लोकांकडील अतिरिक्त गुंतवणूक वाढत आहे. ते योग्य प्रकारे गुंतवण्यासाठी अर्थिक साक्षरता काळाची गरज झाली आहे. अर्थिक साक्षरतेचा प्रचार व प्रसार करण्यासाठी आपल्याकडे एखादी सुधारित योजना उपलब्ध असूनही तिची राष्ट्रीय पातळीवर सर्व सामाजिक थरांमध्ये अंमलबजावणी करण्याची गरज आहे. या बाबत कार्य करणाऱ्या सरकार, वित्तीय संस्था व शिक्षण संस्थासोबत सहकार्य करून ही गोष्ट घडवून आणण्याची गरज निर्माण झाली आहे.

बँका, वित्तीय संस्था व सरकारकडून अर्थिक साक्षरतेचा प्रसार करण्यासाठी प्रयत्न होत आहेत. प्रगत देशाप्रमाणे आपल्याही देशात राष्ट्रीय अर्थिक साक्षरता धोरण राबविण्याची गरज आहे. बालवयात अर्थिक साक्षरता बिबवणे, मुलांना शालेय पातळीवरच अर्थिक साक्षरतेचे बाळकडु देण्याची गरज आहे. शालेय शिक्षणात अर्थिक शिक्षणाचा समावेश केल्यास भावी पिढ्यांमध्ये अर्थिक साक्षरता पसरविण्यास मदत होईल आणि खऱ्या अर्थाने आपल्या देशातील विद्यार्थी शालेय अभ्यासक्रमासोबतच व्यवहारिक व व्यावसायिक ज्ञानात प्रगत होवून देशाची प्रगती होईल.

### निष्कर्ष :-

#### अर्थिक साक्षरतेच्या अभ्यासांती पुढील निष्कर्ष निघतात.

- १) अर्थिक साक्षरते शिवाय मानवाच्या महत्तम कल्याणात वाढ होत नाही. अर्थिक साक्षरतेमुळे उत्पन्नात वाढ होवून अनावश्यक बाबीवरील खर्च कमी होवून उत्पन्न योग्य गुंतवणीकीकडे वळविले जाते.
- २) साने, चांदी व मुल्यवान धातुतील गुंतवणूक खऱ्या अर्थाने गुंतवणूक नसून ते विलासी वस्तु आहेत. या पासून कोणत्याही प्रकारचा परतावा मिळत नाही. उलट या वस्तु सांभाळण्यासाठी खर्च करावा लागतो. त्यांची झिज होत असते. त्यांची पुर्ण विक्री करताना वजन विचारात न घेता त्यात तुट धरली जाते.



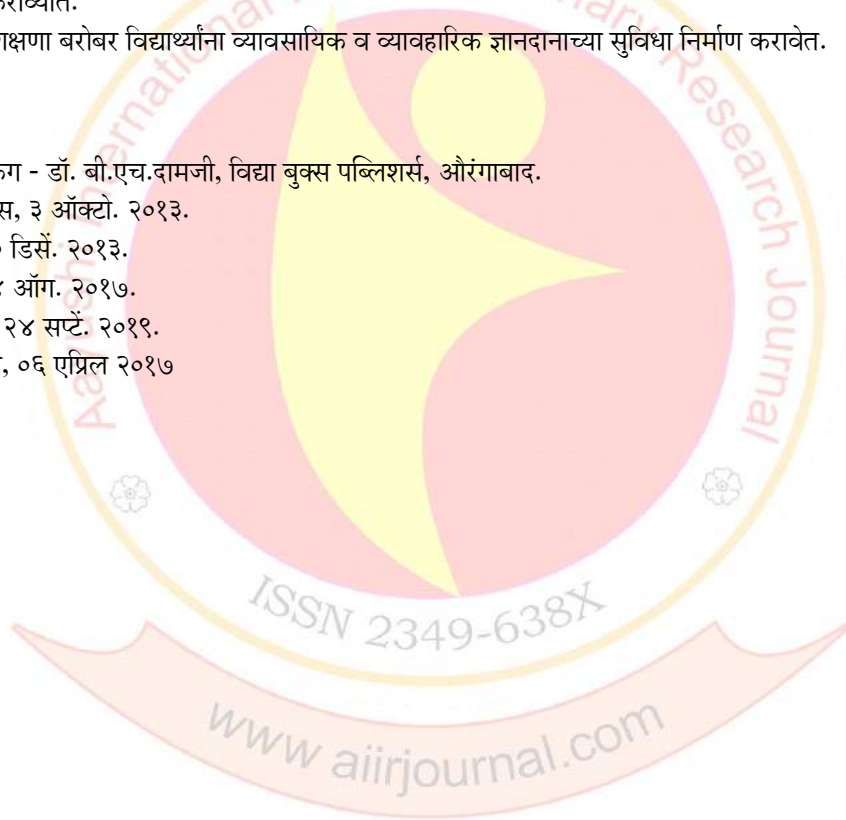
- ३) औपचारिक शिक्षणाबरोबर व्यक्तीला व्यवहारिक व व्यवसायिक ज्ञानाची आवश्यकता असते. केवळ साक्षर असून चालत नाही तर ती व्यक्ती अर्थसाक्षर करण्यासाठी अर्थशास्त्र व वाणिज्य विषयाचे ज्ञान देण्याची सुविधा निर्माण कराव्यात.
- ४) प्रत्येक व्यक्तीने उपभोग खर्च करत असतांना आपल्या उत्पन्नानुसार करावा. ज्यांचे उत्पन्न कमी त्यांनी खर्च कमी करावा. इतर लोकांच्या खर्चाची तुलना न करता प्रदर्शनी परिणामी टाळावा. देशातील विशेषतः ग्रामीण भागातील व गरीब लोकांमध्ये अर्थिक साक्षरते विषयी जाणीव निर्माण करावी. कारण ज्यांचे उत्पन्न कमी तेच लोक अनावश्यक बाबींवर जास्त खर्च करतात व आवश्यक बाबींवरील खर्च कमी करतात. त्यामुळे विषमता मोठ्या प्रमाणात वाढत आहे.
- ५) भारतातील विशेषतः अल्प उत्पन्न गटातील लोक रूढी, परंपरा, अंधश्रद्धा, धार्मिक बाबी व सामाजिक प्रतिष्ठेसाठी कर्ज काढून खर्च करत असतात. ते कर्ज ही जास्त व्याजदराने (खाजगी सावकाराकडून) काढले जाते. परिणाम हे लोक कर्जाच्या सापळ्यात आडकतात व आत्महत्तेचे प्रमाण वाढते. त्यामुळे या लोकांना अर्थ साक्षर बनविणे काळाची गरज आहे.

#### शिफारशी :-

- १) अर्थिक साक्षरता विषयक कार्यक्रमांची प्रभावी अंमलबजावणी करावी. अल्पउत्पन्न गटातील लोकांना खर्चाचे योग्य नियोजन कसे करावे तर उच्च उत्पन्न गटातील लोकांनी गुंतवणूकीचे कोणते पर्याय निवडावेत याचे शिक्षण द्यावे.
- २) सर्वसामान्य लोकांनी सोने, चांदी यावरील खर्च कमी करून तो पैसा इतर क्षेत्रात गुंतविण्यासाठी त्यांना गुंतवणुकीच्या प्रोत्साहनपर योजना सुरू कराव्यात.
- ३) औपचारिक शिक्षणा बरोबर विद्यार्थ्यांना व्यावसायिक व व्यावहारिक ज्ञानदानाच्या सुविधा निर्माण करावेत.

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## पूँजी निर्माण में सहायक खुदरा बैंक

डॉ. रमेश विठोबा कांबळे

अध्यक्ष हिन्दी विभाग

वसंतराव काळे महाविद्यालय,

ढोकी, जि. उस्मानाबाद

प्रसिद्ध अर्थशास्त्री विल रोजर्स ने कहा है, सृष्टि के प्रारम्भ से अब तक तीन महान आविष्कार हुए हैं - आग, पहिया तथा केन्द्रीय बैंकिंग इसमें कोई संदेह नहीं कि आग एवं पहिया के आविष्कार ने आदि मानव को सभ्य बनाया तथा सभ्यता के विकास को गति प्रदान की। सभ्यता की राह पर मनुष्य ज्यों-ज्यों आगे बढ़ा, उसकी परस्पर निर्भरता भी बढ़ती गई। लेकिन आपसी लेन-देनों के निपटारे का कोई मानक माध्यम न होने के कारण उसे वस्तुओं के माध्यम से लेन-देनों का निपटारा करना पड़ता था, जो काफी जटिल कार्य था। कहा जाता है कि आवश्यकता ही आविष्कार की जननी है। अतः विनिमय के माध्यम की आवश्यकता ने मुद्रा को जन्म दिया। मुद्रा की खोज ने विनिमय के कार्य को अत्यन्त आसान बना दिया। परिणामस्वरूप विभिन्न प्रकार की आर्थिक क्रियाओं के विकास की प्रक्रिया शुरु हो गई, जिसके संचालन, प्रबंधन एवं नियंत्रण के लिए बैंकिंग-केन्द्रीय बैंकिंग का जन्म हुआ। इस प्रकार तीसरी महान खोज - केन्द्रीय बैंकिंग या व्यापक अर्थों में कहे, तो बैंकिंग का जन्म हुआ। इस प्रकार तीसरी महान खोज - केन्द्रीय बैंकिंग या व्यापक तीसरी महान खोज - केन्द्रीय या व्यापक अर्थों में कहे, तो बैंकिंग के विकास ने सभ्यता के मुख्य घटक - आर्थिक विकास के पहिये को जैसे पंख लगा दिये तथा आज निरंतर प्रगति के साथ विश्व अर्थव्यवस्था आगे बढ़ रही है। विकास के पथ पर मनुष्य जैसे-जैसे आगे बढ़ रहा है, हर क्षेत्र में नई विधाएँ, शाखाएँ विकसित हो रही हैं, तो भला बैंकिंग इससे अछूता कैसे रहे? इसमें भी नई शाखाएँ/उप शाखाएँ विकसित हो रही हैं, उन्हीं में एक है खुदरा बैंकिंग, जो हमारी इस चर्चा का विषय है। इससे पहले कि विषयगत - खुदरा बैंकिंग से बचत, निवेश एवं पूँजी निर्माण को बढ़ावा शीर्षक पर चर्चा आरम्भ करें, इनके मायने जान लेना उचित होगा।

खुदरा बैंकिंग : विकीपीडिया द्वारा दी गई परिभाषा के अनुसार खुदरा बैंकिंग वह बैंकिंग है, जिसमें बैंकिंग संस्थाएँ कार्पोरेट या अन्य बैंकों के माध्यम से नहीं, बल्कि सीधे ग्राहकों से बैंकिंग लेनदेन करती हैं। इसके अंतर्गत बचत एवं अन्य जमा खाते, बंधक एवं व्यक्तिगत ऋण तथा डेबिट एवं क्रेडिट कार्ड आदि सुविधाएँ शामिल हैं।

यदि दूसरे पहलू से देखें, तो खुदरा बैंकिंग, वर्ग विशेष बैंकिंग (Class Banking) न होकर समूह/जन सामान्य बैंकिंग (Mass Banking) है, जिसमें आम जनता को उनके नजदीकी स्थानों पर न्यूनतम बैंकिंग सुविधाएँ उपलब्ध करायी जाती हैं। इसके अंतर्गत बचत एवं मीयादी जमा खाते, बंधक ऋण (मार्गज), व्यक्तिगत ऋण, डेबिट एवं क्रेडिट कार्ड आदि सुविधाएँ प्रदान की जाती हैं। इसके दायरे को विस्तार देते हुए अब इसमें स्पर्धा प्रबंधन, ब्रोकरेज, निजी बैंकिंग एवं सेवानिवृत्ति निवेश योजना जैसे सेवाओं को भी शामिल किये जाने की बात चल रही है। यहाँ हमारा आशय बैंकिंग सेवाओं के प्रकार या प्रकृति से न होकर इनसे लाभाहित होने वाले समुदाय से अधिक है, जिनकी पहुँच पहले बैंकिंग सेवाओं तक नहीं रही है या कम ही रही है।

**बचत:** किसी व्यक्ति की आय की दो परिणति होती है - उपभोग या बचत। यदि पूरी आय उपभोग पर खर्च हो जाती है, तो बचत। यदि पूरी आय उपभोग पर खर्च हो जाती है, तो बचत कुछ भी नहीं होती है और यदि उपभोग पर कम व्यय होता है, तो बचत अधिक होती है। इस प्रकार बचत, आय का वह भाग है, जो उपभोग पर व्यय न होकर बचा लिया जाता है

बचत (Saving) - आय (Income)-उपभोग (Consumption) ( $S=Y,-C$ )

**निवेश :** निवेश, आय का वह भाग है जो उपभोग पर व्यय न होकर उत्पादन में लगाया जाता है। किसी अर्थव्यवस्था के संदर्भ में निवेश से आशय है वास्तविक पूँजी की मात्रा में शुद्ध वृद्धि। वस्तुतः यह कुल आय का वह भाग है, जो वास्तविक पूँजी की मात्रा में वृद्धि के लिए प्रयुक्त होता है अर्थात् बचत, बशर्ते कि पूरी बचत निवेश हो जाए।

निवेश = आय- उपभोग  $I = Y, C$  {अथवा  $I=S$ }

इस प्रकार देखते हैं कि निवेश की सीधा संबंध बचत से है। यदि बचत की पूरी रकम निवेश कर दी जाती है, तो बचत व निवेश की मात्रा बराबर रहती है, लेकिन व्यवहार में ऐसा होता नहीं है। यदि बचत का कुछ भाग भावी जरूरतों को देखते हुए लोगों द्वारा अपने पास ही रख लिया जाता है, तो निवेश की मात्रा बचत से कम होती है। दूसरी तरफ निवेश के बेहतर विकल्प उपलब्ध होने पर लोग अपनी पुरानी बचतों को भी निवेश कर देते हैं। ऐसी स्थिति में निवेश की मात्रा बचत से कम होती है। दूसरी उपलब्ध होने पर लोग अपनी पुरानी बचतों को भी निवेश कर देते हैं। ऐसी स्थिति में निवेश की मात्रा बचत से अधिक हो जाती है। दूसरे शब्दों में कह सकते हैं कि

निवेश में वृद्धि का अनुपात, बचत में वृद्धि के अनुसार नहीं होता है, बल्कि लोगों की बचत प्रवृत्ति उपभोग प्रवृत्ति तथा निवेश प्रवृत्ति पर निर्भर करता है।

बचत प्रवृत्ति का अर्थ होता है आय एवं बचत के बीच अनुपात, अर्थात् औसत बचत प्रवृत्ति-बचत/आय इसी प्रकार उपभोग प्रवृत्ति का अर्थ है आय एवं उपभोग के बीच अनुपात, औसत उपभोग प्रवृत्ति-उपभोग/आय तथा निवेश प्रवृत्ति का अर्थ है आय एवं निवेश के बीच अनुपात:

औसत निवेश प्रवृत्ति - निवेश/आय

### पूँजी निर्माण :

पूँजी निर्माण से आशय है किसी देश की पूँजी की मात्रा में बढ़ोत्तरी। यह आय का वह भाग है, जो उपभोग पर व्यय न होकर निवेश के रूप में आर्थिक विकास के लिए संसाधन उपलब्ध कराता है। दूसरे शब्दों में बचत ही निवेशित होकर पूँजी का निर्माण करती है।

अब प्रश्न यह उठता है कि क्या खुदरा बैंकिंग से बचत, निवेश तथा पूँजी निर्माण को बढ़ावा मिलता है, तो इसका स्पष्ट उत्तर है हाँ। खुदरा बैंकिंग, चाहे वह बचत एवं मीयादी जमा खातों के रूपों में हो फिर बंधक/व्यक्तिगत ऋण अथवा डेबिट एवं क्रेडिट कार्ड की सुविधा के रूप में हो, इससे छोटी-छोटी बचतों को बढ़ावा मिलता है और ये छोटी-छोटी बचतें बैंकिंग चैनल से होती हुई आर्थिक विकास के लिए पूँजी उपलब्ध कराने में महत्वपूर्ण भूमिका निभाती हैं। तथापि यह निर्विवाद सत्य है कि बचत निवेश में तभी परिणित होती है, जब लोगों के पास निवेश के लिए बेहतर सुविधा एवं विकल्प हों, उसके विषय में उन्हें विधिवत ज्ञान हो तथा वे निवेश करने के इच्छुक हों। पहले जब बैंकिंग सेवाओं का विस्तार नहीं हुआ था या बैंकिंग सेवाएँ वर्ग विशेष तक ही सीमित थीं, उस समय वर्ग विशेष की एवं बड़ी-बड़ी बचतें ही बैंकिंग धारा से जुड़ पाती थीं और वही पूँजी निर्माण के रूप में आर्थिक विकास की मुख्य धारा में आती थीं। उस समय खुदरा बैंकिंग का क्षेत्र इसके प्रकार एवं विस्तार-दोनों ही दृष्टियों से सीमित होने के कारण आर्थिक विकास के लिए पूँजी उपलब्ध कराने में इसका योगदान सीमित था। हमारे देश में यह स्थिति राष्ट्रीयकरण से पहले तक रही। १९६९ में देश के १४ बड़े बैंकों तथा १९८० में पुनः अन्य ६ बैंकों के राष्ट्रीयकरण के बाद छोटे-छोटे केन्द्रों, कस्बों में बैंकिंग सेवाओं का विस्तार हुआ। परिणामस्वरूप इन स्थानों का एक बड़ा तबका, जो पहले इन सेवाओं से वंचित था, बैंकों से जुड़ा और खुदरा बैंकिंग के जारिये उनकी बचतें बैंकों में आयीं।

हालांकि, अभी भी सुदूर ग्रामीण इलाकों में बैंकिंग सेवाओं का अपेक्षित विस्तार न होने के कारण वहाँ की ग्रामीण जनता बैंकिंग सुविधाओं से वंचित है वर्ष २०११ में जारी भारतीय रिजर्व बैंक की रिपोर्ट के अनुसार भारत की आधी आबादी बैंकिंग सुविधाओं से वंचित है। बैंकों में केवल ५५ प्रतिशत लोगों के ही जमा खाते हैं तथा ऋण खाते तो केवल ९ प्रतिशत लोगों के ही हैं। अगर परिवारों की बात करें, तो उस समय देश के १४.५० करोड़ परिवारों के लिए बैंकिंग सुविधाएँ पहुँच से परे थीं। रिपोर्ट के अनुसार उस समय तक १४००० की जनसंख्या पर केवल एक बैंक शाखा उपलब्ध थी। रिपोर्ट जारी होने तक ६ लाख गाँवों की सेवा के लिए ग्रामीण बैंको सहित अनुसूचित वाणिज्यिक बैंकों की केवल ३३४९५ ग्रामीण शाखाएँ ही उपलब्ध थीं। उस समय तक देश की १८ प्रतिशत जनसंख्या को ही डेबिट कार्ड की सुविधा प्राप्त थी। यदि बीमा सुविधा की बात करें, तो २० प्रतिशत से कम आबादी को जीवन बीमा की सुविधा तथा ९.६ प्रतिशत को ही साधारण बीमा की सुविधा उपलब्ध थी। उल्लेखनीय है कि बैंकिंग सेवाओं से वंचित ये लोग खुदरा बैंकिंग के ही ग्राहक हैं।

यह सुखद पहलू है कि इन वंचित गाँवों, परिवारों तथा लोगों तक बैंकिंग सुविधाओं का विस्तार करने के उद्देश्य से भारत सरकार द्वारा वित्तीय समावेशन की परिकल्पना शुरु की गई, जिसके तहत बैंकों को निर्देश दिये गये हैं कि अपनी २५ प्रतिशत नई शाखाएँ बैंक रहित ग्रामीण केन्द्रों पर ही खोलें तथा मार्च २०१२ तक २००० से अधिक की आबादी वाले गाँवों में बैंकिंग सुविधा उपलब्ध करायें। इसके अतिरिक्त सुदूर पिछड़े क्षेत्रों में न्यूनतम लागत पर लोगों को डोर-स्टेप बैंकिंग सेवा उपलब्ध कराने के लिए बिजनेस कॉरिस्पॉण्डेंस (बीसी) की नियुक्ति करें। उल्लेखनीय है कि इन लक्ष्यों की प्राप्ति हेतु बैंकों द्वारा बड़े पैमाने पर वित्तीय समावेशन शाखाएँ तथा ब्रिक्स एंड मोटार शाखाएँ खोली गई हैं तथा बीसी की नियुक्ति कर २००० से अधिक की आबादी वाले गाँवों तक न्यूनतम बैंकिंग सुविधाएँ उपलब्ध करायी गई हैं। इन पिछड़े इलाकों में केवाईसी मानदंडों में छूट देकर सभी परिवारों/अधिकाधिक लोगों को बैंकिंग सेवा के दायरे में लाने का प्रयास युद्ध स्तर पर चलाया गया, जिससे लोगों की छोटी-छोटी बचतें, जो इसके पहले तक उनके पास बेकार पड़ी हुई थीं, खुदरा बैंकिंग के माध्यम से निवेशित होकर आर्थिक विकास की मुख्य धारा में आयीं। सरकार द्वारा २८ अगस्त, २०१४ को शुरु की गई प्रधानमंत्री जनधन योजना के तहत अब तक २४.७४ करोड़ बचत बैंक खाते खोले गये हैं, खुले थे तथा इनके माध्यम से ४३५३२.६७ करोड़ रुपए की जमा राशि प्राप्त हुई है, जो विश्व स्तर पर बैंकिंग इतिहास की सबसे बड़ी उपलब्धि है तथा गिनीज बुक ऑफ रिकार्ड में यह उपलब्धि दर्ज है। ये सभी छोटी-छोटी बचतें पूँजी निर्माण में सहायक हो रही हैं। आर्थिक विकास की बात चली है तो यह जान लेना उचित होगा कि आर्थिक विकास में पूँजी निर्माण का योगदान क्या है? क्या इसके बिना आर्थिक विकास संभव नहीं है? इसके उत्तर के लिए निम्नलिखित तथ्यों पर दृष्टिपात करना उचित होगा



उद्योगों की स्थापना के लिए बड़े पैमाने पर पूँजी निवेश की आवश्यकता होती है, जो पूँजी निमाण से ही सम्भव है। बड़े पैमाने पर पूँजी के निवेश से ही उत्पादन की नई तकनीकों का प्रयोग संभव हो पाता है। पूँजी की पर्याप्त उपलब्धता पर हो किसी अर्थव्यवस्था के लिए नयी परिकल्पनाओं, मानकों एवं उन्नत तकनीकों को अपनाना, लागू करना तथा तदनुसाद परिवर्तन करना सम्भव हो पाता है।

इस प्रकार स्पष्ट है कि आर्थिक विकास के लिए पूँजी निर्माण आवश्यक है और पूँजी का निर्माण, निवेश पर निर्भर करता है। अर्थव्यवस्था के समग्र विकास के लिए आवश्यक है कि देश के हर क्षेत्र, वर्ग, समूह से निवेश प्राप्त हो और यह तभी सम्भव है, जब सभी की बचतों को निवेश की ओर प्रवाहित करने की समुचित सुविधा व माहौल हो। खुदरा बैंकिंग ने हर क्षेत्र, वर्ग, समूह को बचत व निवेश का अवसर प्रदान कर इस कार्य को सरल व संभव बना दिया है। अतः यह अक्षरशः सत्य है कि खुदरा बैंकिंग से बचत, निवेश एवं पूँजी निर्माण को बढ़ावा मिलता है।

#### संदर्भ ग्रंथ –

1. तथ्य भारती – नवम्बर 2045
2. वस्तु सेवा कर विधेयक – सुभाष अरोड़ा
3. उदयोजक – सितम्बर 2017



## भुगतान बैंक

डॉ. दत्ता शिवराम साकोळे

प्रपाठक: हिन्दी विभाग

शिक्षण महर्षी ज्ञानदेव मोहेकर महाविद्यालय कलम, ता. कलम जि.

उस्मानाबाद-413507

वसंतराव काळे महाविद्यालय में आयोजित “भारत में वित्तीय साक्षरता और डिजीटल पेमेंट पर एक दिवसीय राष्ट्रीय संगोष्ठी के लिए प्रधानाचार्य डॉ फेरे जी तथा प्रा. मैदंजी ने फोन पर लेख भेजने को कहा, ऐसे में मैने सोचा क्यों न भुगतान बैंक पर कुछ सामग्री खोज कर आलेख लिखने का प्रयास किया हूँ।

व्यक्ति का नियामक आज धर्म और राजनीति नहीं, बल्कि बाजार हो गया है और बाजारवाद के इस दौर में प्रत्येक व्यावसायिक क्षेत्र में ग्राहक केंद्र में आ गया है, ग्राहक सेवा संस्थान भी इससे अछूते नहीं हैं। बैंक आज आपने उत्पाद ग्राहकों की ध्यान में रखते हुए तैयार कर रहे हैं, ताकि अधिक से अधिक ग्राहकों को अपने साथ जोड़ा जा सके। जिस प्रकार हम अपने ग्राहकों की अपेक्षाओं की उपेक्षा नहीं कर सकते, उसी प्रकार हम ग्राहक की भाषा की भी उपेक्षा नहीं कर सकते, क्योंकि यदि हम अपने उत्पादों की जानकारी ग्राहक की भाषा में नहीं देंगे, तो अपने उत्पादों को लाकप्रिय बनाने में पिछड़ जाएंगे। वैश्वीकरण के दौर में भारतीय बाजार भी विश्वव्यापी नीतियों को अपना रहे हैं। देश में प्रत्येक व्यापारिक संस्था अपना व्यवसाय भारतीय ग्राहकों को ध्यान में रखते हुए ही संचालित करती है। यहाँ तक कि ऐसी विदेशी कंपनियाँ, जो अपना कारोबार भारतीय जनमानस के साथ करना चाहती है, उन्हें अपना कारोबार भारतीय भाषाओं में ही नहीं करना जरूरी हो गया है। यदि हम ग्राहक और भाषा की दृष्टि से बैंकिंग उद्योग को ही लें और सार्वजनिक क्षेत्र के बैंको को छोड़ भी दें, तो विदेशी बैंक यथा एचएसबीसी, सिटी बैंक, चार्टर्ड बैंक एवं बैंक यस बैंक भी अपने मध्यम श्रेणी के उत्पादों के लिए संप्रेषण की भाषा के रूप में हिंदी का ही इस्तेमाल कर रहे हैं। इन बैंकों के एटीएम तथा क्रेडिट कार्ड जैसी सेवाओं में भी अंग्रेजी के साथ साथ भारतीय भाषाओं, विशेषतः हिंदी का इस्तेमाल हो रहा है।

भारत का बैंकिंग क्षेत्र काफी विशाल और व्यापक है, इसमें वाणिज्य बैंक, सहकारी बैंक, विकास बैंक तथा निर्यात आयात और आवासन जैसे क्षेत्रों की आवश्यकताओं को पूरा करने के लिए विशेष बैंक शामिल हैं। क्षेत्र विशेष तथा वर्ग विशेष की बैंकिंग संबंधी आवश्यकताओं की पूर्ति के लिए समय समय पर नए बैंको की अवधारणाएँ जन्म और आकार लेती रही हैं। नवीनतम कड़ी में मुद्रा बैंक तथा भुगतान बैंक का नाम लिया जा सकता है। भारतीय बैंकिंग परिवार के ये नए सदस्य बैंक हैं। इस लेख में हम भुगतान बैंक के संबंध में चर्चा करेंगे।

पृष्ठभूमि :

भारतीय रिजर्व बैंक ने 23 सितंबर 2013 को नचिकेत मोर की अध्यक्षता में लघु व्यवसाय और कम आय वाले परिवारों के लिए व्यापक वित्तीय सेवाओं पर समिति का गठन किया था। इस समिति ने 7 जनवरी 2014 को अपनी अंतिम रिपोर्ट प्रस्तुत की। इस रिपोर्ट में अन्य सिफारिशों के साथ साथ यह सिफारिश भी की गई थी लघु व्यवसाय और कम आय वाले परिवारों की भुगतान संबंधी समस्याओं के समाधान के लिए भुगतान बैंकों का गठन किया जाए। इस सिफारिश के कार्यान्वयन हेतु भारतीय रिजर्व बैंक ने 17 जुलाई 2014 को भुगतान बैंकों के लिए प्रारूप दिशा निर्देश जारी किए और जनता तथा इसमें रुचि रखने वाली संस्थाओं के सुझावों को ध्यान में रखते हुए 27 नवंबर 2014 को अंतिम दिशा निर्देश जारी किए।

**भुगतान बैंक अवधारणा :**

भुगतान बैंको की परिकल्पना ऐसे बैंको के रूप में की गई है, जो विशेष रूप से लघु व्यवसायियों, असंगठित क्षेत्रों, अल्प आय वाले परिवारों, किसानों और प्रवासी मजदूरों आदि की भुगतान संबंधी आवश्यकताओं को कम लागत पर और आसानी से पूरा कर सके।

उदाहरण के लिए आप अपने घरेलू नौकर को वेतन का भुगतान नकद में इसलिए करते हैं, क्योंकि उसका कोई बैंक खाता नहीं है। उसके जैसे व्यक्ति सामान्यतः अपने परिवार को अपने गाँव जाने वाले किसी पहचान वाले व्यक्ति के साथ या फिर मनीआर्डर से नकद राशि भेजते हैं। यह उल्लेखनीय है कि हमारे देश में 90 करोड़ लोग मोबाइल रखते हैं, जिनमें से 70 करोड़ लोग सक्रिय रूप से मोबाइल का उपयोग करते हैं। आपके घरेलू नौकर जैसे अधिकांश लोग इनमें शामिल हैं। भुगतान बैंक ऐसे ही लोगों को अपना ग्राहक बनाएंगे। मोबाइल के प्रयोग से कम लागत पर और तत्काल धन प्रेषण करने के लिए सुविधा प्रधान करने हेतु भुगतान बैंक काम करेंगे।

भुगतान बैंकों के सृजन के उद्देश्य :

भारतीय रिज़र्व बैंक के अनुसार भुगतान बैंको की स्थापना का उद्देश्य अपने गांवों/कस्बों आदि से दूर रह कर अन्य स्थानों पर कार्य करने वाले लोगों, अल्प आय वाले परिवारों, लघु व्यवसायियों, असंगठित क्षेत्र में कार्यरत संगठनों तथा अन्य उपयोगकर्ताओं को 1 लघु बचत खाता, तथा 2. भुगतान और प्रेषण सुविधाएँ उपलब्ध करा कर वित्तीय समावेशन को और व्यापकता प्रदान करना है। इसे देखते हुए भुगतान बैंक के सृजन के निम्नलिखित उद्देश्य रेखांकित किये जा सकते हैं।

- वित्तीय समावेशन—भुगतान बैंको के माध्यम से कोई भी व्यक्ति आसानी से अपना बैंक खाता खोल सकता है।
- शहरों में काम करने वाले लोग गांवों/कस्बों में रहने वाले अपने परिवारों को आसानी से, कम लागत पर और शीघ्रता से धन का अंतरण कर सकें।
- गांवों/कस्बों में रहने वालों को डिजिटल अर्थव्यवस्था से जोड़ना, ताकि वे उसके माध्यम से धन प्रेषण के अलावा वस्तुओं और सेवाओं की खरीद भी कर सकें।
- अपने उक्त ग्राहकों की छोटी-छोटी राशियों के लिए नकदी यपर निर्भरता कम करना। इसके लिए मोबाइल वैंलट का बैंक खाते के रूप में प्रयोग शुरू करना।
- ग्राहकों तक बैंकिंग सेवाएँ परंपरागत शाखाओं के जरिये न पहुंचा कर मुख्यतः मोबाइल के माध्यम से पहुंचाना।

भुगतान बैंक और परंपरागत बैंक में अंतर :

- भुगतान बैंक प्रति ग्राहक अधिकतम एक लाख रुपये तक की ही जमा राशि स्वीकार कर सकते हैं, जबकि परंपरागत बैंक के मामले में सामान्यतः ऐसी कोई सीमा नहीं है।
- परंपरागत बैंकों की तराह ये बचत बैंक खाते में जमा राशि पर ब्याज अदा कर सकते हैं तथा ग्राहकों का चालू खाता भी खोल सकते हैं।
- परंपरागत बैंक, ग्राहकों की जमाराशियों का उपयोग ऋणकर्ता ग्राहकों को ऋण देने के लिए करते हैं लेकिन भुगतान बैंक लोगों को ऋण प्रदान नहीं कर सकते।
- चूंकि भुगतान बैंक ऋण प्रदान नहीं कर सकते, इसलिए वे परंपरागत बैंकों की तरह क्रेडिट कार्ड जारी नहीं कर सकते। हाँ, वे एटीएम कार्ड तथा डेबिट कार्ड जारी कर सकते हैं।
- ग्राहकों द्वारा जमा कराई गई राशियों के निवेश के लिए परंपरागत बैंकों के पास कई विकल्प उपलब्ध होते हैं, लेकिन भुगतान बैंक इस प्रकार प्राप्त जमाराशियों का निवेश सिर्फ सरकारी प्रतिभूतियों में ही कर सकते हैं।
- परंपरागत बैंक अनिवासी भारतीयों से जमाराशि स्वीकार कर सकते हैं, लेकिन भुगतान बैंक ऐसा नहीं कर सकते।
- भुगतान बैंक भारतीय रिज़र्व बैंक के दिशानिर्देशों के अधीन किसी अन्य बैंक के बीसी मतलब बिजनेस करेस्पोंडेंट के तौर पर काम कर सकते हैं।
- परंपरागत बैंकों की भांति भुगतान बैंक म्यूचुअल फंड यूनिट तथा बीमा आदि जैसे गैर जोखिम सहभागिता वाले सरल उत्पादों का वितरण कर सकते हैं।

भुगतान बैंक—विशेषताएँ :

- “पे-टीम” या “एम-पैसा” जैसे प्रीप्रेड भुगतान माध्यमों में ग्राहकों को बिना किसी ब्याज के उक्त कंपनियों के पास पहले से राशि जमा करके रखनी होती है, जिसमें से ग्राहकों की ओर से भुगतान किया जाता है। लेकिन, भुगतान बैंको के मामले में ग्राहकों की जमाराशि पर ब्याज अदा किया जाएगा, इसलिए यह भुगतान के लिए बेहतर विकल्प प्रस्तुत करेंगे।
- बैंकों को जोड़ने वाले गेटवे के रूप में भुगतान बैंक लगभग बिना किसी लागत के सीधे ही बैंक खातों में धन का अंतरण कर सकेंगे।
- भुगतान बैंक यात्रियों को फॉरेक्स कार्ड जारी करा सकेंगे, जिनका उपयोग भारत भर में डेबिट या एटीएम कार्ड के तौर पर किया जा सकेगा।



- भुगतान बैंक अपने ग्राहकों को विदेशी मुद्रा संबंधी सेवाएं बैंकों की तुलना में कम लागत पर उपलब्ध कर सकेंगे।

- भुगतान बैंक "एप्पल पे" जैसे तीसरे पक्षों को कार्ड स्वीकृति मेकेनिज्म उपलब्ध करा सकते हैं।

भुगतान बैंक—गठन के लिए विनियामक शर्तें :

भारतीय रिजर्व बैंक ने भुगतान बैंकों के गठन आदि के लिए विनियामक शर्तें और मानदंड तय किए हैं, इनमें से कुछ महत्वपूर्ण दिशानिर्देश निम्नानुसार हैं :

भुगतान बैंक स्थापित करने के लिए पात्रता :

निम्नलिखित में से कोई भी भुगतान बैंक स्थापित कर सकता है।

- प्रीपेड भुगतान लिखित जारी करने वाली विद्यमान बैंक/संस्थाएँ/व्यक्ति/व्यावसायिक लोक।
- गैर— बैंकिंग वित्तीय संस्थाएँ।
- कॉरपोरेट बिजनेस करेस्पॉण्डेंट।
- मोबाईल टेलिफोन कंपनियाँ।
- सुपर मार्केट श्रृंखलाएँ।
- निवासियों के स्वामित्व और नियंत्रण वाली रियल सेक्टर सहकारी संस्थाएँ।
- सरकारी निकाय।

भुगतान बैंक की स्थापना के लिए प्रवर्तक/प्रवर्तकों का समुह किसी विद्यमान अनुसूचित वाणिज्य बैंक के साथ संसयुक्त उपक्रम रख सकता है। लेकिन, भुगतान बैंक में किसी अनुसूचित वाणिज्य बैंक की शेयरधारिता बैंककारी विनियम अधिनियम 1989 के धारा 19 के अंतर्गत सीमा से अधिक नहीं हो सकती।

भुगतान बैंक के प्रवर्तन के लिए पात्रता हेतु प्रवर्तक/प्रवर्तक समुह को सुदृढ़ व्यवसाय चलाने का पिछला अच्छा अनुभव अथवा कम से कम पाँच वर्ष तक व्यवसाय चलाने का अनुभव होना अनिवार्य है।

**पूंजी संबंधी अपेक्षाएँ :**

- भुगतान बैंक के लिए न्यूनतम चुकता शेयर पूंजी 100 करोड़ रुपये होगी।
- भुगतान बैंकों का कारोबार शुरू होने के प्रथम पाँच वर्ष में प्रवर्तकों को चुकता शेयर पूंजी में कम से कम 40 प्रतिशत का प्रारंभिक अंशदान करना होगा।
- भुगतान बैंकों की बाह्य देयताएँ उनकी पूंजी और प्रारक्षित निधियों के 33.33 गुने से अधिक नहीं होनी चाहिए।
- भुगतान बैंकों की विदेशी शेयर धारिता निजी क्षेत्र के बैंकों के लिए प्रत्यक्ष विदेशी निवेश संबंधी नीति के अनुसार होगी।

इस प्रकार विविध पत्रपत्रिकाओं में डिजिटल पेमेंट पर सामाग्री जमा की और यह आलेख बनाने का प्रयास किया है।

**संदर्भ ग्रंथ—**

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## डिजिटल भूगतान के फायदे और नुकसान

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### प्रस्तावना -

नोटबंदी के बाद सरकार का डिजिटल पेमेंट पर जोर है केशलेस इंडिया बनाना I इसके लिए मोबाईल का इस्तेमाल बढ़ेगा I आपका मोबाईल आपका बटूआ बन सकता है I केशलेस इंडिया के लिए भारत तैयार है या नहीं यह तो वक्त ही बताएगा I विकसित देशों की तुलना में साक्षरता का प्रमाण कम है I हमारे देश का तंत्रज्ञान विकसित नहीं है, फिर भी दुनिया के साथ हमें रहना है I

सरकार जिस डिजिटल करेंसी की बात कर रहे हैं वो क्या है, डिजिटल याने आप मोबाईल या कंप्यूटर में ही बैंकिंग से लेकर भूगतान तक की सुविधा यानी आप अपने मोबाईल के जरिए ही सब्जी , दुध से लेकर रोजमर्रा की हर जरूरत का सामान खरीद सकते हैं I अभी डिजिटल भूगतान क्रेडिट कार्ड, डेबीट कार्ड, मोबाईल बैंकिंग, मोबाईल वॉलेट के जरिए किया जाता है I नोटबंदी के बाद मोबाईल वॉलेट कंपनी पेटियम इस समय सबसे ज्यादा चर्चा में थी I पेटियम से रोज 120 करोड़ रुपये का लेन-देन हो रहा था I पेटियम युजर्स की संख्या 15 करोड़ से ऊपर पहुंच चुकी है I चाय , गोलगप्पे जैसे 10 लाख छोटे -बड़े दुकानदार की पेटियम से खुशी -खुशी पेमेंट ले रहे हैं I

पे वलर्ड नाम की कंपनी के 10 करोड़ युजर्स हैं I एक लाख जगहों पर पे वलर्ड से ट्रांजेक्शन होता है I 630 शहरों के साथ-साथ 80 हजार गावों में भी पे वलर्ड की पहुंच है I नोटबंदी के पास कंपनी का बिजनेस 25 फिसदी बढ़ा है I पीएम मोदी का सपना देश को डिजिटल इंडिया बनाने का है I लेकिन ये इतना आसान भी नहीं है I देश में 65 फिसदी मोबाईल युजर्स के पास स्मार्ट फोन नहीं है I 93 फिसदी ग्रामीण भारत ने कोई डिजिटल ट्रांजेक्शन किया नहीं है I

मैनेजमेंट कंसल्टिंग फर्म की रिपोर्ट के मुताबिक 2020 तक गावों में मोबाईल युजर्स की संख्या 30 करोड़ से ज्यादा होगी I इसलिए तो अनुमान लगाया जा रहा है कि 2022 तक यानी अगले तीन-चार सालों में मोबाईल वॉलेट से ट्रांजेक्शन 55 लाख करोड़ तक हो सकता है , जो अभी 20 हजार करोड़ के ऊपर है I अनुमान भविष्य का सच लगता है क्योंकि 2014-15 में मोबाईल वॉलेट युजर्स की जो संख्या 25 करोड़ थी वो अब 60 करोड़ से ज्यादा हो चुकी है I

### संशोधन के उद्देश :-

- 1) डिजिटल भूगतान के विभिन्न तरीकों का अध्ययन करना
- 2) डिजिटल भूगतान के फायदों का शोध करना
- 3) डिजिटल भूगतान के नुकसान का अध्ययन करना

### संशोधन की पध्दती :-

प्रस्तुत डिजिटल भूगतान के फायदे और नुकसान इस संशोधन के लिए प्राय दुय्यम स्रोतों का चयन किया है I संशोधन संबंधित ग्रंथों पुस्तके, नियतकालिके, मासिके, साप्ताहिके, इंटरनेट सामग्री का प्रयोग किया है I

### डिजिटल भूगतान के विभिन्न तरीकें :-

डिजिटल भूगतान अब इतना लोकप्रिय हो गया है, फिर भी इनका इस्तेमाल सुरक्षित तरीके से करना भी जरूरी है I आप डेटा ब्रीच ये दो शब्द अक्सर सुनते होंगे , और आपको यह जरूर पता होना चाहिए कि अपने डिजिटल पैसे को सुरक्षित ढंग से कैसे इस्तेमाल करना चाहिए I इसके अलावा बाजार में डिजिटल पेमेंट के अब इतने सारे तरीके उपलब्ध हो जाने के कारण उनमें से किसी एक को चुनना थोड़ा भ्रामक अध्ययन हम आगे करेंगे I

### 1) UPI -

UPI या युनिफाईड पेमेंट इंटरफेस सीधे बैंक अकाउंट में पैसे भेजने और प्राप्त करने में आपकी मदद करता है I यह सिर्फ अपने UPI ID या अकाउंट नंबर का इस्तेमाल करके पैसे ट्रांसफर करने में आपकी मदद करता है I बाजार में कई लोकप्रिय UPI टेप्स उपलब्ध हैं जैसे BHIM, TEZ, SBI, UPI, HDFC UPI, Imobile ऐप आदि I

### 2) AEPS -

आधार इनेबल्ड पेमेंट सर्विस (AEPS) पेमेंट करने का एक डिजिटल मोड है जो आपके लेनदारों को पेमेंट करने के लिए आपके आधार नंबर का इस्तेमाल करता है I पेमेंट करने के अन्य डिजिटल मोड के विपरीत , AEPS आपके द्वारा या आपकी तरफ से किए गए लेनदेन के लिए आपसे चार्ज लेता है I सुविधा की बात यह है की यह पासवर्ड के रूप में सिर्फ आपके फिंगरप्रिंट का इस्तेमाल करना है और इसके

लिए किसी सिग्नेचर , अकाउंट नंबर या किसी अल्फाबेटिक या न्यूमेरिक पासवर्ड की जरूरत नहीं पड़ती है I आप इसके माध्यम से इंटरबैंक ट्रांसफर भी कर सकते है I

### 3) USSD -

अनस्ट्रक्चर्ड सप्लिमेंटरी सर्विस डेटा (USSD) बाकी सबे थोडा अलग है क्योंकि इसका इस्तेमाल करने के लिए आपको इंटरनेट की जरूरत नहीं पड़ती है I आप बेलेंस चेक कर सकते है , पैसे भेज सकते है या MPIN चेंज कर सकते है और वह भी बस एक फिचर फोन की मदद से I इसे 99 बैंकींग भी कहा जाता है I इस प्लैटफॉर्म के माध्यम से एक दिन में एक ग्राहक द्वारा अधिक से अधिक 5000 रुपये का लेनदेन किया जा सकता है और प्रत्येक लेन-देन पर अधिक से अधिक 2-5 रुपये चार्ज लिया सकता है I

### 4) BankBazar.com -

भारत में स्थित एक प्रमुख ऑनलाईन मार्केट प्लेस है जो क्रेडिट कार्ड, पर्सनल लोन, होमलोन , कारलोन, और इश्योरेंस की तुलना और आवेदन करने में उपभोक्ताओं की मदद करना है I

### 5) ई-वॉलेट -

ई-वॉलेट ने उस समय लोगों को काफी राहत पहुंचाई थी, जब नोटबंदी के कारण नोटों की किल्लत हो गई थी, और ATM भी खाली हो गए थे I तब से लोगों ने इसे अपनी रोजमर्रा की जिंदगी के एक हिस्से के रूप में अपनाना शुरू कर दिया है I ई - वॉलेट का इस्तेमाल युटिलिटी बिल भरने , लोकल स्टोअर्स से खरीदी करने, किसी को पैसे भेजने और प्राप्त करने आदि के लिए किया जा सकता है , याद रखें की RBI के दिशा निर्देशानुसार अब ई-वॉलेट का इस्तेमाल करने के लिए KYC अनिवार्य है I

ई-वॉलेट का मतलब है इलेक्ट्रॉनिक वॉलेट है I जो Physical नहीं है बस इसका एक डिजिटल अस्तित्व है जिसे केवल ऑनलाईन ही देखा जा सकता है, यह एक प्रकार का इलेक्ट्रॉनिक कार्ड होता है जिसका प्रयोग केवल कॉम्प्यूटर या स्मार्टफोन के जरिए ही ऑनलाईन लेन-देन के लिए किया जाता है I ई-वॉलेट का मुख्य उद्देश्य है कागज रहित धनराशी स्थानांतरण को अधिक आसान बनाना I

ई-वॉलेट मुख्य रूप से तीन प्रकार के होते है I क्लोज्ड ई-वॉलेट, सेमी क्लोज्ड, ई-वॉलेट, बैंकिंग ई-वॉलेट I

### डिजिटल पेमेंट के फायदे -

नोटबंदी के बाद से कैशलेस पेमेंट और डिजिटल पेमेंट को लेकर तमाम बातें हो रही है I सरकार भी डिजिटल पेमेंट को बढ़ावा देने के लिए हर प्रसारण के जरिए लोगों का जागरूक कर रही है I टी.व्ही., अखबार, रेडिओ और डिजिटल माध्यमों के जरिए सरकार लोगो को डिजिटल पेमेंट और कॅशलेस पेमेंट के फायदे गिना रही है I

### 1) पेट्रोल -डिजल पर छूट -

कॅशलेस पेमेंट का सबसे बड़ा फायदा सरकार आपको पेट्रोल और डिजल की छूट पर दे रही है I हाल ही में सरकारने घोषणा की है की, पेट्रोल और डिजल उत्पादन पर डिजिटल पेमेंट करने वालो को 0.75 % की छूट दी जाएगी I वही कुछ राज्य जैसे असम और गोवा में वैट रेट घटा देने के बाद ये छूट और भी ज्यादा हो गई है I

### 2) रेलवे की मंथली पास पर मिलेगी छूट -

सब अर्बन रेलवे नेटवर्क के लिए डिजिटल पेमेंट के लिए मंथली , सीजनल टिकट होनेवालों को 0.5 प्रतिशत की छूट मिलेगी I

### 3) ऑनलाईन टिकट पर 10 लाख का बीमा कवर -

देश में जितने लोग रेलवे में सफर करते है उनमें 58% लोग ऑनलाईन टिकट खरीदते हैं I ऑनलाईन टिकट खरीदने वाले को 10 लाख रुपये का इश्योरेंस कवर मिलेगा I

### 4) डिजिटल पेमेंट पर 5 फिसदी की छूट -

रेलवे क्रेटिंग , एकोमोडेशन , रिटार्डिंग रुम आदि के लिए डिजिटल पेमेंट करने वाले ग्राहकों को 5 फिसदी की छूट मिलेगी I

### 5) गावों में लगेगी POS मशीने :-

ऐसे गांव जिनकी आबादी 10 हजार से ज्यादा है वहां दो POS मशीन की सुविधा दी जाएगी I सरकारने ऐसे 1 लाख गाव चिन्हीत किए है I वित्तमंत्री ने कहा की ऐसों POS मशीनों से कृषि और दुग्ध उत्पादक किसानों को इसका लाभ मिलेगा I

### 6) किसानों को मिलेंगे रुपे क्रेडिट कार्ड -

को-ऑपरेटिव बैंक में 4 करोड 32 लाख खाताधारक किसानों के पास किसान क्रेडिट कार्ड है अब उन्हें रुपे क्रेडिट कार्ड दिया जाएगा I

### 7) ऑनलाईन प्रिमियम भरने पर मिलेगी छूट -

पब्लिक सेक्टर इश्योरेंस कंपनी जिसमें सामान्य बीमा है और लाईफ इश्योरेंस है, ऐसे लोग जो इन इश्योरेंस का प्रिमियम ऑनलाईन भरते हैं उन्हें सामान्य बीमा में 10 फिसदी की छूट मिलेगी I



### 8) नहीं लगेगा ट्रांजेक्शन शुल्क -

2000 रु तक के जिसमें भी डिजिटल पेमेंट के ट्रांजेक्शन है उनपर सर्विस टैक्स नहीं लगेगा I

### 9) टोल प्लाजा पर मिलेगी छूट -

नेशनल हाइवे पर जितने टोल प्लाजा हैं फास्ट टैग कार्ड या IFRD कार्ड पर डिजिटल पेमेंट करने पर 10 फिसदी की छूट मिलेगी I

### 10) सुविधा -

वित्तिय लेनदेन में आसानी डिजिटल पेमेंट सिस्टम के लिए सबसे अच्छी बात है I आपकी कॅश ढोने, प्लाॅस्टिक कार्ड, बैंक या ए.टी.एम. की लाईनमें लगने की जरूरत नहीं है I खासतौर पर जब आप सफर में हो तो खर्च करने का यह सेफ और इजी विकल्प है I अगर आप इमरजेंसी में हो जैसे हॉस्पिटल तो यह काफी मददगार साबित हो सकता है I डिजिटल पेमेंट में आपको कहीं भी और कभी भी पेमेंट करने की सुविधा है I कई बार तो आपको पेमेंट करने के लिए वहां होना भी जरूरी नहीं है और ऑफिस आवर में पेमेंट का इंझट नहीं हैं I

### 11) खर्च को ट्रैक करना -

अगर सभी लेन - देन का हिसाब रखा जा रहा है तो आपके लिए खर्च पर काबू पाना आसान हो जाता है I यह आपको इनकम टैक्स रिटर्न में भी मदद करेगा I क्योंकि आपके सभी खर्च आपके सामने रहेंगे और सबका हिसाब रहेगा I

### 12) बजट का अनुशासन -

आप ई-वालेट या कार्ड से ट्रांजेक्शन करते है तो यह स्टेटमेंट के रूप में आपके पास रहेगा I इससे आप अपने खर्च पर लगाम लगा सकते है I बहुत से हप और हल है जो आपके खर्च करने के पैटर्न का विश्लेषण करते है और कुछ सालों में बढिया हनालिसिस देकर आपकी मदत करते है I डिजिटल पेमेंट की वजह से बजटरी लिक्स और अनकाउंटेड स्पेंड जैसी चीजे खत्म हो जाएगी और महिने के आखिर में आपके बजट को चपत नहीं लगेगा I

### 13) कम जोखिम -

क्रेडिट कार्ड या मोबाईल वालेट के गुम होने पर इसे दूरी से भी ब्लॉक करना मुश्किल नहीं है I नकदी मामलें में यह नामुकिन है I भविष्य में अगर कार्ड्स बायोमेट्रिक सिस्टम पर चलने लगे तो इससे फ्रॉड करना असंभव हो जाएगा I

### 14) छोटी बचत -

डिजिटल पेमेंट से आपके उधार खर्चों पर लगाम लगेगा उससे आपकी छोटी-छोटी बचत से आपका बजट सुधरेगा I

### डिजिटल पेमेंट के नुकसान -

डिजिटल ट्रांजेक्शन में सबसे बड़ा जोखिम आईडेंटिटी थेफ्ट का है I हम डिजिटल पेमेंट के अभ्यस्त नहीं है, जबकी बहुत पढे लिखे और समझदार लोग भी फिशिंग ट्रेप में फस जाते है I ऑनलाईन फ्रॉड के बढते खतरे के दौर में अधिकतर लोगों के डिजिटल ट्रांजेक्शन प्लेटफार्म पर आने से हॅकिंग के खतरे बढेंगे I

देश में शिकायत पर सुनवाई की दशा बहुत खराब है I थका देने वाली प्रक्रिया और कमजोर शिकायत सुनवाई व्यवस्था की वजह से लोगों के पास ऑनलाईन फ्रॉड से निपटने का कोई विकल्प नहीं है I इसके अलावा इस तरह के फ्रॉड से निपटने के लिए कोई कड़ा कानून भी नहीं है I इस साल अक्टूबर में ही इंडियन बैंकिंग सिस्टम को डेटा चोरी का शिकार होना पड़ा था I

मोबाईल गुम होने के कारण बहुत सारी असुविधा हो सकती है I सभी ट्रांजेक्शन मोबाईल से करने के कारण मोबाइल पर अवलंबित रहना पडेगा I मोबाईल गुमने का डर हमेशा रहता है , कभी -कभी महत्वपूर्ण पेमेंट करते समय मोबाईल डिस्चार्ज होता है तो समस्या उत्पन्न होती है I

डिजिटल पेमेंट की तरफ लोगों को मोडने में सबसे बड़ी समस्या मानसिक है I आप तीन पीढियों को एक साथ डिजिटल बनाने जा रहे हो I देश में साल 2016 तक 34.8 फिसदी लोगों के पास ही इंटरनेट था I साल 2015 में सिर्फ 26.3 फिसदी के पास स्मार्टफोन था I डिजिटल होंगे के पीछे प्रॅक्टिकल दिक्कतें भी है I

जिन लोगों के तकनीक की समझ नहीं है उनके लिए यह चुनौती की तरह होगा I ट्रांजेक्शन करने में उन्हें दुसरो लोगों की तुलना में अधिक समय चाहिए I बुजुर्ग लोगों के लिए इसमें दिक्कत ज्यादा है I अगर उनके पास नकदी नहीं है और वे हप डाऊनलोड नहीं कर पा रहे है तो वे असहाय महसूस करेंगे I

कार्ड और मोबाईल वालेट से ट्रांजेक्शन करना सुविधाजनक तो है, लेकिन यह लोगों को अधिक खर्च करने की लत लगता देगा I कैश खर्च करने में लोग हिचकते है बजाय कार्ड से खर्च करने के यह उन लोगों की मुसीबत बढा देगा जो खर्च पर कार्ड की वजह से कंट्रोल नहीं कर पाते I यह तक बड़ा कारण है जब लोगों का खर्च बढ जाएगा और उनका बजट बेकार साबित हो जाएगा I

डिजिटल पेमेंट की तरफ शिफ्ट में एक बड़ी बाधा यह मानी जा रही है की सिस्टम में दोबारा उतनी नकदी आ रही है जितनी पहले थी I अगर ऐसा होता है तो बहुत से लोग नकदी के इस्तेमाल को ही प्राथमिकता देंगे क्योंकि उन्हें अपनी आदत तोडने में मुश्किल आएगी I

संदर्भ -

- 1) गुडरिटर्न्स - 26 डिसेंबर 2016
- 2) राजीव दवे - 14 नोव्हें 2019
- 3) नवभारत टाईम्स - 07 -04- 2018
- 4) डिजिटल पेमेंअ बुक ग्रामीण विकास मंत्रालय
- 5) प्रेस प्रकाशनी RBI- 08 नवंबर 22019
- 6) मनी भास्कर - 04 जून 2019



## डिजिटल व्यवहार के लाभ तथा हानी

डॉ. एस. पी. तेरसे,

एन. ए. डी. टोपीवाला कनिष्ठ महाविद्यालय, मालवण.

### ➤ सारांश :-

डिजिटल पेमेंट एक ऐसी प्रणाली है, जहाँ केश और चेक के सिवा विनिमय प्रक्रिया की जाती है। सरकारने इस सुविधा में लोगों का हिस्सा बढ़ाने के लिए अलग अलग आकर्षित योजनाएँ जारी की। जिससे इस प्रणाली की ओर लोग आकृष्ट होकर भारत की एक नई ऊँचाई प्राप्त करने में सभी अपना योगदान दे। देश के विकास के लिए यह एक बेहतरीन व्यवस्था है, जिससे काल पैसे पर रोक लगेगी। तथा पारदर्शी व्यवहार के लिये यह एक अच्छा पर्याय के रूप में इसका इस्तमाल किया जा सकें। इस व्यवस्था के उपयोग से लोगों को लेन देन में आसानी आह रही है। तथा समय की भी बचत हो रही है।

### ➤ प्रस्तावना :-

डिजिटल इंडिया का ही एक हिस्सा यानी आज देश केशलेस सिस्टीम की तरफ बढ़ रहा है। डिजिटल पेमेंट यह एक ऐसी प्रणाली है जहाँ केश और चेक के सिवा विनिमय प्रक्रिया की जाती है। शुरु-शुरु में लोग यह सोचने लगे कि, क्या ऑनलाईन व्यवहार की प्रक्रिया से उन्हे सुविधा मिलेगी? या उनकी परेशानी और बढ़ा देगी? क्या इससे कुछ फायदे होंगे या अधिकतम चार्ज चुकाना पड़ेगा? सरकारने भी इस सुविधा में लोगों को आकर्षित करने के लिए डिजिटल ट्रांजेक्शन पर कई तरह के फायदे की घोषणा की। इसे डिजिटल प्रणाली के फायदे – नुकसान के बारे में इस निबंध में चर्चा करेंगे।

### ➤ उद्दिष्ट :-

- 1) डिजिटल आर्थिक व्यवहार के होने वाले लाभ का अध्ययन करना।
- 2) डिजिटल पेमेंट पर दी गई डिस्काउंट का अध्ययन करना।
- 3) डिजिटल आर्थिक व्यवहार के नुकसान / जोखिम के बारे में अध्ययन करना।

### ➤ डिजिटल आर्थिक व्यवहार के फायदे / केशलेस होने के लाभ :-

- 1) डिजिटल पेमेंट सिस्टम से वित्तीय लेन-देन में आसानी होती है।
- 2) इस व्यवहार से केश दोने तथा बैंक, एटीएम की लाईन में लगने की जरूरत नहीं है।
- 3) जब हम किसी सफर में होते है तो खर्च करने का यह आसान विकल्प है।
- 4) कम आमदनी वाले लोगों को छोड़कर बाकी सबके लिए यह प्रणाली फायदेमंद है।
- 5) जब हम किसी इमरजेंसी में होने है तब यह प्रणाली काफी मदद्गार साबित हो सकती है।
- 6) इस प्रणाली सी हमें कहीं भी और कभी भी पेमेंट करने की सुविधा है।
- 7) डिजिटल व्यवहार करने पर सर्विस टैक्स भी कम मात्रा में या कभी कभी मुफ्त में ही मिलता है।
- 8) डिजिटल ट्रांजेक्शन के बढ़ावा देने के लिए सरकारने अनेक घोषणाएँ की। जिससे लोगो की बचत बढ़ाने में मदद् हुई।
- 9) सरकार द्वारा जारी छूट स्कीम और इ-वालेट कंपनियों के केशबैंक ऑफर, रिवाइड पॉइंटस् और लॉयल्टी बेनिफिट को देखकर लोगों की बचत बढ़ सकती है।
- 10) डिजिटल आर्थिक व्यवहार करने पर सभी लेन-देन का हिसाब रखा जा सकता है।
- 11) ऐसे व्यवहार से खर्च पर काबू पाना आसान हो जाता है।
- 12) सभी खर्च का हिसाब सामने होने के कारण इनकम टैक्स रिटर्न में इसकी मदद् होगी।
- 13) लोगों की डिजिटल पेमेंट की आदत बनी रहे तो छुट्टे की वजह से होने वाली समस्या खत्म हो जाएगी।
- 14) दुकानदारों के लिए भी उधारी से किए जानेवाले व्यवहार बंद हो जाएँगे।

### ➤ डिजिटल पेमेंट करने पर दी गई डिस्काउंट :-

#### 1) सर्विस टैक्स :-

2000 रुपये से कम के डिजिटल ट्रांजेक्शन पर 15% सर्विस टैक्स की बचत.

#### 2) इंधन :-

क्रेडीट / डेबिट कार्ड्स, इ वालेट या मोबाईल वालेट की मदद् से पेमेंट पर 0.75% की छुट।

#### 3) रेल टिकट्स :-

माह तथा सिजन टिकट पर 0.5% की छुट तथा ऑनलाईन रेल टिकट लेने पर 10 लाख रुपये का फ्री बीमा।

#### 4) हाइवे टोल :-

फास्ट टैग के जरीए नैशनल हाइवे पर पेमेंट करने से 10% डिस्काउंट।

#### 5) इश्योरंस :-

पोर्टल के जरिए साधारण बीमा खरीदने या प्रीमियम के पेमेंट पर 10% डिस्काउंट।



6) ऑनलाईन एलआयसी :-

ऑनलाईन एलआयसी की पॉलिसी ऑनलाईन लेने पर 8% डिस्काउंट।

7) रुपये :-

किसान क्रेडीट कार्ड वाले लोगों को रुपये किसान कार्डस् मिलेंगे।

➤ डिजिटल ट्रांजेक्शन के जोखिम / नुकसान :-

- 1) ऑनलाईन फ्रॉड के बढ़ते खतरे के दौर में हैकिंग के खतरे बढ़ने की संभावना है।
- 2) ऑनलाईन फ्रॉड से निपटने के किस कोई कडा कानून भी नहीं है।
- 3) डिजिटल ट्रांजेक्शन की वजह से मोबाईल का महत्त्व बढ़ जायेगा। तथा मोबाईल गम हुआ तो गहरी समस्या उत्पन्न हो सकती है।
- 4) छोटे गाँवों में ऐसी डिजिटल व्यवस्था न होने के कारण बड़ी दिक्कत होती है।
- 5) 100% लोगों को यह प्रणाली उपयोग में लाना असंभव है।

➤ संदर्भ :-

- 1) अर्थशास्त्र – 3 (भारतीय अर्थव्यवस्था : समकालीन समस्या)  
लेखक – दिपक डी. शेलार, धनंजय टी. पगारे, आनंद अण्णासो कांबळे.
- 2) इंटरनेट, विकीपिडिया.



## व्यापारवाद, व्यापार के साधन, विज्ञापन और डिजिटलायझेशन

प्रा.डॉ. राजकुमार पंडितराव जाधव

हिंदी विभाग

वसंतराव काळे महाविद्यालय, ढोकी

ता. जि. उस्मानाबाद

भूमंडलीकरण के दौर में भारत विश्व के बाजार में मंडी के रूप में उभर रहा है। मनुष्य अपनी जिविका पूर्ति के लिए अनेक प्रकार के व्यापार करता है। प्राचीनकाल से लेकर आज तक व्यापार में हमेशा बदलाव होता नजर आ रहा है। आज जिस प्रकार यातायात के साधनों की बढ़ोत्तरी हो रही है इस प्रकार की बढ़ोत्तरी प्राचीनकाल में नहीं थी। व्यापार शब्द का मूल अर्थ क्रय - विक्रय है। यह क्रय - विक्रय और लेन - देन माल तक ही सीमित नहीं है। क्रय - विक्रय सेवाओं और धन का भी हो सकता है। इस क्रय - विक्रय आदान - प्रदान अथवा विनियम का मुख्य मन्तव्य लाभ की आशा है। लाभ कमाने की आकांक्षा व्यापारिक उन्नति की महान प्रेरक शक्ति है। क्रय - विक्रय की प्रक्रिया कानूनी और निरंतर हो, तो ही व्यापार कहलाता है। कानून के विरुद्ध, समाजहित और सामाजिक नैतिकताओं को ताक पर रखकर अमर्याद लाभ के लिए किया जानेवाला लेन - देन ठगी कहलायेगा, व्यापार नहीं। गैर कानूनी और आदान - प्रदान के व्यवहार को व्यापार की संज्ञा नहीं दी जा सकती।

व्यापार मुख्यतः दो प्रकार का होता है - १. अंतर्देशीय और २. अंतर्राष्ट्रीय। अंतर्देशीय व्यापार अपने ही देश के अंदर होता है। यह व्यापार दो रूपों में होता है - १. थोक व्यापार और २. फुटकर व्यापार थोक व्यापार में वस्तु अधिक मात्रा में खरीदी जाती है और थोड़ी - थोड़ी मात्रा में फुटकर व्यापारियों को बेची जाती है। फुटकर व्यापार में वस्तु थोड़ी - थोड़ी मात्रा में खरीद कर उपभोक्ताओं को छोटी - छोटी मात्रा में बेची जाती है।

अंतर्राष्ट्रीय व्यापार देश की सीमाओं से परे दो देशों के बीच होता है। यह भी दो रूपों से होता है - १. आयात व्यापार और २. निर्यात व्यापार। एक देश जब दूसरे देश से वस्तुएँ खरीदता है तब आयात व्यापार होता है और जब एक देश दूसरे देश को वस्तुएँ बेचता है तब उसे निर्यात व्यापार कहलाया जाता है। दो देशों की सरकारों के बीच हुए व्यापारिक अनुबंधों के अनुसार ही होता है।

### व्यापार के साधन :-

वस्तु या माल को ग्राहकों तक सुचारू और निरंतर पहुँचाने के लिए अनेक साधनों की सहायता लेनी पड़ती है। व्यापार के अनेक साधन हैं।

### १. परिवहन साधन :-

उत्पादित स्थान से ग्राहकों तक वस्तु या माल पहुँचाने के लिए सड़क, लोहमार्ग, जलमार्ग तथा हवाई मार्ग के विभिन्न परिवहन साधनों की सहायता लेनी पड़ती है। अंतर्देशीय व्यापार में सड़क मार्ग तथा लोहमार्ग के परिवहन साधनों का अधिक मात्रा में प्रयोग होता है। अंतर्राष्ट्रीय व्यापार में जलमार्ग तथा हवाई मार्ग के साधनों का उपयोग होता है। व्यापार का विकास करने के लिए परिवहन साधनों जरूरत है।

### २. बैंक तथा वित्तीय संस्थाएँ :-

व्यापार के विकास में बैंकों ने महत्त्वपूर्ण योगदान दिया है। व्यापार में लेन - देन मूद्रा के द्वारा ही होता है। देश - विदेश में क्रय - विक्रय बैंकों के द्वारा ही होता है। व्यापार के लिए ग्राहकों को बैंक ऋण के रूप में पूँजी देती है। इस प्रकार से बैंक व्यापारियों के लिए आर्थिक साधन भी जुटाते हैं।

### ३. बीमा साधन :-

एक स्थान से दूसरे स्थान वस्तु भेजी जाती है उस समय वस्तुओं के नष्ट होने या अन्य प्रकार की हानि पहुँचाने का खतरा हमेशा बना रहता है। एक स्थान पर रखा हुआ माल भी सुरक्षित नहीं रह सकता। ऐसी समस्याओं से बचने का सरलतम रास्ता है - बीमा। जिसमें व्यापारी बीमा कंपनी को थोड़ा - सा प्रीमियम देता है और सारे खतरों से बच जाता है। प्रीमियम निरंतर शुरू रहने के पश्चात बीमा कंपनी हानि की पूर्ति का वचन व्यापारी को देती है। जिसके कारण व्यापारी अपने आपको सुरक्षित महसूस करता है।

### ४. सरकारी और अर्ध सरकारी तंत्र - साधन :-

सरकार के सहयोग से ही व्यापार में बढ़ोत्तरी होती है। उत्पादित माल का कोटा, परमिट, देश - विदेश में व्यापार करने का लाइसेंस, कस्टम तथा अबकारी विभाग के द्वारा माल की जाँच पडताल आयकर विक्रीकर आदि अनेक सरकारी तंत्र हैं। जिनसे व्यवसाय और व्यवसायी जुड़े होते हैं। यह तंत्र व्यापार को सुचारू रूप से चलाने की सुविधा देता है। व्यापारी भी इन तंत्रों द्वारा नियंत्रित रह कर

कोई अवैधानिक कदम उठाने की जोखिम नहीं उठाता व्यापार अच्छा चलाने के लिए विधि विषयक कार्य भी करने पड़ते हैं। इसलिए विधि और कानून क्षेत्र से व्यापार का संबंध है।

#### ५. जनसंचार माध्यम और विज्ञापन :-

संपूर्ण व्यापार की नींव है उपभोक्ता की क्रय - इच्छा। ग्राहक न हो तो व्यापार होना संभव नहीं है। वस्तु की आवश्यकता आवश्यक वस्तु की जानकारी ग्राहकों को खरीदने की इच्छा निर्माण करने के लिए व्यापारियों को अनेक साधनों का प्रयोग करना पड़ता है। उन सभी में प्रमुख है विज्ञापन। वस्तु की गुणवत्ता किमत, वितरण - प्रणाली, विक्री का ढंग, व्यक्तिगत बिक्री, पैकेजिंग आदि बातों का व्यापार में काफी महत्त्व है। आज के सूचना, संचार तथा मीडिया के युग में विज्ञापन के बिना व्यापार उद्योग असंभव है। विज्ञापन एक व्यापारिक कला है। विज्ञापन का कार्य विज्ञापक वस्तुओं को बेचना तथा जनता के मस्तिष्क को व्यक्तिगत एवं सामूहिक रूप से विज्ञापक के हित में प्रभावित करना होता है। वस्तु की जानकारी देना, नवीन वस्तु का आधार तैयार करना माँग उत्पन्न करना, माँग को स्थिर रखना, माँग को अधिकाधिक बढ़ाना और व्यापारिक प्रतियोगिता में अपना स्थान निर्धारित करना आदि व्यापारिक कार्य विज्ञापन से संभव हो जाते हैं। मुद्रित तथा दृक - श्राव्य माध्यम से विज्ञापन अपने कार्य करते हैं। पहले समाचारपत्र घर - घर में जाकर व्यापार व्यापारिक कार्य करते थे बाद में रेडियो उनका साथ देन लगे। आज दूरदर्शन के अनेक चैनलों द्वारा यह कार्य हो रहा है। व्यापार में जनसंचार माध्यम तथा विज्ञापन का महत्वपूर्ण स्थान है।

जैसे - जैसे समाज में सभ्यता का विकास होता गया व्यापार तथा उद्योग धंधों का विशेषीकरण होता गया। आरंभ में मानव की आवश्यकताएँ कम थीं। सभ्यता के विकास के साथ - साथ मनुष्य की आवश्यकताएँ बढ़ने लगी उसके अनुरूप वस्तु की माँग और उत्पादित वस्तुओं में बढ़ोत्तरी हुई। उत्पादित वस्तुओं की खपत के लिए वस्तु विनिमय की आवश्यकता प्रतीत हुई। अन्न विनिमय, श्रम विनिमय, धातु तथा मुद्रा की उपलब्धि से लेकर बाजार आज नोट तक सफर करता गाँव, शहर, राज्य की सीमा लाँघकर देश की सीमाओं को भी पार कर गया। वस्तुओं का क्रय - विक्रय बढ़ने के कारण देश - विदेशों में संपर्क बढ़ा। व्यापार से ही पारस्परिकता बढ़ी लेकिन मनुष्य के संकुचित स्वभाव के कारण यही व्यापार आक्रमणों का कारण बना।

इस बाजारवादी व्यवस्था में सर्वश्रेष्ठ माध्यम विज्ञापन ही है। हमारे देश में विविध उत्पादनों को लोकप्रिय बनाने में विज्ञापनों का योगदान महत्वपूर्ण है। आज प्रत्येक मानव विज्ञापन से जुड़ा है। हमारी सामाजिक, आर्थिक, औद्योगिक आदि सभी प्रकार की आवश्यकताओं की पूर्ति करने का सामर्थ्य ही विज्ञापन में है। विज्ञापन एक व्यावसायिक कला है। बाजारवाद के इस दौर में ग्राहकों को आकर्षित करने का माध्यम विज्ञापन ही है। विविध जनसंचार माध्यमों के द्वारा ये विज्ञापन हमारे जीवन को प्रभावित करते हैं। विज्ञापन की महत्ता समझकर ही बहुराष्ट्रीय कंपनियों ने अपने विज्ञापन की भाषा हिंदी बनवाई है। 'बुलंद भारत की बुलंद तस्वीर हमारा बजाज, दो बूँद जिन्दगी के, ये फेविकॉल का मजबूत जोड़ है टूटेगा नहीं, बढ़ती दोस्ती के नाम कुछ मीठा हो जाए' आदि घोष वाक्य के कारण वस्तु की खपत बढ़ती है। रेडियो, टेलिविजन, फिल्म, आदि के माध्यम से उत्पादनों की बिक्री में वृद्धि करायी जाती है। विभिन्न राज्यों की सरकारें भी विज्ञापन के माध्यम से अपनी योजनाएँ जनता तक पहुँचाती हैं। साक्षरता मिशन, प्रौढ शिक्षा, परिवार नियोजन, बचत योजनाएँ, स्त्री जन्म का स्वागत, स्वच्छता अभियान आदि समाज उपयोगी योजनाएँ विज्ञापन के माध्यम से जनता तक पहुँचायी जाती हैं।

व्यापार में आज वित्तिय साक्षरता का प्रभाव भारी मात्रा में दिखाई देता है। भारत सरकार डिजिटल इंडिया, मेक इन इंडिया आदि योजनाओं के तहत समाज उपयोगी काम कर रही है। ई - लर्निंग अँड ई - गव्हर्नन्स के जरिये भी अभूतपूर्व काम चल रहा है। व्यवहार में बैंकों के माध्यम से डिजिटलायझेशन भी बढ़ गया है। नेट बैंकिंग, ऑनलाईन मनी ट्रांसफर के माध्यम से व्यापार में बढ़ोत्तरी हो रही है।

#### संदर्भ ग्रंथ सूची :-

1. प्रयोजनमूलक हिन्दी चिंतन - अनुचिंतन - सं. डॉ. सुधाकर शेंडगे
2. मीडिया और हिंदी - डॉ. पंडित बन्ने
3. हिन्दी के प्रयोजनमूलक भाषा - रूप - डॉ. माधव सोनटक्के
4. प्रयोजनमूलक हिन्दी के अधुनातम आयाम - डॉ. अंबादास देशमुख



## Digital Payment System Advantages & Difficulties

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### Introduction:

A payment system is any system used to settle financial transactions through the transfer of monetary value. This includes the institutions, instruments, people, rules, procedures, standards, and technologies that make it exchange possible. A common type of payment system is called an operational network that links bank accounts and provides for monetary exchange using bank deposits. Some payment systems also include credit mechanisms, which are essentially a different aspect of payment.

Payment systems are used in lieu of tendering cash in domestic and international transactions. This consists of a major service provided by banks and other financial institutions. Traditional payment systems include negotiable instruments such as drafts (e.g., cheques) and documentary credits such as letters of credit. With the advent of computers and electronic communications, many alternative electronic payment systems have emerged. The term electronic payment refers to a payment made from one bank account to another using electronic methods and forgoing the direct intervention of bank employees. Narrowly defined electronic payment refers to e-commerce a payment for buying and selling goods or services offered through the Internet, or broadly to any type of electronic funds transfer.

Modern payment systems use cash-substitutes as compared to traditional payment systems. This includes debit cards, credit cards, electronic funds transfers, direct credits, direct debits, internet banking and e-commerce payment systems.

Payment systems may be physical or electronic and each has its own procedures and protocols. Standardization has allowed some of these systems and networks to grow to a global scale, but there are still many country-specific and product-specific systems. Examples of payment systems that have become globally available are credit card and automated teller machine networks. Other specific forms of payment systems are also used to settle financial transactions for products in the equity markets, bond markets, currency markets, futures markets, derivatives markets, options markets. Additionally, forms exist to transfer funds between financial institutions. Domestically this is accomplished by using Automated clearing house and real-time gross settlement (RTGS) systems. Internationally this is accomplished using the SWIFT network.

Cashless payment is a way of payment which is made through digital modes. In digital payments, payer and payee both use digital modes to send and receive money. It is also called electronic payment.

**Key word:** Digital Payment, Advantages ,Difficulties

### Digital Payments and their Benefits

Digital Payments are, simply enough, payments made through digital channels. They convert a traditional cash-operation to a cashless one. All transactions are completed online.

### Some of the advantages of digital payments are:

- Convenience & accessibility: Customers no longer need to carry cash or visit an ATM. In fact, they don't even need to be physically present to pay! Customers can pay anytime from any part of the world.
- Lower risk: Digital transactions are much more secure than traditional transactions because they are processed by secure gateways which are hard to tamper with.
- Easily traceable: Details of payments are stored in a merchant-specific databases. Both merchants and customers have easy access to payment information. This avoids ambiguity and confusion while tracking payments.

### **The Disadvantages of Digital Payment System**

If digital payment doesn't interfere with an electronic transaction, the nature of online businesses has its own disadvantages. The open and democratic nature of the internet expose consumers to get-rich-quick offerings from unscrupulous vendors. Anyone with even modest knowledge of website creation can build an online store with no need to ensure the availability of inventory or a way to provide services. Too-good-to-be-true offers abound online, and many consumers submit to the temptations of easy deals, only to find later that the store from which they ordered disappeared between payment and delivery. While many payment providers offer some level of fraud protection, that too isn't universal.

There's also the risk of identity theft, since a buyer must often disclose personal information to complete a transaction. The headlines frequently feature news of legitimate businesses experiencing cyber attacks that expose sensitive customer information. There's often no way for a buyer to be sure that transaction privacy and data encryption systems offered by retailers are as robust as billed.

Call it virtual cash or cryptocurrency, digital forms of money aren't immune to drawbacks either. If you didn't know from one day to the next how much a dollar could buy, confidence in conventional money would soon vanish. Yet this is what users of digital currencies such as Bitcoin, Blockchain and Ethereum face regularly. Price volatility is a necessary side effect of the development of these currency systems. Even though the concepts of cryptocurrency are becoming accepted and increasingly adopted, digital money makes up only a tiny fraction of the global economy.

### **Conclusion:**

Cashless payments are more convenient than cash payments. You do not need to carry a lot of cash with you all the time. You can make digital payments in seconds.

The change is not a concern with digital payments when you can pay the exact amount. You will also have all your payments recorded automatically. We all love simplicity and ease. Hence, we can say that Digital payments is the future of fund transfer and money transactions.

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## Overview Of Cashless Indian Economy

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### Abstract:

*The purpose of this study is to understand the acceptance of the transition to a low cash economy in India and how well it will be accepted. India is currently a cash-based society, and it should not only involve the government's efforts to consciously change the economy of the low-cash, but also the efforts of individuals and entrepreneurs. Therefore, the citizens of the country are aware of the purpose of this research on a personal level, from cash flow to change based on digital economy. By conducting surveys, the sample population is selected by non-probability convenience samples. Both primary and secondary data have been collected for research. Primary data were collected through questionnaires and secondary data accounting. The data collected through the questionnaire has been classified as belonging to a fixed cause and the data is tabulated and analyzed to understand people's perceptions of cash, low cash and cashless economies. Studies have found that there is a trend towards using online applications and payment methods for any transaction in India. The desire to accept a transition to a low cash economy is also followed.*

**Key words:** Cash less Economy, Digital Payment System.

### Introduction:

Indian Economy The Indian economy is the world's seventh largest GDP and is the third largest by the purchasing power group. Known as the country of the new industry and one of the major G4 economies, the average growth rate is approximately %% in the last two decades. Maharashtra is the richest state in India and the annual national GDP is India305 billion US dollars and 4.4% of the country's GDP. It is followed by Tamil Nadu (\$ 1 billion) and Uttar Pradesh (\$ 150 billion). In the last quarter of 2014, the Indian economy surpassed the economy of the People's Republic and became the world's fastest growing economy. India's young population, low dependency ratio, healthy savings and investment rates and increasing integration into the global economy provide India with the opportunity for long-term growth. According to some economists, the Indian economy is likely to become the third largest economy in the next decade and one of the most complete economies in two centuries.

### Literature Review

"Cashless" Probably the New Normal? G Sampath, The Hindu, December 14TH2016, Article about cashless economy is a bit different. By first dealing with the consequences of such an economy, the author incorporates the concept of a cashless economy. This article covers the concept of cashless society for the beneficiaries and who will face difficulties if implemented. According to the authors, the immediate result of Cashless India is the sharp increase in indirect tax compliance. Merchants, small businesses, shopkeepers and consumers use cash to trade, so they avoid paying, service tax, sales tax, VAT and any indirect taxes and fees. With the implementation of the cashless payment system, 86% of the paperwork will be cut off and people will be shocked for some time if they are lacking in sharp money, the authors suggest. General Chat Chat Lounge Globally, over 80 payments go to the cashless economy.

Bernardo Batiz-Lazo, Leonidas Efithimieu, Sohia Michael on January 9 at 1.26pm AADT. Through his research, he sheds light on innovation around the world towards a cashless economy. Since the introduction of computers in the retail banking system in the late '50s, the future has seen a world where cash is obsolete. Closer death of a person, increase in debit and credit card use and paypal, square, apple moment pen cash less association with within or reach.

### Transition to Cash-based Economy

The Transition to Cash-based Economy After the destruction of the Western Roman Empire in Western Europe, coins, silver jewelry and hack-silver became the method of transaction. In the early Middle Ages, Venetian markets favored the use of silver bars for large transactions. With the following developments, the Venetian market will turn to the use of physical notes and instruct banks to pay the recipients. With the development of the global economy, the supply of silver and the colonization of South America, coins grew and developed from the 4th century onwards to become the base of international payments. The East India Company started the coinage in England and was sent in the early thirteenth. Soon, paper money developed around the world. In the 8th century, major paper variables were issued in colonies such as Ceylon, Essequibo,



Demerand Barbis. When the currency was issued, the relationship between currency supply and inflation was completely ignored. They soon became ineligible due to the excessive giving of notes. The early 1990s became the mainstay of the banknotes, although some gold and silver coins were used in the early 00s. After World War I, coins gradually lost value and almost disappeared. After World War I, only gold coins, mainly British Sauvignons, were used until the mid-00s. In his dissertation, David Chaum introduced the concept of digital cash in 1983. In the year 1990, he founded the 'digi-cash' company in Amsterdam and sold electronic cash. The company failed and he filed a bankruptcy petition in 1998 and David Cham left the company. In 1997 n, Coca-Cola began paying for their vending machines using mobile payments. PayPal was founded shortly thereafter in 1998. The emergence of digital currencies - the 1990s - is the dot-com bubble. It was one of the first e-golds and was the backbone of gold, founded in 1996. Liberty Reserve was another digital currency service established in the 5th. Liberty Reserve allows users to convert Liberty Reserve dollars or Euros into Euro. Exchange them freely with 1% fee. Both services were centralized and soon gained fame in the pursuit of money, and the US government was essentially shut down. In 2008, Bitcoin was introduced and digital currencies were introduced. The growing interest in crypto currencies has prompted innovation in digital currencies, including Bitcoin, introduced in 2009.

### Suggestions:

- Movement towards a low cash economy is slow, but the country is getting there. Government should take appropriate initiatives to make the transition easier and faster.
- Simplifying payment applications on the next phone and online payment methods will help senior members as well as individual-tech companies to work faster, participate or contribute to a less cash economy.
- Cash travel has become a widespread and expensive topic. If payment can be paid online, it will be easier to track it. Also, tourism departments in all states can support the changing economy by promoting online payments and simplifying the widespread mobile application.
- Transaction fees should be reduced to promote online transactions.

### Conclusions

A cash-based economy and a less cash-free economy are less viable, viable, and more efficient. It turns out that people are open to the concept of a low cash economy and they are easy to adapt to. The low cash economy will boost the economy of the nation as it will reduce the amount of cash to make and handle on paper. The low cash economy reduces terrorist activity because most terrorist activities eliminate the hard cash money and help counter the problem of counterfeit money. Smartphones India is the largest market for smartphones and mobile applications, providing an easy transition towards low cash. Economy. Local markets have already accepted the transition to paperless transactions. Banks and payment gateways are moving towards payment via smart phones soon. Therefore, research shows that there is a consortium for moving from a cash-based society, both individually and nationally, to the cashless economy.

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