

**DIGITIZATION OF PAYMENT SYSTEM : A KEY FOR INCLUSIVE GROWTH****Dr. Praveen Narayan Chougale,***Principal, D. R. Mane Mahavidyalaya, Kagal.*

And

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*Payment system in the country have key role in the development of the country. Efficient and secure payment and settlement systems are essential components of a well-developed financial system. The Payments System provides the arteries or highways for conducting trade, commerce and other forms of economic activities in any country. An efficient payments system functions as a lubricant speeding up the liquidity flow in the economy and creating a momentum for economic growth. Digitization of payment system means shifting from paper based payment system to digital/ electronic payment system. India is now in phase of digitization of payment system. 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 professed role of Digital India. Digital payment system is an integral part of digital India programme and prime important for cashless society. Digital payment system offers many advantages such as substantial monetary savings of the government, financial inclusion, higher tax revenue, reduction in poverty, strengthening banking system, effective tool to address the problems of corruption, black money and fake notes etc. The aim of the present paper is to present the overview of payment system of India and explain the necessity of digital payment system for attaining inclusive growth of India.*

**Keywords:** *Payment System, Digital India, Paper Based Payment System, Digital Payment System, Cashless Society, Banks, Financial Inclusion.*

**Introduction**

‘The ‘payments system’ refers to arrangements which allow consumers, businesses and other organizations to transfer funds usually held in an account at a financial institution to one another. It includes the payment instruments – cash, cheques and electronic funds transfers which customers use to make payments – and the usually unseen arrangements that ensure that funds move from accounts at one financial institution to another’ (Reserve Bank of Australia) <sup>1</sup>. Efficient and secure payment and settlement systems are essential components of a well-developed financial system. ‘The Payments System provides the arteries or highways for conducting trade, commerce and other forms of economic activities in any country. An efficient payments system functions as a lubricant speeding up the liquidity flow in the economy and creating a momentum for economic growth. The payments process is a vital aspect of financial intermediation; it enables the creation and transfer of liquidity among different economic agents. A smooth, well-functioning payments system not only ensures efficient utilization of scarce resources but also eliminates systemic risks’<sup>2</sup>. Safe, secure and efficient payment systems are vital for the working of financial markets and more generally for the economy itself. Any disruption to the payment system has the potential to disrupt the functioning of the financial markets and lead to systemic instability<sup>3</sup>.

At present India is witnessing rapid changes in its payment system. India is moving towards digital payment system. The process of the shifting of paper based payment system to digital/electronic payment system can

be termed as digitization of payment system. In digital payment system digital payment methods such as electronic clearing system, RTGS, NEFT, Bank cards, mobile banking, internet banking, mobile wallets, USSD, AEPS, UPI, Micro ATMs are used for payment of money. Use of electronic payment system offers many advantages. According to the McKinsey & Company's report on "Inclusive growth and financial security The benefits of e-payments to Indian society" An electronic platform for government payments to and from individual households could save an estimated INR 100,000 crore a year – almost 10 per cent of the total payment flows between the government and households<sup>4</sup>. Apart from that the more use of digital payment system helps for financial inclusion, effective use of social welfare scheme, strengthening banking industry, transparency in economic transaction, higher tax collections, curb corruptions, free from fake currency and reduction in the interest rates. An attempt has been made in the present paper to present the overview of present payment systems in India and discuss the necessity of digital payment system for achieving inclusive growth of India.

### **Objectives**

The objectives of the present paper are

1. To present the overview of payment system in India.
2. To explain the necessity of digital payment system for attaining inclusive growth of India.

### **Research Methodology**

The present research paper is based on the secondary data. The data have been collected from various books, journals, research articles and web-sites from internet. The inferences are based on the analysis of the secondary data.

### **Overview of Payment System in India**

In India, the payment and settlement systems are regulated by the Payment and Settlement Systems Act, 2007 (PSS Act) which was legislated in December 2007. According to the Payment and Settlement System Act 2007 "payment system" means a system that enables payment to be effected between a payer and a beneficiary, involving clearing, payment or settlement service or all of them, but does not include a stock exchange. The PSS Act, authorized Reserve Bank of India to operate a payment system in India. Reserve Bank has since authorized payment system operators of pre-paid payment instruments, card schemes, cross-border in-bound money transfers, Automated Teller Machine (ATM) networks and centralized clearing arrangements.

In order to regulate and supervise retail payment in India RBI took initiative to set up National Payment Corporation of India. It is an umbrella organization for all retail payments system in India. The core objective of setting up NPCI was to consolidate and integrate the 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<sup>5</sup>.

The payment system in India can be broadly classified into 1. Paper Based Payment System and 2. Digital Payment System

#### **1. Paper Based Payment System:**

This is the traditional system of payment. Currency is an important means of payment in India, with 19% of M3 represented by currency, as against its share of 6 to 7% in advanced countries. It is supplemented by cheques and drafts for payments in commercial transactions. Various other paper instruments like a Banker's cheque, Payment order, Payable 'At Par' cheques (Interest/Dividend warrants, refund orders, gift cheques

etc.), are also used to cater to the specific payment needs. The statutory basis for these instruments was provided by the Negotiable Instruments Act, 1881 (NI Act) <sup>6</sup>.

Use of paper-based instruments (like cheques, drafts, and the like) accounts for nearly 60% of the volume of total non-cash transactions in the country. In value terms, the share is presently around 11%. This share has been steadily decreasing over a period of time and electronic mode gained popularity due to the concerted efforts of Reserve Bank of India to popularize the electronic payment products in preference to cash and cheques.

Since paper based payments occupy an important place in the country, Reserve Bank had introduced Magnetic Ink Character Recognition (MICR) technology for speeding up and bringing in efficiency in processing of cheques.

Later, a separate High Value Clearing was introduced for clearing cheques of value Rupees one lakh and above. This clearing was available at select large centers in the country (since discontinued). Recent developments in paper-based instruments include launch of Speed Clearing (for local clearance of outstation cheques drawn on core-banking enabled branches of banks), introduction of cheque truncation system (to restrict physical movement of cheques and enable use of images for payment processing), framing CTS-2010 Standards (for enhancing the security features on cheque forms) and the like<sup>7</sup>.

## **2. Digital Payment System**

The initiatives taken by RBI in the mid-eighties and early-nineties focused on technology-based solutions for the improvement of the payment and settlement system infrastructure, coupled with the introduction of new payment products by taking advantage of the technological advancements in banks. The Vision-2018 for Payment and Settlement Systems in India reiterates the commitment of the Reserve Bank of India (the Bank) to encourage greater use of electronic payments by all sections of society so as to achieve a “less-cash” society. The objective is 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. Following are the components of electronic payment system

### **Electronic Clearing Service**

Electronic Clearing Service (ECS) is an electronic mode of funds transfer from one bank account to another. RBI offers two electronic clearance services- ECS Credit for making payments & ECS Debit for receiving payments. The Reserve Bank introduced the ECS (Credit) scheme during the 1990s to handle bulk and repetitive payment requirements (like salary, interest, dividend payments) of corporates and other institutions. ECS (Credit) facilitates customer accounts to be credited on the specified value date and is presently available at all major cities in the country.

The ECS (Debit) Scheme was introduced by RBI to provide a faster method of effecting periodic and repetitive collections of utility companies. ECS (Debit) facilitates consumers / subscribers of utility companies to make routine and repetitive payments by ‘mandating’ bank branches to debit their accounts and pass on the money to the companies.

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

National Electronic Funds Transfer (NEFT) is a nation-wide payment system facilitating one-to-one funds transfer. It was introduced in November 2005. 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. However, such cash remittances will be restricted to a maximum of Rs.50,000/- per transaction.

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

RTGS is a funds transfer systems where transfer of money takes place from one bank to another on a "real time" and on "gross" basis. Settlement in "real time" means payment transaction is not subjected to any waiting period. "Gross settlement" means the transaction is settled on one to one basis without bunching or netting with any other transaction. Once processed, payments are final and irrevocable. This was introduced in in 2004 and settles all inter-bank payments and customer transactions above `2 lakh. There is no upper ceiling for RTGS transactions.

### **Pre-paid Payment Systems**

Pre-paid instruments are payment instruments that facilitate purchase of goods and services against the value stored on these instruments. The value stored on such instruments represents the value paid for by the holders by cash, by debit to a bank account, or by credit card. The pre-paid payment instruments can be issued in the form of smart cards, magnetic stripe cards, internet accounts, internet wallets, mobile accounts, mobile wallets, paper vouchers, 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 or other financial institution to conduct a range of financial transactions through the financial institution's website.

### **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). Mobile banking services have been attaining increased importance. Reserve Bank brought out a set of operating guidelines on mobile banking for banks in October 2008, according to which only banks which are licensed and supervised in India and have a physical presence in India are permitted to offer mobile banking after obtaining necessary permission from Reserve Bank.

### **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).

### **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.

### **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, Airtel Money, Jio Money, SBI Buddy 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.

### **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.

### **Digitization of Payment System a Key for Attaining Inclusive Growth in India**

Digitization of payment system means shifting from paper based payment system to digital/ electronic payment system. India is now in phase of digitization of payment system. The government of India is focusing on the more use of digital payment system. In the digital payment system the citizens of the country pay or transfer money by using electronic device instead of cash or cheques. The use of physical cash is minimum. The digital payment system offers many advantages to the payee and beneficiary. The necessity of digital payment system for attaining inclusive growth of the India can be explained as under **Substantial**

**Monetary Savings of the Government:**

According to the McKinsey & Company's report on "Inclusive growth and financial security: The benefits of e-payments to Indian society." The benefits of an e-payment system far outweigh the costs. An electronic platform for government payments to and from individual households could save an estimated INR 100,000 crore a year – almost 10 per cent of the total payment flows between the government and households. This saving is almost one third of the government's spend of INR 290,000 crore on welfare schemes for the poor. The bulk of the savings, INR 82,700 crore, would come from welfare schemes, where payment inefficiencies reach 30 per cent or higher. Of the INR 100,000 crore in savings, about INR 71,000 crore would accrue to the government, about INR 26,200 crore to individual beneficiaries and about INR 2,800 crore to intermediaries (payment and operational). Further according to the analysis in the said report the one-time cost of setting up a national e-payment infrastructure is INR 60,000 crore to INR 70,000 crore, which means the direct financial return from e-payments could cover the cost of building the infrastructure within a year.

**1. Financial Inclusion**

The digital payment system can speed up the process of financial inclusion in India. Through digital payment system the financial services can effectively and speedily be provided to the deprived sections especially in rural area. As in most of the part of India telecommunication network have established. Further setting up telecommunication network is relatively easy and takes less time than the setting up physical infrastructure like building and recruiting the employees to look after for providing financial services. Thus with the digital network the deprived sections or community including laborers, low income households and small business can be brought into the formal channel of banking and other financial services.

**2. Reduction in Poverty**

With the digital payment system the government of India can efficiently and effectively implement its welfare schemes by locking or removing the leakages in the current system. The improved efficiency and greater penetration of an e-payment setup will likely encourage greater participation from poor rural citizens, and bring the central government closer to its cherished goal of reducing poverty and hunger through its welfare, food, and housing subsidy schemes.

**3. Strengthening Banking System in India**

Banking industry is backbone of the economy. It has pivotal role in economic development of the country. Banks play the role of financial intermediaries by mobilizing savings and providing loan and advances to individuals and business organizations. The direct beneficiary of digital transactions is the banking industry in India. As in the digital payment system, every transaction is directly or indirectly routed through banks. Therefore the physical cash will come into the banking channel. The banking industry will thus get the low cost deposits. The banks in turn pass it to the individuals and small and large business houses in the form of low rate loans and advances.

**4. Capital Formation:**

The economic development of the country is mostly depends on availability of capital. Government needs capital to undertake developmental activities, business organization be it small or large, be it in manufacturing, trading or service sectors, it requires capital to form or further carry on its activities. The digital payment system helps for capital formation in the economy because capital formation depends on saving and investment. With the effective and transparent digital payment system, idle money in the hands of people came in to the formal channel. It facilitates for higher amount of savings and investments which leads to capital formation. It will further facilitate for inclusive growth of the country.

### **5. Higher Tax Revenue to Government**

At present Indian economy is facing major problems of tax avoidance. Taxpayers account for just about one per cent of India's population. As transaction through digital payment system will give footprint of the transaction. It make difficult to hide income. All it brought majority of the people in tax bracket. Thus the tax revenue of the government will increase which can be used for carry on development activities.

### **6. Digital Payment System is an effective tool to Address the problems of Corruption and Black Money**

At present Indian economy is facing the sever problems of corruption and black money. The problems of black money and corruption are interrelated and the root cause of these problems are cash payments. Because in the cash payments system the monetary transactions can easily be hided. The digital payment system records every footprint of the transaction. Digital payment bring transparency in all receipts and payments transactions. Therefore it is difficulty to hide any monetary transaction in the system of digital payment. And it is also easy for the controlling authorities like Income tax department to watch on the monetary transactions. Therefore digital payment system can curbs generation of black money and corruptions.

### **7. Digital Payment System is the perfect solution to the problem of Fake currency notes and to Control Funding to Terrorists**

Fake currency is a severe problem. It not only increases rate of inflation but also creates an environment of distrust. Digital payment system is the perfect solution to the problem of fake currency. There are the evidences that the terrorist uses fake money or the money from undisclosed sources. Better control can be exercised in the digital system of payment on the flow of funds in economy and therefore on the funding to terrorism.

### **8. Cashless Society**

If digital payment system is secured, easily accessible, and easy to use the people in the country will move towards use of digital payments from their accustomed cash payments. It will leads to cashless society. Cashless society is one where all transactions are done through use of electronic money. The instruments like debit cards, credit cards, post terminals, mobile wallet mobile banking, internet banking are used for payment of money. The circulation of physical money is minimum. The present Indian Government is focusing on the cashless society. Thus to establish sufficient IT infrastructure is an important way to move towards cashless society.

### **Conclusion:**

From the above discussion it can be concluded that the digitization of payment system is the need of hour today. Digital payment system is a key for attaining inclusive growth as it offers many advantages such as substantial savings of the government, helps for financial inclusion, effective use of social welfare scheme, strengthening banking industry, transparency in economic transaction, higher tax collections, curb corruptions, free from fake currency and reduction in the interest rates. Digital payment system is an integral part of the Digital India programme of the Government of India and prime important for cashless society. The RBI and Government of India encouraging greater use of digital payments by all sections of society so as to achieve a "less-cash" society. However shifting from paper based payment system to digital payment system is not a simple process. Apart from setting up necessary IT infrastructure ensuring financial literacy of people regarding use of plastic money and other financial devices and instruments used in payments is must. The security and ease for transaction is utmost essential in digital payment system. Due preparation

and planned process of digitization of payment system is necessary for attaining inclusive growth of the country.

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