

AN OVERVIEW OF DIGITAL PAYMENTS SYSTEMS IN INDIA

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Abstract

The Information Technology (IT) has revolutionized the various aspects of our lives; particularly it has provided an easy way to go for digital payments. During the Demonetization period, the Government of India forced the people directly or indirectly to do all commercial transactions via Digital mode. The common people started to move from traditional payment system towards Digital Payments systems which ensured safe, secure and convenience. With giant technological leaps in the smart phone and easy internet access has led Indian market to accept Digital Payments. The percentage of the digital payments through other modes is also increasing in a significant speed. The objective of the present study is to know about the various types of Digital payment transactions that are used by the common people in their day- today's lives. This study is chiefly based on Secondary data. Result indicates that the Digital revolution has made the cash less transaction an easy one. As a result that in 2015-2016, a total of 4018 billion has been transacted through mobile banking when compared to 60 billion in 2012-13. The reach of mobile network, Internet and electricity is also expanding digital payments to remote areas. So, it is without doubt said that future transaction system is cashless transaction.

Keywords: Digital Payments, Methods, Problems, Prospects

Introduction

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 (currency notes) is involved in the digital payments. All the transactions in digital payments are completed through online. It is an instant and convenient way to make payments.

Currently available digital payment systems include Banking cards, Digital wallets, Unified Payment Interface (UPI), Unstructured Supplementary Service Data (USSD),

Immediate Payment Service (IMPS), Real Time Gross Settlement (RTGS), National Electronic Fund Transfer (NEFT), Aadhar Enabled Payment System (AEPS) and Mobile banking. With recent advances technologies, digital payments is having an impact on our daily lives and beginning to offer interesting and advantageous new services. According to RBI Bulletin cashless transaction in India increasing day by day. The statistics in report shows that in Nov. 2016 and Dec. 2016 the total value transaction done using E-Wallet was 50.74 Billion and 97.70 Billion respectively and in Jan. 2017 it is increased up to 108.69 Billion. According to the survey conducted by CashKaro India, E-Wallet payment method is more preferred by customers than other payment methods. The users of Smart phone has been increased randomly, this has also paved the way for digital transactions. In 2015-2016, a total of Rs. 4018 billion transacted through mobile banking as compared to Rs. 60 Billion in 2012- 2013.

Statement of the Problem

The Union Cabinet chaired by Prime Minister Narendra Modi has approved 'Pradhan Mantri Gramin Digital Saksharta Abhiyan' (PMGDISHA) to make 6 crore rural households digitally literate. The outlay for this project is Rs 2,351.38 crore to usher in digital literacy in rural India by March 2019. PMGDISHA is expected to be one of the largest digital literacy programmes in the world. Under the scheme, 25 lakh candidates will be trained in the fiscal year 2016-17, 275 lakh in fiscal year 2017-18 and 300 lakh in fiscal year 2018-19. The Committee on Digital Payments constituted by the Ministry of Finance, Department of Economic Affairs has recommended for the medium term strategy for accelerating growth of Digital Payments. However, many of the digital payment methods are not popular among the common people and people are not comfortable to use them for their day-today's transactions. There is less awareness among the people about different types of digital payment methods. There is also a myth among them that overspending is possible when we use the digital payment nodes and banks deduct high transaction cost for the digital payment operations. Hence literacy about the digital payments has become a necessity.

Objectives of the Study

The general objective of the study is to know about the various types of digital payment transactions.

The following are the specific objectives,

- To explore the various modes of digital payment transactions that is offered by various financial institutions.
- To gauge the progress of operations of digital payments while dealing with online transactions
- To analyse about the Advantages and Barriers of Digital Payments.

- To Study about the Prospects of Digital Payments.

Methodology

The study is based on secondary data. The materials were collected from books, journals, newspapers and relevant websites which have been consulted in order to make the study an effective one.

Digital Payment Method

Banking card: Banking sector provides various cards to avoid the time spend over the banking transaction. It offers consumers more security, convenience, and control than any other payment method. There are many types of cards Rupay, mastercard, visa etc. they provides more security to the customer while using it. 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.

USSD: The innovative payment service *99# works on Unstructured Supplementary Service Data (USSD) channel. This service allow to users mobile banking without internet. *99# facility available to make money transfer from one person to another without using internet and smart phones. *99# service has been launched to take the banking services to every common man across the country. The Common number across all Telecom Service Providers on their mobile phone and can make transaction using an interactive menu on the mobile screen. Using this customer can check balance, transfer money, can get mini statement etc.

Adhar enabled Payment system: AEPS is a bank led model which allows online interoperable financial transaction at PoS (Point of Sale or Micro ATM) through the Business Correspondent or Bank Mitra of any bank using the Aadhar authentication.

UPI: UPI is a Unified Payments Interface system that allow to multiple bank accounts into a single mobile application, merging several banking features. It is use to transfer money receive money, bill payments and others. Now it is getting popularity among the Indian people. It is interesting and easy to use and not need to remember frequently use beneficiary's account number. The customer can get transaction history quick payment.

Mobile Wallets: there are several mobile wallets are available and each bank have their own application. The customer can carry digital cash trough mobile wallet. By use of wallet customer can link credit card or debit card in mobile device to make transaction. An individual's account is required to be linked to the digital wallet tosdd the money. The Paytm, Freecharge, Mobikwik, Airtel Money, Jio Money, SBI Buddy, itz Cash, Vodafone M-Pesa, Axis Bank Lime, ICICI Pockets, Speed Pay etc. are the mobile wallets use in India.

Point of sales: A point of sale (PoS) is where sales are made. It allow to PoS holder to collect money from their customer by the way of swap Also and no need to go bank for making transaction of purchase and selling. On a micro level, retailers consider a PoS to be the area where a customer completes a transaction, such as a checkout counter. But its require GPS system internet and bank account of merchant.

Internet banking: Internet banking, also known as online banking, e-banking or virtual banking, is electronic payment systems that allow customers of a bank to make transaction using website of the bank using ID and password.

National Electronic Fund Transfer: (NEFT) National Electronic Funds Transfer is a nationwide payment system which provides funds transfer from any bank any branch to any bank. Using the system individual 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. Not only account holders but also without having account people can sent money to others account by depositing money from anywhere. However, such cash transaction have limit of Rs. 50000/- using this service individual can deposit money on 50000/- and this facility can use in working days only.

Real Time Gross Settlement (RTGS): RTGS is 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 at some later time. Considering that the funds settlement takes place in the books of the Reserve Bank of India, the payments are final and irrevocable. Transferring large amount RTGS is used. Customers can send minimum 2 lakh and maximum have no limit. RTGS can use in banking hours.

Electronic Clearing System (ECS): ECS is an alternative method for the payment transactions like utility-bill-payments such as telephone bills, electricity bills, insurance premium, card payments and loan repayments, etc.,

Immediate Payment Service (IMPS): IMPS offers an instant, 24x7x365, interbank electronic fund transfer service through mobile phones. IMPS are a tool to transfer money instantly across India using mobile, internet and ATM it is safe and cost-effective.

Mobile banking: Mobile banking is a portable system provided by banks to customer on their mobile phones, smart phones with a special application using software. It provided by the banks or financial institution for the purpose. Each Bank provides its own mobile banking App for Android, Windows.

Micro ATM: Micro ATM meant to be a device that is used by the million Business Correspondents to deliver basic banking services. The micro ATM enables Business Correspondents to make instant transactions. It helps to withdrawals, transfers transaction instantly.

Progress of Digital Payment Services in India

The progress and use of digital services can be seen using following information. After dematerialization of money the digital system got mentionable progress after 2016.

Payment System Indicator- transactions

All value in Billions

Method	2013-14	2014-15	2015-16	2016-17	2017-18
RTGS	904968.04	929333.09	1035551	1253652.08	1467431.99
Retail Electronic Clearing	47856.29	65365.51	91408.14	132324.30	193112.33
Card Payments Credit Card, ATM POS etc	22159.58	25415.27	29397.65	30214.00	38214.64
M. Wallets	29.05	81.84	205.84	838.01	1416.34
Mobile banking	224.18	1035	4040.91	13104.76	14738.54
Total	975237.1	930449.9	1160604	1430133	1714914

Source: RBI Reports

As table shown above it indicates that the number of electronic transactions are in increase trends, as compared to the 2013-14 to 2017-18 RTGS, electronic clearing, Card payments and m. wallets and mobile banking are increased by near about 75%. RBI allowed in May 2014 to access the mobile banking above age 10 minor. They can open and use the mobile banking services. They can open fixed and saving accounts using mobile banking, SBI and ICICI are the banks who providing these services to minor. According to the NPCI – National Payment Corporation of India there are 104500 ATM working in India and out of the total 59% ATM are of PSB and remaining of Pvt. SB and Co-operative banks.

Development of ATM, POS and Transaction

Year	ATMs			POS		Total
	On-site	Off-site	Total	On-line	Off-line	
	1	2		3	4	
2018	104011	101173	205184	3193356	0	3193356
2017	109740	98073	207813	2614584	0	2614584
2016	101826	98128	199954	1403112	0	1403112
2015	90819	91661	182480	1125377	0	1125377

Source: RBI Reports

The ATM and numbers of POS machines are increasing from the emerged and now in 2018 there are 205184 ATM are working and numbers of POS machines are also increasing from the 2015 it was 1.82 lakh and now it increases near to 2.05 lakh. The changes show that India is moving to paperless banking and presently Indian

adapted the paperless banking tools to make the transaction. The POS machines also increased by

Use of Credit Cards

Year	Credit Cards				
	No. of outstanding cards as at the End of the month	No. of (Actual)	Transactions	Amount of transactions (Rs. Millions)	
		ATM	POS	ATM	POS
	1	2	3	4	5
2018	37782876	7271175	132318612	3396	448342
2017	32056929	613206	110762306	2848.5	339297.4
2016	24860730	591865	72827537	2863.37	227246.3
2015	21288891	430487	57304068	2285.7	179215.7

Source: RBI Reports

Debit Card Use and Transaction

Year	Debit Cards				
	No. of outstanding cards as at the end of the month	No. of Transactions (Actual)		Amount of transactions (Rs. Millions)	
		ATM	POS	ATM	POS
	1	2	3	4	5
2018	906356781	758938556	333766148	2647971	454571
2017	804051123	703913571	261256191	2270761	351310.5
2016	671187187	733399002	118284077	2252098	148033.8
2015	564707913	615527057	80124846	2000398	114991.1

Source: RBI Reports

The numbers of transaction in compare to 2015, 32% are increases in 2018 while use of Pos machines is increases by 316%. It shows that the people are using the paperless tool to shopping as well as for cash withdrawal. Use of Credit card is also in progressive trend as compare to 2015. Digital technology is helps to make paperless transaction. For the development paperless banking system there should be strong network of banking and India a hug banking network is available and it is rapidly increasing also. It is observed that mobile banking is appreciated by the customer due to easy use anytime anywhere.

Advantages of Digital Payment System

Time Sever: Using digital payment system customer can pay to merchant transfer money quickly and no need to make payment by cheque and waiting for clearing. Because Digital Payment system take less time than traditional payment system.

Availabilities: Digital payment system can use by customer from anywhere and anytime there is no need to go banks for every transaction.

Easy Purchasing: The Digital payment system provides facility to user for purchasing by using ATM card Credit card and POS therefore it is easy for making transaction and no hard cash required to travel with us.

Use of Wallet: The Digital Payment system includes digital wallets which make payment easy and with that wallet customer can get discount as well as cash back.

Written record: You often forget to note down your cash spending. Or even if you note, it takes a lot of time. But you do not need to note your spending 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 spending and budget planning.

Less Risk: In digital Payment system it provides us securities for every transaction it require MPIN or OTP which can be avoid frauds in the system.

Barriers to Used Digital Payment

1. **People use of currency note money:** In India people are using currency in High level. People in Rural area in India nearly made transaction 80% in cash. Because it is became traditional and habitual to the people.
2. **Computer Illiteracy:** There is only 6% people in India are computer literate and near about 90% Indian people don't understand the computer and internet that's why they cannot use the digital payment system.
3. **Use of ATM Card:** There are many digital payment systems but Indian People still using ATM cards for withdrawal and give money to other. They didn't use M. wallet and digital payment for money transfer.
4. **Limited availability of POS:** According to the reports of RBI there are 1.44 Million POS terminals installed by banks across locations at the end of July 2016 and it increased by 24% in 2018. There should be involving every trader.
5. **Mobile Internet Penetrations Rate:** The use of mobile remains weak in rural India. For setting transaction digitally internet connection is requires but the connectivity are not available in the rural area.
6. **Risk and Security:** The Indian people still don't believe in online transaction. And they feel that the traditional system is good and faithful. And also not believe in Security of the transaction.

7. **Training:** There is a communication gap between bank and their customer. It requires giving training about use of online and payment system but banks do not provides any training program to increase the digitalization.
8. **Public sector banks:** There are 80% share of finance sector is occupied by public sector banks and the public sector banks started the digitalization from 1996. That's why it is in progressive trend. Private sector banks are ahead in digitalization to public sector banks.

Prospects

1. The India banking sector is one of the best sector in India and it changes as per the requirement of the India country
2. There are large scope of digital payment system in India because of it is increasing trend. The growth in volume and value of transactions using payment issued banks entities has been significant.
3. There are several banks and near about all banks are in adaption of Digital banking and NPCI also promoted Adhar enabled payment system to involve all Indian in digital transaction.
4. UPI system the best system to make digital transaction and it is expected to give a progress in digital payment transactions
5. 5. Debit and credit card are shows as usual to make transaction but it is increasing trend from Demonetization of money IN 2016.
6. With increasing mobile banking services, growth in e-commerce and use of mobile payment applications, the use of cash will decrease.
7. RTGS and NEFT volumes increase almost threefold between 2013 and 2016 reflecting greater adoption of the system.
8. The government of India is focus on digital infrastructure and it can encourage digital transactions culture in India there are almost every persons have Jan dhan yojana account and Adhar card.
9. As per the research there are 320 above mobile users in India in 2018 and it is a good environment to motivate the Digital payment system.

Conclusion

Digital Payment system is easy to use to the customer as well as bank officers and there are several option are available in the financial system in India, but there are large amount of people in India don't know how to use the system. The Digital literacy of Indian people is low level, Therefore digital payment system is not pure developed and spread all over the India. The social and infrastructure barriers are there influences to use of digital payment system. But Now a day's mobile banking are becoming famous in the India because it is easy to use and anytime can use. It is also required to

improve the digital literacy among the people. There are also issues relating to the risk and security.

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