

Opportunities and Challenges of E- Payment System in India

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Abstract:

Now a day's world changed to digital world. India tries to stepping towards e-payment system. Electronic payment system is a payment system through an electronic network. In other words 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 location and time. Today India is at a stage of demonetization so; in the present scenario this study is inevitable to makes electronic payments at any time through the internet directly to manage the e-business environment. This study aimed to identify the issues and challenges of electronic payment systems and offer some solutions to improve the e-payment system. E-payment system not only provides more opportunities but many threats also.

Keywords: E-payment, Digital payment, Cashless system, Online payment.

Introduction:

The payment system in any country needs to pass the litmus test of safety, security, soundness, efficiency, and accessibility. In order to address all these, payment systems have evolved from barter to currency, to digital systems. We are witnessing enormous change in the payment systems, disrupting the monopoly of physical/paper-based system by electronic ones. 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. Digital payments save you from long queues of ATMs and banks.

Objectives of the study:

- To know the different modes of e-payment.
- To know the opportunities and challenges of e-payment system in India.
- To identify the future of digital payment system in India.

Research methodology:

The study based on secondary information/data. Different journals, newspapers, books and relevant websites have been consulted in order to make the study an effective one. The present study is an attempt to examine the E-payment system in India.

E- Payment options in India

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. As part of promoting cashless transactions and converting India into less-cash society, various modes of digital payments are available.

- **E Wallets** – Paytm, Freecharge etc.
- **UPI** – Unified payments Interface Apps
- **Plastic Money** – Debit/Credit Cards
- **Net Banking** – Online Fund Transfer
- **Aadhaar Card** – Aadhaar Enabled Payment System

E Wallets

Mobile wallets are digital instruments where you can store money for instant payments. You load money from your bank account via credit/debit cards or net banking. Most wallets are semi-closed wallets, i.e. you can transfer money to people who have the same wallet, or make payments at merchants who are authorized to accept from that particular instrument. There are also many other electronic wallets available in app stores like google play. You can download any of them to make digital payments easily. They include jio money, Vodafone mpesa & airtel money. Even banks have launched their own e wallet apps like State bank buddy and Yes Pay.

Payments through E-Wallets

Requirements	Transaction Process	Limitation/Risk
<p>1. Online Account in Digital Wallet. For example few popular e wallets are PayUmoney, Paytm, Pockets, Oxygen wallet, Mobiwiki etc.</p> <p>2. A mobile phone with wallet app loaded. Bank wallets are also used operated through desktop PC.</p> <p>3. Internet connection.</p>	<p>1. Download wallet app in mobile and create account using mobile no. Mobile number is treated as wallet account no.</p> <p>2. Load money using debit/credit card or net banking.</p> <p>3. Link your bank account with digital wallet to transfer money in advance to your wallet.</p> <p>4. Transfer money from one wallet to other using mobile number.</p>	<p>1. Consumer Wallet Limits: Rs.20, 000/month for all. Rs.1 lakh/month with KYC</p> <p>2. Merchant Wallet Limits: Rs.50, 000/month with Self Declaration. Rs.1 lakh/month with KYC</p> <p>3. Money can be transferred to same company wallet.</p>

Unified Payments Interface (UPI)

Unified Payments Interface (UPI) is a payment system launched by National Payments Corporation of India and regulated by Reserve

Bank of India which facilitates the fund transfer between two bank accounts on the mobile platform instantly.

Unified Payment Interface is an electronic funds transfer instrument that enables all bank account holders to send and receive money from their smartphones without the need to enter bank account information or net banking user id/password. This requires only the recipient's mobile number or Virtual Payment Address (VPA). UPI is an advanced version of Immediate Payment Service(IMPS) platform designed for transferring funds using: Transfer through Virtual Payment Address (Unique ID provided by bank) or Account Number + IFSC or Mobile Number +

MMID(Mobile Money Identifier) or Aadhaar Number or Collect / Pull money basis Virtual ID. A MPIN (Mobile banking Personal Identification number) is given to the banking customer once they register for UPI which is required to be entered while confirming a money transfer. Banks supporting UPI payment have started to upload their own UPI enabled Apps on Google Play store as well as on Apple App Store also. National Payments Corporation of India has launched a Payment app BHIM and NUUP service for performing transaction using Aadhaar number over UPI

Payments through UPI (Unified Payment Interface)

Requirements	Transaction Process	Limitation/Risk
1. A Bank account for registration only 2. Any smartphone with internet connections 2G/3D/4G/wifi. 3. UPI Apps of bank (28 banks have enabled upi)	1. Download bank UPI app of mobile banking apps of banks 2. Register by creating your Virtual Payment Address (VPA) e.g <i>sujith@icici</i> or <i>julieebi@sb</i> 3. For money sending you just need the VPA of payee 4. After entering amount and VPA of payee you will be asked for confirm payment and it is done. 5. Account details of payee is not required only VPA is required	1. Maximum transaction limit is Rs 1 lakh 2. Sender and Receiver of money must have VPA (Virtual Payment Address) for fund transfer 3. Smartphone is required

Plastic Money

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. Also risk of theft goes down to zero as it needs a PIN carry out transactions. You don't

need to carry huge amount of cash with you. Just swipe and go. Debit card payments are made through bank account. Bank account gets debited while paying using debit card. But in case of a credit card, it is a monthly postpaid bill payment system that takes place.

Payments through Debit/ATM Cards

Requirements	Transaction Process	Limitation/Risk
1. Issue of Debit Cards by Bank. Card Pin/password or mobile for OTP (One Type Password) verification. 2. Bank ATMs 3. Swipe machine or POS (Point of Sale) machine at merchant. 4. Online payment portal	1. Bank issue ATM card with a PIN no. 2. Used to withdraw cash from any ATM machine using PIN no. 3. Used at any POS for shopping. Also for online shopping 4. SMS notifications come in mobile for every transaction.	1. POS of Swipe machine at merchant is a must. 2. Cloning of card is a security threat.

Payments through Credit Cards

Requirements	Transaction Process	Limitation/Risk

<ol style="list-style-type: none"> 1. Issue of Credit Cards by Bank. Card Pin/password or mobile for OTP (One Type Password) verification. 2. Swipe machine or POS (Point of Sale) machine at merchant. 3. Online payment portal 	<ol style="list-style-type: none"> 1. Bank issue Credit cards with a PIN no to only eligible customer. 2. There is credit limit for issued cards, limit vary from person to person depending upon income. 3. Used at any POS for shopping. Also for online shopping or transaction. 4. Every month Bill is generated, the total dues is to be paid before the due date, otherwise interest is charged. 5. SMS notifications come in mobile for every transaction. 	<ol style="list-style-type: none"> 1. Every card has a credit limit, beyond that you cannot shop. 2. Cash withdrawal is possible but at huge interest rate. 3. POS of Swipe machine at merchant is a must. 4. Cloning of card is a security threat.
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Net Banking

Net banking is another way for making transactions electronically. 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.

Online Transaction through Net Banking

Requirements	Transaction Process	Limitation/Risk
<ol style="list-style-type: none"> 1. Activation of Net banking facility 2. Internet facility in PC or mobile. 	<ol style="list-style-type: none"> 1. First add the bank Account of payee in fund transfer page of your bank portal. 2. Adding payee take time, exact 	<ol style="list-style-type: none"> 1. Takes time to add payee. 2. Not instantaneous for inter-bank transfer

	<p>time vary from bank to bank.</p> <p>3. Transfer of fund is carried out using NEFT, RTGS, and IMPS mode.</p>	
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Aadhaar Enabled Payment System

Aadhaar Enabled Payment System is a way to get money from the bank account. This system of getting money neither requires your signature nor Debit card. You don't even need to visit a bank

branch for getting money through the Aadhaar Enabled Payment System. Rather, it uses Aadhaar data for the authentication. Like UPI and USSD, this is another initiative by the NPCI.

Payments Using Aadhaar Card (Aadhaar Enabled Payment System, AEPS)

Requirements	Transaction Process	Limitation/Risk
<ol style="list-style-type: none"> 1. Aadhaar Card 2. PoS (MicroATM) 	<ol style="list-style-type: none"> 1. Go to a MicroATM or banking correspondent 2. Provide your bank name and Aadhaar 3. Choose which transaction to do 4. Provide finger print on scanner 5. on successful transaction, take the print slip 6. Process completed 	<ol style="list-style-type: none"> 1. Micro ATMs are required 2. There is limitation on banks called as Net Debit Cap (NDC), It is net of total outward and inward for the day.

Advantages of Digital Payments

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.

Discounts from taxes: Government has announced many discounts to encourage digital payments. If you use digital modes to make a payment up to Rs. 2000, you get full exemption from service tax. You also get 0.75% discounts on fuels and 10% discount on insurance premiums of government insurers.

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.

Challenges of Digital Payments:

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.

Intermediaries in the payment process: The payments sector operates through several intermediaries which create the front-end

payments interface. There are instances where banks or other licensed entities enter into arrangements with the mobile app developers for compliance purposes. The app developers maintain the software and the IT systems but the transaction is ultimately routed through the licensed entity (read the bank/mobile wallet/the payment gateway). This increases the costs of doing business through commissions and forces payment companies to shell out more to facilitate access to their services by the consumer.

Advantages Of Going Cashless Economy

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,"

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 with digital payment.

Similarly, saving on rail tickets, highway toll, or purchase of insurance can help cut your costs. Add to these the cashback offers and discounts offered by mobile wallets like Paytm, as well as the reward points and loyalty benefits on existing credit and store cards, and it could help improve your cash flow marginally.

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.

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 analyse their spending patterns and throw up good insights over a couple of years," says Jhaveri. 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 change 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.

The government's demonetization move, and the subsequent cash crunch, has led to a surge in digital payments. According to the government data, the number of daily transactions through e-wallet services such as Oxigen, Paytm and MobiKwik has shot up from 17 lakh — recorded on November 8 when demonetisation was announced — to 63 lakh as on December 7 (a growth of 271%). In terms of value, the surge has been 267%, from Rs 52 crore daily to Rs 191 crore now

Future of Digital Payments:

The future of digital payments is very bright. India is experiencing a remarkable growth in digital payments. In 2015-16, a total of Rs. 4018 billion transacted through mobile banking as compared to Rs. 60 billion in 2012-13. The percentage of the digital payments through other modes is also increasing in a significant speed.

There are many factors which are affecting the future of digital payments.

Digital revolution

Digital revolution has provided an easy way to go for digital payments. India has more than 100 crore active mobile connections and more than 22 crore smartphone users as of March 2016. This number is going to increase further with a faster internet speed. The reach of mobile network, Internet and electricity is also expanding digital payments to remote areas. This will surely increase the number of digital payments.

Government's support

The government is supporting digital payments a lot. It has reduced some taxes and announced incentives for digital payments. It has launched Lucky Grahak Yojna for customers and Digi Dhan Vyapar Yojna for shopkeepers. You can get cash prizes up to 1 crore if you pay digitally. Due to these incentives and waivers, more people are showing interest in digital payments.

Go Digital, Get Discounts

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.

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.

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 analyzed 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.

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