

# Digital Payments - An Innovation in Financial Services

Jelsy Joseph

Professor, Department of Commerce with Professional Accounting, PSG College of Arts and Science, Coimbatore, India

**Abstract:** India has traditionally been an economy obsessed by cash. With exceptional population demographics and diffident literacy levels, it is a difficult market to “digitalise”. However, as a consequence of demonetisation, India has been witnessing a new wave of financial technology, with the introduction of innovative products and a wider customer base. Increased penetration has also compelled both the regulators and government to renew their focus on this migration to a “cashless” society. The new-age client anticipates transactions to be fast, continuous and custom-made. The effortlessness and suitability offered by e-commerce has transformed consumer behaviour, and this has stretched quickly to the payments market as well. Therefore, the sector has experienced drastic changes in the past few years. Payment companies have been progressively capitalising the power of big data, analytics and the cloud to create customer-centric models. This has created a new marketplace, ushering in a new era in the payments market. A number of innovations have occurred in the past five years leveraging mobile devices and connectivity to make payments simpler and more valuable. Examples range from digital wallets to automated machine-to-machine payments. Since the introduction of credit cards in the 1950s, debit cards in the 1980s and the growth of e-commerce through the 1990s, electronic payments have grown in acceptance, put out of place cash and cheques. This paper provides an overview of the status, innovations and all areas of e-finance and applications of the internet technologies to financial service industry. It discusses how organizations could benefit from such innovations and e-finance systems and infrastructure and technology.

**Keywords:** Digitalise, e-commerce, e-finance, electronic payments

## 1. Introduction

The development of digital transactions has disturbed the payments market. Now payments are possible without banks. Revolutions have occurred in the past five years leveraging mobile devices and connectivity to make disbursements simpler and more valuable. Digital wallets to automated machine-to-machine payments are examples of this. These developments have grown in reputation, dislocating cash and cheques. Best examples are acceptance of credit cards in the 1950s, debit cards in the 1980s and the rise of e-commerce through the 1990s and its impact on cash and cheque transactions. New generation customer anticipates dealings to be fast, continuous and tailored. The effortlessness and ease offered by e-commerce has transformed consumer behaviour, and this has extended quickly to the payments market as well. Accordingly, the sector has experienced radical changes in the past few years. Payment companies have been increasingly exploiting the power of big data, analytics and the cloud to create customer-centric models. This has created a new marketplace, escorting in a new era in the payments market.

### What is Digital Payment?

Digital payment is a method of payment which is made through digital styles. Under this method both client and recipient use digital modes to send and receive money. It is also called electronic payment. In this mode of payment no hard cash is involved and all payments are made online and are immediate too. It is very convenient and easy. Neither the customer nor the trader is required to go to visit the bank.

### Payment Systems in India

India has traditionally been an economy obsessed by cash. With exceptional population demographics and diffident literacy levels, it is a difficult market to “digitalise”. However, as a consequence of demonetisation, India has

been witnessing a new wave of financial technology, with the introduction of innovative products and a wider customer base. Increased penetration has also compelled both the regulators and government to renew their focus on this migration to a “cashless” society. In India, the payment and settlement systems are regulated by the Reserve Bank of India (RBI), which exercises oversight over this market. Payment systems are required to obtain authorisation from the RBI to enable payment between a payer and a beneficiary;

### Types of Digital Payments in 2019

There are different types of digital payments from generally used cards to newly launched UPI. Some are for technical experts and others are for less technical experts. Given below are some methods of digital payments.

- 1) **Unified Payment interface or UPI:** This mode of payment helps to make the payment through mobile apps. By using this app people can transfer funds between two accounts. Those who are interested in this type of transfer have to register for mobile banking to use UPI apps. Only android phone users can access this facility. People have to download a UPI and create a Virtual Payment Address (VPA). There are a number of UPI apps are available like iMobile, PhonePe, SBI UPI App, BHIM etc. Any app can be used for transfer of funds.
- 2) **Aadhaar based digital payment mode (AEPS):** It is an Aadhaar Enabled Payment Service. In order to get this facility you have to link your Aadhaar number to your bank account. This app can be used with the help of PoS (Point of Sale) Machines. For any type of transactions like withdrawal, deposit or transfer fund to any other Aadhaar account. It does not need pass word, or signature or bank account details. It uses finger print as password. No one can counterfeit your fingerprints, thus it is the most secure digital payment mode.

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3) **Cards:** These have been the most commonly used mode. Cards are given to all account holders by banks. Most of us use cards for transferring funds and making digital payments. Credit cards, debit cards and prepaid cards are the main kinds of cards.

**Credit cards** – RBI authorised banks and some other bodies issue these cards. Extra money can be withdrawn with this card. It can be used for national and international payments.

**Debit cards** – These are issued by the bank where you have your account irrespective of cash balance in the account. With this card we can withdraw only the amount that is in our account. No extra amount can be withdrawn like credit card. It is an instant transaction, the payee's account will be credited and your account will be debited immediately.

**Prepaid cards** – These are just like another type of cards which you use to pay digitally and have to recharge before using it.

#### Key innovations for the cashless world

Following are a number of payment novelties that have developed in the past five years, leveraging mobile and connectivity to make payments simpler and add value

#### 4) Mobile payment

Under this system instead of paying with cash, cheque or cards, a consumer can use a mobile to pay for a wide range of goods and services. In developing countries it was considered as a means of financial services to the underbanked community. Since dependence of smart phone is increasing day by day, various means have been developed to pay appropriately through a phone. In different ways this mode is being implemented all over the world. The first patent for "Mobile Payment System" was filed in 2000. There are five primary models for mobile payments

#### Mobile wallets

- Card-based payments
- Carrier billing
- Near Field Communication
- Direct transmissions between payer and payee bank accounts in near real-time (bank-led model, intra/inter-bank transfers/payments that are both bank and mobile operator agnostic)

#### 5) Benefits of electronic transactions

- **Convenience:** It gives a lot of convenience as it decreases the need for to bring cash, decreasing related costs, including trips to banks, price inflexibility and opportunity costs etc.
- **Efficiency:** It increases efficiency as it reduces the cash management charges as scarcer bills are swapped by hand and currency activities are established by electronic means
- **Traceability:** Enables a greater degree of prominence into the flow of money for financial institutions and regulators, facilitating taxation, transparency, and information gathering
- **Protection:** Defends customers and merchants from swindle and robbery by recording transactions and reducing the need to hold cash

#### 6) Key challenges

- **Merchant adoption-** Due to the infrastructure costs, high fees and clearance delays, E-Payments are not accepted by every merchant
- **Accessibility** Under-banked population does not have access to primary accounts and therefore only uses cash in transactions
- **Fraud** Even though the safety measures more and more adopted, electronic transactions create opportunities for dishonest activities
- **Convenience**
- **Minor value payments** are often still conducted reducing the number of processing steps and time to complete a transaction

## 2. Conclusion

Digital payment devices that can serve for as much diversity as commerce in the real world. Payments are made by means of different payment instruments that are used in different ways. All systems directly related to transfer credit/debit details for settlement in the existing financial systems. This also suffers from transaction processing costs, ensuring that low value transactions cannot be cost-effective. E-commerce on the Internet needs payment devices that can serve for as much diversity as commerce in the real world. Large value transactions will require secure ways to use existing bank card mechanisms. At the end, finally, in light of the success of the iTunes music store and the emergence of micropayments via mobile phones, the issue of micropayments needs to be revisited.

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