



## Indian Banking Innovations in Cashless Economy

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### ABSTRACT

The Indian Banking regulation act of 1949 defines banking as accepting, for the purpose of lending or investment, of deposits of money from the public, repayable on demand or otherwise, and withdrawable by cheque, draft, and order or otherwise. There is wider acceptance of the concept that finance and economic growth are positively related. There is significant transformation of banking sector of India due to financial sector reforms initiated in 1990s. Apart from financing the needs of major sectors in the economy, banking has a lot to do in the modern economy as the payment systems constitute the backbone of economic activities. Recently announced demonetization scheme of high value denomination currencies in India stresses the importance of digital payments and banking technologies. So this paper intends to make familiarize with the innovations in Indian banking sector.

### 1. Introduction

The developments in Tele-communication technology and electronic data processing have contributed to remarkable changes in banking sector. Also the application of modern information technology has altered the traditional ways of banking. Apart from this, availability of ATMs and plastic money has helped the customers to avoid bank premises for cash. All such developments in banking sector led to the concept of Electronic banking recently. Keeping all these in mind, in a country like India, where cash to GDP ratio is 12%, a surgical attack, as the Central Government called demonetization lead to severe crisis. 85% of total money in circulation (in value terms- 14 lakh crores) was demonetized recently in India. In this situation it is important to analyze the situation and find whether it is possible to transform India into a cashless economy and specify the importance of banking innovations. So it is high time of India to be thinking of possibilities of efficient secure payment systems in banking. Payment systems are the backbone of any financial economy. A well-defined payment system is a crucial component of financial infrastructure.

### 2. Statement of problem

Demonetization necessitates cashless economy where banks have to play a key role through innovative technologies.

### 3. Scope of study

Technological innovations in the world made a positive impact on payment systems in India. RBI has insisted all banks for the computerization of procedures and promoted Core banking solution. Technology plays key role in banking strategy through which banks made a jump from paper based transactions that includes usage of currency notes, cheque, challan to electronic means that includes RTGS, NEFT and other electronic payment modes like ECS, debit and credit cards.

### 4. Electronic Fund Transfer

Electronic Fund Transfer is the process by which money is transferred from one place to other electronically on a real time basis. Salary placed into account by Electronic Fund Transfer, Money withdrawn from ATM is the

examples of Electronic Fund Transfer. Through this scheme, work from home becomes easier, quick and safe. Currency and Exchange rate are automatically calculated when funds are being transferred from one country to other. In this system, Encryption, Verification and passwords are used for secure payments. Any transactions of sale, refund, withdrawal, deposit, payments and so on can be performed under EFT. Electronic Fund Transfer Point of Sale technology empowers a retailer to directly debit a customer's bank account by using a debit card. Debit card swiped through a reading machine and the PIN number has to be provided to enhance transaction. Cashless options available in India through banking innovations are:

#### 4.1 NEFT

National Electronic Fund Transfer (NEFT) mechanism assist fund transfer from one bank to other through RBI server and settlement occurs on net basis. Every day, RBI system enables 3 sessions of electronic clearing and after the completion of each session; the net amount will be settled among banks through their current accounts maintained with RBI. NEFT settlement happens within 24 hours and there is no limit for amount transacted. The condition here is that, the two branches of bank must be Core Banking Solution enabled.

#### 4.2 RTGS

Real Time Gross Settlement (RTGS) is a payment mechanism for interbank payments. In this method, one bank makes payment electronically to another bank through RBI. Paying bank sends a message to RBI, based on which it debit current account paying bank and credit current account of receiving bank without a time lag. Banks participating in RTGS have to maintain a current account with RBI and each transaction is settled within 2 hours. Transaction or remittance made through RTGS can never be cancelled or modified. RTGS is done through interfacing Core Banking Solution of 2 banks with computer server of RBI. The transaction limit under RTGS is minimum 100000 rupees.

#### 4.3 IMPS

Immediate Payment Service (IMPS) was introduced by National Payments Corporation of India in 2010. It is an instant real time interbank electronic fund transfer system of India through mobile phone. This facility is available on a 24\*7 basis.

#### 4.4 UPI

Unified Payment Interface (UPI) interconnects banks to help transfer funds. In this mode, both money sender and receiver need a UPI identity. Currently thirty banks in India offer this facility.

#### 4.5 USSD

Unstructured Supplementary Service Data (USSD) helps customers to link their mobile number and bank accounts and then to make payments. It was developed by National Payments Commission of India which is technology based service for feature phones through which customers needed to dial \*99# and enter short messages for basic banking activities such as balance enquiry and generating mini statement.

#### 4.6 Mobile Banking

It refers to conduct of banking operations on mobile. The services under mobile banking involves, making enquiry about bank balance and last few transactions, viewing details of bank account, order demand draft and so on. It is a service provided by a bank or other financial institution that allows customers to conduct financial transactions via mobile device like mobile phone or tablet. Mobile banking uses software called an app for this purpose. This facility is available on a 24 hour basis and some banks impose restrictions on which accounts can be accessed and limits the amount of transaction.

#### 4.7 Mobile Wallets

Mobile wallets are mechanism to make and receive payments through mobile phones. Mobile wallets are growing at a phenomenal pace. The convenience of making payments through mobile phones is replacing cash payments and credit card payments. Mobile wallets are changing the way cash transactions take place around the world. The demonetization announced by the Indian Government on 8th November 2016 will force more people to

move towards mobile wallets rather than cash transactions. With more than a billion smart phone holders in India, the use of mobile wallets is bound to expand to a level that was not originally comprehended

## 5. Demonetization

Demonetization is the act of stripping a currency unit of its status as legal tender. It is a necessary scheme where there is a change in national currency. The old unit of currency becomes retired and replaced with a new currency unit. As part of demonetization, the currency loses its public confidence and further it will not be supported by government. The central government plans to promote a cashless economy and people also preferring it due to difficulties with cash holdings and dealings. The countries like Canada, Norway, Denmark, Kenya, South Korea etc. have already adopted cashless economy either by penalizing high value cash transactions or by stopping printing of high value currencies. A cashless economy means an economy with cash free transactions where coins and notes are replaced by bits and bytes and spending, earning, investment gets updated in real time through smart phones.

## 6. Conclusion

The scope of banking innovation in a cashless economy in the context of demonetization is relevant but in India even though there is 1 billion mobile phones in usage, there is more amount of less sophisticated phones and lack of knowledge also becomes a constraint for the smooth functioning. Creating a basic infrastructure and increasing banking density is the need of the hour.

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