

## Impact of banking technology on Indian economy

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### Abstract

Finance is the life blood of any economy for growth and development. The financial support required by the economy to grow and develop is supported by strong and sustainable banking system. The Banks in India have started adopting and embracing technology since from 1980s. It was imperative and inevitable to the Indian banks to embrace new innovations to meet the challenges of changing trends in banking sectors and to meet the expectations of the customers. Developments in the field of information technology have contributed to remarkable changes in banking sector. The modern information technology have altered and replaced the traditional ways of banking into digitalization. The demonetization announcement was to restrain the black money, to check the corruption, eliminate the flow of fake currency etc., but, this declaration led to cash less economy and grabbed unbanked community of the nation under the ambit of formal banking services. This paper makes an attempt to study various technologies adopted in banking sector over the decade and its impact on Indian economy. The study is made by making use of secondary information from various resources.

**Keywords:** Digitization, Demonetization and Banking Innovations

### Introduction

The economy to grow and develop is supported by strong and sustainable banking system. The Banks and financial institutions have to adopt and adapt new technological innovations to provide more customer-friendly banking services. The Banks in India have started adopting and embracing technology since from 1980s. It was imperative and inevitable to the Indian banks to embrace new innovations to meet the challenges of changing trends in banking sectors and to meet the expectations of the customers. Developments in the field of information technology have contributed to remarkable changes in banking sector. The demonetization has motivated the entire economy to adapt digital banking system and use of cashless or less cash.

### Objectives of the study

The objectives are- to study the technology innovations in banking sector and to examine the impact of the banking technology on Indian Economy.

### Research Methodology

The study is based on the secondary data and the data was collected from newspapers, books, magazines and internet sources.

### Banking Innovations

The banks in India have embraced and started adopting technology since from decades. The modern information technology have altered and replaced the traditional ways of banking system. After announcing Demonetization by Prime Minister, varieties of technologies were introduced to make India less cash economy. Financial inclusion has promoted banking sectors to launch new technology to bring the informal business activities and unbanked under the ambit of banking services. The demonetization has motivated the entire economy to adopt digital banking system and use of cashless

or less cash. Now, the customers transact with banks by their figure tips using smart phones. Some of the technological innovation adopted over the decades by Indian banks are-

#### 1980s

MICR (Magnetic ink character recognition): MICR was implemented, a character recognition technology which was used by the banking sectors to process and clear the cheques and other documents in more easier way. This technology eliminated manual work of processing and clearance of negotiable instruments.

#### 1990s

In this decade all banks in India were computerized and expanded their products and services to their customers. EFT (electronic fund transfer) was introduced in this decade which was of a great achievement. EFT facilitates transfer of funds from one place to another electronically by using secured password. Transactions such as payment, receivables, withdrawals and deposits can be made through EFT. In this decade, ATMs was also introduced which witnessed drastic change in banking services and also in customers experience in banking transactions.

#### New Millennium (2000)

During this decade internet banking was embraced by all the banks in India. Payment and Settlement System Act 2007 (PSS Act) and regulated by RBI and the Board for Regulation and Supervision of Payment and settlement Systems introduced multiple payment and settlement systems like ECS, NEFT, RTGS, IMPS, UPI USSD etc.,. These technologies made customers to sit at home and perform banking transactions by a click of a button rather than visiting the bank.

ECS (Electronic Clearing Service): This technology is used to transfer funds from one bank account to another periodically. ECS is used by institutions for both debit and credit purposes.

ECS credit through banks. ECS credit is that, when an institution makes a credit to customers' savings account such as salary, distribution of dividend and interest, pension etc... ECS debit is that, when a institution pays bills such as telephone bill, electricity bill, water bill, equated monthly loan installments etc...

NEFT (National electronic fund transfer): NEFT facilitates electronically transfer of funds from one bank to another having core banking solution. NEFT has no limit both minimum and maximum on the amount of funds to be transferred.

RTGS (Real Time Gross Settlement): RTGS is an electronic form of funds transfer where the transmission takes place on real time basis. It is a interbank payment through interfacing core banking solution with a minimum transaction limit of Rs. 2,00,000. The customer needs to know the IFSC (Indian Financial Service Code) of the beneficiary's bank while transferring funds using RTGS.

### Decade 2010

IMPS (Immediate payment service): Immediate Payment Service was introduced by National Payments Corporation of India in the year 2010. Through this service, funds are transferred instantly on real time interbank using mobile phone on 24X7 bases.

UPI (Unified Payment Interface): National Payments Corporation of India launched UPI app of banks which allows money transfer between any two bank accounts by using smart phone. Both the sender and receiver banks need UPI identity which helps in transferring funds.

USSD (Unstructured Supplementary Service data): This was developed by NPCI which operates by the sim card. It is a Global System for Mobile (GSM) communication technology that is used to send text messages. By dialing \*99# USSD links customers' mobile number to the bank accounts to check customer's bank balance, mini statement, internet pack balance, fund transfer via IFSC code etc., without internet connection.

BHIM (Bharat Interface for Money): Government of India launched on 30<sup>th</sup> December 2016. It is Aadhar based mobile payment which is linked to the customer's account. BHIM enables online payments simpler, easy and quick using unified payments interface. A study reveals that, BHIM app has been downloaded 17 million times, and 19.37 lakh transactions worth Rs. 950 crore have been carried out by February 2017.

Rupay: It was launched by National Payment Corporation of India under the Jan Dhan scheme for lower income class which works on three paths viz ATMs, point of sale and online sale. Rupay is similar to visa or Master card and an Indian version of a credit or debit card. The banks provide a Rupay debit card to every account holders with Rs. 1 Lakh accident insurance.

Other than these technologies, Government of India has launched number of new digital innovations focusing on financial inclusion and demonetization. After announcing demonetization GOI introduced variety of digital apps to motivate and attract the people to adopt these new digital modes like Lucky Grahak Yojana, Aadhar payment app, Digi Dhan Abhiyaan, Digilocker, e-wallets etc... And now, to empower Indian society digitally the GOI has defined nine pillars of digital India for uninterrupted success of the programme viz...

1) Broadband Highway 2) Universal Access to Mobile Connectivity 3). Public Internet Access Programme 4) e-Governance-Reforming Government through technology 5) e-Kranti- electronic Delivery of Services 6) Information for All 7) Electronics Manufacturing 8) IT for Jobs and 9) Early Harvest Programmes.

### Impact of banking technology on Indian economy

The modern banking technology has eliminated manual efforts in all banking transactions and has moved towards automation. The biggest gain from the technology is that, banking has become increasingly easy and comfortable for the customers in doing business and day today transactions. Online banking services are universally available to everyone. Entire banking process becomes transparent and corruption can be automatically caught and reduced. More transparency can be achieved in financial transactions by producing valid identity cards to the banks for exchanging the money. It helps to eliminate black money and corruption to larger extent by implementing PAN card requirement for cash transaction beyond Rs. 2, 00,000. The systematic records of financial transactions are made easier and substantially reduce the need to carry cash. With more digital or online transactions the nation can achieve less cash or cash less economy or digital economy. Digital banking promotes financial inclusion by bringing unbanked under the ambit of financial services. Through digital transactions more money is deposited and the Government can utilize the funds for economic development. On the other side, along with many opportunities, threats have also developed overtime causing threat and damage to the system. Since, large portion of the population is computer illiterates and cannot use digital banking services. The rural and poor people find difficult to go for digitization. Server problem, computer virus, uninterrupted power supply, difficulty in finding ATMs, fast and reliable internet connections are not available easily at many places. The most dangerous threats are cybercrime, cyber theft, online fraud, hacking etc., which may cause damage to the whole economic system. According to the study made by Shane Harris an American noted journalist and author, alongside land, air, sea and space, the cyberspace has become the fifth domain of warfare.

### Findings and Conclusion

Though there are more than 50 banks in India, approximately only 15 to 20 percent population of the country are using digital banking services. Other part of the population are still unbanked which indicates slow progress in the adapting the technology. Government is coming out with new initiations to boost and motivate Digital programme. Though banks are under the pressure of rules and regulations, they are making efforts to launch new technologies, whereas, customers are not ready to embrace this technology to larger extent. Post demonetization has given push to digital transactions and made banking services more customers friendly. The new programmes launched by the Government should be effectively implemented and succeed. The Government of India should definitely take some measures to address cybercrimes, cyber theft, online fraud, hacking etc. followed by connectivity and data protection. Once people get addicted to digital transactions; there will be less demand for cash

holding or cash hoarding. This will lead to more deposits in the banking systems. The funds accumulated can be used on overall economic growth and development.

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