

Digital Revolution in the Indian Banking Sector - Challenges and Opportunities

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ABSTRACT

Banking sector plays an important role in the economic development of a country. It can undoubtedly be called the lifeline of an economy. A strong and healthy banking system is important requirement for economic growth. Indian banking industry, today has undergone a major change and is observing an IT revolution. The implementation of internet in banking organizations has modernized the banks. Implementing the internet banking approach has benefited both the consumers as well as banks. Considering the benefits, the banks all over the globe have implemented the internet banking and banking organizations in India are no exception. The competition among the banks has led to the increasing total automation in the Indian banking industry. Digital Banking is a generic term encompassing internet banking, telephone banking, mobile banking etc. Through Digital Banking the bank wants to introduce the core concept of IT based Enabled Services (ITES). The Digital Banking services are executed only upon the customer, and these services would fully integrate with the core banking solution that is already in usage. The objective of the present paper is to examine and analyze the progress made by Digital Banking in India , focusing on the challenges and opportunities .

KEYWORDS: Digital Banking, Information Technology, Internet Banking, India

OBJECTIVES OF THE STUDY

- To study the use of Information Technology in Indian banking sector.
- To identify various digital banking services provided by Banks in India.
- To study the challenges of digital banking.
- To study the opportunities available for digital banking.

METHODOLOGY

The study is descriptive in nature. It is based on secondary data , collected from the concerned sources as per need of the research. The relevant books, documents of various ministries/departments and organizations, articles, papers and web-sites are used in this study.

INTRODUCTION

Liberalization and de-regulation process, which started in 1991-92 has made a drastic change in the Indian banking system. From a totally regulated environment, we have gradually moved into a market driven competitive system. Information Technology is the buzzword in today's times in all sectors. Tremendous progress has taken place in the field of technology which has reduced the world to a global village and it has brought remarkable changes in the banking industry too. Banking sector today operates in a highly globalized, liberalized, privatized and a competitive environment. IT has introduced new business paradigm. It is increasingly playing a vital role in improving the services in the banking industry. Indian banking industry has witnessed a tremendous development due to the changes that are taking place in the information technology.

In today's era, one cannot think about the success of any service industry including banking industry without information technology. It has increased the contribution of banking industry in the economy. Financial transactions and payments can now be processed quickly and easily in friction of seconds. Every second development in Information Technology (IT) and its acceptability by the commercial banks in India has enabled them to use IT extensively to offer their products and services to customers apart from just back office processes. Banks with latest information technology techniques are more successful in the cut throat competitive market in these days. Further, they can generate more and more business opportunities resulting in greater profitability. Information technology revolution in banking sector has not only provided improved service to the customers, but also reduced the operational cost (Talwar, 1999) .

Digital banking is the term that signifies and encompasses the entire sphere of technology initiatives that have taken place in the banking industry. It is a generic term making use of electronic channels through telephone, mobile phones, internet etc. for delivery of banking services and products. Digital banking has broken the barriers of branch banking. It allows individual customers to perform banking activities at off-sites such as home, office and other locations via internet based secured networks. It also enables customers to perform all routine transactions, such as account transfers, balance inquiries, bill payments and stop-payment requests, and some even offer online loan and credit card applications.

To survive in emerging competitive situation banks need to modify their services and upgrade their information technology system. Now more and more people are switching to electronic platforms for executing financial transactions. The wider usage of cell phone and internet connection in mobile, laptop and PC seems to be playing a role in blurring physical boundaries. There are huge opportunities for banks in tapping newer customer segments and providing various services through digital banking.

Digital Banking in India The need for computerization was felt in the Indian banking sector in late 1980s, in order to improve the customer service, book-keeping and MIS reporting. In 1988, Reserve Bank of India set up a Committee on computerization in banks headed by Dr. C. Rangarajan.

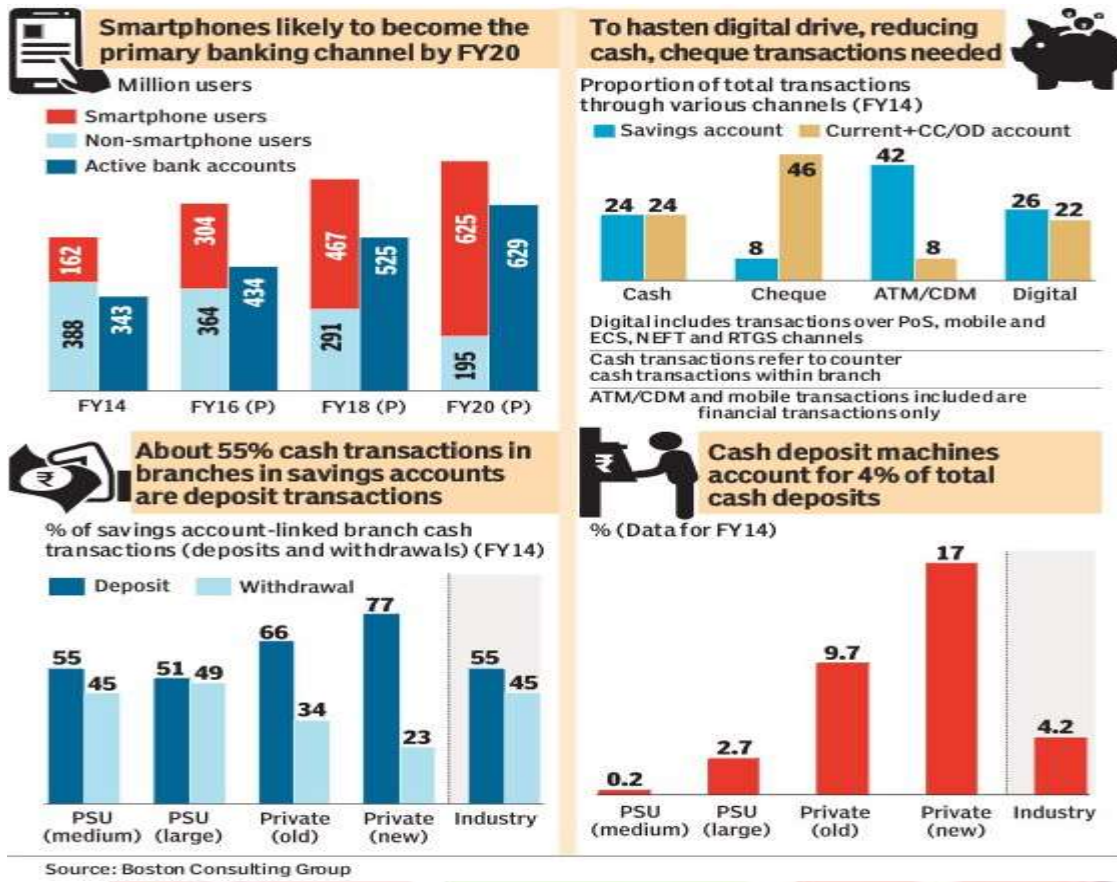
Banks began using Information Technology initially with the introduction of standalone PCs and migrated to Local Area Network (LAN) connectivity. With further advancement, banks adopted the Core Banking platform. Thus branch banking changed to bank banking. Core Banking Solution (CBS) enabled banks to increase the comfort feature to the customers as a promising step towards enhancing customer convenience through Anywhere and Anytime Banking. Different Core Banking platforms such as Finacle designed by Infosys, BaNCS by TCS, FLEXCUBE by i-flex, gained popularity.

The process of Computerization gained pace with the opening of the economy in 1991-92. A major driver for this change was propelled by rising competition from private and foreign banks. Several commercial banks started moving towards digital customer services to remain competitive and relevant in the race.

Digital Banking has become an integral part of banking system in India. Till the early 90's traditional model of banking i.e. branch based banking was prevalent, but after that non-branch banking services were started. The credit of launching internet banking in India goes to ICICI Bank. Citibank and HDFC Bank followed with internet banking services in 1999. The Government of India enacted the IT Act, 2000 with effect from October 17, 2000 which provided legal recognition to electronic transactions and other means of electronic commerce. The Reserve Bank monitors and reviews the legal and other requirements of digital banking on a continuous basis to ensure that digital banking would develop on sound lines and e-banking related challenges would not pose a threat to financial stability. To cope with the pressure of growing competition, Indian commercial banks have adopted several initiatives and digital banking is one of them. The competition has been especially tough for the public sector banks, as the newly established private sector and foreign banks are leaders in the adoption of digital banking. Indian banks offer to their customers following digital banking products and services:

Automated Teller Machines (ATMs) Internet Banking Mobile Banking Phone Banking Tele banking Electronic Clearing Services Electronic Clearing Cards Smart Cards Door Step Banking Electronic Fund Transfer

Current status in Digital Banking



Indian Government is aggressively promoting digital transactions. The launch of United Payments Interface (UPI) and Bharat Interface for Money (BHIM) by National Payments Corporation of India (NPCI) are significant steps for innovation in the Payment Systems domain. UPI is a mobile interface where people can make instant funds transfer between accounts in different banks on the basis of virtual address without mentioning the bank account.

Today banks aim to provide fast, accurate and quality banking experience to their customers. Today, the topmost agenda for all the banks in India is digitization.

According to the RBI Report in 2016-17 there are 2,22,475 Automated Teller Machines (ATMs) and 25,29,141 Point of Sale devices (POS). Implementation of electronic payment system such as NEFT (National Electronic Fund Transfer), ECS (Electronic Clearing Service), RTGS (Real Time Gross Settlement), Cheque Truncation System, Mobile banking system, Debit cards, Credit Cards, Prepaid cards have all gained wide acceptance in Indian banks. These are all remarkable landmarks in the digital revolution in the banking sector. Online banking has changed the face of banking and brought about a noteworthy transformation in the banking operations.

National Electronic Funds Transfer (NEFT) is the most commonly used electronic payment method for transferring money from any bank branch to another bank in India. It operates in half hourly batches. At present there are 23 settlements.

Real Time Gross Settlement (RTGS) is primarily used for high-value transactions which are based on 'real time'. The minimum amount to be remitted through RTGS is Rupees Two Lakhs. There is no upper limit.

Immediate Payment Service (IMPS) is an instant electronic funds transfer facility offered by National Payments Corporation of India (NPCI) which is available 24 x 7.

The usage of Prepaid payment instruments (PPIs) for purchase of goods & services and funds transfers has increased considerably in recent years. The value of transactions through PPI Cards (which include mobile prepaid instruments, gift cards, foreign travel cards & corporate cards) & mobile wallets have jumped drastically from Rs.105 billion and Rs. 82 billion respectively in 2015-16 to Rs. 277 billion and Rs. 532 billion respectively in 2017-18.

Benefits of Digital banking:

Digital banking helps the customers as well as banks by overcoming the drawbacks of manual system as computers are capable of storing , analysing , consolidating, searching and presenting the data as per the requirement of customers and banks with a lot of speed and accuracy.

Advantages to the Banking institutions

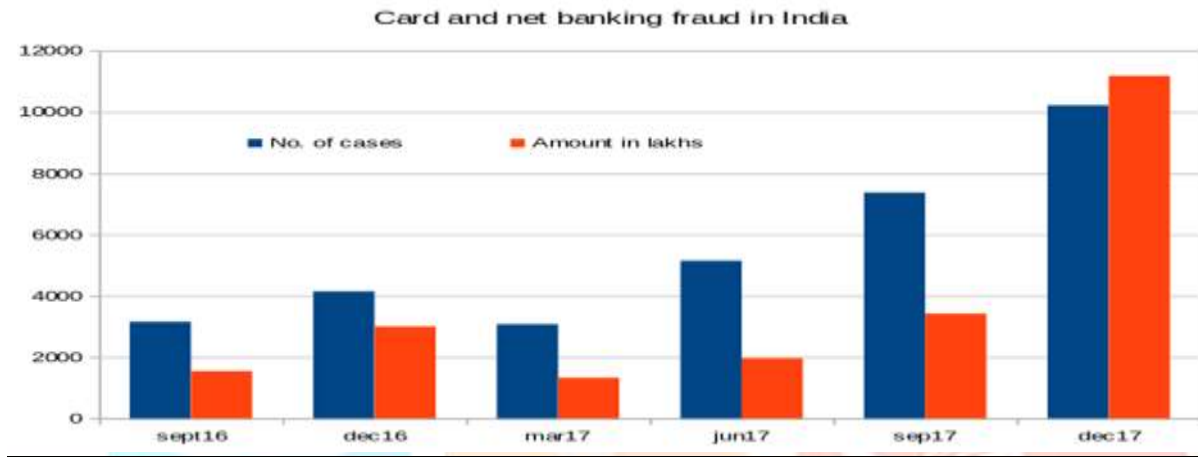
1. Digital banking helps in reducing the cost of delivering the services to the customers.
2. It provides banks with competitive advantage among their peers.
3. It reduces the use of paper money that helps the central bank in printing less paper notes.
4. Through websites, banks can earn revenue by promotional activities.
5. FAQ"s uploaded over the banks" website will reduce the workload on employees.
6. Customers can avail digital banking facility from anytime, anyplace, therefore there is a need to invest more and more on relevant infrastructure.

Advantages to the customers

1. Digital banking delivers 24x7 services to customer.

2. Easy access to account information in quick time.
3. Payment can be made online for the purchase of goods and services.
4. With digital banking, customers can check account balance, can get statement of their account, apply for loans, check the progress of their investments and collect other relevant information.

Challenges in Digital Banking



□ **Security Risk:** The problem related to the security has become one of the major concerns for banks. A large group of customers refuses to opt for digital banking facilities due to uncertainty and security concerns. According to the IAMAI Report (2006), 43% of internet users are not using internet banking in India because of security concerns. So it's a big challenge for marketers and makes consumers satisfied regarding their security concerns, which may further increase the online banking use.

□ **The Trust Factor:** Trust is the biggest hurdle to online banking for most of the customers. Conventional banking is preferred by the customers because of lack of trust on the online security. They have a perception that online transaction is risky due to which frauds can take place. While using digital banking facilities lot of questions arises in the mind of customers such as: Did transaction go through? Did I push the transfer button once or twice? Trust is among the significant factors which influence the customers' willingness to engage in a transaction with web merchants.

□ **Customer Awareness:** Awareness among consumers about the digital banking facilities and procedures is still at lower side in Indian scenario. Banks are not able to disseminate proper information about the use, benefits and facility of internet banking. Less awareness of new technologies and their benefits is among one of the most ranked barrier in the development of e-banking.

- **Privacy risk:** The risk of disclosing private information & fear of identity theft is one of the major factors that inhibit the consumers while opting for internet banking services. Most of the consumers believe that using online banking services make them vulnerable to identity theft. According to the study consumers“ worry about their privacy and feel that bank may invade their privacy by utilizing their information for marketing and other secondary purposes without consent of consumers.
- **Strengthening the public support:** In developing countries, in the past, most e-finance initiatives have been the result of joint efforts between the private and public sectors. If the public sector does not have the necessary resources to implement the projects it is important that joint efforts between public and private sectors along with the multilateral agencies like the World Bank, be developed to enable public support for e-finance related initiatives.
- **Availability of Personnel services:** In present times, banks are to provide several services like social banking with financial possibilities, selective up gradation, computerization and innovative mechanization, better customer services, effective managerial culture, internal supervision and control, adequate profitability, strong organization culture etc. Therefore, banks must be able to provide complete personnel service to the customers who come with expectations.
- **Implementation of global technology:** There is a need to have an adequate level of infrastructure and human capacity building before the developing countries can adopt global technology for their local requirements. In developing countries, many consumers either do not trust or do not access to the necessary infrastructure to be able to process e-payments.
- **Non- Performing Assets (NPA):** Nonperforming assets are another challenge to the banking sector. Vehicle loans and unsecured loans increases N.P.A. which terms 50% of banks retail portfolio was also hit due to upward movement in interest rates, restrictions on collection practices and soaring real estate prices. So that every bank have to take care about regular repayment of loans.
- **Competition:** The nationalized banks and commercial banks have the competition from foreign and new private sector banks. Competition in banking sector brings various challenges before the banks such as product positioning, innovative ideas and channels, new market trends, cross selling ad at managerial and organizational part this system needs to be manage, assets and contain risk. Banks are restricting their administrative folio by converting manpower into machine power i.e. banks are decreasing manual powers and getting maximum work done through machine power. Skilled and specialized man power is to be utilized and result oriented targeted staff will be appointed.

□ **Handling Technology:** Developing or acquiring the right technology, deploying it optimally and then leveraging it to the maximum extent is essential to achieve and maintain high service and efficiency standards while remaining cost effective and delivering sustainable return to shareholders. Early adopters of technology acquire significant competitive advances. Managing technology is therefore, a key challenge for the Indian banking sector.

Opportunities in Digital Banking

□ **Untapped Rural Markets:** Contributing to 70% of the total population in India is a largely untapped market for banking sector. In all urban areas banking services entered but only few big villages have the banks entered. So that the banks must reach in remaining all villages because majority of Indian still living in rural areas.

□ **Multiple Channels:** Banks can offer so many channels to access their banking and other services such as ATM, Local branches, Telephone/mobile banking, video banking etc. to increase the banking business.

□ **Competitive Advantage:** The benefit of adopting digital banking provides a competitive advantage to the banks to banks, improves customer relation, increases the geographical reach of the bank, etc. The benefits of e-banking have become opportunities for the banks to manage their banking business in a better way.

□ **Increasing Internet Users & Computer Literacy:** To use digital banking it is very important or initial requirement that people should have knowledge about internet technology so that they can easily adopt the internet banking services. The fast increasing internet users in India can be a very big opportunity and banking industry should encash this opportunity to attract more internet users to adopt internet banking services. Table shows evidence of increasing number of internet users in India.

□ **Worthy Customer Service:** Worthy customer services are the best brand ambassador for any bank for growing its business. Every engagement with customer is an opportunity to develop a customer faith in the bank. While increasing competition customer services has become the backbone for judging the performance of banks.

□ **Internet Banking:** It is clear that online finance will pickup and there will be increasing convergence in terms of product offerings banking services, share trading, insurance, loans, based on the data warehousing and data mining technologies. Anytime anywhere banking will become common and will have to upscale, such up scaling could include banks launching separate internet banking services apart from traditional banking services.

□ **Retail Lending:** Recently banks have adopted customer segmentation which has helped in customizing their product folios well. Thus retail lending has become a focus area particularly in respect of financing of consumer durables, housing, automobiles etc., Retail lending has also helped in risks dispersal and in enhancing the earnings of banks with better recovery rates.

Strategic findings to cope with the challenges

For making digital banking services a successful arsenal to cope with changing environment, banks need to take certain measure to overcome the loopholes in securely delivering services electronically. The major initiatives are:

1. The primary focus of banks should be on ensuring reliable service delivery through investing on and implementing right technology.
2. Banks should improve the system security in ATM location and at the same time, they must educate their customers about using their cards with due caution and about the risks involved while transacting through cards.
3. Implementation of technology related solutions involves huge investment. Banks need to look for ways to optimize resources for technology applications. In this regard, global partnership on information technology and skills sharing may help.
4. Cyber frauds need to be kept in control. Despite many steps taken up by banks, news regarding cyber frauds are frequently in the air. Banks need to keep ahead of the fraudster by investing and adopting latest technology.
5. For reducing risks, banks need to conduct a pilot survey, consult experts of various fields and then monitor performance. Further they need to analyse the availability of additional resources and cost of delivering the service, periodic evaluation of new technology and appropriate consideration for the cost of upgradation of information technology equipments.
6. Banks should use proxy server type firewall so that there is no direct connection between internet and banks system. This will facilitate a high level of control and in-depth monitoring using logging and auditing tools.
7. Banks should regularly keep back-up of their data. There should be periodic check on the back up data to ensure the recovery without loss of transaction.
8. Banks should organise meetings with the customers to educate them regarding the use of digital banking services securely.
9. Banks should regularly train their available human resource to tackle the queries of digital banking customers.
10. Business Analytics and Artificial Intelligence (AI) has a potential to bring a major change. Robotics, enabled by AI, is expected to be the future game changer in the banks. Many private banks are planning to

deploy Robots for customer service, investment advisory and credit-approval process to improve the services and be cost effective in the long run.

CONCLUSION

With the time, the concept of digital banking has got attention in the Indian context. Most of the banks have already implemented the e-banking facilities, as these facilities are beneficial to both i.e. banks as well as consumers. The banks are facing many challenges and many opportunities are available with the banks. Many financial innovations like ATMs, credit cards, RTGS, debit cards, mobile banking etc. have completely changed the face of Indian banking. Thus, there is a paradigm shift from the seller's market to buyer's market in the industry and finally it affected at the bankers level to change their approach from "conventional banking to convenience banking" and "mass banking to class banking". The shift has also increased the degree of accessibility of a common man to bank for his variety of needs and requirements. Digital Banking will be the most preferred form of banking in the coming years for all customers in all banks.

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