

# Technology in Indian Banking Sector

Reeshma

Research Scholar, School of Social Sciences and Languages, VIT University, Vellore, Tamil Nadu, India.

## To Cite this Article

Reeshma, Technology in Indian Banking Sector, *International Journal for Modern Trends in Science and Technology*, Vol. 02, Issue 11, 2016, pp. 60-62.

---

## ABSTRACT

*Information and Communication Technology has altered the banking system all over the world. In India, the banking sector has been witnessing path breaking technological advancement. Paper transactions, like cheques and drafts are displaced by internet transfers through RTGS, clearing houses are replaced by MICR. Customers no more belong to a particular bank or branch. Thus impact that in the technological changes in banking sector is analyzed in this paper. This paper deals in the analysis of technological revolution in Indian banking sector.*

**KEYWORDS:** Technology in banks, Indian banking sector, commercial banks

---

*Copyright © 2016 International Journal for Modern Trends in Science and Technology  
All rights reserved.*

## I. INTRODUCTION

Information and Communication Technology (ICT) has changed the working of banks and other financial institutions worldwide. The major advance started in the year 1980s with the use of Advanced Ledger Posting Machines (ALPM). The huge computerization started at the branch level with the focus on automation of transactions. This abridged errors in shrewdness and transactions. Customers started getting error free services and were supplied with printed account statements. In late 1980s, banks absorbed on Total Branch Automation (TBA) and automation of both the front-office and back-office operations started within the same branch. Total Branch Automation means total automation of a particular branch with its own database. Computerized cheques processing systems have been established, which customs a Magnetic Ink Character Reader (MICR) machinery. After the entry of new private sector banks and with the introduction of internet, banks adopted for a different model having a single centralized database instead of having multiple databases for all their subdivisions. Decentralized

networks have their own set of problems in terms of cost and organization. Internet has made it easy to share the databases and sustain a centralized database at a low cost. Internet has provided a model shift in the working of banks. Internet is a network of networks, provides free exchange of information.

Internet simplified the World Wide Web (WWW), wherever banks can create their own web pages, and customers can access these web pages over the web browsers by shifting at home. This kicked off online banking way back in 1996, while the usage improved only after 1999 due to lower ISP connected charges which increased PC penetration and technology stabilization. Internet has thus escorted the concept of anytime and anywhere banking.

Through online banking, customers could get their account information; bill might be paid online through the electronic bill payment service, online requirements, stop payment of cheque, cheque book replacement, demand draft, opening of fixed deposit account, etc. The additional important development include the evolution of the ATM channel, debit cards, mobile banking and telephone banking throughout which the bank

services are made available to customers on a 24 X 7 basis all over the world.

Establishment of the Indian financial Network (INFINET) in 1999 resulted in the data implementation of Real Time Gross Settlement (RTGS) system. It not only stemmed in compliances through the core principles of systematically important payment systems of the Bank for International Settlement (BIS), whereas well provide the way for risk free, credit push-based fund transfers settled on a real time basis.

In 2012-13, Indian banks deployed technology-intensive solution to raise profits, to develop customer experience, enhance cost structure and manage venture threat. Hence, there is a wide variation in the technology programs and implementation capability across different players of the banking sectors:

- a) Enhancing core bank value
- b) Revamping the digital agenda
- c) Moving from in order to insight
- d) Dealing through a change risk regime
- e) Since cash to electronic modes of payment
- f) Contending with financial inclusion
- g) Empowerworkers
- h) Accelerate innovation

## II. OBJECTIVE OF THE STUDY

1. To study about the advancement of banking sector
2. To analyze the technology development in banking sector
3. To identify the technology revolution in banking sector

## III. ROLE OF TECHNOLOGY IN IMPROVING BANKING SECTOR

The profits of Citibank consume shot up by 60% during the past five years though it has not opened even a single branch in India. Technology seems to have done a trick and single handled responsible for the renovation of the banking sector in India. All banks have been aiming their effort towards advancement technology. Due to the introduction of digitization, the industry has viewed a paradigm shift from the conventional methods of customer banking to digital ones. In the month of January 2014, ICICI Bank had transactions asset Rs 600 crores through the use of mobile phones. The advent of alternative networks of banking can be tested from the fact that more than 80% of the monetary transactions are applied through the digital channel.

## IV. INFORMATION TECHNOLOGY AND BANKS

At the time of conventional transactions, an account holder had to wait for hours at the bank counters for receiving a draft or for withdrawing his own money. Now, for banking transactions customers stay no longer to wait for information or services. They want their banking information and services at their fingertips by their preferred delivery channel. This makes a problem for many banks and financial institutions. Because if they are incapable to provide a fingertip service or IT based service to their customer, it affects their business. So for instance as per the increasing requirement of information technology, they have now started to provide a wide variety of distribution channels like automated teller machine, Telephone Banking, Internet Banking, Mobile Banking etc. Today, customer has a choice to use adapt made products for a speedy service. Various banks in India have introduced IT for several reasons:-

- a) Adoption of Technology in financial institutions and IT based new services offered by them/competitors
- b) Rising competition in banking industry
- c) Globalization in banking
- d) To meet the growing demand of customers for mobility, speed, effectiveness and economy over various technology based services
- e) A technological revolution in the Indian economy currently IT has intensely changed the operations of the banks. They have moved from a distributed/disbursed to a centralized atmosphere by introducing various delivery channels like: ATM, Internet, and Mobile etc.

From the IT perception, the banking industry can be categorized into three categories:

- Banks where all the processes are automated.
- Banks that are in the process of inventing core banking software and setting up their networking infrastructure.
- Banks that are in the process of recognizing the core solutions.

The technologies for managing and distributing information have transformed over the period of time, nevertheless the functions required for human organization have remained impartially constant. In each of the above category, the extent of IT usage and process automation varies. Most of the automation take place in the core banking system, while support functions form a very small portion of the overall operations.



## V. TECHNOLOGICAL REBELLION IN COMMERCIAL BANKS

The banking sector faced with higher operating costs in recent years have increasingly turned toward automation and electronic networks to replace labour-based production system, especially for taking credits, dispensing payments, making credit available in ATM machines and which gives customers 24 hours access to their deposit accounts; point-of-sale (POS) terminals in stores and shopping centers that replace paper-based way of transactions around the globe.

Reserve bank of India has played an important role in implementation of information technology in banking industry. Dr. Rangarajan committee had taken drawn up in 1983-84 plans for computerization and technology in the banking industry and viewed into the modalities of drawing up a phased plan for mechanization for the banking industry covering the period 1985-1989. The commission in its report in 1984 recommended the introduction of computerization and mechanization at the branch office and head office levels of banks. Now a days nearly all nationalized banks have implemented IT based resolutions for their day to day transactions. According to the RBI policy, nearly all commercial banks have previously implemented the step by step solutions for proving computerized transactions. Public sector banks, nationalized banks, foreign banks have implemented advanced technology based solutions like core banking services for provided their customers anywhere and anytime banking facility.

## VI. CONCLUSION

To conclude, banking is becoming more capital-intensive, fixed-cost industry and a smaller amount of a labour-intensive, variable cost industry. Many specialists believe that traditional brick and mortar bank structure and face to face meetings between bankers and their customers will eventually become left overs of the past, substituted by electronic communication. Production and service delivery will be fully automated and such stages will significantly lower inter-face between the banker and the customer.

## REFERENCES

- [1] <http://www.ey.com/Financial> Services, "Banking-on-technology-India-banking-Industry".
- [2] Reddy, Y.V. (1998) "Financial Sector Reforms: Review and Prospects". RBI Bulletin, December.
- [3] Reserve Bank of India, Annual Report, various years.

- [4] [www.banknetindia.com](http://www.banknetindia.com)
- [5] "Technology: key differentiator of future success, vepa kamesam, volume 71, 2003, Economic development in India
- [6] "The final chapter for bank systems and technology", Kathy Burger, January, 2015
- [7] "Technology in banking", BFSI Sector in India, <https://www.dnb.co.in>
- [8] Karekha ramey, "The role of technology in banking industry", October, 12, 2012
- [9] Mittal R.K, Dhingra Sanjay, "Technology in Banking Sector: Issues and Challenges", Vinimaya, Vol. XXVII, No. 4, Jan - March, 2007, pp 14-22, 2007.
- [10] Sharma M.C, Abhinav Sharma, " Role of Information Technology in Indian Banking Sector", International Journal of Multidisciplinary and Academic Research (SSIJMAR), Vol 2, Issue 1, January-February