

## IMPACT OF INFORMATION TECHNOLOGY (IT) ON BANKING SECTOR

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### **Abstract:**

*Banking atmosphere has to turn into highly competitive currently. IT states to the gaining, dealing out, storing and broadcasting of all forms of material using computer knowledge and telecommunication systems. These technologies are used for the input, storing, dealing out, and communication of information. IT includes auxiliary equipment, software, and similar measures, services etc. Recent developments in the banking sector in India are the Internet. The basic essential of Information Technology (IT) in the banking sector are meeting internal requirements, effective in data handling, extending customer services, creative support for new product development, end-user development of the non-technical staff. Emerging trends of information technology in the banking sector are Outsourcing, Combination, Distinguishing Edge, IT as Income Centre, Flourishing in Down Market. Tests faced by Indian banking scenario in India are Meet customer prospects on service and capability offered by the bank, Customer retaining, Dealing the spread and sustain the functioning profit, Recollecting the present market share in the industry and the enlightening the same, Accomplishment from another group of actors in the banking industry.*

**Keywords:** E-Banking, Services, Innovation, Challenges.

## **1. Introduction**

Banking atmosphere has developed highly competitive today. To be able to continue and grow in the moving market atmosphere banks are going for the modern technologies, which is being perceived as an 'enabling resource' that can help in emerging beginner and more flexible structure that can respond rapidly to the changing aspects of a fast-changing market situation. It is also observed as a tool of cost reduction and effective communication with people and institutions connected with the banking business. IT also facilitates the introduction of new delivery channels--in the form of Automated Teller Machines, Net Banking, Mobile Banking and the like. Further, IT deployment has assumed such high levels that it is no longer possible for banks to manage their IT implementations on a standalone basis with IT revolution, banks are increasingly interconnecting their computer systems not only across branches in a city but also to other geographic locations with high-speed network infrastructure, and setting up local area and wide area networks and connecting them to the Internet. As a result, information systems and networks are now exposed to a growing number.

## **OBJECTIVES OF THE STUDY**

1. To analyze the role of IT in the Indian banking industry.
2. To examine the extent of use of services especially the IT-enabled services in Indian banking.
3. To assess various aspects of IT services provided by Indian banks.
4. To know the implementation of IT in Indian Banking industry.

## **2. TECHNOLOGY INFLUENCES THE BANKING INDUSTRY, MOSTLY IN THE FOLLOWING THREE ASPECTS**

### **2.1 Technology is influencing competition and the amount of contestability in banking:**

Due to the growth of technology, the bank's incomparability in particulars is deteriorated. Entry barrier has been declining, a new competitor has emerged. Information Communication and Computation Technology have changed the contours of three major functions being performed by the banks viz. access to liquidity, the transformation of assets and monitoring of risks. Information technology and the communication networking systems have a crucial bearing on the efficiency of money, capital, and foreign exchange markets. Some monetary

products and services have become more crystal-clear commodities, customer show willing to unbundled the petition for monetary products and services, all these lead to a more competitive market atmosphere. Due to hand down entry and existed construction, for some sub-financial markets, contestability in banking is also raised up [1].

**2.2 Technology influence Economy of scale:** Competitive pressure force banks to lower their cost. Bank seeks to get economy of scale in bank procession instead of being a big bank. Bank seeks to secure the optimal business structure, and secure the competitive imperative of economy of scale. There are other options to get economy of scale, including joint venture and confederation of financial firms. Small firms also can get economy of scale by outsourcing, i.e. buy in an economy of scale [2].

**2.3 Technology influence the economics of delivery:** Technology has a major impact on the way banking and financial services are delivered., a wide range of alternative delivery mechanism becomes available, Internet, ATM... these Reduce the dependence on the branch network as a core delivery mechanism. With the development of technology, the financial systems are substantially over-supplied with a delivery system through a duplication of a network, the bank has to change their delivery strategy, rationalize their branch network strategy, and widen the range of delivery option [3].

**2.4 The Banking industry has been taking advantage of the following technology Products:**

**(1). Net Banking:** Online banking, also identified as internet banking, is an automated payment scheme that allows customers of a bank or additional financial institution to conduct a choice of financial transactions through the financial institution's website. It is a portion of the central banking system. The operational banking system will characteristically attach to or be part of the fundamental banking system functioned by a bank and is indifference to division banking which was the traditional way customers get into banking services.

**(2). Credit Card Online:** A credit card is a card distributed by a financial corporation which allows the cardholder to borrow funds. Issuance of credit cards has the state that the cardholder will pay back the unique, borrowed amount plus any added agreed-upon charges.

**(3). One View:** A single customer view is an aggregated, consistent and holistic representation of the data held by an organization about its customers that can be viewed in one place, such as a single page. The advantage to an organization of attaining this unified view comes from the ability it gives to analyze past behavior in order to better target and personalize future customer interactions

**(4). Insta Alerts:** Receive updates about your Bank account when select debit and credit transactions take place without having to step into the branch or ATM. With InstaAlert, you can keep a track on your banking transactions from your mobile phone or email ID.

**(5). Mobile Banking:** Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct financial transactions remotely using a mobile device such as a smartphone or a tablet. ... Mobile banking is usually available on a 24-hour basis.

**(6). Net-Safe:** A system of protection for bank customers provided through federal legislation. The protection includes deposit insurance, bank access to the short-term credit discount window of the Federal Reserve, and bank access to the Federal Reserve check clearing and inter-bank system [4].

**(7). e-Monies Electronic Fund Transfer:** An automated funds transfer system is a transmission scheme in which money can be moved to business or separate accounts without requiring paper-money to alteration hands. Electronic funds transfer schemes are used for payroll payments and all other payments.

**(8). Online Payment of Excise & Service Tax:** Central Board of Excise and Customs (CBEC) is a part of the Department of Revenue "Taxable Service" means in the least facility provided or to be on condition that to any issue of pay order, demand draft, cheque, letter of credit and bill of exchange.

**(9). Phone Banking:** Telephone banking is a service provided by a bank or other financial institution, that enables customers to perform over the telephone a range of financial transactions which do not involve cash or documents (such as cheques), without the need to visit a bank branch or ATM. Telephone banking times are usually longer than branch opening times, and some financial institutions offer the service on a 24-hour basis. However, some banks impose restrictions on which accounts may be accessed through telephone banking and usually limit the amounts that can be transacted.

**(10). Bill Payment:** Electronic bill payment is a feature of online, mobile and telephone banking, similar in its effect to a giro, allowing a customer of a financial institution to transfer money from their transaction or credit card account to a creditor or vendor such as a public utility, department store or an individual to be credited against a specific account. These payments are typically executed electronically as a direct deposit through a national payment system, operated by the banks or in conjunction with the government. Payment is typically initiated by the payer but can also be set up as a direct debit [5].

**(11). Shopping:** A way of conducting transactions from your bank account via your bank's secure website rather than in a branch or over the phone. A payment service for online stores. A particular type of scam, where an email or web message is used to try and trick people into giving up passwords and financial information.

**(12). Ticket Booking:** Booking Ticket online is easy but Sometimes when your ticket not booked amount is debited means amount is credited back on the following day to the particular Bank by IRCTC and Bank credits back the amount within 2-3 days in Account over which booking was done.

**(13). Railway Ticket Booking through SMS:** You can now book your railway tickets on your mobile phone and show the SMS to the traveling ticket examiner as a proof. Indian Railways has recently launched a new facility called 'M-ticket' that allows passengers to board a train without taking a printout of the booked ticket -- the SMS is proof enough.

**(14). Prepaid Mobile Recharge:** Prepaid you pay for the service upfront. Postpaid you receive a bill at the end of each month based on your actual usage. As the name suggests, the difference between Prepaid and Postpaid plans is about when you pay for them. Prepaid plans work by having you 'recharge' your account before you can use it.

**(15). Smart Money Order:** Electronic Money Order A money order is an order issued by the Post Office for the payment of a sum of money to the person whose name the money order is sent through the agency of the Post Office. A 'Payee' is the person named in money order as the person to whom the money is to be paid [6].

**(16). Card to Card Funds Transfer:** Electronic funds transfer (EFT) is: a funds transfer initiated through an electronic terminal, telephone, computer (including online banking) or magnetic tape for the determination of assembling, training, or approving a financial institution to debit or recognition of a consumer's account.

**(17). Funds Transfer (e-Cheques):** Electronic funds transfer (EFT) is: a funds transfer initiated through an electronic terminal, telephone, computer (including online banking) or magnetic tape for the determination of gathering, teaching, or approving a monetary organization to debit or credit a customer's account.

**(18). Anywhere Banking:** Highly secure and convenient system for banking transactions. Online & real-time transaction capability. Withdraw or remit cash through your AWB cheque from any of our branches. This facility is extended to Savings, Current, Loan and Overdraft Accounts.

Information Technology offers huge possible and countless opportunities for the Indian banking sector. It provides a cost-effective, rapid and methodical provision of facilities to the customer. The effective use of technology has facilitated correct and timely managing of the improved transaction volumes of banks which comes with a larger client base. Indian banking industry is greatly benefiting from the IT revolution all over the world [7].

The virtual financial services can be largely categorized as follows:

**A. Automated Teller Machines:** • Cash withdrawals • Details of the most recent balance of an account • Mini statement • Statement ordering facility • Deposit facility • Payments to third parties.

**B. Remote Banking Services:** • Balance inquiry • Statement ordering • Funds transfer (payment) to third parties • Funds transfer between customer's different accounts • Order traveller's cheques and other financial instruments.

**C. Smart Cards:** (i) Stored value cards (ii) As a replacement for all types of magnetic stripes cards like ATM Cards, Debit Cards, and Charge Cards etc.

**D. NRI Services:** With a significant number of Indians who have relatives abroad, have begun to banks, services, expatriate Indians to send money to relatives India can offer cost-effective to transfer one of the most important improvements of the report [8].

### 3. E-BANKING

Electronic banking is normally a postponement of traditional banking, using the net as an electronic delivery station for banking products and services. E-banking is a variety of banking facilities that exploit electronic equipment and consist of Telephone banking, Net Banking, ATM, Debit/Credit Card. EFT, AFT etc. E-banking made its debut in UK and USA 1920s. It grows into highly popular during 1960, over and done with electronic funds transfer and credit cards. The concept of web-based banking came into existence in Europe and USA at the beginning of 1980. In India e-banking is of new. Technology will bring a fundamental shift in the functioning of banks [9].

#### 3.1 Benefits of e-banking:

• **To the Customer:** Anywhere banking no substance where the client is in the world. Set of scales inquiry, request for services, issuing information etc., from wherever in the world is conceivable. Anytime Banking – Managing assets in actual time and most significantly, 24 hours a day, 7days a week according to the convenience of the customers. Several banks have rationalized their facilities with the services of computer and electronic equipment. Brings

down the “Cost of Banking” to the customer completed a period of time. Cash drawing from any branch / ATM. On-line acquisitions of goods and services together with online payment for the same.

- **To the Bank:** Innovative, scheme, discourses opposition and contemporary the bank as technology determined in the banking sector market. Decreases customer official visit to the branch and thereby human involvement. Inter-branch understanding is instant thereby reducing probabilities of fraud and misappropriation. On-line banking is an effect of medium promotions of a number of schemes in the bank, a marketing instrument indeed. Combined customer data covers way for personalized and customized services [8].

#### 4. Emerging Trends of Information Technology in Banking Sector

1). **Outsourcing:** Banking business process outsourcing or banking BPO is a highly specialized sourcing strategy used by banks and lending institutions to support the business acquisition and account servicing activities associated with customer lending lifecycle.

2). **Integration:** integration is a phenomenon in which financial markets in neighboring, regional and/or global economies are closely linked together. ... Because of financial market imperfections, financial integration in neighboring, regional and/or global economies is therefore imperfect.

3). **Distinctive Edge:** banking entity, owned by a state or nationally chartered BANK, with an international business scope. Edge Act banks are authorized to operate interstate branches, accept DEPOSITS from offshore sources, invest in foreign securities and projects, and grant foreign LOANS.

4). **Prospering in Down Market:** to commercial products, services, etc, that are cheap, have little prestige. The market condition in which the values of safeties are falling and extensive gloom causes the undesirable sentiment to be self-sustaining [10].

5). **Leading to Downsizing:** Downsizing is the eternal decrease of a company's labor power through the removal of unproductive workers or divisions. Downsizing is a mutual administrative exercise, usually connected with economic downturns and fading businesses.

6). **Getting Competitive Intelligence:** Competitive intelligence is the performance of gathering and examining actionable info about participants and the marketplace to form a business strategy. It is effective when a business has a comprehensive plentiful representation of the marketplace so that it may anticipate and respond to tests and problems before they arise.

## 5. CONCLUSION

Information Technology offers enormous potential and various opportunities for the Indian banking sector. It provides a cost-effective, rapid and systematic provision of services to the customer. One of the best things about technology is that it is constantly changing. The efficient use of technology has facilitated accurate and timely management of the increased transaction volumes of banks which comes with the larger customer base. Indian banking industry is greatly benefiting from the I.T. revolution all over the world. The positive conclusion can be concluded in the field of Information Technology on Banking sector is having the level of relationship to develop the business sector.

## REFERENCE

- [1] N. M. Nair, (2014). Role of Information Technology in Banking Sector in India. *IBMRD's Journal of Management and Research*, 3(1), 334-346.
- [2] Sahem A. Nawafleh, (2015). The Effect of Information Technology on the Bank Profitability Empirical Study of Jordanian Banks. *International Journal of Business and Management*, 10(2), 170-175. [DOI: 10.5539/ijbm.v10n2p170](https://doi.org/10.5539/ijbm.v10n2p170).
- [3] Rebeena Alavudeen28 Dr. Sr. Rosa K. D., (2015). Impact of Technological advancements in the banking sector. *International Journal of Information Technology & Computer Sciences Perspectives*, 4(3), 1621-1629.
- [4] S. Gnana Sugirtham, (2014). Impact of Information Technology on the Profitability of Banking Sector in India. *International Journal of Management and Commerce Innovations*, 2(1), 311-341.
- [5] Ibha Rani, (2016). A study of the impact of information technology in the Indian banking industry. *Abhinav National Monthly Refereed Journal of Research in Commerce & Management*, 4(6), 23-30.
- [6] H. K. Singh, Amar E. Tigga, (2012). Impact of information technology on Indian banking services. *Research Gate*, 2(1), 1-5. [DOI: 10.1109/RAIT.2012.6194608](https://doi.org/10.1109/RAIT.2012.6194608).
- [7] Dr. K. Mala, (2017). In the impact of technology in the banking sector in India. *International Journal of Pharmaceutical Sciences and Business*, 5(1), 1-7.
- [8] Rajesh Tiwari, Rakesh Kumar, (2012). Information technology in the banking sector. *Asia Pacific journal of marketing and management review*, 1(1), 25-33.
- [9] G. Tulasi Rao, T. Lokeswara Rao, (2015). Role of Information Technology in Indian Banking Sector. *IOSR Journal of Business and Management (IOSR-JBM)*, 17(5), 80-84. [DOI: 10.9790/487X-17518084](https://doi.org/10.9790/487X-17518084).
- [10] Thyaga Raju N (2016). Impact of information technology (IT) on the banking sector. *International Journal of Current Advanced Research*, 5(7), 1106-1111.