



# **A Research on Role of Information Technology in Banking Sector**

Poonam

Department of Commerce, Vivekananda Global University, Jaipur, India

Email ID: poonam.rajharia@vgu.ac.in

**ABSTRACT:**The article presents an investigation which plans to break down the job of Information Technology (IT) in the financial business. After Liberalization the IT and correspondences organizing framework is set to change the working condition of banks definitely. Innovation has just empowered a portion of the banks to acquaint inventive items with their clients as ATM office, versatile banking, and home banks and so on. With the utilization of innovation there had been an expansion in infiltration, profitability and productivity. It has expanded the cost viability as well as has helped in making little worth exchanges reasonable. The changing realized by IT, new items, progressively refined clients, very good quality administrations, changing cost structures, and improved serious weights have all consolidated to change the structure of the financial business. Further improvement of new innovations the business will probably keep on advancing permits banks to make what resembles a branch in a business building's entryway without employing labor for manual tasks. The branches are running on the idea of 24 X 7 working, made conceivable by the utilization of Tele banking, ATMs, Internet banking, Mobile banking and E - banking. This innovation driven conveyance channels are being utilized to connect with greatest number of clients at lower cost and in most effective way. Clients of banks have felt the position effect of innovative arrangements actualized by banks. The client of banks today has a virtual menu of choices undoubtedly and all these are advantages of innovation.

**KEYWORDS:**Finance, Customer satisfaction, Information Technology (IT), Convenience, Versatile Banking

## **I. INTRODUCTION**

There is a long history of banking administrations in India. The historical backdrop of banking is as old as mankind's history. All the more especially in the territory of Information Technology (IT), where India has certainly an edge over its rivals, staying ceaselessly or consistency of the world patterns is unsound. Money related area when all is said in done and banking industry specifically is the biggest high-roller and recipient from data innovation. This undertakings to relate the universal patterns in it with the Indian financial industry [1]. Today, a large portion of the exchanges should be possible from the home and clients need not visit the bank office for anything. Innovation is not, at this point an empowering agent, yet a business driver. The development of the web, mobiles and correspondence innovation has added an alternate measurement to banking.

IT empowers advanced item improvement, better market foundation, execution of solid systems for control of dangers and encourages the budgetary go-betweens to arrive at topographically far off and differentiated markets. Web has altogether impacted conveyance channels of the banks. Web has risen as a significant mode for conveyance of banking items and administrations [2]. Moving from a manual, scale-compelled condition to a worldwide nearness with robotized frameworks and procedures, it is hard to imagine the unfriendly situation; the part was in the time before the changes, when a basic store or withdrawal of money would require a day. ATMs, versatile banking and online bill installments Facilities to merchants and utility specialist co-ops have nearly hindered the requirement for clients to visit a branch. Branches are likewise changing from working as exchange handling focuses into relationship the board center points. The change has been extremely gainful for banks acquiring an expansion in profitability and operational proficiency to be progressively serious. With a large portion of the banks being innovation empowered, the center is moving to mechanizing territorial provincial banks (RRBs). What's more, banks are pushing toward dynamic and business knowledge programming and attempting to improve the IT foundation made Better hazard the executives because of centralization of data and ongoing accessibility of basic information for dynamic [3].



# International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering

(An ISO 3297: 2007 Certified Organization)

Vol. 6, Issue 9, September 2017

Everybody need to envision where innovation is going in the present quickly changing condition and rapidly embrace those arrangements that best fit our industry and shoppers. Clients have gotten acquainted with having innovation readily available, so everybody must be progressively deft in receiving and presenting rising advancements. In business banking, for instance, advancements in entryway innovations that offer improved information investigation and detailing are significant territories of speculation. Foreseeing where the market is going, how innovation is developing, and enhancing in front of our opposition—both different banks and non-conventional contenders—while meeting developing security, administrative and consistence necessities present difficulties.

Banks need to concentrate on a structure that is versatile yet agile and ready to help future development and expanding needs of the business. At Capital One, we've moved to an engineering that bolsters our consistently onl way to deal with empower our clients to bank at whatever point and any place. Everybody need to convey with sped up and effectiveness while characterizing the job of large information and distributed computing in our answers. Ability securing keeps on being significant. Competitors don't regularly think about a bank as a spot for extraordinary IT ability – however banking is basically an IT-lead industry and programming advancement will turn into a gigantic need in banking. At Capital One, All have a colossal craving for the best innovation personalities. Banks need to show that they have the earth where tech ability will flourish and where they can get the chance to deal with the absolute best, most recent innovation[4].

## *Wellspring of data*

Since the goal of the current examination requires a comprehension of different elements of IT job, the examiner looks to accumulate both subjective just as quantitative information with respect to IT job in the banks [5]. The data search, considers both essential and auxiliary information. The essential information for the current research has been gathered through example review of bank's clients and staff.

The optional wellsprings of information assortment through fathering distributed assets, for example, separates structure significant books, magazines, diaries, periodicals, and fields 'sites and so on. The essential information, which is the base of research work, has been gathered through example study of 120 clients and 60 cutting edge bank faculty from three banks (SBI, AXIS, ICICI) To gather the essential information the agent controlled two unique arrangements of organized poll one set for the bank-client and the other for the banks staff intended for the reason [6].

## II. REVIEW OF LITERATURE

In the field of banking, data innovation suggests the exchange preparing and the incorporation of data framework with correspondence innovation and of imaginative. Late patterns in Banking Industry IT development, Chartered Financial Analyst, (pp 45-56) right now that advancement strategy and exceptional rivalry causes each broker to remain alert. Execution of Information Technology (IT) helps for keeping up appropriate records particularly in dynamic procedure. He likewise expressed that offices like ATM, anyplace banking, Internet and versatile banking have imported client care which thus helps for better client relations the board. He likewise clarified the difficulties looked by banks in view of IT execution like business issue and security concerns. He proposed that the client charm is the essential objective of all future IT activities.

Indian banking in 2010 IBA Bulletin Special Issues, (pp 170-173) right now about the progressive changes that saw in the budgetary segment far and wide. He expressed that net worked branches. ATMs, innovation based installment and settlement framework, innovation vision of RBI, drifting pace of premium have changed the Indian financial division. He inferred that physical bank offices will vanish and clients will have the option to activity their records through electronic gadgets.

## *Job of IT in banking area*

Banking condition has become profoundly serious today. To have the option to endure and develop in the changing business sector condition banks are going for the most recent advances, which is being seen as a 'enabling asset' that can help in creating student and increasingly adaptable structure that can react rapidly to the elements of a quick changing business sector situation. It is additionally seen as an instrument of cost decrease and successful correspondence with individuals and organizations related with the financial business [7].

The Software Packages for banking applications in India had their beginnings in 80s, when the Banks began modernizing the branches in a restricted way. The mid 90s saw the diving equipment costs and appearance of modest and cheap however powerful PC's and Services and banks went in for what was called Total Branch Automation (TBA) bundles. The center and late 90s saw the tornado of budgetary changes, deregulation globalization combined with fast insurgency in correspondence innovations and advancement of novel idea of intermingling of correspondence



# International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering

(An ISO 3297: 2007 Certified Organization)

Vol. 6, Issue 9, September 2017

advances, similar to web, portable/mobile phones and so on. Innovation has ceaselessly assumed on significant job in the working of banking establishments and the administrations gave by them [8]. Protection of open cash, move of cash, giving drafts, investigating venture openings and loaning drafts, investigating speculation being given.

IT empowers complex item advancement, better market framework, usage of dependable strategies for control of dangers and encourages the money related middle people to arrive at topographically far off and broadened markets. Web has essentially impacted conveyance channels of the banks. Web has risen as a significant vehicle for conveyance of banking items and administrations. The clients can see the records get account articulations, move assets and buy drafts by simply punching on not many keys. The keen cards i.e., cards with microchip chip have added new measurement to the situation [9]. A presentation of Cyber money 'the trading of money happens altogether through Cyber-books'. Assortment of Electricity bills and phone bills has gotten simple. The upgradeability and adaptability of web innovation after phenomenal open doors for the banks to contact its clients. Almost certainly banking administrations have experienced intense changes thus additionally the desire for clients from the banks has expanded more prominent.

IT is progressively moving from a back office capacity to a prime partner in expanding the estimation of a bank after some time. IT does as such by expanding banks of master dynamic estimates, for example, fortifying and institutionalizing banks framework in regard of security, correspondence and systems administration, accomplishing entomb branch availability, moving towards Real Time Gross Settlement (RTGS) condition the guaging of liquidity by building continuous databases, utilization of Magnetic Ink Character Recognition and Imaging innovation for check demonstrating to innocence a couple. Indian banks are going for the retail banking in a major manner. The key driver to charge has to a great extent been the expanding advancement in innovation and the developing prevalence of the web. The move from customary banking to e-banking is changing client's desires [10].

### III. ONLINE BANKING

A framework permitting people to perform banking exercises at home, by means of the web. Some online banks are customary banks which likewise offer web based banking, while others are online just and have no physical nearness. Web based banking through customary banks empower clients to play out every single routine exchange, for example, account moves, balance requests, charge installments, and stop-installment solicitations, and some much offer online advance and Mastercard applications. Record data can be gotten to whenever, day or night, and should be possible from anyplace. A couple of online banks update data progressively, while others do it every day. When data has been entered, it shouldn't be returned for comparative ensuing checks, and future installments can be planned to happen naturally.

Many bank colorless document move between their program and mainstream bookkeeping programming bundles, to streamline record keeping. In spite of the focal points, there are a couple of disadvantages. It takes some an opportunity to set up and become accustomed to an online record. Likewise, a few banks just offer web based banking in a constrained territory. Moreover, when a record holder pays on the web, he/she may need to place in a check demand as much as about fourteen days before the installment is expected, yet the bank may pull back the cash from the record the day that solicitation is gotten, which means the individual has lost as long as about fourteen days of enthusiasm on that installment. Online-just banks have a couple of extra disadvantages: a record holder needs to mail in stores (other than direct stores), and a few administrations that conventional banks offer are troublesome or outlandish for online-just banks to offer, for example, voyager's checks and clerk's checks.

### IV. ROLE OF E- BANKING SYSTEM IN THE DEVELOPMENT OF THE FINANCIAL SYSTEM IN INDIA

E-banking made its obligation in UK and USA 1920s. It turns out to be conspicuously mainstream during 1960, through electronic supports move and charge cards. The idea of electronic preparing appeared in Europe and USA in the start of 1980. In India e-banking is of ongoing root. Innovation will get central move the working of banks. It would not just assist them with getting enhancements their inside working yet additionally empower them to give better client care. Innovation will break all limits and support cross fringe banking business. Banks would need to embrace broad Business Process Re-Engineering and handle issues like (a) how best to convey items and administrations to clients; (b) planning a fitting hierarchical model to completely catch the advantages of innovation and business process changes



## International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering

(An ISO 3297: 2007 Certified Organization)

Vol. 6, Issue 9, September 2017

realized; (c) How to abuse innovation for inferring economies of scale and how to make cost efficiencies and (d) how to make a client - driven activity model [8].

Section of ATMs has changed the profile of front workplaces in bank offices. Clients no longer need to visit branches for their everyday financial exchanges like money stores, withdrawals, check assortment, balance enquiry and so on. E-banking and Internet banking have opened new roads in —convenience banking|. Web banking has additionally prompted decrease in exchange costs for banks to about a tenth of branch banking [5]. Innovation arrangements would make stream of data a lot quicker, increasingly exact and empower snappier investigation of information got. This would settle on the dynamic procedure quicker and increasingly productive. For the Banks, this would likewise empower improvement of evaluation and observing instruments which would make credit the board significantly more compelling. The outcome would be a positive decrease in exchange costs, the advantages of which would be shared among banks and clients [11].

While use of innovation would assist keeps money with decreasing their working expenses over the long haul, the underlying speculations would be sizeable. IT spent by banking and monetary administrations industry in USA is roughly 7% of the income as against around 1% by Indian Banks. With more prominent utilization of innovation arrangements, all expect IT spending of Indian financial framework to go up essentially. One territory where the financial framework can decrease the venture costs in innovation applications is by sharing of offices. Everybody are as of now observing banks meeting up to share ATM Networks. So also, in the coming years, all hope to see banks and FIs meeting up to share offices in the region of installment and settlement, back office handling, information warehousing, and so on. While managing innovation, banks should manage orderly operational dangers. This would be a basic zone the Bank the executives should manage in future.

*The e-banks, which may call as easy bank offers the following services to its customers*

- Credit Cards – Debit Cards
- ATM
- E-Cheques
- EFT (Electronic Funds Transfer)
- D-MAT Accounts
- Mobile Banking
- Telephone Banking
- Internet Banking
- EDI (Electronic Data Interchange)

*Mobile is the magic word-2013*

For money related organizations, the enchantment word in 2013 will be versatile. Bank clients are going to the simplicity and comfort of their advanced cells and tablets for portable banking, installments and check store. Dealing with this seismic monetary move will demonstrate trying for bank IT offices, yet those with a powerful portable procedure will appreciate a noteworthy upper hand from those without.

In 2013, a progressively heterogeneous and stretched out foundation to help versatile will turn into a top need for bank IT. Portable will start IT challenges for banks to meet their clients 'moving requirements, and banks must build up a triumphant IT procedure to deal with the new versatile biological system. Another insurgency in the domain of e-banking is the development of portable banking. On-line banking is presently moving to the versatile world, giving everyone with a cell phone access to constant financial administrations, paying little heed to their area. The Wireless Application Protocol (WAP) innovation, which will permit client to surf the net on their mobiles to get to everything without exception. This is a truly adaptable method for executing banking business. As of now ICICI and HDFC banks have tied up cell administration gives, for example, Airtel, Orange, Sky Cell, and so on in Delhi and Mumbai to offer these portable financial administrations to their clients. An Analysis on Socio-Economic Profile of Sample Customers Respondents by use of ATM office. The conversation given beneath gives the quantity of test respondents who have an ATM office.

**Table 1. Distribution of respondents by usage of ATM facility**

Sl.No.	Nature	No. of Samples	Percentage
1	Yes	76	63.33
2	No	44	36.67
	<b>Total</b>	<b>120</b>	<b>100.00</b>



# International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering

(An ISO 3297: 2007 Certified Organization)

Vol. 6, Issue 9, September 2017

As it could be seen in Table 1 of the 120 respondents only 63.33 percent use the ATM facility while the remaining 36.67 percent do not have. Thus from the analysis it can be concluded that a majority of the respondents have ATM facility.

*Respondents by usage of e-banking facility*

The preceding paragraph provides the usage of e-banking facility by the sample customers.

**Table 2. Distribution of respondents by usage of e-banking facility**

Sl.No.	Reason	No. of Samples	Percentage
1	Using	48	39.67
2	Not Using	72	60.33
	<b>Total</b>	<b>120</b>	<b>100.00</b>

As given in Table 2, a highest of 60.33 percent of the respondents is not using the e-banking facilities. The remaining 39.67 per cent of the respondents use the e banking facilities. Thus from the analysis it can be concluded that a majority of the respondents are either not using the e-banking facility or it is not available. Respondents by usage of credit card facility. The preceding paragraph provides the usage of e banking facility by the sample customers.

**Table 3. Distribution of respondents by usage of credit card facility**

Sl.No.	Reason	No. of Samples	Percentage
1	Using	51	42.33
2	Not Using	69	57.67
	<b>Total</b>	<b>120</b>	<b>100.00</b>

As given in Table 3, a most elevated of 57.67 percent of the respondents isn't utilizing the Credit card office. The staying 42.33 percent of the respondents are utilizing the Mastercard office. In this manner from the investigation it very well may be inferred that a larger part of the respondents are not utilizing the charge card office.

*IT challenges-2013*

The test in 2013 in banking IT will be speed. The key inquiry is whether conventional banks can put up new advancements for sale to the public quick enough to hold and develop clients. Banking IT pioneers must assistance drive development plans, notwithstanding giving financially savvy IT administrations. Proceeded with shifts in buyer conduct, just as developing advances, are changing what clients anticipate from banks and non-banks that offer money related types of assistance. This condition is making difficulties and game changing open doors for foundations that can get new development empowering advancements to showcase rapidly.

## V. CONCLUSION

From empowering banking administrations to driving change in the Industry. Data Technology course guarantee to change the pace of banking to the following hardly any years. Versatile bank and web banking are going to make indoor in the financial division sooner rather than later. Despite the fact that IT frameworks are unpredictable and advanced however they are —energy guzzlers!. Indian open part banks that hold around 75 % of piece of the overall industry do have stepped up to the plate in its field. They are moving towards the unified database and decentralize choices making process. They have advantageous quality labor. Mindfulness and energy about IT are especially there. What is required is a major push ‘the way it was given in the post nationalization period for expansionary exercises. Consequently, the future for banking division is going to make quick straights in not so distant future.

## REFERENCES

- [1] U. Srivastava and S. Gopalkrishnan, “Impact of big data analytics on banking sector: Learning for Indian Banks,” in *Procedia Computer Science*, 2015, doi: 10.1016/j.procs.2015.04.098.
- [2] M. Fatma and Z. Rahman, “The CSR’s influence on customer responses in Indian banking sector,” *J. Retail. Consum. Serv.*, 2016, doi: 10.1016/j.jretconser.2015.11.008.
- [3] V. Kaura, C. S. D. Prasad, and S. Sharma, “Service quality, service convenience, price and fairness, customer loyalty, and the mediating role of customer satisfaction,” *Int. J. Bank Mark.*, 2015, doi: 10.1108/IJBM-04-2014-0048.



ISSN (Print) : 2320 – 3765  
ISSN (Online): 2278 – 8875

## International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering

(An ISO 3297: 2007 Certified Organization)

**Vol. 6, Issue 9, September 2017**

- [4] R. Kant and D. Jaiswal, "The impact of perceived service quality dimensions on customer satisfaction: An empirical study on public sector banks in India," *Int. J. Bank Mark.*, 2017, doi: 10.1108/IJBM-04-2016-0051.
- [5] K. Choudhury, "Service quality and customers' purchase intentions: An empirical study of the Indian banking sector," *Int. J. Bank Mark.*, 2013, doi: 10.1108/IJBM-02-2013-0009.
- [6] V. Kaura, "Antecedents of customer satisfaction: A study of Indian public and private sector banks," *Int. J. Bank Mark.*, 2013, doi: 10.1108/02652321311315285.
- [7] H. Chahal and P. Bakshi, "Measurement of Intellectual Capital in the Indian Banking Sector," *Vikalpa*, 2016, doi: 10.1177/0256090916629253.
- [8] A. K. Pennathur, V. Subrahmanyam, and S. Vishwasrao, "Income diversification and risk: Does ownership matter? An empirical examination of Indian banks," *J. Bank.Financ.*, 2012, doi: 10.1016/j.jbankfin.2012.03.021.
- [9] J. Kendall, "Local financial development and growth," *J. Bank.Financ.*, 2012, doi: 10.1016/j.jbankfin.2012.01.001.
- [10] S. N. Rajesh Raj, K. Sen, and V. Kathuria, "Does banking development matter for new firm creation in the informal sector? Evidence from India," *Rev. Dev. Financ.*, 2014, doi: 10.1016/j.rdf.2014.03.003.
- [11] K. Kumar and A. Prakash, "Developing a framework for assessing sustainable banking performance of the Indian banking sector," *Soc. Responsib. J.*, 2019, doi: 10.1108/SRJ-07-2018-0162.