

# INFORMATION TECHNOLOGY IN INDIAN BANKING SECTOR – CHALLENGES AND OPPORTUNITIES Dr. S. Bulomine Regi\* & Dr. C. Eugine Franco\*\*

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#### Abstract:

Liberalization and globalization have brought several changes in the service sector in India and banking sector is no more exception to this changing phase. Rapid strides in information technology have redefined the role and structure of Indian banking sector. Banking system is shifted from traditional banking to modern customer oriented banking. Advancement in technology, global pressure and better customer services demand banks to enhance their quality of services which can assure efficient delivery of services with lesser cost and time and also maintaining reliability and convenience. Technology not only created opportunities but it also give birth to several challenges in front of banks. The objective of this paper is to analyze the impact of information technology on Indian banking sector and to give focus on the challenges and opportunities of information technology to banks and provides some suggestion in order to handle these challenges efficiently and strengthen their presence in domestic as well as global market.

**Key Words:** Traditional Banking, Information Technology, Customer Oriented Banking & Banking Scenario. **Introduction:** 

In present technological revolutionary scenario Indian banking is passing through a crucial transformation stage where all vistas of working are going to change at a fast pace and technology is the most dominating factor which helped the banks to have a mix of knowledge with innovative products and services to win market competition. Before this electronic era, the whole banking business was done manually. Bank head office had responsibility for the overall clearing network, the size of branch network and the training of the employees in the branch network and the information available to both branch staffs and their customers are limited to one geographical location. But the rapid advancement in information technology has redefined the role and structure of banking system in India. Banks are changing their styles of functioning and are trying to become one-stop financial supermarket. Market focus is also shifting from mass banking products to class banking with introduction of value added and customized products. Every transaction is done electronically through various e-channels such as ATMs, Credit/Debit Cards, Smart Cards, Internet Banking, Tele-Banking and EFTs etc. Customers are also demanding better services with more products from their respective banks. All the credit goes to technology that realized the slogan of 'Anywhere banking' and anytime banking' into reality. Since the early 1980, the Reserve bank of India appointed committees and working groups to discuss and recommend the appropriate use of technology by banks. These committees are – Rangarajan committee 1<sup>st</sup> in early 1980, Rangarajan committee 2<sup>nd</sup> in late 1980, Saraf working group in early 1990, Vasudevan working group in early 1990 and Barman working group in the 2000. Based on the recommendations of these committees and working groups, the Reserve bank of India issued appropriate guidelines to banks. In the 1980s, the use of technology for back office operations of banks dominated the scene. It was in the form of accounting transactions and collection of management information system. In the interbank payment system, this was in the form of clearing and settlement through MICR technology. Two important decisions of Reserve bank of India of the 1990s forever changed the scenario of banking sector are - (a) the requirement of mandatory use of technology in its entirety by private sector banks in its new status of license and (b) The establishment of a unique research institute for banking institute of technology development and research in banking technology. In this paper the main aim to examine the impact of information technology on Indian banks and to analyze the changing faces of banking and opportunities created by technology for banking industry.

## **Objectives of the Paper:**

An attempt is made to through light on the impact of information technology on Indian banks and to analyze the changing faces of banking and opportunities created by technology for banking industry. **Research Methodology:** 

The whole study is based on secondary data. The data was collected from various research papers, journals, websites and articles to ensure detailed understanding of the subject authenticity of information.

**Changing Faces of Banking:** Information technology in banking sector in has put its ever lasting impact. Internet banking is changing the banking industry and is having a significant impact on the banking relationship. Web is more important to financial services for many other industries. With the help of advanced technology, most banks have begun to take an innovative approach to banking, with the aim of creating more value for customers. Some of the significant changes in the banking sector are discussed below.

(a) Mobile Banking: Taking advantage of the booming market for mobile phones and cell phone service, several banks have introduced mobile banking transactions using their mobile phones. For examples of HDFC, ICICI, SBI, CANARA banks etc. has introduced SMS services. Mobile banking has been especially more benefited for people who travel frequently and keep track of your banking. GNI NPS survey released that 40% of people in India is now using mobile banking. Mobile banking consist of three inter-related concepts such as – mobile accounting, mobile brokerage and mobile information services. Mobile banking services may include several services such as - accounting information (mini statement, alert on account activity, loan statement and mutual funds etc.), investments information (portfolio management services, real time stock quotes and notification on security prices etc.), supportive information (ATM location, exchange of data message and email etc.) and content services (general information about weather updates and news and location based services etc.) (b) E-Banking: Electronic banking is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick- and -mortar institution. E-bank is the electronic bank that provides the financial service for the individual client by means of internet. The e-banks, which may call as easy bank offers the following services to its customers

- ✓ Credit Cards/Debit Cards
- ✓ ATM
- ✓ E-Cheque
- ✓ EFT (Electronic Fund Transfer)
- ✓ DEMAT Accounts
- ✓ Mobile Banking
- ✓ Telephone Banking
- ✓ Internet Banking
- ✓ EDI (Electronic Data Interchange).

(c) **Rural Banking:** One of the innovative schemes to be launched in rural banking was the Kisan Credit Cards (KCC) Scheme began in fiscal year 1998-1999 by NABARD. KCC easiest way to meet the production requirements of the farmers in a timely and hassle free manner. Banks have already been directed to issue new Kisan Credit Cards that can be used at ATMs or point of sale terminals. Other innovative schemes have been launched in order to bridge the gap between the rural population and the formal retail banking includes Local area bank, self help groups etc.

(d) **NRI Services:** If a person is NRI or PIO, she/he can, without the permission from Reserve Bank of India, open, hold and maintain the different types of accounts given below with an authorized dealer in India, i.e. a bank authorized to deal in foreign exchange. Indian banks have begun offering a service that enables Indian expatriates more convenient to send money to relatives in India, which is one of the major improvements in the transfer of money with the help of advanced technology.

## Challenges to Banks:

Technology plays a catalytic role in financial inclusion, a sustainable banking theme very relevant to a country like India that has a large unbanked population. Today, banking is becoming increasingly complex and banks which fail to use technology to take their services to the common man and tap the potential of the rural sector will stand to lose. Some of the general issues that have concerned unions and employees, especially women and customers in the wake of the introduction of new technology in the banking have been -

- ✓ One of the biggest IT challenges for banks in 2013 will undoubtedly come from ongoing cyber attacks that blocks customers from accessing their online banking services.
- Presently banks IT departments facing the challenges relating to ensuring their institutions are meeting and complying with various new regulatory requirements coming out of the consumer financial protection bureau and Basel III etc.
- ✓ Increased the workloads of employees. New technology could lessen the repetitive and heavy nature of certain operations. However, most employees in the banking sector, especially in the foreign banks, have experienced serious strain and heavy work-loads. Before computerization employees do 30-40 cash entries per day but now banks employees to do more than 100. There is a greater pressure of work and more responsibility. Pressure for flexibility on employees and organizations. Computer technology demands functionally flexible multiskilled workers rather than specialists. The strategy of increasing flexibility in the employment system frequently target women workers, who occupy the lower rungs of the job hierarchy.
- ✓ Changes in work methods caused by the introduction of computerization affect the content of work as well as the skills needed by employees.

- ✓ Increased insecurity and loss of union power. It has increased because unions have been considerably weakened.
- ✓ Increased in the proportion of non-bargainable staffs. In almost every industry in India, computer programmers are in the non- bargainable category. Computer programmers are usually in a position to anticipate change and may use their knowledge to keep other workers and unions informed.
- ✓ Continued changes in consumer behavior, as well as emerging technologies, are changing what customers expect from the banks that provide financial services. This environment is creating challenges and game changing opportunities for banking institutions.
- ✓ The introduction of new technology has also created a range of new hazards for the workers. Increases in the scale and pace of production have contributed towards stress, especially where there is also inadequate support or training or an unfair distribution of workloads. Some specific health and safety problems have been shown to arise from the introduction of computer-based system likes skin diseases, eye problems, varicose veins, headaches and infertility etc.

New information technologies are creating new opportunities and new challenges for banking industry. Those that can adopt quickly and often to the rapidly changing environment of global electronic commerce may survive and prosper.

# **Opportunities to Banks:**

As we enter 2014, IT faces a kind of transition in the banking industry. No longer off on its own, IT is playing a greater role in helping banks carryout marketing, sales and channel integration initiatives in financial services. Consumers are now becoming more technology-savvy and banks must adopt their approach to digital platform. Banks need to anticipate where technology is going in today's rapidly changing environment and quickly adopt those solutions that best fit for the market and customers. Banks presently cover performance monitoring, decision making, control of branches, administrative matters, submission of statutory returns to RBI, inter branch transactions, reconciliation of outstanding entries in various accounts, fund transfer, credit related information, investment management, treasury operations through money market, fore market, security market, employees personal data and scores of other operations with the use of IT and computers. Yet the level of computerization may differ from banks to banks. Today, we may say that approximately 80% of banking operations in cities are computerized. The process is fast picking up even at rural branch level. Information technology enables new product development, better market infrastructure, implementation of right techniques for control of risks and helps banks to extend their markets geographically. Internet has emerged as an important medium for delivery of banking products and services. Some of the benefits of information technology to banking sector are discussed as follow-

- ✓ Major business initiatives the use of technology by banks helps in supporting initiatives such as customer relationship management, enterprises resources planning, sales for automation and supply chain management.
- ✓ Supply chain management information technology also help in supply chain management activities by automating the tracking of inventory and information among business processes and across companies.
- ✓ Customer relationship management customer relationship management (CRM) consists of the processes a company uses to track and organize its contacts with its current and prospective customers. CRM software is used to support these processes likes information about customers and customer interactions can be entered, stored and accessed by employees in different organization departments.
- ✓ Sale force automation system with the help of technology, banks employees automatically track all the steps in the sales process.
- ✓ Business intelligence with the use of technology banking organizations also received information about customers, competitors, business partners, competitive environment and own internal operations. All these helps in making effective, important and often strategic business decisions.
- ✓ Banks can do a wide range of inquiries relating to financial statement. Banks are also able to make replies fastly to customers' queries without reference to ledger keeper. It also helps in carrying out of standing instructions on due date and generation of reports.

Bank's always want to increase the facilities for their customers. They always care about their convenience and facility. This thing has increased competition and forced them to integrate the new technology in order to satisfy their customers and they have already developed certain number of solutions among them. Banks with the help of technology provides following facilities to their customers:

- ✓ Self inquiry facility
- ✓ Remote banking
- $\checkmark$  Any time banking and anywhere banking
- $\checkmark$  Tele banking
- ✓ Electronic banking and mobile banking

Internet has initiated an electronic revolution in the global banking sector. The dynamic and flexible nature of this communication channel as well as its ubiquitous reach has helped in leveraging a variety of banking activities. Now banks offering new types of banking services have emerged as a result of innovative E-Banking. There are different types of e-banking such as -

- ✓ Automated Teller Machine (ATM)
  ✓ Internet banking
  ✓ Mobile banking

- ✓ Electronic fund transfer at point of scale
- ✓ Electronic clearing system
- ✓ Smart cards
- ✓ Electronic data interchange etc.

# **Conclusion:**

Lastly to conclude that information technology in banking sector has put its ever lasting impact. Technology infusions have created both challenges and opportunities for banking organization in order to gain strength in domestic market and also increase their presence in global market. Banking industry is growing rapidly with the use of technology in ATMs, online banking, mobile banking, telephone banking etc. is a plastic card banking products to suit the needs of the retail segment has increased its numbers in geometric progression in recent years. This growth has been strongly supported by the development in the field of technology, without which this would not have been possible of course that will change our lifestyles in the coming years. Successful organizations will need to reassess their operating models and address the effects of advanced technology, regulatory reforms, competitive dynamics and increased expectations from stakeholders.

- **References:** 
  - 1. Golden, S. A. R. (2014). Customer Preference towards Innovative Banking Practices Available In State Bank of India at Palayamkottai. Sankhya International Journal of Management and Technology, 3(11 (A)), 31-33.
  - 2. Golden, S. A. R. (2015). Regional Imbalance affecting quality of e-banking services with special reference to Tuticorin District-An Analysis. International Journal of Research, 2(3), 788-798.
  - 3. Golden, S. A. R., & Regi, S. B. (2015). Satisfaction of Customers towards User Friendly Technological Services offered by Public and Private Sector banks at Palayamkottai, Tirunelveli District. International Journal of Research, 2(3), 775-787.
  - 4. Golden, S. A. R., Regi, S. B., & Franco, C. E. (2014). A study on Impact of Information Technology (IT) in Modern Banking Sector. Golden Research Thoughts, 3 (11), 1, 4.
  - 5. Goyal and Joshi, "Indian banking industry: challenges and opportunities", International journal of business research and management, Vol. (3), Issue (1), 2012
  - Mckinsey and company's report on 'India Banking 2010 towards a high performing sector', 6. Oct..2005
  - 7. Mengi, P. (2009). Customer satisfaction with service quality: An empirical study of public and private sector banks. IUP Journal of Management Research, 8(9), 7.
  - Regi, S. B. Challenges Faced by the Select Urban Public Sector Bank Customer's While Using 8. ATM/Debit Card-A Descriptive Analysis. In International conference on Recent Innovations in Engineering and Technology (p. 1). Edu Pedia Publications (P) Ltd.
  - Regi, S. B., & Golden, S. A. R. (2014). A Study on Attitude of Employee towards Working 9. Environment with Special Reference to RR Pvt Ltd. Review of Research, 2 (2), 1, 5.
  - 10. Regi, S. B., & Golden, S. A. R. (2014). Customer Preference towards Innovative Banking Practices Available In State Bank of India at Palayamkottai. Sankhya International Journal of Management and Technology, 3 (11 (A)), 31, 33.
  - 11. Regi, S. B., & Golden, S. A. R. (2014). Customer Preference towards E-Channels Provided By State Of Bank of India.
  - 12. Regi, S. B., Golden, S. A. R., & Franco, C. E. (2014). Role of Commercial Bank in the Growth of Micro and Small Enterprises. Golden Research Thoughts, 3 (7), 1, 5.
  - 13. Sathish, G. A Study on Loan Portfolio Management of Urban Cooperative Banks in Tamilnadu.
  - 14. Uppal and Kaur, "Banking in the new millennium: issues, challenges and strategies", Mahamaya publishing house, New Delhi, 2007
  - 15. S. Bulomine Regi, "Prospectus & Challenges of Women Entrepreneurs A Study With Special Reference to Tirunelveli District, International Journal of Scientific Research and Modern Education, Volume 1, Issue 1, Page Number 786-792, 2016
  - 16. S. Bulomine Regi, "Factors Influencing Customer's To Select Bank in Tirunelveli District- an Analysis", International Journal of Current Research and Modern Education, Volume 2, Issue 1, Page Number 85-88, 2017.

- 17. Dr. S. Anthony Rahul Golden, "Users' Preference towards Traditional Banking Versus E-Banking An Analysis", International Journal of Computational Research and Development, Volume 1, Issue 1, Page Number 177-182, 2016.
- 18. www.unu.edu.
- 19. www.rbi.org.
- 20. www.deloitte.com
- 21. www.banktech.com