



IMPACT OF BIG DATA ON BANKING SERVICES

Elizebath Ligia Fernandez

Ph.D Research Scholar, Department of Commerce, VISTAS, CHENNAI

Corresponding Author :

Dr.M.KAVITHA

Professor & Research Supervisor, Department of Commerce, VISTAS, CHENNAI

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ABSTRACT

The banking industry plays an important role in the development of the country's economy. The growth of the banking sector depends on the services that they provide to their clients in various respects. The trend of banking development is noticeably observed after the new economic reforms in India. India today has a fairly developed banking system with many different types of banks - public sector banks, foreign banks, private sector banks - old and new generations, regional rural banks. Sector and partnership banks with the Reserve Bank of India are like a fountain. System Commander. Today the banking sector is the mainstay of the Indian economy, which is reflected as a support during boom and bust. Today, the banking industry is going through a completely unexpected paradigm shift, and in the age of advanced technology and modern resources, bankers must first define what it is. A new banking system because there is no definition that defines what the new generation of banks/banks are and how they can be operated sustainably and not only for profit. But, watch for longevity for a better future. This article sheds light on the next generation of banking and its innovative products and channels.

Keywords: Banking Sector, Recent Trends and Developments, Technologies, Banking products and services.

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INTRODUCTION

Banking is said to be the backbone of any economy as it has a direct bearing with financial and economic development. Economic development becomes faster if the banking sector is stronger and efficient. The importance of banking sector is highly recognised in emerging economies. Banking is an integral part of the whole financial system. It affects the country's economy by providing investment, credit and infrastructure.

In simple terms, banking is the act of generating, storing, and managing money. It's an economical operation that a banker does to make money available for lending purposes. Banks have various functions such as money production, money security, custody operations, investments and other financial services such as international money transfers. The banking industry offers many types of financial services through banks.

The banking industry offers many domestic amenities. The financial performance of the banking sector is an essential driver for promoting social and economic development. Thus, economic development increases with the increase in the efficiency of the banking sector in the country. Researchers have now used various indicators of the banking sector to examine their impact on economic growth in advanced and developing economies.

The banking sector has benefited greatly from the implementation Technology in the recent past, in almost every country in the world. Productivity Innovative and innovative products, fast transactions, transparent and real-time transfers Risk management and effective information systems are some of the advantages Thanks to technology. Information technology has also improved efficiency and the robustness of business operations throughout the banking sector. The Indian banking industry has grown rapidly Progress in reform to adapt to the new



competitive business environment. The industry is in the midst of an information technology revolution. Technology infrastructure has become an essential component of the banking system reform process, with advanced tools and innovative market practices. Information technology in the bank. The Indian banking industry is currently experiencing a computer revolution a combination of Regulatory and competitive reasons have increased the importance of Automation in the Indian banking sector.

Speakers at the World Economic Forum's India Economic Summit said: India's financial innovation is key to inclusive growth by connecting hundreds of millions of people to the banking system. The liberalization of the financial services industry and the increased competition with investment banking have certainly led to an increased focus on the ability to design new products, develop better processes, and implement more effective solutions to increasingly complex financial problems. These financial innovations are the result of a number of government regulations, tax policies, globalization, liberalization, privatization, integration with international financial markets and increased market risk in the national financial school. Financial innovation is the process by which financial regulators or financial market brokers add value to existing plain vanilla products that meet user needs. According to John Finnerty, "Financial innovation involves the design, development and implementation of innovative financial tools and processes, and the construction of innovative solutions to financing problems." The various innovations in banking and finance are ECS, RTGS, EFT, NEFT, ATM, retail banking, debit and credit cards, free advisory service, implementation of location instructions for customers, utility bill payments, money transfer, internet banking, phone and mobile banking, banking and selling products. Insurance, issuance of free checkbooks, travellers' cheques, and more other value-added services. Today we have a fairly developed banking system with many different types of banks - public sector banks, foreign banks, private sector banks, regional rural banks and cooperative banks. The Reserve Bank of India (RBI) ranks first among all the banks. The most important objective of the Reserve Bank of India is to maintain monetary

stability (moderate and stable inflation) in India. The Reserve Bank of India uses monetary policy to maintain price stability and consistent credit flows. The rates used by the Reserve Bank of India to achieve this are the bank rate, repo rate, reverse repo rate and cash reserve ratio. Reducing inflation has been one of the most important goals for some time.

Recent trends and developments in banking sector.

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New Generation banks.

Today, banks are establishing themselves as next-generation banks based on a number of services. They show or the length of time they have been formed or purchased to last. but it should Not, because it totally depends on how it works, in terms of implementation Strategies for creating and starting new investment plans, fund



management and inactivity Assets, looking at how they hire and retain their workforce through analytics real caliber and so on. 'Next generation banks are not just those that co-create survival strategy. But banks are involved in the process of creating a transform models to conquer ever-changing market needs and customer preferences by how we organize internal and external activities and initiatives, taking into account traditional human values and the use of modern technology. This can lead to the creation of income by investing and managing money properly to achieve optimal returns and the company's long-term reputation can be reviewed and its sustainability demonstrated." Likewise, time passes as well as time, so the institutions involved in the creation Change and survive by implementing innovative and effective service strategies Future generations can be considered as such. So in the process, the bank excelled thanks to an innovative strategy that considers the new generation bank like The strategies used to demonstrate customer service and happiness are just a marketing strategy It brings customers but in the long run it's just about running an internal business and managing money Strategies help the company maintain its position in the market.

Development in the new generation bank

Electronic Payment Service - Electronic Check Nowadays, we hear about e-governance, e-mail, e-commerce, e-tail, etc. in on By the way, a new technology is being developed in the United States for the introduction of electronic checks, It will replace traditional paper checks. Check, the law of tradable instruments.

Real Time Gross Settlement system - It is introduced in India since March 2004, is a system through which electronics instructions can be given by banks to transfer funds from their account to the account of another bank. The RTGS system is maintained and operated by the RBI and provides a means of efficient and faster funds transfer among banks facilitating their financial operations. As the name suggests, funds transfer between banks takes place on a 'Real Time' basis. Therefore, money can reach the beneficiary instantaneously and the beneficiary's bank has the responsibility to credit the beneficiary's account within two hours.

National Electronic Funds Transfer (NEFT) - The transfer of money from the customer remitting it to the beneficiary account usually takes place on the same day. Settlement or clearance of funds takes place in batches as specified by the guidelines by the RBI. Any amount of money can be transferred using NEFT, making it usually the best method for retail remittances. Customers with Internet banking accounts can use the NEFT facility to transfer funds nationwide on their own. Funds can also be transferred via NEFT by customers by walking into any bank branch (which is NEFT-enabled) and leaving relevant instructions for such transfer - either from their bank accounts or by payment of cash. Transfer of funds to Nepal using NEFT, is also allowed subject to limits.

Electronic funds transfer (EFT)- It is a system whereby anyone who wants to make payment to another person/company etc. can approach his bank and make cash payment or give instructions/authorization to transfer funds directly from his own account to the bank account of the receiver/beneficiary. Complete details such as the receiver's name, bank account number, account type (savings or current account), bank name, city, branch name etc. should be furnished to the bank at the time of requesting for such transfers so that the amount reaches the beneficiaries' account correctly and faster. RBI is the service provider of EFT.

Electronic Clearing Service (ECS) - Electronic Clearing Service is a retail payment system that can be used to make bulk payments/receipts of a similar nature especially where each individual payment is of a repetitive nature and of relatively smaller amount. This facility is meant for companies and government departments to make/receive large volumes of payments rather than for fund transfers by individuals.

Automatic Teller Machine (ATM) - Automatic Teller Machine - It is the most popular device in India, which enables the customer to withdraw their money 24 hours a day 7 days a week. It is a device that allows customer who has an ATM card to perform routine banking transactions without interacting with a human teller. In addition to cash withdrawal, ATMs can be used for payment of utility bills, fund transfer between



accounts, deposit of cheques and cash into accounts, balance enquiry etc.

Tele-banking - Tele banking is another innovation, which provided the facility of 24 hour banking to the customer. Tele-banking is based on the voice processing facility available on bank computers. The caller usually a customer calls the bank anytime and can enquire balance in his account or other transaction history. In this system, the computers at bank are connected to a telephone link with the help of a modem. Voice processing facility provided in the software. This software identifies the voice of caller and provides him suitable reply. Some banks also use telephonic answering machine but this is limited to some brief functions. This is only telephone answering system and now Tele-banking. Tele banking is becoming popular since enquiries at ATM's are now becoming too long.

Internet Banking- Internet banking enables a customer to do banking transactions through the bank's website on the Internet. It is a system of accessing accounts and general information on bank products and services through a computer while sitting in its office or home. This is also called virtual banking. It is more or less bringing the bank to your computer. In traditional banking one has to approach the branch in person, to withdraw cash or deposit a cheque or request a statement of accounts etc.

Mobile Banking - Mobile banking facility is an extension of internet banking. With recent developments in handset designs and mobile software, this is a trend which has already caught focus of majority of the banks. The bank is in association with the cellular service providers offers this service. For this service, mobile phone should either be SMS or WAP enabled. These facilities are available even to those customers with only credit card accounts with the bank.

Point of Sale Terminal - Point of Sale Terminal is a computer terminal that is linked online to the computerized customer information files in a bank and magnetically encoded plastic transaction card that identifies the customer to the computer. During a transaction, the customer's account is debited and the retailer's account is credited by the computer for the amount of purchase.

Electronic Data Interchange (EDI) - Electronic Data Interchange is the electronic exchange of business documents like purchase order, invoices, shipping notices, receiving advices etc. in a standard, computer processed, universally accepted format between trading partners. EDI can also be used to transmit financial information and payments in electronic form.

Challenges faced by Banks, vis-à-vis, IT Implementation

It is becoming increasingly imperative for banks to assess and ascertain the benefits of technology implementation. The fruits of technology will certainly taste a lot sweeter when the returns can be measured in absolute terms but it needs precautions and the safety nets. The increasing use of technology in banks has also brought up 'security' concerns. To avoid any mishaps on this account, banks ought to have in place a well-documented security policy including network security and internal security. The passing of the Information Technology Act has come as a boon to the banking sector, and banks should now ensure to abide strictly by its covenants. An effort should also be made to cover e-business in the country's consumer laws. Some are investing in it to drive the business growth, while others are having no option but to invest, to stay in business. The choice of right channel, justification of IT investment on ROI, e-governance, customer relationship management, security concerns, technological obsolescence, mergers and acquisitions, penetration of IT in rural areas, and outsourcing of IT operations are the major challenges and issues in the use of IT in banking operations.

Conclusion

Everyone today is convinced that the technology is going to hold the key to future of banking. The achievements in the banking today would not have made possible without IT Revolution. Therefore, the key point is while changing to the current environment the banks has to understand properly the trigger for change and accordingly find out the suitable departure point for the change.



REFERENCES

1. Arvid O.I. Hoffmann Cornelia Birnbrich. "The impact of fraud prevention on bank-customer relationships", International Journal of Bank Marketing, Vol. 30 Iss 5 pp. 390-407; 2012.
2. Schroeck, Michael; Rebecca Shockley, Dr. Janet Smart, Professor Dolores Romero-Morales and Professor Peter Tufano. "Analytics: The real-world use of big data. How innovative organizations are extracting value from uncertain data." IBM Institute for Business Value in collaborations with the Saïd Business School, University of Oxford, October 2012.
<http://www-935.ibm.com/services/us/gbs/thoughtleadership/ibv-big-data-at-work.html>. ©2012 IBM. 2 LaValle, Steve, Michael Hopkins, Eric Lesser, Rebecca Shockley and Nina Kruschwitz. "Analytics: The new path to value: How the smartest organizations are embedding analytics to transform insights into action." IBM Institute for Business Value in collaboration with MIT Sloan Management Review. October 2010. <http://www-935.ibm.com>.
3. Nobanee, H., Al Hamadi, F. Y., Abdulaziz, F. A., Abukarsh, L. S., Alqahtani, A. F., AlSubaey, S. K., Alqahtani, S. M., & Almansoori, H. A. (2021). A bibliometric analysis of sustainability and risk management. *Sustainability*, 13(6), 3277.
- Pérez-Martín, A., Pérez-Torregrosa, A., & Vaca, M. (2018). Big data techniques to measure credit banking risk in home equity loans. *Journal of Business Research*, 89, 448–454.
- Prabowo, H. (2016). Learning fraud detection from big data in online banking transactions: A systematic literature review. *Journal of Telecommunication, Electronic and Computer Engineering*, 8(3), 127–131.
- Rahman, N., & Iverson, S. (2015). Big data business intelligence in bank risk analysis. *International Journal of Business Intelligence Research*, 6(2), 55–77.
- Rakhman, R., Widiastuti, R., Legowo, N., & Kaburuan, E. M. (2019). Big data analytics implementation in banking industry – Case study cross selling activity in Indonesia's Commercial bank. *International Journal of Scientific & Technology Research*, 8(9), 1632–1643.
4. Pivotal Case Study – China CITIC Bank. Driving Revenue and Reducing Risk; 2011
5. Cloudera. Identifying Fraud, Managing Risk and Improving Compliance in Financial Services; 2013.

