



“AN IMPACT OF DIGITAL BANKING ON PERFORMANCE OF BANKS IN INDIA”

**DR. PRALHAD PRAKASH JOSHI, ASSOCIATE PROFESSOR
TRINITY INSTITUTE OF MANAGEMENT AND RESEARCH, PUNE**

Abstract –

Digitization of banking has been deployed more aggressively during the last few years to support development and improvement in the financial and operational performance of Indian banking sector. The application of the digital technology in banking has positively transformed the traditional delivery system to digital delivery system and services to the customers. Digital technology has created a great revolution in the Indian banking sector. Nowadays digital technology forms an important role in the improved performance of bank in terms of reduced operational cost, faster customer service and increased profitability. The present study is aimed to focus on the growth of digitization trends in public, private and co-operative sector banks in India. Through the study an attempt has been made to understand the perspective of the bank officials about impact of Digitization on the performance of the banks from public, private and co-operative sector banks. Various platforms based on Augmented Reality, Block chain, Robotic Process Automation, Quantum Computing, Artificial Intelligence, API Platforms, Prescriptive Security, Hybrid Cloud, Instant Payments and many more is an upcoming future of this sector. The study has focus on impact of digital initiatives on banking system and increase in customer satisfaction due to such initiatives.

Key words – Digital Technology, Performance of banks, Digital Delivery System, Augmented Reality.

I) Introduction -

Digitization is a concept deeply rooted in the banking sector of India. Banks in all the sectors (private, public and cooperative) and all sized across all regions have invested huge amount in the Digitization with a view to maintain a competitive edge and deliver their service to the maximum customers. The process of Digitization leads to data analytics and intelligence, which helps to the bank to keep closer relations with maximum customers. Evolution of new technology in the banking sector such as - app banking, mobile wallets etc. proved as very helpful to the bank customers in accessing and utilizing of financial services made available by the banks. Adoption of new digital technology has led to increased revenue generation, increasing customers, optimize cost structure and manage organization risk. The

new Digitization technology has caused to change the banking business and have the significant impacts on the banking connections. The role of Digitization in the banking sector has altered customer's preferences and demand. The main objective of the present study is to understand the growth of Digitization trends in public, private and cooperative sector banks, and the impact of Digitization on the operational and financial performance of the all sector banks in India.

II) Review of Literature

1) S. N. Azami, (2020), has conducted a study to examine the impact of Digitization on the profitability and cost of operations of the banks. Through the study author has also examined that, whether Digitization has improved employee efficiency and examined the impact of Digitization on the business prospects. Author has observed that, due to Digitization there is an improvement in the financial operational performance and improvement in employee efficiency.

2) RashiSinghal, (2020), has focused on the utilization and significance of Digitization of banking in India. Through the study author has also focused on the various types of innovative digital payment system in Indian banks. Author has explained the consequences of Digitization on the operational and financial performance of the Indian commercial banks. Author has concluded that Digitization benefited to the banks for expanding customer services, employee efficiency and customer services.

3) RachanaKalsan, (2021), has analysed the concept of Digitization and its application in the banking sector. Through the study author has discussed on the role of digital banking system in providing various services. Author explained on the role of digital banking system in providing various services. Author has focused on the advantages and disadvantages of digital banking and various challenges in the adoption of Digitization tools in banking activities. Author has concluded that Digitization of banking will help to increase capital market insurance sector, venture capital market etc. which will increase the financial performance of banks.

4) J. Poornima and S. K. Banerjee, (2022), have reviewed the bank transformation in rural areas and need for digital transformation in the rural banking in India. While discussing

on the Digitization of rural banking authors have focused on the factors like - digital illiteracy, vulnerable systems, and mistrustselective to non-acceptance of digital payments, inadequate infrastructure, poor rural economy etc. Authors have also focused on the impact of digital banking on rural customers. Authors have concluded that an overall performance of the rural customers towards digital banking services is better.

III) Objectives-

- 1) To observe the digitization trends in banking sector of India during 2016 to 2021.
- 2) To know the observations of the bank officials about the performance of the banks.
- 3) To understand the opinion of the bank officials about the benefits of digitization to banking sector.
- 4) To identify the financial variables those are positively impacted due to digitization as per the observations and experience of banking officials.
- 5) To highlight the perception of bank officials regarding prospective areas of digitization in banking sector.

IV) Importance of the study -

There is a drastic transformation in the Indian banking business due to penetration of advanced digital technology in the recent years. Digitization has introduced innovative banking business paradigm. It has an important role in improving the banking services rendered to the customers. The present study is important with a view to understand the opinion and experience of the banking officials with regards to the impact of Digitization on the financial and operational performance of public, private and cooperative sector banks in India. The study is also important to know about the recent trends in digital banking in terms of growth in digital transactions, growth in mobile banking users etc. The present study is equally important to know about the prospective areas for Digitization in the view of bank officials.

V) Methodology of the study -

The study is descriptive in nature and survey method has been applied for the study purpose. The present study is based on primary as well as secondary information. For the collection of primary information small questionnaire has been prepared for the selected bank officials. Convenient sampling method has been used to select 20 officials from all sector banks (public sector banks 7, cooperative sector banks -7, and private sector banks -6 officials). The secondary information has been collected through the study papers, articles, published in various national and international journals, and books. Apart from this the required information is also collected through the oral discussions with bank officials, banking experts etc. Simple percentage method has been used for analysis of primary information.

VI) Results and discussion -

Table No. 1 (A)

Growth trends of bank's Digitization during 2015-2016 to 2020-2021

S. No.	Financial Year Particulars	E-Payments	
		Number (Million)	Amount (Billion)
01	2015-2016	10514.27	722044.93
02	2016-2017	14022.18	822193.19
03	2017-2018	18328.15	1013252.64
04	2018-2019	22405.67	1268347.70
05	2019-2020	27900.04	1490379.27
06	2020-2021	29683.87	1673458.24

Source - Reserve Bank of India Bulletin

The above table indicates the success of Digitization of banks during the study period. The numerical information shows the growth trends in the Digitization of banks. The increase of digital banking in India can be understood with the increased number of digital payment (transactions) and amount.

Trend percentage is observed during the last 6 years (Base year 2015-16)

2015-2016 Base Year	2016- 2017	2017- 2018	2018- 2019	2019- 2020	2020- 2021
100	133.36%	174.31%	213.09%	265.35%	282.32%
100	113.87%	140.33%	175.66%	206.41%	231.77%

A consistent growth in terms of Volume and Value can be observed through the trends in last five years.

The following table indicates the volume of digital transactions during the 2015-2016 to 2020-2021

Table No. 1 (B)

Volume of various digital transactions during 2017-2018 to 2019-2020

Type of digital transactions	Volume (Millions)		
	2017-2018	2018-2019	2019-2020
RTGS Customer transactions	104	121	13
RTGS Interbank transactions	04	04	05
Retail Electronic clearing (ECS, NEFT, NACH, IMPS)	4205	5467	7113
Debit-credit card uses	3486	4749	6177
Prepaid payment transactions	1963	3454	4604
UPI (Including BHIM)	18	915	5343

Source - Reserve Bank of India Bulletin.

The above table clearly indicates the increasing trend in the volume of digital payments through various modes. It is observed that the debit-credit card holders are increased almost double during the study period. UPI post launch increasing rapidly as compare to other digital modes of transactions. There is a growth in the various types of digital transactions due to variety of the initiatives taken by the central government to encourage Digitization of banks and digital payment.

The following table indicates the growth in the number of mobile banking users during the study period.

Table No. 1 (C)

Growth in the number of Mobile banking users during 2015-2016 to 2019-2020

Sr. No.	Year	Number of Mobile Banking
01	2015-2016	638.4
02	2016-2017	684.1
03	2017-2018	730.7
04	2018-2019	775.5
05	2019-2020	813.2

Source - Reserve Bank of India Bulletin

From the above table it is revealed that, digital banking is gaining popularity today; and the awareness of customers regarding the banking services is also increasing day by day, that too after demonetization the digital banking services have gained more attention by the customers. The above table also shows the increasing trend in the number of mobile banking users. The number of mobile banking users was 638.4 million in the year 2015-2016 which has been increased up to 813.2 million in 2019-2020.

Table No. 2

Impact of digital banking on the financial performance of the banks (2015-2016 to 2020-2021) (Opinion of the bank officials) (Multiple Response)

Sr. No.	Particulars	Frequency	Percentage
01	Increase in the conventional Revenue	17	85%
02	Increase in the non-conventional Revenue	13	65%
03	Transparency in the Transactions	19	95%
04	Minimal operating and maintenance expenses	12	60%
05	Reduction in HR costs	10	50%
06	Other impacts	09	45%

The above table shows the opinion of the bank officials about the financial performance of the banks after digitization. In the opinion of 85% officials, digitization has led to increase of conventional revenue of the banks and 65% bank officials stated that, due to

digitization, there is an increase in the non-conventional revenue also. 95% bank officials stated that, there is a transparency in every transaction and there is minimum chance for financial malpractices. 50% officials appreciated that digitization has caused towards reduction in HR costs. 45% officials have stated that, due to rapid digitization of bank's services there is a growth in bank deposits and customers. Apart from this, these officials have also stated that digitization has provided key channel for the marketing the loan products of the bank, and digitization created important avenue for more loan customers very effectively and efficiently.

Digitization brought great revolution in the day to day banking business. It has created positive relationship between customers and banks. Digitization has not only positively impacted on the financial performance but also positively impacted on the operational performance of the banks. Digitization has enhanced innovation in the banking business model and created value to the customers, saved operating costs, and thereby it has increased the operational performance of the Indian banks.

The following table focused on the opinions of the officials about the impact of digitization the operational performance of the banks.

Table No. 3

Impact of digital banking on the operational performance of the banks (2015-2016 to 2020-2021) (Multiple responses)

Sr. No.	Particulars	Frequency	Percentage
01	It helps for marketing of the various bank products	16	82%
02	It provides interest calculation tools to customers	13	65%
03	It helps to increase efficiency of employees	15	75%
04	It helps to provide efficient service delivery	17	85%
05	Other impact	07	35%

In the opinion of 80% bank officials, marketing of various banking products become easier. It saves the additional costs for advertisements. In the opinion of 65% officials, due to digitization, banks are able to provide interest calculation tools to the customers. 75% officials have stated that, there is a positive impact of digitization on the efficiency of the employees, which has proved very helpful to support and improve the operational and

managerial performance of the banks. According to 85% officials, digitization has helped to provide efficient service delivery to the customers and positively changed the traditional delivery channel of banking services. 35% officials have opined that, due to digitization bank officials have got ease of communication with customers, and able to retain current customers, and in capturing new customers in a cost effective manner.

The banking sector of India has achieved tremendous development and growth today; and encouraged higher amount of capital formation due to digitization. Indian banking sector has benefited in many ways due to adoption of digital technology in regular banking business. The digital transformation in the Indian banking sector is now become a continuous process that positively impacted the external and internal banking environment by re-designing internal process and existing business methods. The continuous process of digitization has proved very helpful for the banks to improve their operational and financial performance and to increase market share to improve the profitability and improve financial position.

The following table shows the benefits of Digitization on the customer's deposits.

Table No 4

Benefits of Digitization on the customers deposits

Sr. No.	Particulars	Frequency	Percentage
01	It benefitted for attracting additional business	09	45%
02	It benefitted for retaining existing customers and attract more new customers	03	15%
03	It benefitted for keeping ease communication with customers to get more deposits	02	10%
04	All the above	06	30%
05	Total	20	100%

45% bank officials have stated that digitization of banking business has benefitted for attracting additional business from the customers in terms of deposit maintenance. Digitization has enabled the bank to attract more customers for additional business. In the opinion of 15% officials, it benefitted to the banks to retain existing customers and attract

more customers through efficient service delivery. In the opinion of 10% officials, due to digitization they are now able to keep easy communication with the customers. 30% officials have mentioned that all the above benefits are achieved by the banks because of rapid digitization of banking business.

To know about the factors that are mainly impacted due to Digitization of banks is one of the major objectives of the present study. The following table shows the opinion of the bank officials in this regard.

The following table focused on the prospective areas in banking business for Digitization.

Table No. 5

Prospective areas in banking business for Digitization (Opinion of the bank officials)
(Multiple response)

Sr. No.	Particulars	Frequency	Percentage
01	Further Reduction in Operational costs	14	70%
02	Improved Customer satisfaction	19	95%
03	Digitization of rural banking	12	60%
04	Control on Cyber financial crime	17	85%
05	More reach towards new geographies	11	55%

According to the 70% bank officials reducing of operational costs is the major area of banking business and more digitization is expected with many steps to drive efficiency and lower operating costs in the routine banking business with the help of digital technology. In the opinion of 95% bank officials, today, digital technology is focusing more on efficient delivery systems to address changing customer needs and improvement of bank and customer relationship. The expectations of today's techno-savvy customers are increased and they are expected to deliver digital services from their banks. Therefore, banks are also recognizing the significance of developing digital solutions to ensure more customer satisfaction. Government and banks have recognized the importance of digitization of rural banks which is helpful in ensuring financial inclusion and which encourages the economic growth. Therefore, the preference is also given to the Digitization of rural banks is stated by the 60% bank officials. Financial fraud or crimes and cyber security have long been a serious issue for banks. Risk for banks is also increased because of the vulnerability inherent to massive

automation, growth in transactions, core banking etc. Apart from this, the modes of cyber-crimes or fraud have also changed which have increased the risk for banks. Therefore banks are now trying to evolve an improved and holistic approach to mitigate the cyber financial frauds with applying innovative digital technology as stated by 85% bank officials. 55% bank officials have stated that, the innovative technology like Artificial Intelligence (AI) and Machine Learning (ML) have radically transformed the banking operations today.

VII) Findings -

1) The numerical information pertaining to the growth trends of bank's Digitization indicates that, Digitization has caused huge growth in the number of total e-payments or e-transactions and brought growth in the transaction done through digital technology during the study period (2015-2016 to 2020-2021). It is observed that application of digital technology has changed business model of the Indian banking sector to a great extent. It is also found that there is a sweeping growth in the various types of digital transactions. There is major increase in the number of e transactions through ECS, NEFT, NACH, IMPS, UPI etc. During the study period huge increase in the number of mobile banking users is observed.

2) As per the information provided by the bank officials it is found that, due to digitization there is an improvement in the financial performance in terms of conventional and non-conventional revenue generation, minimization in operational expenses and reduction in the HR costs. It is also observed that digitization has provided important mode or channel for marketing of the banking products.

3) As per the information provided by the bank officials it is observed that due to digitization there is an improvement in the operational performance in terms of marketing of banking products, employee efficiency and improvement in the customer service delivery, ability to retain current customers etc.

4) Majority of the bank officials have stated that digitization of banks has benefited to them by attracting additional business, retaining existing customers and to attract new customers. Digitization is also proved as beneficial to keep easy contact/communication with the customers which results in improved customer satisfaction etc. It is found that the efficiency of employees, service delivery system is improved due to digitization.

6) Minimization of operational costs, digitization of rural banking, controlling cyber frauds, more reach towards new geographies etc. are some of the major prospective areas in banking sector in future.

VIII) Conclusion -

It is concluded that in Indian banking sector, there is tremendous opportunity for improving and expanding digitization of banking business. Banks need to go faster towards their journey to be digital which will help them survive the threats that are to be faced in near future.

APIs, containerization, cloud computing, AI and block chain etc. will play vital and critical role in digital transformation of Banks and Financial Institutions and digital delivery of services.

Now in the era of technology driven systems banks and other financial service provider have had to respond with an array of digital and innovative platforms to provide their services more effectively and efficiently. These initiatives include use cutting-edge technologies to ensure a customer-centric perspective instead of the traditional methods based on products, real-time intelligent data integration in place of manual and belated analysis being performed by time consuming methods.

Banking technologies include Digital Banking, Artificial Intelligence, Analytics, Software designed for Personal financial management, Internet of Things, Voice banking, Banking as a service and FinTech innovation and so on. It leads towards the goal of achieving invisible banking.

Various platforms based on Augmented Reality, Block chain, Robotic Process Automation, Quantum Computing, Artificial Intelligence, API Platforms, Prescriptive Security, Hybrid Cloud, Instant Payments and many more is an upcoming future of this sector.

IX) References

- 1) S. N. Azami, (2020), "Impact of Digitization on bank performance - A Study of Indian banks," Mattingley publishing Co. Inc.
- 2) RashiSinghal, (2020), "Impact and importance of digital payment in India," International Journal of Muttidisciplinary Education Research, Vol. 10, No. 3.
- 3) RachanaKalsan, (2021), "Impact of digital banking in India-Trends and challenges," International Journal for Reseaqrch in Engineering Application and Management, Vol. 5, No. 7.
- 4) Dr. J. Poornima and S. K. Banerjee, (2022), "Impact of digital transformation of banking sector in rural areas," Journal of positive school psychology, Vol. 6, No. 2.
- 5) Sonia Dara, (2017), "Digitization in Indian Banks," World Wide Journal of multidisciplinary Research and Development, Vol.3, No. 11.
- 6) K. M. Kusuma, (2020), "Digitization of Banks-An evidence from India," International Journal of Research and Analytical Reviews, Vol. 7, No. 1.
- 7) P. Chaturvedi and AshaThakkar, (2021), "E-banking services - A Comparative study of public, private and foreign banks in India," International Journal of Creative Research Though, Vol. 9, No. 4.
- 8) A. E. Tigga, (2020), "Impact of Information Technology on Indian banking sector," ICAFI Reader, May 2020.
- 9) PoojaMalhotra and Balvinder Singh, (2019), "Experience in Internet banking and performance of the banks," International Journal of Electronic Finance, Vol. 5, No. 3.
- 10) U. R. Gurrām and V. Anudeep, (2020), "Impact of Digitization on Traditional Banking," International Journal of Research in Engineering, Science and Management, Vol. 2, No. 3.