# **Progress of Digital Banking in Rural India**

Shailendra Singh\*
Megah Agarwal\*\*

### **Abstract**

A sound and effective banking system are essential for any country's economic growth. Through the various medium, the bank helps the citizen of the country to deposit their savings, make an investment, avail loans and facilitate in trading both outsides and within the country. Indian Banking has undergone various changes over the years, and, has timely evolved with their products and services. In the 1980's a need was felt to improve customer service, MIS reporting, and bookkeeping. To overcome the problem, in 1988, RBI had set up a committee under Dr. C. Rangarajan. The objective of the committee was to implement computerization in Indian Banking System. Since then, the journey of transforming the Indian banks from computerized banking to digital banking has been successful, but, has seen many ups and downs. Though they have been successful to some extent, there are still major issues and challenges in from of Indian Banks to completely turn India into digital banking.

Keywords: Digital Banking, E-Banking, Rural Banking, Issues and Challenges in Banking, Technology in Banking.

### Introduction

In 1991 when the Indian government decided the liberalize the Indian economy, it corresponded with the worldwide internet revolution. The opening up of the economy impacted the Indian banks which were till then following the old ways of functioning. The new foreign companies bought new technologies with them, due to which there was a rise in new Indian IT companies, the boom in Indian IT companies encouraged banks to wholeheartedly embrace the technology. This paved the way for business process automation in banking, which enhanced customer service, reduced manpower cost, and increased profitability. By issuing mechanization and computerization Reserve Bank of India played a vital role in this transformational journey.

There were many significant changes landmarks in the banking technology revolution, like the introduction of MICR, ECS, RTGS, NEFT, and many more. On one side where ATM provided any time access to their money, the introduction of credit card enabling cashless transactions unleashed a revolution in the banking

world. As the number of mobile users is increasing in India, the introduction of mobile banking was a noteworthy milestone. According to the RBI Report in 2016-17, there are 2,22,475 Automated Teller Machines (ATMs) and 25,29,141 Point of Sale devices (POS). Online banking has changed the face of banking and brought about a noteworthy transformation in banking operations.

Another concept in banking that has been tested in advanced countries such as Europe and the United States is "Virtual Banking". Technology is a key differentiator in the performance of banks, due to which Indian Banking is going through rapid change to meet the competition, demands of the customers, and various challenges of technologies.

As 60% of the Indian population is living in rural India, it becomes very important for Indian banks to ensure that the banks innovate accordingly. The pace of technology adoption, a key feature of the urbanized world, cannot be forced upon the rural population. Rural population is one of the key challenges that Indian Banks are facing n

<sup>\*</sup>Research Scholar, Banasthali Vidyapith, Vanasthali, India, Email: shailendrs\_singh@yahoo.com

<sup>\*\*</sup>Assistant Professor, WISDOM, BanasthaliVidyapith, Vanasthali, India, Email: meghamba86@gmail.com

today's time, there are other challenges too, which are highlighted in the paper.

## **Digitalization of Indian Banks**

The digitalization of Indian banks started in the 1980's when RBI had set up a committee under Dr. C Rangarajan to computerize the Indian banking system. The need to computerize was to improve the customer service, to update and secure the records and bookkeeping and to have a proper MIS system. The process to computerize banks gained pace when Indian government in 1991 opened the economy. The new foreign players started investing in India. The new private and foreign banks propelled the competition, and several commercial banks started moving towards digital services.

Banks started using Information Technology initially with stand alone PCs and then switched over to LAN connectivity (Local Area Network) and with advancements adopted core banking platform. Core Banking Solution (CBS) paved way to start the concept of "Anywhere and Anytime Banking". This was a promising step to enhance the customer convenience. Through digitalization, banks were able to innovate their services and introduce various options to make banking convenient to customers.

### Trends and Innovations in Digital Banking:

- 1. Automated Teller Machines (ATMs)
- 2. Electronic Clearing Services (ECS)
- 3. National Automated Clearing House (NACH)
- 4. Credit and Debit Cards
- 5. Immediate Payment Service (IMPS)
- 6. National Electronic Funds Transfer (NEFT)
- 7. Prepaid Payment Instruments (PPIs)
- 8. Mobile Banking
- 9. Unified Payments Interface (UPI)
- 10. Bharat Interface for Money (BHIM)
- 11. AADHAAR Enabled Payment System (AEPS)
- 12. Bharat Bill Payment Systems (BBPS)
- 13. Bharat Quick Response Code Solutions (Bharat QR)
- 14. Social Media Banking

### **Research Objectives**

1.) To analyze various issues and challenges in digital banking in India

- 2.) To analyze the factors influencing the digital banking in India
- 3.) To analyze the measures that needs to be taken up to overcome the issues and challenges in India

## Research Methodology

This study is based on the analysis of the recent trends, opportunities and challenges in digital banking in India, with the help of secondary data collection. The source of data is taken from the report payment system indicators published by RBI for the FY 2016-17Report on trend and progress of banking in India, various reputed journals, newspapers, white papers and research studies.

#### Literature Review

- 1.) Mr. Dileep S and Dr. G.V. Kesava Rao (2013), conducted a "A Study on Indian Rural Banking Industry-Issues and Challenges on", the objective of the research was to trace out the genesis and concepts of rural banking, know the reasons for unprofitable rural banking in India and usage of bank facility in rural India. They considered secondary data for their study, the also referred reports published by National Sample Survey Organization (2006), World Bank report on "Access to usage of financial service (2008) and report by Reserve Bank of India. N their study they have concluded that, there are 185 million bankable adults in rural India who are unbanked because of access and usage issues and commercial banks can turn this as an opportunity for themselves by building a infrastructure in coordination of 3 key stakeholders "Government of India, Reserve Bank of India and the commercial banks".
- 2.) V.Devadevan (2013), conducted a research on "Mobile Banking in India – Issues & Challenges", the objective of the research was to identify the mindset and analyze the security issues in Mobile banking among the banking customers in India. The research was conducted by collecting primary and secondary data. Primary data was collected from 65 respondents using online questionnaire and secondary data was collected from the website of Telecom Regulatory Authority of India (TRAI). The study concludes that the evolution of different

technology in communication system and mobile device is a major challenge to frequently change the mobile banking solutions. To facilitate rural community, banks should use customerfriendly software that can be used in local language.

- 3.) Chirag Patel and DarshanRanpura (2013), conducted a study on "Rural Banking through internet: A study on use of internet banking among rural customers". The objective of the research was to study the factors that affect the selection behavior of rural consumers, how aware are the rural consumers about the internet banking facilities and to identify relation between demographic factor like Gender, occupation, education, income and choice of internet banking among rural consumers. The study employs primary data as well as secondary data. Secondary data was collected from different published sources. Primary data was collected by structured questionnaire survey. Non-probability and convenience sampling applied to conduct this research. Data is collected from 200 respondents for determining the rural consumer's preference towards Internet Banking. The finding of their study concludes that basic facilities like balance enquiry is most preferred services used by rural consumers whereas services like term loan, FD, demand draft etc... are least preferred.
- 4.) Dhanraj N and Dr. R. Sai Kumar (2016), conducted a research on "Challenges and Issue of Indian Rural Banking Industry", the objective of their research was to analyze the rural credit and the role played by the RRBs in the priority and non-priority sector landings. The study is diagnostic and exploratory in nature and makes use of secondary data. In their study they find and concludes that RRBs in India has significantly improved rural economy.
- 5.) KumariNidhi (2016), conducted a study on "E-banking in India: Challenges and opportunities". The objective of the study was to identify financial innovations in Indian banking sector and the challenges faced in E-Banking. The study is diagnostic and exploratory in nature and makes use of secondary data. The study concludes that financial innovations have changed the face of Indian banking, there has been a paradigm shift from the

- seller's market to buyer's market and has affected the banks approach from "conventional banking to convenience banking" and "mass banking to class banking".
- 6.) Dr. S.M. Syed and Krishna R Simadhri (2017), conducted a study on "Significance of technology in banking", the objective of the study was to identify the emerging trends and significance of technology in banking and what are the benefits to customers, employees and banks. The study is conducted through secondary data based on various reports and publications. The study concludes that the growth of technology has changed the face of banking. The banks are using technology in customer acquisition, process efficiency, and delivering the ease and efficiency to customers.
- 7.) Aarti Sharma and NidhiPiplani (2017), conducted a research on "Digital Banking in India: A Review of Trends, Opportunities and Challenges". The objective of the research was to examine thedigital banking trends in India along with identifying the challenges faced by banks in incorporating these digital banking trends. The research was based on secondary data and reports published by Reserve Bank of India. Their research concludes that the digitization in banking has started shifting the paradigm of cash and paper based banking to cashless and paperless banking.
- 8.) S. MD. SHAKIR ALI, MD. WASIM AKHTAR, S. K. SAFIUDDIN (2017),conducted a study on "Digital Payments for Rural India Challenges and opportunities". The objective of the study was to identify factors that impact and support the digital transactions in rural economy of India. The study is based on reviewing the trends and analysis collected from secondary data sourced from reports by Assocham (M-Wallet Report), "Demonetization and Merchants The Promise, The Potential and The Practicality", report by Deloitte (2017), Mobile money the next wave a report by EY (2016). In their study they have concluded that for India to sustain its robust economic growth, it will have to focus on certain integral factors like transparency, corporate

governance and restrict parallel cash based economy.

9.) RaghvendraNayak (2018), conducted a study on "A Conceptual Study on Digitalization of Banking -Issues and Challenges in Rural India", the objective of the study was to analyse various issues and challenges in implementation of digitalization in rural banking, what are the factors that are influencing the digitalization of rural banking and what needs to be done to improve the digitalization in rural banking. On the basis of the secondary data collected from various reports and research papers, he concluded that digitalization plays an important role in the development of the country and for financial inclusion. By bringing digitalization in rural India we can bridge the gap between rural and urban India and also there will be an increase in investment activities.

## **Issues and Challenges**

1.) Rural Market: Approximately 69% of India's population resides in rural areas. Lately, there have been some ambitious targets by the government like access to bank accounts to all the households of the country. But even if everyone gets access to a bank account, many villages do not have adequate branches and ATMs to feed the market in rural areas. Currently, the banking sector does not have the infrastructure to reach out to the market at the bottom of the pyramid (BOP). Many economists state that the infrastructure will always be inadequate owing to a large population. But there is a need for better supervision and monitoring framework.

Table -1

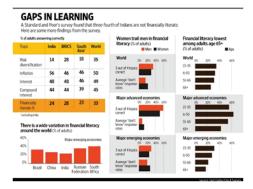
1: ONLY 38% OF BANK BRANCHES ARE IN RURAL AREAS\*
Bank branch distribution of scheduled commercial banks (%)

<ul> <li>Rural</li> </ul>	Semi-urban	<ul><li>Urban</li></ul>	■ Metropolitan			
18.1	18.1	17.7	17.2	16.6	16.5	16.5
19.7	19.4	19.2	18.8	18.3	18.3	18.3
24.7	25.7	26.4	27.0	27.0	27.0	27.1
37.5	36.8	36.6	37.0	38.1	38.2	38.1
2010	2011	2012	2013	2014	2015	2016

(Source – RBI Report Bank Branch Distribution of Scheduled commercial Banks)

2.) Lack of Financial Literacy: Financial literacy is directly proportional to economic growth of a country, therefore, it has become one of the top priorities in the world today. As per a global survey by Standard & Poor's Financial Services LLC (S&P) 76% of the adults in India are not even aware of the basic financial concepts. The financial literacy in India has been poor when compared to the world. Lack of basic financial knowledge results in poor financial decision and investment. Financial literacy is important for India as it considered an important adjunct to promotion of financial inclusion and ultimately financial stability. Financial illiteracy puts a burden on the nation in the form of higher cost of financial security and lesser prosperity. According to the world bank's global findex database, India has 180 billion accounts in banks, but 48% of the bank accounts have seen no transaction for last one year.

Table - 2

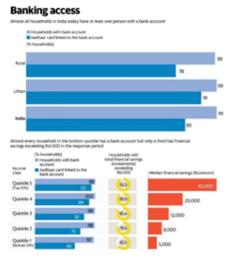


(Source – Global Survey: Standard & Poor Financial Services)

3.) Usage % of digital banking services: The proportion of the Indian population accessing financial institution accounts from their phones or the Internet, making digital payments or using mobile money wallets is significantly lower than in other developing economies. According to a report by BCG on "Encashing on Digital: Financial Services by 2020", 33% of banked population is not using digital banking. According to the same report, 23% of banked population feel that digital banking services lack transparency in the form of hidden transaction charges. No more than 1% of Pradhan MantriJanDhanYojana (PMJDY) account holders—3.1 million beneficiaries—use overdraft facilities

available to them, and 17% of PMJDY accounts are "zero-balance", meaning they are not used, recent data show, although that is down from 25% in 2016 and 75% in 2014.38% of Indian accounts are inactive—meaning, there were no withdrawals or deposits over the course of a year—suggesting that many Indians are still not integrated into the formal banking system.

Table - 3

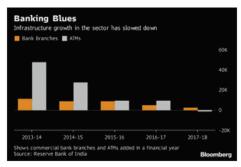


(Source – BCG Report: Enhancing on Digital Financial Services by 2030)

4.) Lack of Infrastructure: India's banking system "lags in terms of physical infrastructure and has failed to reach the poor," said a 2017 study from EY and the Associated Chambers of Commerce and Industry of India, which found 19 percent of the population still lacks access to the formal credit system. While India gained about 25,000 bank branches and 45,000 ATMs in the four years to March 2018, growth has not kept up with a surge in new customers. For Example - The experience of villagers in Jogaliya in Rajasthan, India's largest state by area, is typical. The village of about 5,500 people has no bank branch or ATM, and the closest one is 15 kilometers away. That's a 60 rupee (87 cents) bus ride that would have been unnecessary before the government made it mandatory to have bank accounts to get old-age pensions and other welfare payments. While electronic payments have wide advantage over cash, the limitation of electronic infrastructure in rural

regions and developing cities has put these facilities out of reach to people. For the benefits of electronic payments to fully reach the two billion people that lack financial services, new infrastructure that makes serving the poor more economical is essential.

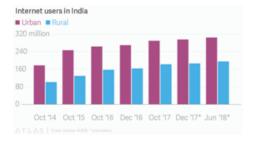
Table - 4



(Source – Study Report E & Y and Associated Chambers of Commerce & Industry India)

5.) Network issues: Internet penetration faces an urban rural divide. According to a report by Mobile Association of India, 65% of urban households had an internet connection compared to 20% in rural India. There is a problem of communication networks because of which there is lesser digital payments in rural areas which needs to be addressed. The rural India also lags behindin internet access for any kind of online transaction due to lack of electricity and poor network quality. As far as frequency of Internet usage is concerned, 182.9 million urban users access the Internet every day, as against 98 million users in rural areas.

Table -5



6.) Security and Privacy Risk: Many people don't opt for digital banking because they fear of online frauds, due to which they don't take any risk by doing online transaction. There have been cases wherein personal details of people have got leaked, fraudulent calls to customers have been made and, there have been cases where customers have ended up sharing their account number and pin number with fraudulent companies. All these activities have time and again discouraged customers to avoid digital banking.





(Source -Experian India Fraud Report, 2018-19)

#### Conclusion:

Despite significant advancement in banking and payments infrastructure, India is far away from its vision of cash less economy. Though government has been successful in opening the accounts through Jan DhanYojana, it has miles to go to make all the accounts operate successfully. Banks will have to invest in infrastructure and network to ensure that people residing in rural India can also avail the digital banking facilities. The Focus of the government and banks should be on Availability, Affordability & Acceptability yet with an Assurance about Safety & Security, only then can we expect that there will be a rise in online transactions across the country and meet the vision of cash less economy. To encourage customers to deposit amount in their account and also invest in markets, banks in association with government should start finance literacy programs across the country. These literacy workshops will prevail an understanding among the customers and encourage them to invest the amount in different verticals.

#### Reference

- Aarti Sharma, NidhiPiplani, "Digital Banking in India: A Review of Trends, Opportunities and Challenges", IRJMST Vol 8 Issue 1 [Year 2017].
- Bhavesh J. Parmar, Darshan B. Ranpura, Chirag R. Patel, Naineshkumar P. Patel, "Rural banking through internet: A study on use of internet banking among rural consumers", ASIAN JOURNAL OF MANAGEMENT RESEARCH, (2016)
- 3. Dileep S., Dr. G.V.Kesava Rao, "A Study on Indian Rural Banking Industry-Issues and Challenges", Asia Pacific Journal of Research, Volume No. 2, Issue:4, (June 2013)
- 4. Dhanraj N., Dr. R. Sai Kumar, "CHALLENGES AND ISSUES OF INDIAN RURAL BANKING INDUSTRY", AIJRRLJSM, VOLUME 1, ISSUE 4 (2016, May).
- 5. KumariNidhi, "E-BANKING IN INDIA: CHALLENGES AND OPPORTUNITIES", International journal of science technology and management, Vol. No. 5, Issue No. 8, August 2016.
- RaghavendraNayak, "A Conceptual Study on Digitalization of Banking - Issues and Challenges in Rural India", International Journal of Management, IT & Engineering, Vol. 8 Issue 6, June 2018.
- 7. S. MD. SHAKIR ALI, MD. WASIM AKHTAR,S. K. SAFIUDDIN, "DIGITAL PAYMENTS FOR RURAL INDIA CHALLENGES AND OPPORTUNITIES", International Journal of Management and Applied Science, Volume-3, Issue-6, Jun.-2017.
- 8. S.M. Syed, Krishna R Simhadri, "SIGNIFICANCE OF TECHNOLOGY IN BANKING", IRJMST Vol 8 Issue 3 [Year 2017].
- V. Devadevan, "Mobile Banking in India Issues & Challenges", International Journal of Emerging Technology and Advanced Engineering, Volume 3, Issue 6, June 2013).
- 10. BCG Report on "Encashing on digital: Financial Services in 2020"
- 11. ASSOCHAM and EY report "19 per cent of Indian population is still unbanked" July 24, 2017.