Digital Banking in India- Trends, Problems and Opportunities

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Abstract

Banking sector is passing through a shift from traditional branch banking to modern technology based branchless banking. The modern baking is fully digitalised and every banking service is available at the finger tip of the customers. Digital banking is the process of digitalisation of all the traditional banking services that were previously available inside the bank branches. People can deposit, withdraw and transfer money between accounts, check account balance and make bill payments etc through digital banking services without visiting the bank branches. People are adopting digital banking services to save their time and at the same time it helps to reduce the operational cost of bankers. The present paper is a study on the trends and the opportunities and problems in digital banking. Trend has been studied for the period from 2011-12 to 2018-19. The present study has observed the positive growth in digitalised banking services. Even though digital banking services are beneficial to the customers as well as banks, it has some challenges; like security problem, internal barriers, convenience sustainable competitive advantages etc.

Keywords: *Digital, Branchless, Cost, Opportunities, Challenges*

JEL Classification: **G21**

Introduction

Banks are the backbone of financial system and one of the major players in the context of economic development. Banking system in the country is operating in a competitive environment and most of the banks want to have a better position over other banks of the economy. Introduction of technology into the banking system has invigorated the degree of competition. Consequently, the banking system is gradually shifting from traditional branch banking to modern technology based branchless banking. Digital banking is the digitization of all the traditional banking activities and programs services that were historically available to customers when physically inside of a bank branch. This includes activities like withdraw money, transfer of money between accounts, bill payment, loan management etc (Proctor, 2020). Digitalization offers new opportunities for banks to place the customer at the centre of the development process. It helps the banks to increase

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their customer base by providing digitalised services at fingertips on anywhere at any time basis (Prasanth & Suthamadhi, 2018). Thus, it leads to improved customer services and customer satisfaction.

The period 1990 is marked as the introduction of internet which brought dramatic changes in the banking system. The online banking system helps the banks to cut down their operating cost and speed up their service delivery. The ATM cards and credit cards are considered as the pioneers in digital banking. The efforts in the area of digitalisation of banking have been proved to be beneficial and so the banks took another leap towards creating their own space on the internet by designing a website. The website has opened up a gateway of various online services like opening new accounts, downloading the necessary forms, and applying for loans (Khan, Hameed, & Hamayun, 2019). Furthermore, digital banking has offered many other features and opportunities to people such as income tax filing, fund transfer, bills payments, opening and checking account balance etc. (Hamilton, 2020).

Digital banking also allows calculation of loan portfolio, calculation of premium, tools for financial planning, investment analysis, budgeting and forecasting. As a result, most of the financial planning can be done efficiently without the need to personally visit a bank (Lemke, 2020). Now, banks are come up with advanced apps to perform online banking using smart phones. This facilitates doing online banking transactions anywhere and anytime. The online banking feature provides the luxury for banking anytime and anywhere. The internet banking services offered by banks are available 24*7 basis throughout the year except the time for website maintenance (Monisha, Kanika, & Kaur, 2017). On the internet-banking page, the customer can see the summary of their real-time bank account. This mode of banking helps to keep a check on the bank account at any time (Shetter, 2019). Having this background, the present paper attempts to study the trends in digital banking, and opportunities and challenges of digital banking in India.

Review of Literature

Shukla & Shukla (2011) studied the problems and prospects of E-Banking while focusing on the advantages and the risks arising due to growth of electronic banking. The study argued that e- banking services are easy and convenient to manage the financial resources of the customers. However, it continued to challenges to the financial security and personal privacy. Nayak (2018) stated that Indian banking system is passing through tremendous growth with higher capital formation with the help of digital technology. However, one of the major challenges in digital banking is the implementation of these services in the rural area. Khan, Hameed, & Hamayun (2019) studied the key issues of e-banking acceptance in the rural areas of Pakistan by employing a comprehensive framework of Unified theory of acceptance and Use of Technology. The study discovered that personality openness significantly shapes behavioural intensions and trust on the internet moderates between customer’s intension and their usage of e-banking.

Chandrawati & Pandey (2017) conducted a study to identify drivers of digital banking transformation for Indian bank. The study concluded that digitalization has changed the face of branch banking and mobile is being increasingly used as a primary channel of banking. Moreover, social media integration and online channels are also considered as the major drivers of digital banking transformation. Vishnuvardhan, Manjula, & Naik (2020) explored that customers use mobile devices for the purpose of electronic transactions due to high Internet speed, personal Digital Assistants, and design of banking application. Bamoria & Singh (2011) explored the issues in mobile banking perceived by its users and non- users and found that that mobile handset operability, security/privacy and standardization of services are the critical issues. Sahu & Kumar (2017) found that factors influencing successful implementation of digital payment system in India with are Anonymity, Bank Involvement, Drawer, Infrastructure, Mobility, Parties, Popularity, Range of Payment, Risk, Security, Transfer limit, Transfer mode and Transfer time. Shetter (2019) also underlined the importance of understanding the behaviour, preferences, choices, requirements, and expectations of tech savvy customers for the success of digital banking.

Yadav & Pathak (2013) conducted a study on private and public sector banks in India to measure environmental sustainability through green banking and advocated that focusing only on green initiatives can provides win-win situation for the bank. Vimaladevi, Meenakshi, & Shree (2019) studied the perception of users of digital banking with reference to private banks in Chennai and found that customers are highly satisfied with digital banking services.

The prime reason behind taking up the present work is that not a single study has so far been carried out to assess the trend of digital banking with respect to mentioned reference period.

Objectives of the study

1. To study the trends in digital banking in India.
2. To identify the opportunities and challenges of digital banking in India.

Methodology of the Study

The present study is descriptive in nature. The present study is based on secondary data collected from the website of Reserve Bank of India for a period of 8 years from 2011-12 to 2018-19. Further, in order to identify the opportunities and challenges in digital banking in India, the relevant information has been collected from research paper published in journals, edited books and various reports published by the Reserve Bank of India from time to time. The collected data have been analysed with the help of statistical tools like year on year growth rate and compound annual growth rate. Apart from tabular presentation, line chart has also been used for better understanding of the readers.

Trends in digital banking

Digitalisation of banking sector brought tremendous changes in the financial system. It improves the operational efficiency of bank at a lower cost and improved their customer services. The major trends in digitalised banking are (i) Rapid increase in the number of customers; (ii) Steady increase in the number of chatbots; (iii) Offering mixed physical and digital process to the customers; and (iv) Increased mobile banking transactions.

The digitalisation facilitates data utilisation. These data insights are considered as a major trend of digital banking. This will help the banks to understand not only the purchase behaviour of the customers but also to identify the expected timing of their needs. Business collaborations are another trend of digital banking. The banks are operating in a competitive environment. They always desire to have competitive advantage over other banks in their surroundings. Through this digital platform, banks can build business collaborations with many firms and this will enable them to extend their working platform to new markets and new customers.

Digital banking facilitates new interactive channels in the world of banking. The traditional banking believes only in the physical distribution of traditional banking products and services with a wide branch network. Whereas the new world of banking is introduced with new customer experiences. This includes real time customer engagement, open banking, convenience banking with more engagement of customers. The digitalisation of banking services leads to adoption of ATM cum debut cards, credit cards, internet banking, mobile banking, NEFT, RTGs etc. The Table 1 deals with the volume of transactions in digital banking.

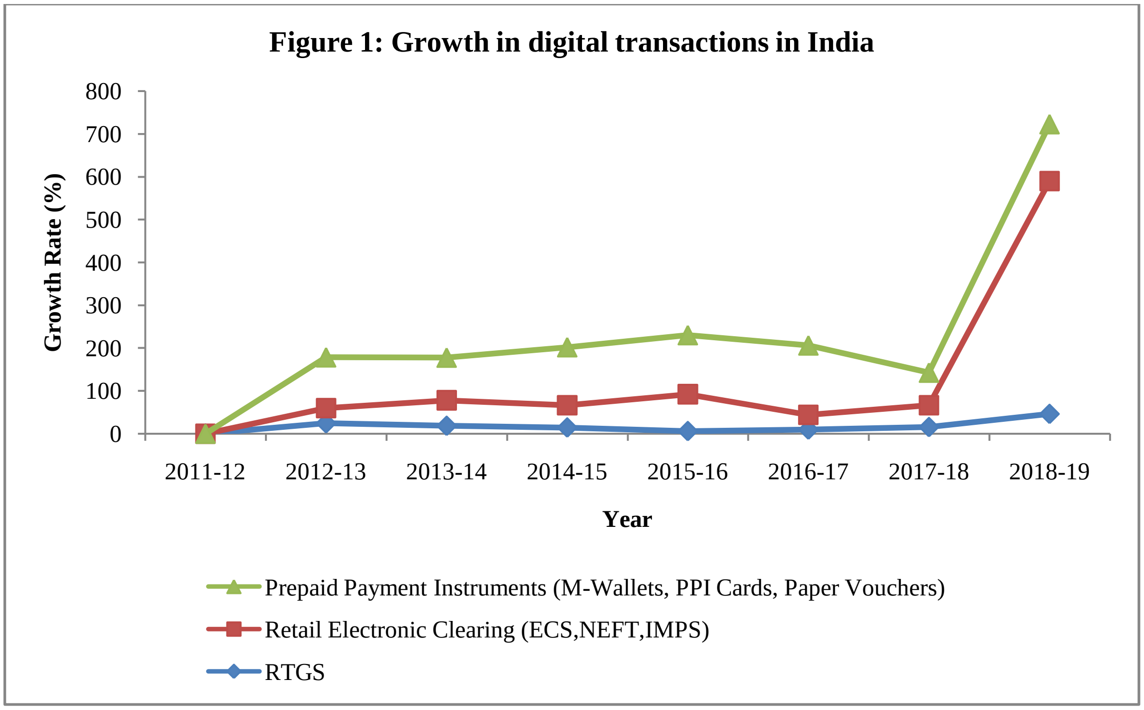
Table 1: Volume of digital banking in India

(Rs. in millions)

Year	RTGS		Retail Electronic Clearing (ECS, NEFT, IMPS)		Prepaid Payment Instruments (M-Wallets, PPI Cards, Paper Vouchers)	
	Volume	Growth rate *(%)*	Volume	Growth rate *(%)*	Volume	Growth rate *(%)*
2011-12	55.10	--	512.40	--	30.60	--
2012-13	68.50	24.32	694.10	35.46	66.90	118.63
2013-14	81.10	18.39	1108.30	59.67	133.60	99.70
2014-15	92.80	14.43	1687.40	52.25	314.50	135.40
2015-16	98.40	6.03	3141.50	86.17	748.80	138.09
2016-17	107.80	9.55	4222.90	34.42	1963.70	162.25
2017-18	124.40	15.40	6382.40	51.14	3459.00	76.15
2018-19	181.90	46.22	41091.00	543.82	8057.00	132.93
CAGR (%)	18.60	--	87.08	--	121.71	--

Source: Trend and Progress of Banking in India, Reserve Bank of India

Table 1 and Figure 1 shows that the digital banking services of banks have registered a mixed increasing trend during the study period. In the year 2011-12 the volume of RTGS was Rs. 55.10 Million which has increased to Rs. 181.90 Million in 2018-19 with CAGR of 18.60%. Initially, year on year growth rate of RTGS was 24.32% in which has declined to 6.03% in 2015-16. Further, it increased to 46.22% in 2018-19.



The volume of Retail Electronic Clearing was Rs. 512.40 Million in 2011-12 which has also increased to Rs. 41091.00 Million in 2018-19 with CAGR of 87.08%. The year on year growth rate of retail electronic clearing was 35.46% in 2012-13 which has declined to 34.42% in 2016-17. However, it jumped to 543.82% in 2018-19.

Further, the volume of Prepaid Payment Instruments was Rs. 30.60 Million in 2011-12 which has rose to Rs. 8057.00 Million in 2018-19 registering CAGR of 121.71% during the study period. The year on year growth rate of prepaid payment instruments was 118.63% in 2012-13 which has 76.15% in 2017-18. Further, it increased to 132.93% in 2018-19.

Thus, it can be said that among different digital banking services; the growth of transactions is highest in case of Prepaid Payment Instruments which includes M-Wallets, PPI Cards and Paper Vouchers whereas it is lowest in case of RTGS services. The prime reason behind lowest growth of RTSG transaction may be due to customers prefers to use IMPS transactions rather than RTGS. However, in recent years the use of M-Wallets has gain momentum due to easy and quick transfer of money.

Opportunities and challenges in digital banking

Opportunities of digital banking

1. **More output more profit:** The customers are no longer needed to wait in a long queue for getting the banking services after the introduction of digital banking. They can enjoy the banking services at any time at anywhere basis. Therefore, through this digital banking, banks can provide maximum and quick services to its customers and this will help the banks to maximise their profit.

2. **More customers with time**: Customers are preferring digital services since it saves their time and energy. However, aged people prefer to visit the bank branches to undertake the banking services. They are not interested to do online transactions. Because they believe that only transaction at branches are safe and secured. Based on ongoing acceleration of digitations, it can be predicted that coming generations will be fully equipped with digital platforms. Therefore, it is certain that digital banking is proved to be the peoples' favourite in the future.
3. **Mobile banking**: One of the main digital banking services offered by banks to its customers is mobile banking. People can perform account opening, balance enquiry, bills payment, fund transfer, mobile recharge etc through mobile banking. Through mobile banking, banks can generate more revenue with a large customer base.
4. **More loans and interests**: Credit is one of the major assets of banks. The quantum of credit dispersed by banks determines its profit. As the number of credit disbursement increases the amount of interest received by banks also increases. Through digital banking, it is easy to get loans by the customers, thereby increase the customer base of banks.
5. **Better market predictions:** Through digital banking, banks obtain the opportunity to create a large database of their customers. This database can further be analysed in order to customise the digital banking services in order to attract more customers and keep the existing customers more satisfied. This endeavour may also leads to customer loyalty and competitive advantage in the market.

Challenges of digital banking

1. **Security** and **Safety:** Maintaining the security of each customer is one of the most significant challenges in digital banking. Digital banking involved higher level of danger and risk. In order to protect the interest of the digital banking service holder; need to focus more on security issues to overcome this challenge.
2. **Sustainable competitive advantage:** One of the major challenges before the modern banks is to keep the tech-savvy customers satisfied. In the traditional banking, cost and products of banks provided them competitive advantages over their competitors. Now-a-days, banks may lose competitive advantage due to lack of experience in the digital activities.
3. **Convenience and the death of loyalty:** In the case of digital banking, the customers are not directly in contact with the bankers. The urbanisation and digitalisation of services are forcing the banks to change the method of banks' contact with the customers. Thus, it is a big challenge for the banks to bridge this gap.
4. **Confidence of user:** The success of digital banking depends on a bank's ability to get customers to switch to online banking from branch banking. Till date a large group of customers hesitate to use digital banking services due to lack of confidence. Therefore, concerned authorities need to focus more on building confidence of their customers.

Conclusion

The present study is mainly concentrated on studding the trends, opportunities and challenges in digital banking. One of the major technological innovation in the banking industry is digitalisation. From the study, it is concluded that digitalised banking services offered by banks are increasing day by day. The digital banking services of banks are showing a mixed increasing trend during the study period. From the literature, it has been observed that invention of digitalised banking services facilitates both banks and their customers. These services save time in processing of baking transactions. This improves the technical as well as operational efficiency of banks and reduces their operation cost. Even though, digital banking provides various opportunities, it causes many challenges too. Security issues are one of the major challenges among them. However, digital banking would facilitate growth in the bank's performance (Revathi, 2019).

References

Bamoria, P. S., & Singh, P. (2011). Issues in mobile banking. *Journal of Finance and Accounting*, *2*(2).

Chandrawati. N, & Pandey, B. B. (2017). Role of e-banking services towards digital India. *International Journal of Commerce and Management Research*, *3*(4), 67-71.

Hamilton, D. (2020). What is digital banking? Retrieved from https://www.securities.io/what-is-digital-banking/.

Khan, I. U., Hameed, Z., & Hamayun, M. (2019). Investigating the acceptance of electronic banking in the rural areas of Pakistan: An application of the unified model. *Business and Economic Review, 11*(3), 57-88.

Lemke, M. (2020). The benefits of digital banking. Investors Community Bank Blog. Retrieved from https://content.investorscommunitybank.com/blog/benefits-of-digital-banking.

Monisha., Kanika, B., & Kaur, J. (2017). Electronic banking in India: Innovations, challenges and opportunities. *International Journal of Engineering Research & Technology, 5*(11), 1-8.

Nayak, R. (2018). A conceptual study on digitalisation of banking-Issues and challenges in rural India. *International Journal of Management, IT and Engineering, 8* (6), 186-191.

Prasanth, S., & Suthamadhi, S. (2018). Challenges faced banking sector on digital innovation. *Journal of Emerging Technologies and Innovative Research, 5*(10), 964-967.

Proctor, D. (2019). What is digital banking? Retrieved from https://www.temenos.com/news/2019/12/19/what-is-digital-banking/.

Reserve Bank of India. Trend and Progress of Banking in India. 2011-12 to 2018-19.

Revathi, P. (2019). Digital banking challenges and opportunities in India. *EPRA International Journal of Economic and Business Review*. *7*(12), 20-23.

Sahu, G. P., & Kumar, S. N. (2017). Paradigm shift of Indian cash-based economy to cash-less economy: A study on Allahabad city. 16th Conference on e-Business, e-Services and e-Society (I3E), New Delhi, 453-461. Retrieved from https://hal.inria.fr/hal-01768539/document

Shetter, R. M. (2019). Digital banking an Indian perspective. *IOSR Journal of Economics and Finance, 10*(3), 1-5.

Shukla, R., & Shukla, P. (2011). E-banking: Problems and prospects. *International Journal of Management and Business Studies*, *1*(1), 23-25.

Vally, K. S., & Divya, K. H. (2018). A study on digital payments in India with perspective of consumer's adoption. *International Journal of Pure and Applied Mathematics. 118*(24), 1-9.

Vimaladevi, R., Meenakshi, A., & Shree, S. V. (2019). Consequence of perceiving users of digital banking (with reference to private banks in Chennai). *International Journal of Management, 10*(6), 247-253.

Vishnuvardhan B., Manjula B., & Naik, R. (2020) A study of digital banking: Security issues and challenges. In Raju K., Govardhan A., Rani B., Sridevi R., & Murty M. (Eds.), *Proceedings of the third international conference on computational intelligence and informatics* (pp. 163-185). Advances in Intelligent Systems and Computing, 1090, Singapore: Springer. Retrieved from https://doi.org/10.1007/978-981-15-1480-7_14.

Yadav, R., & Pathak, G. (2013). Environmental sustainability through green banking: A study on private and public sector banks in India. *OIDA International Journal of Sustainable Development, 6*(8), 37-48.

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