



Revisiting digital transformation of banking sector in India

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Abstract

A digital transformation is the up-gradation of existing processes or introduction of new ways of carrying out business activities using digital technologies that enhance a customer's experience and leads to higher conversion rates for a banking company. Digitization in banking industry basically refers to the different services rendered by the bank being available online. The quickness that banks in India have displayed during the past couple of decades demonstrates that they will continue to evolve. The Indian banking sector will continue to grow, and digitization will continue. This paper advocates journey of digital banking and its growth prospects in India. Banking will be an important aspect of economic growth. The future of banking technology is e-banking or digital banking.

Keywords: technological innovation, e-banking, digital transformation, artificial intelligence, growth of banking industry

Introduction

Opening note

The banking sector underwent paramount transformation since decades, in bring into line with the progress made by the real economy. Technological innovation began in the Banking sector back in the 1980s. Banks offering a number of services over the internet has resulted in the growth of banking sector in India. Banks have been able to expand their customer base, provide additional services, and ensure that customers are able to handle a number of banking tasks over the internet in the comfort of their homes or offices.

A digital transformation is the up-gradation of existing processes or introduction of new ways of carrying out business activities using digital technologies that enhance a customer's experience and leads to higher conversion rates for the company. Digitization in banking industry basically refers to the different services rendered by the bank being available online. It is also called internet banking, or online banking. Mobile banking, telephone banking, use of ATMs etc. are all aspects of digitization in banking industry.

Banking over the years

The Bank of Hindustan and the General Bank of India were established in the late 18th century but did not survive for very long. The British presidency government then established the Bank of Calcutta, Bank of Bombay, and Bank of Madras which were merged in 1921 to form the Imperial Bank of India. In 1955 it became the State Bank of India and is the oldest surviving bank in India. A number of banks have been established pre- and post-independence. In 1935 the Reserve Bank of India was established and it was nationalized in 1949. That same year the Banking Regulation Act was passed, which authorized the Reserve Bank of India to regulate, control and inspect all banks in India. It also stipulated that RBI will have to authorize the establishment of any new banks.

Technological innovation began in the Banking sector back in the 1980s. Since the establishment of the ICICI Bank, digitization in banking industry has been commendably fast. Banks offering a number of services over the internet has resulted in the growth of banking sector in India. Banks have been able to expand their customer base, provide additional services, and ensure that customers are able to handle a number of banking tasks over the internet in the comfort of their homes or offices.

The ATM cards and credit cards were pioneers in digital banking so to speak; these cards prepared the way for further development in digital banking. It was the introduction of internet in the early 90's that brought about the revolution in the banking sector. The traditional banks on the street side started to think about various ideas that could help them to cut down on their operating cost and provided restricted online bank services.

The efforts in this area 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 opened up a way for many features like opening new accounts online, downloading the necessary forms, and also applying for online loans. Under the digital banking umbrella, with time, there were many new features added, such as income tax filing, bill payments, transfer of funds, opening recurring accounts, fixed deposit, etc.

With the advent of technology, many people prefer to do everything online. From online shopping to online dating, people just love to do everything from their couch. Digital banking has offered many comfortable features and possibilities to people.

Problem Statement

Not to forget how covid-19 has changed the scenario. With lockdowns being imposed and the security of our health getting worse, people have adopted net banking and prefer carrying out every single banking activity at the tip of their fingers. The solution to this is undoubtedly going towards digitalization.

In fact, the next generations are going to be early adopters of the internet and are going to be a part of the already digital world. The digital wave that we have experienced in our teens or late 20s, is going to be available to the next generation much in advance. They are practically going to grow up with it. Thus, to be able to cater to them in the future, the digital transformation of banks needs to start today. As much as people need banks, it is also vice versa. Private banks are coming up with value-additions year on year, thus to compete with them, it is important that every bank adopts digital transformation.

Importance of the Study

The study has the following importance:

- The paper may help in knowing need for digital transformation of banking system.
- The study may help the scholars to know about the past, present and future technological scenario of the banking system in India.

Objectives of the Study

The present paper has the following objectives:

- To evaluate and examine the present Indian banking in terms of technology.
- To predict about the future technological upgradation of the banking system in India.

Research Methodology

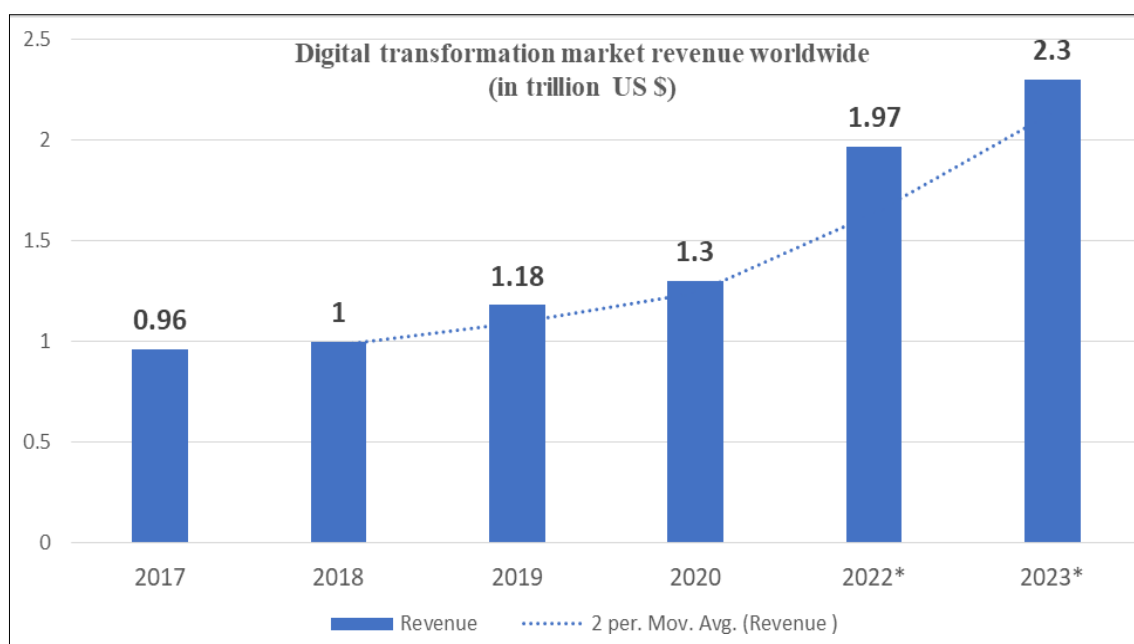
The research methodology used here is totally based on the secondary data. The secondary data is the fundamental tool of the data collection for the preparation of the research paper. The various books, journal, bulletin and websites are used for the data collection.

Limitation of the Study

- The research study has certain limitations which are quoted below:
- The study has certain time limit, money limit and individual limit.
- The study is limited to the banking system of the India only.
- The data is limited only up to the secondary data.
- The prediction is totally derived from researchers own thoughts which may or may not be scientific.

Advocating digital transformation in banking

In this context, digital transformation implies multiple changes in the banking industry performed to integrate various fintech solutions in order to automate, optimize, and digitize processes, as well as increase data safety. This process requires multiple large and small changes that reshape the methods and technologies used in the financial area. Regardless of industry, the primary trend of digital transformation is the integration of computer technologies, and Statista shows us that this trend will only grow.



Source: Statista 2020. (*for year 2022 and 2023 are estimation)

Fig 1: Worldwide digital transformation and market value

However, banking has several specific characteristics that define the priorities, goals, methods, driving forces, and other features of the Digital Transformation peculiar to the financial area.

Modern banking is mostly associated with Big Data. For this reason, most technologies that are actively implemented during the digital transformation of the financial sector are highly beneficial for collecting, processing, storing, and analysing large amounts of information. Here are 4 most popular types of computer technologies in banking which can be seen as future of banking:

Artificial Intelligence and Machine Learning.

AI and ML are powerful technologies, even when they are used separately. However, their synergy multiplies their effectiveness if they are used in combination.

Blockchain

While this technology is mostly associated with cryptocurrency, it is used in banking for its extremely high security features. It ensures safe storage of data and protects it from tampering.

Cloud Computing.

In addition to personal data centres and warehouses, financial institutions also use a wide range of cloud-based services.

Internet of Things.

Smart devices are the best way for enterprises to learn about their current and potential clients, find out their needs and desires. Banks use personal information to create customer journey maps. They also use it to develop and adjust their marketing strategies using targeted advertisements. Personal information collected using the IoT is also used as a source for further analysis performed with Machine Learning to find customer behaviour patterns and train Artificial Intelligence to recognize subtle signs of fraud.

The process of digital transformation is rather endless as technologies enhance, the systems should be constantly updated. New technologies will give a chance for new services to appear that again will require constant upgrade and support.

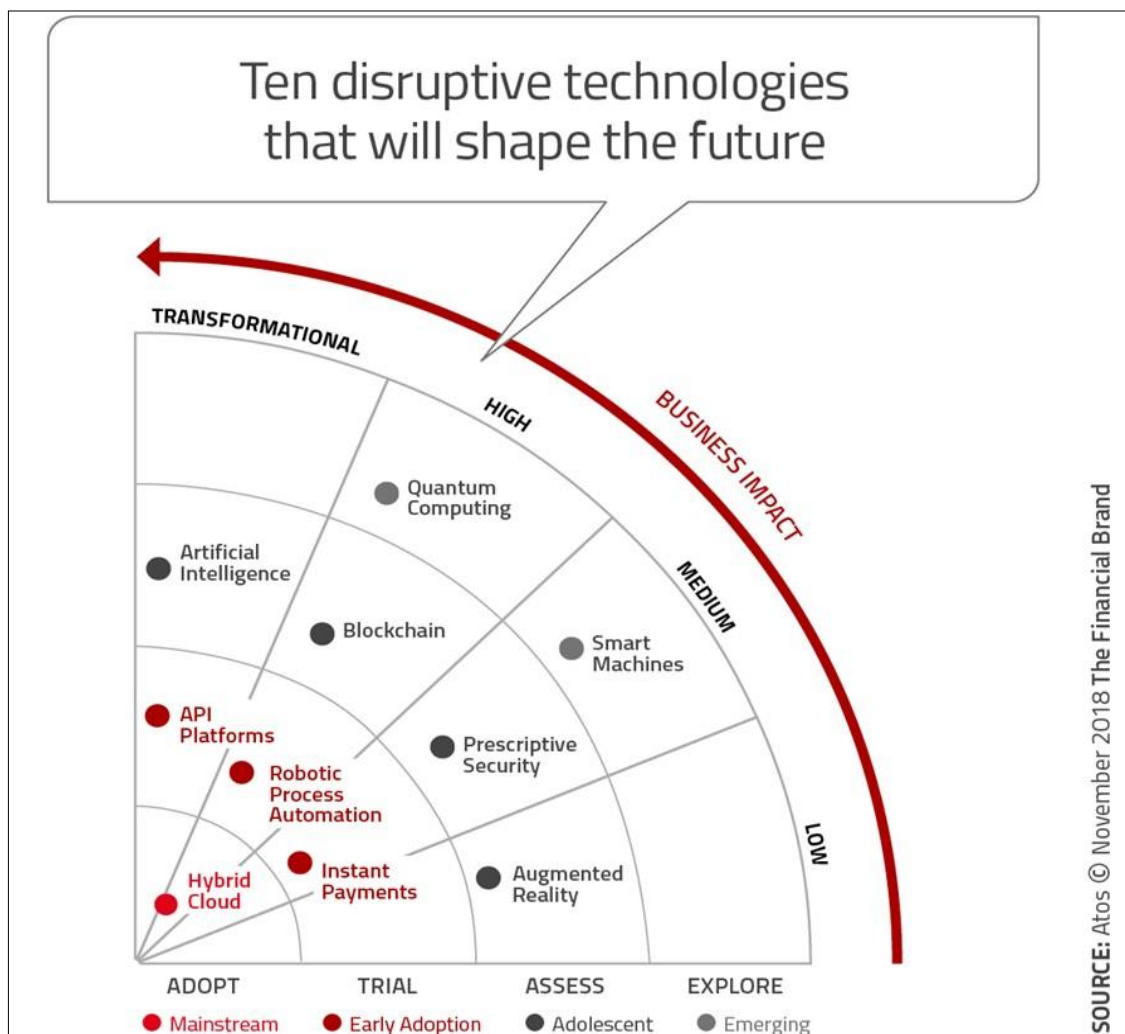


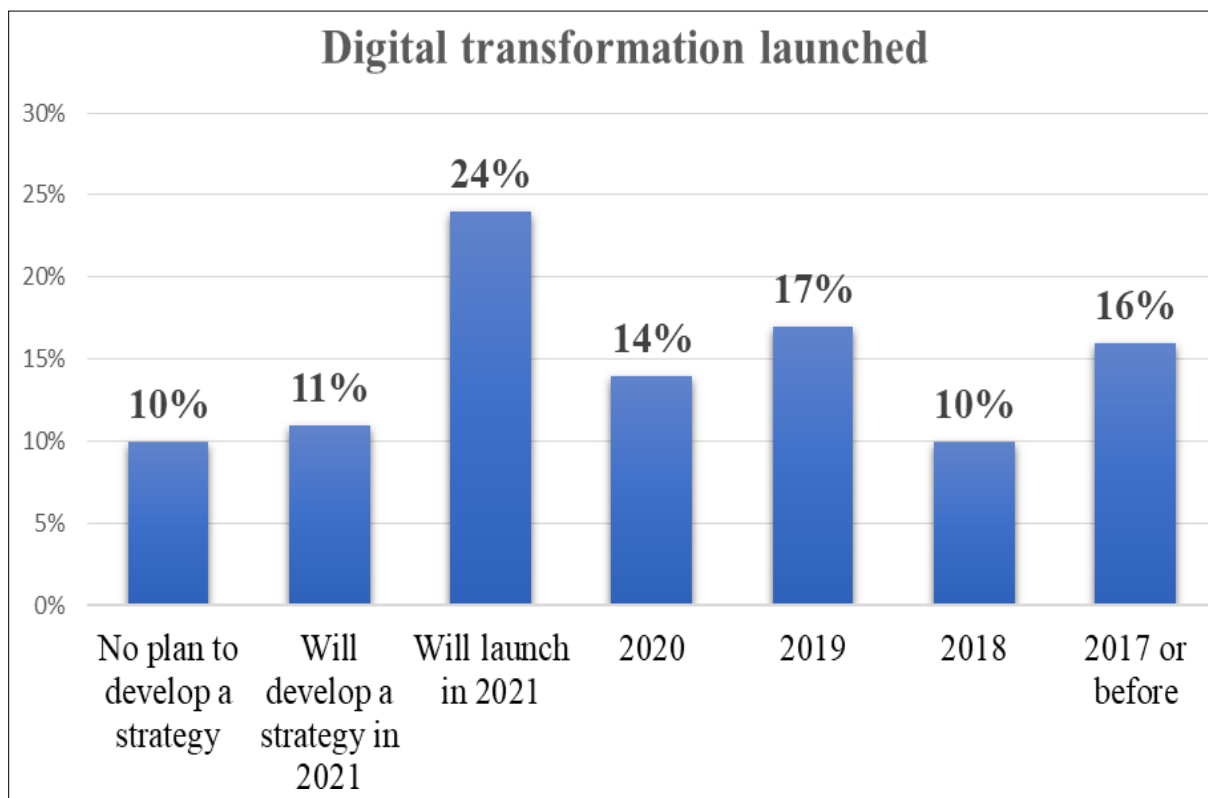
Fig 2: Future of disruptive technology

Digital transformation in banking is going to speed up in the upcoming years. Financial institutions should take into account the current state of affairs, work out a profound strategy, and use the right tools in order to succeed in the future.

The transformation journey is not an easy thing and involves a lot of resources, but as a result, the services could be more secured and delivered quicker, and most of all, enhance the level of customer satisfaction. As technologies develop and enhance, the banking industry will also get better and better year by year.

Banks on the other hand, have a long way to go to achieve their digital transformation.

A study from Cornerstone Advisors which was done on surveying 260 executives of financial institutions found that only about a quarter of banks and credit unions had get on a digital transformation strategy prior to 2019, and that 45% had not launched a strategy prior to this year.



Source: Cornerstone Advisors.

Fig 3: Institutions launch its digital transformation strategy

Not surprisingly, then, few banks are very far along towards completing their digital transformation journey—all told, only 36% think they’re at least halfway done. The diagrammatic presentation is as follows:

Table 1: Digital transformation progress

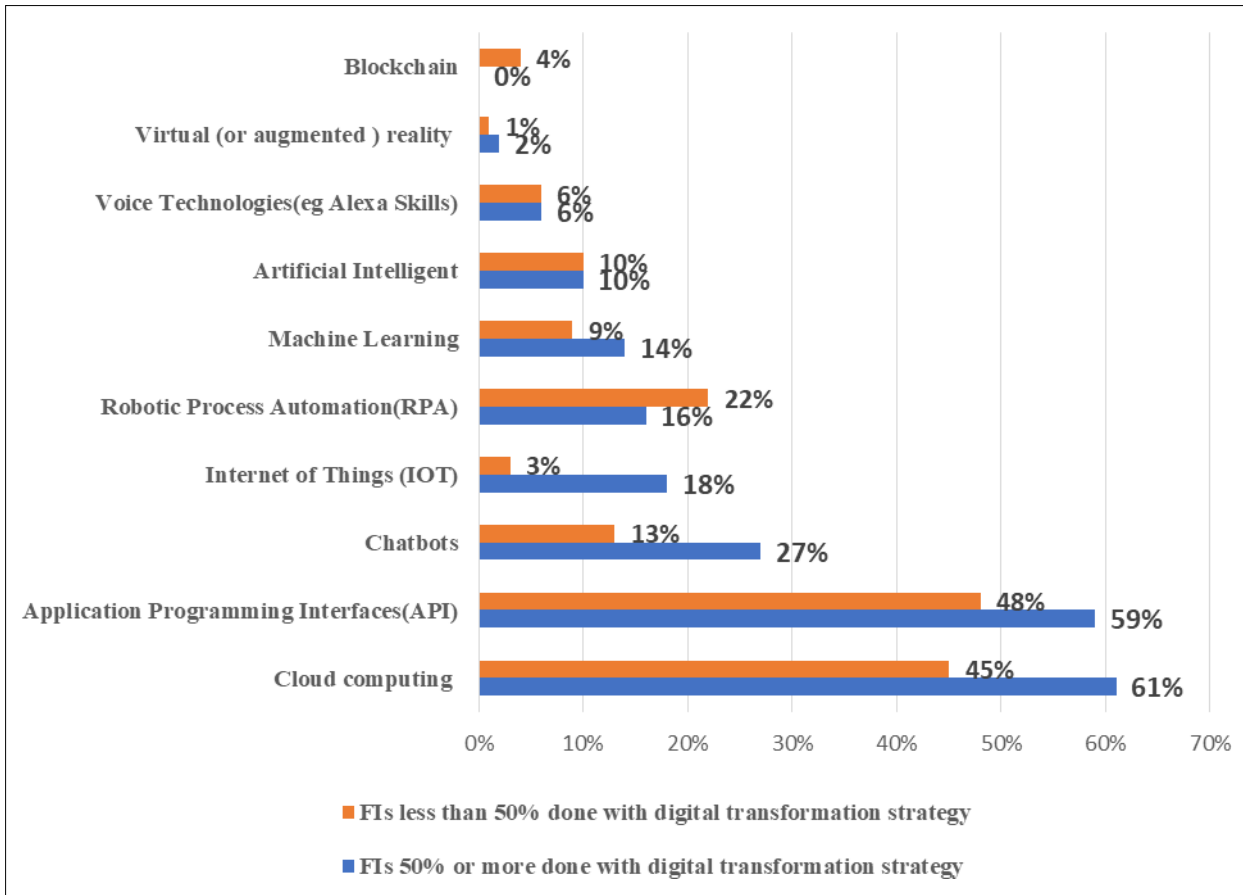
When did your institution launch its digital transformation strategy?					
		2020	2019	2018	2017 or before
How far along in your digital transformation strategy do feel your institution is?	Less than 10%	49%	21%	4%	8%
	25%	31%	52%	54%	35%
	50%	11%	17%	29%	21%
	75% or more	9%	10%	13%	38%

Source: Cornerstone advisors survey

It is hard to believe, however, that 20% of the institutions that deployed their digital transformation strategy in 2020, and 27% of those who started in 2019, think they’re at least halfway done.

Digital transformation progress

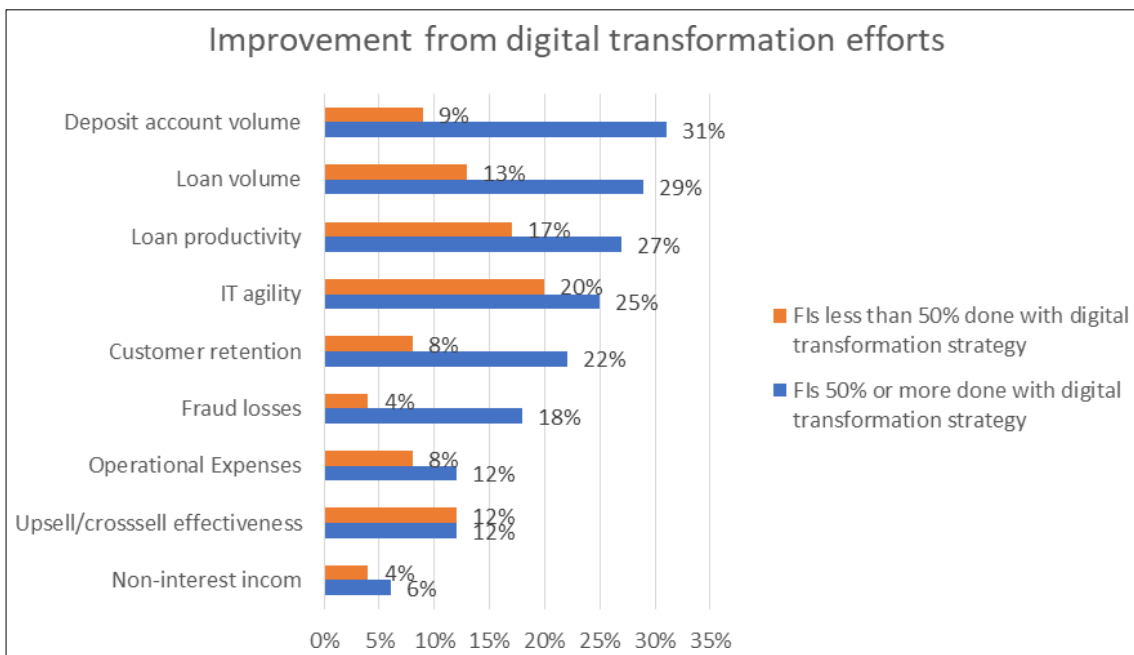
One can thought of those financial institutions who were halfway (or more) done with their digital transformation strategy would have already deployed most emerging technologies, we have to think again., because the data tells a different story, especially regarding cloud computing, chatbot, machine learning etc.



Source: Cornerstone Advisors

Fig 4: Emerging Technology deployment by Financial Institutions

Less than a third of the banks who claim to be halfway or more done with their digital transformation strategy have achieved a 5% improvement in any of nine key performance measures. Digital transformation isn't just about technology only one can use business results as a gauge for digital transformation impact. A quick look of digital transformational impact is as below which showing percentage of banks that have achieved greater than 5% improvement on following given matrix from their digital transformation efforts.



Source: Cornerstone Advisors

Fig 6: Improvement from digital transformation applications

The rapid changes that the banking sector in India has experienced are indicative of the future of banking in India. We can expect further rapid technological changes that would revolutionize customer experience regarding Banking. The future of banking technology will indeed be beyond expectations. Banks need a technology platform that enables them to rapidly and cost-effectively design, create—or plug in—and deploy new digital products and services. The digital product platform must be:

1) component-based; 2) API-driven; and 3) cloud native.

By this criteria, most banks have a long, long way to go towards becoming digitally-transformed.

Concluding points

Banking in India is to adopt a holistic approach to digitization. It is not just a customer relation tool, neither is it just something that speeds up a banking process. It is changing the entire concept of banking. Product innovation and development according to the needs of individual customers is the current buzzword. The quickness that banks in India have displayed during the past couple of decades demonstrates that they will continue to evolve. The Indian banking sector will continue to grow, and digitization will continue. Banking will be an important aspect of economic growth. The future of banking technology is only the e-banking or digital banking.

When the digitization in banking industry becomes mature, we can imagine a scenario somewhat like what we experience with the World Wide Web today. Banks will lose their individual identity because to the customer they will all be interconnected and will provide all their services online. No more physical trips to the bank, no more bank counters, and so on. Instead, customers will access all banking services and do all their banking activities over the internet, in the comfort of their homes or offices.

The future of Indian banking sector is bright because we have seen them take on technology, innovate its use, and improve their customer services with digitization. Recent developments in the banking sector give us confidence in the growth of banking sector in India.

References

1. Assocham-Deloitte. The Associated Chambers of Commerce & Industry of India. Retrieved, 2016. From www.assocharm.org.
2. Bhattacharyee B. Pansari S. Digital adoption & usage trends. Kantar IMRB, Retrieved, 2018. from <https://imrbint.com/images/common>
3. Business Standard. 33.66 crores bank accounts opened under Jan-Dhan Yojana, 2019.
4. Business Standard, news-IANS, Business Economy. Retrieved, 2019. From https://www.business-standard.com/article/news-ians/33-66-crore-bank-accounts-opened-under-jan-dhan-yojana-119010801202_1.html.
5. Digital India <https://digitalindia.gov.in/>
6. Goswami S. Retrieved, 2016. from <http://www.downtoearth.org.in/news/can-digital-villages-inspire-transition-to-cashless-economy--56467>.
7. Gupta K. Government to create 1 lakh digital villages in five years. Retrieved, 2019. from <https://www.livemint.com/budget/news/govt-to-create-1-lakh-digital-villages-in-five-years-says-fm-1549007110457.html>.
8. Jain R. A study of e-consumers in India. PRAGATI: Journal of Indian Economy, 2019;6(1):112-121.
9. Ministry of Agriculture Government of India. M-kisan portal – mobile based services for farmers. Retrieved, 2013. from <http://mkisan.gov.in/images/Detailed%20Write%20up%20on%20mKisan.pdf>.
10. Mittal A, Mohan, D. Growth of internet marketing: The Indian scenario. MANTHAN: Journal of Commerce and Management, 2016;3(2):108-120.
11. Mukhopadhyay D, Mandal AK. Smartphone, internet and digitalization in India: An exploratory analysis. PRAGATI: Journal of Indian Economy, 2019;6(2):22-43.
12. National Informatics Centre <https://www.nic.in/>
13. Sengupta D, Shastri, N. Digital Payments through PFMS Facilitating digital inclusion and accelerating transformation to a 'Digital Economy.' In Proceedings of the 12th Intern. Conf. Theory and Practice of Electronic Governance, 2019.
14. Unique Identification Authority of India; <https://uidai.gov.in/>