Srijan Paul (October 2022). Role And Importance Of Digitalization In Banks: An Indian Prespective
International Journal of Economic Perspectives,*16*(10),17-24

Retrieved from https://ijeponline.org/index.php/journal

ROLE AND IMPORTANCE OF DIGITALIZATION IN BANKS: AN INDIAN PRESPECTIVE

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ABSTRACT

Financial institutions are seeking to increase their knowledge in relation to technological innovation, both through partnerships with tech companies and by investing in or acquiring such companies. Despite this, there are wide differences in the preparedness of market participants for these changes in practice. While such innovation facilitates the entrance of new users to the financial system, it may also move the provision of some payment services to non-banking companies that are not regulated as financial entities.

There are a number of web-based and mobile-based payment applications that primarily focus on the customer experience and often aim to better integrate payment transactions within the commerce value chain. These service providers usually do not offer banking services other than payments, and they normally do not apply for banking licenses. The modern world in which we are living is dominated by the concept called "Digitalization". The government of India recently announced Digital India Programme with a vision to transform India into a digitally empowered society and knowledge economy. The concept of digitalization has been playing major role in all sectors of the economy and banking sector is not exception to it. Digitalization has become decisive for Indian Banking sector, which plays major role in furthering financial inclusion and which is mainly concerned with providing better services to customers along with an opportunity to gain more in near future.

Indian banking sector is achieving tremendous growth in recent years, encouraging higher amount of capital formation, which is because of digitalization of banking. Even though Indian banking sector is moving towards digitalization, there are various issues and challenges to be addressed, especially in rural banking. This conceptual research paper is an attempt made to analyze the issues and challenges in the area of Digitalization of Rural Banking and to gain a new perspective in that area.

Keywords: *Digitalization, rural banking, India, growth, issues.*

Introduction

The modern world is filled with digitalization; banking sector is not exception to it. Digitalization has become integral part of our life, without which we feel world is nothing. In the fast moving world digitalization is playing a prominent role. Al most all the sectors of the economy depends on digitalization for their growth and banking sector is not exception to it. The countries which are easily adapting to it are performing exceptionally well compared to those countries which are lagging behind in adopting digitalization. The banking sector which is called as the sector of development of all other sectors, because of the financial

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Submitted: 27 July 2022, Revised: 09 August 2022, Accepted: 18 August 2022, Published: October 2022

assistance it provides for other sectors and thereby encouraging capital formation. Even though India is one of the fastest developing countries in the world, it is lagging behind in the implementation of digitalization to banking sector. It is true that digitalization of banking will bring revolution in the economy; there is a need to take some important steps in digitalizing rural banking. Still 19% population remains unbanked even after the implementation of Jan Dhan Yojna by the central government according to the study conducted jointly by The Associated Chambers of Commerce & Industry of India and Ernst and young India (ASSOCHAM-EY) report 24th July 2017. Digitalization plays a major role in providing better services to those areas which are not there in financial inclusion. This conceptual paper highlights the various issues and challenges in implementing digitalization of rural banking.

Digitalization of rural banking is very helpful in financial inclusion and helps the economy to grow faster with the development of all other sectors. Some of the significances of digitalizing rural banking are i. Increases efficiency: digitalization of banking increases the efficiency in banking sector and enable smoother transactions. ii. Fast and furious: digitalization will reduces the time of transaction and thereby encourages easy flow of funds compared to traditional banking. iii. Vast coverage: digitalization of banking covers large number of people and has wide coverage. iv. Improves the quality: Digitalization will improve the quality of service of the banking sector compared to traditional banking. v. Less human error: Digitalization of banking maintains proper records of transactions and thereby reduces the human error. vi. Environment friendly: As digitalization of banking saves paper and trees it is more of environment friendly vii. Increases Investment: Digitalization of banking leads to quick and easy access to various banking services and thereby increases the investment activities in the country. viii. Less cost: Digitalization of banking reduces the cost of printing currency notes as there is no usage of hard cash and less cost in maintaining records as its available online.

Objective:

This paper seeks

1. To understand the digitalization across the fintech sector especially banking
2. To explore the digitization impact on the transaction by people

Digitization in Banking : Present

Indian banking in future is, thus, expected to grow exponentially supported by technology intensive processes and customer friendly models with focus on convenience and cost effectiveness. A report titled Indian Banking 2020: Making Decade's Promise come True brought out by the Boston Consulting Group in 2010 had identified ten broad trends for the Indian banking. These and a few other areas which should receive the attention of banks seeking opportunities for sustainable growth are summarized below:-

i. Retail banking will be immensely benefited from the Indian demographic dividend. It is important to note that the middle class population is expected to touch 200 million by 2020 and 475 million by 2027. This would imply mortgages would grow fast and likely to cross Rs 40 trillion by 2020;
ii. Another segment that will provide huge opportunities will be the financing of affordable housing for growing 'low' & 'middle' class;
iii. Rapid accumulation of wealth in rich households will drive wealth management to a large size;

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iv. "The Next Billion" consumer segment will emerge as the largest in terms of numbers and will accentuate the demand for low cost banking solutions and innovative operating models, throwing up a big market of small customers;
v. Branches and ATMs will need to grow 2X and 5X respectively to serve the huge addition to bankable population. Low cost branch network with smaller sized branches will be adopted;
vi. Mobile banking will come of age with widespread access to internet on mobile reaping the benefit of the high mobile density in the country;
vii. Banks will adopt CRM and data warehousing in a major way to reduce customer acquisition costs and improve risk management. Banks will have to understand and adopt new technologies like, cloud computing and invest significantly in analytics based on big data;
viii. Margins will see downward pressure both in retail and corporate banking, spurring banks to generate more fees and improve operating efficiency;
ix. Banks will discover the importance of the SME segment for profitability and growth and new models to serve SME segment profitably will be found as more than three fourth of the segment is still waiting to be served;
x. Investment banking will grow 10X, driven by demand from corporates for transaction support and capital market access; and
xi. Infrastructure debt will surpass Rs 45 trillion — half of which will be on bank's books. It will touch the ALM limits of banks and will require a significant upgrade of banks' risk management systems.
xii. The focus of agricultural financing will be on areas like end-to-end supply chain management, various aggregation models of financing, organic and other niche areas of agriculture. Rural banking predominantly will have to harness branchless models and alternative channels of service.
xiii. Although banks will continue to focus on domestic business, given the rising trend of globalization, cross-border banking business will need more attention. As per a recent World Bank report, India retained its topmost position with US$ 70 billion in remittances in 2013 followed by China (US$ 60 billion), the Philippines (US$ 25 billion), Mexico (US$ 22 billion), Nigeria (US$ 21 billion), Egypt (US$ 17 billion), Pakistan (US$ 15 billion) and Bangladesh (US$ 14 billion). Apart from remittances and deposit & investment related transactions originating from the growing Indian diaspora, India has been witnessing a significant increase in trade finance and outward direct investments. In other words, banks will need to gear up to reap the benefits of increasing business arising out of globalization of India and resident and non-resident Indians;
xiv. It has now been realized that manufacturing will have to be one of the key drivers of growth though in the recent past, with moderation in the growth rate, the sector also witnessed a slowdown. A recent report of the McKinsey Global Institute observes that for making a substantial improvement in the standards of living of the Indian people and alleviating poverty, about 115 million new non-farm jobs will have to be created between 2012 and 2022 and of these, about 27 million new jobs need to be created in manufacturing. The required growth rate in manufacturing sector output needs to be at least 10 per cent a year, probably higher. The National Manufacturing Policy envisages share of manufacturing in GDP to 25 per cent by 2022. Achieving this rate of growth would require significant amount of financing by the banks.

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Re-orientation of the Indian Banking Structure: Technology

As the economy expands, a greater quantum of resources will be needed for supporting the growth process. The Indian banking sector also needs to catch up the likely acceleration in the credit to GDP ratio as the economy expands. To support the economic growth as envisaged in the 12th Five Year Plan, the banking business needs to expand significantly to an estimated Rs 288 trillion by 2020 from about Rs 115 trillion in 2012. Given this, there is a need for reorienting the banking structure to make it more dynamic and flexible, while ensuring safety and systemic stability. There is enormous scope for increasing the size and capacity of the banking structure. Accordingly, the Reserve Bank came out with a set of guidelines for licensing of new banks in the private sector in February 2013. The process of licensing culminated with the granting of "in-principle" approval to two applicants who would set up new banks in the private sector within a period of 18 months.

While announcing the decision to grant "in-principle" approval to the two applicants, the Reserve Bank indicated that going forward, it would use the learning experience from this licensing exercise to revise the guidelines appropriately and move to grant licences more regularly on "tap" basis. Further, Reserve Bank would work on a policy of having various categories of "differentiated" bank licences which will allow a wider pool of entrants into banking leading to greater banking penetration and more competitive environment. Reserve Bank has, accordingly, been working on the relevant guidelines for licensing payment banks and small banks.

Eventually, over the years, the reoriented banking structure may comprise four tiers. The first tier may consist of three or four large universal Indian banks with domestic and international presence along with branches of foreign banks in India. The second tier is likely to comprise several mid-sized banking institutions including niche banks like Payment Banks with economy-wide presence. The third tier may encompass old private sector banks, Regional Rural Banks, and multi state Urban Cooperative Banks. The fourth tier may embrace many small

Competition

W. Chan Kim & A. Renee Mauborgne in their 'Blue Ocean Strategy' have shown that companies can succeed not by battling competitors, but rather by creating Blue Oceans of uncontested market space. These strategic moves create value for the company, its buyers and its employees, while unlocking new demand and making the competition irrelevant. Unlike the Red Ocean Strategy, the conventional approach to business of beating competition, the "Blue Ocean Strategy" tries to align innovation with utility, price and cost propositions. Similarly, financial sector reforms have brought about significant structural changes and created several blue oceans. A manifestation of this development is reflected in the increase in bank competitiveness. The share of public sector banks (PSBs) in total banking assets, which was 90 per cent on the eve of reforms in 1991 has since declined to around 72 per cent, a decline of roughly 1 percentage a year. In a move that is further expected to increase competition in the domestic banking industry, the Reserve Bank released the framework for setting up of Wholly Owned Subsidiaries (WOS) by foreign banks to India in November 2013, besides the framework for new universal banks and differentiated banks, such as, small banks and payment banks, which is in the offing. Further, banks are facing increasing competition from non-banks including NBFCs, MFIs and tech companies. Going ahead, there may be increase in the non-bank related financing activities through innovations like Peer-to-Peer (P2P) lending direct consumer lendings and

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social investing. With increasing competition, banks, will need to tap into untapped business opportunities. This would also call for harnessing resources at the bottom of the pyramid. Small customers are as important to their business growth as big business opportunities. The challenge before banks would be to make the best use of technology and innovation to bring down intermediation costs while protecting their bottom lines.

Digital transaction @present

System	Volume (Million)	Value (Rs. Billion)	Volume (Million)	Value (Rs. Billion)	Volume (Million)	Value (Rs. Billion)
	2014-15	**2014-15**	**2015-16**	**2015-17**	**2016-17**	**2016-17**
1 RTGS	92.78	929,332.89	98.34	96,016.24	107.86	1,253,652.08
1.1 Customer Transactions	88.39	631,050.74	93.95	64,718.26	103.66	849,950.51
1.2 Interbank Transactions	4.38	122,981.62	4.37	10,201.29	4.17	131,953.25
1.3 Interbank Clearing	0.012	175,300.73	0.016	21,096.69	0.018	271,748.31
2 CCIL Operated Systems	3.03	752,000.42	3.12	89,800.06	3.65	1,056,173.36
2.1 CBLO	0.21	167,645.96	0.22	17,332.33	0.22	229,528.33
2.2 Govt. Securities Clearing	1.09	258,916.76	1.02	40,872.50	1.51	404,389.08
2.2.1 Outright	0.98	101,561.62	0.88	21,145.09	1.34	168,174.46
2.2.2 Repo	0.109	157,355.15	0.134	19,727.41	0.17	235,647.62
2.3 Forex Clearing	1.73	325,437.69	1.89	31,595.23	1.93	422,255.95
3 Paper Clearing	1,196.51	85,434.14	1,096.39	6,282.95	1,206.69	80,958.15
3.1 Cheque Truncation System (CTS)	964.86	66,769.93	958.39	5,716.59	1,111.86	74,035.22
3.2 MICR Clearing	22.43	1,850.40	-	-	-	-
3.2.1 RBI Centres	7.50	614.51	-	-	-	-
3.2.2 Other Centres	14.93	1,235.89	-	-	-	-
3.3 Non-MICR Clearing	209.82	16,939.34	137.98	566.36	94.83	6,922.93
4. Retail Electronic Clearing	1,687.44	65,365.51	3,141.53	9,040.77	4,196.88	132,190.35
4.1 ECS DR	226.01	1,739.78	224.75	2.60	8.76	39.14
4.2 ECS CR (includes NECS)	115.35	2,019.14	39.00	7.49	10.10	144.08
4.3 EFT/NEFT	927.55	59,803.83	1,252.88	8,145.39	1,622.10	120,039.68
4.4 Immediate Payment Service (IMPS)	78.38	581.87	220.81	251.22	506.73	4,111.06

Run up to fintech vis-à-vis Banking Sector Reforms

Leading economists most often cite the importance of sound financial sector reforms as being central to a healthy banking system that aids economic growth. India is the largest country in South Asia with an extensive financial system characterized by varied financial institutions, comprising of both banks and non-banks. Banks are the mainstay of the

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financial system with bank assets comprising, on average, around 70 percent of GDP during the post-reform period. The commercial banking segment comprises of 26 public sector banks in which government has majority equity stake, 20 private sector, including 7 de novo (which became operational after initiation of economic reforms in 1991) private banks, although RBI has recently done away with this distinction and over 40 foreign banks, which operate as branches.

Prior to the inception of financial sector reforms in 1991, the Indian financial system can best be characterized as highly regulated and financially repressed. The prevalence of high reserve requirements, interest rate controls and allocation of financial resources to predesignated sectors adversely affected banks' resource mobilization and allocation.

The period 1992-97 laid the foundations for reforms in the banking system. The reforms comprised of five major planks: cautious and proper sequencing, mutually reinforcing measures, complementarities between banking reforms and other associated policies (e.g., monetary, external, etc.), developing financial infrastructure and nurturing and developing financial markets. Some of the salient reforms undertaken in the financial system, included, among others, lowering of statutory reserve requirements; liberalizing the interest rate regime, first on the lending side and later, on the deposit side; infusing competition by allowing more liberal entry of foreign banks and permitting the establishment of de novo private banks; institution of prudential measures (capital adequacy requirements, income recognition, asset classification and provisioning norms for loans, exposure norms, accounting norms) and enhanced disclosures and levels of transparency in their annual audited statements to promote market discipline.

Over the period of reforms beginning 1992 through 2013, real bank assets have grown at a compound annual rate of about 10%; the growth rate of deposits and credit both in real terms, during the same period has been roughly of the order of 10% and 12%, respectively.

PROSPECTIVE OPPRTUNITIES AND CHALLENGES ASSOCIATED WITH DIGITAL BANKING

Opportunities

- The internet user base is expected to reach to 120 billion by 2020 with 70% urban consumers already using digital banking services
- Government of India has established and open API architecture as the backbone for digital innovation in financial services with 1 billion+ Aadhaar Cards and 150 million e-KYC and 40+ banks with UPI / AEPS
- Digital innovation will also enable to create infrastructure for recent technologies such as Bitcoins and Block Chain Technology.
- Online platforms like Facebook, Amazon, among others, are expected to enter digital retail payments industry.

They are expected to leverage their subscriber base to offer digital payments services.

Challenges

- Internet connection and a smart device such as mobile phone, tablet or personal computer is a prerequisite to use these services.
- The digital literacy in India is still very low. According to the Internet and Mobile Association of India Report (IAMAI), 2016, Approximately 40% population is living

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below poverty line, illiteracy rate is not more than 25-30% and digital literacy is almost no-existent among more than 90% of India's population.

- Security of user's information has been a matter of concern since the inception of electronic transactions and the same may hamper their adoption as well.
- Difficulty in understanding the usage of the digital banking services. Senior citizens preferring the traditional banking systems and people who are not tech-savvy are more prone to this difficulty. According to a report on Encashing on Digital: Financial Services by 2020, 33% of banked population is not using digital banking as they find it complex to understand and operate .
- According to the same report, 23% of banked population feel that digital banking services lack transparency in the form of hidden transaction charges.

Conclusion

There is no doubt that the Banking Sector in India has become more competitive with the advent of digitization and the Digital India Program for ensuring better customer service, thereby attaining the goal of a cash-less economy. From the study it can be concluded that the digital innovations are creating a new picture of banking services all together. The digitization in banking has started shifting the paradigm of cash and paper based banking to cashless and paperless banking. However, there is still a long way to cover by encountering the challenges with possible solutions and encashing the available opportunities.

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