



The New Face of Banking Sector in India-Digital Revolution

Dr.T.V.Ramana,
Faculty Member, Dept. of Economics, AKNU MSN Campus Kakinada

Abstract

Information Technology has provided banking industry with the power to deal with the challenges of the new economy. By adopting digitization, banks are now providing better customer services. This provides convenience to custom helps save time. Today, people have access to banks 24 hours due to online banking. Managing large amounts of cash has also become easier. Banks have benefitted in several ways by adopting newer technologies. E-banking has resulted in reducing costs drastically and has helped generate revenue through various channels. Immediately after the demonetization announcement, the availability of bank accounts with most of the households, thanks to the PMJDY scheme, made it possible for the public to deposit their SDN currency notes into their accounts. Subsequently, in the context of shortage of new currency notes, public were able to make digital transactions through these accounts using IMPS, UPI, BHIM, POS, e-commerce pre-paid instruments, etc. The present paper analyses various methods of digitalization of banking.

Key words: Digitalization, E-banking, JAM, UPI.

Introduction:

Information Technology has provided banking industry with the power to deal with the challenges of the new economy. It has been the cornerstone of recent financial sector reforms aimed at increasing the speed and reliability of financial operations and making initiatives to strengthen the banking sector. Structural changes of the banking 28 sector and increasing networks of offices are the areas where information technology may be fully implemented and stimulate creation of new generation of banking software. Technological progress has enabled to implement deregulation. The reduction or elimination of government power in a particular industry usually enacts to create more competition within the industry. All banking services, such as electronic payments, loans, deposits, or securities have become heavily dependable on information and telecommunication technology. This is the main reason why banks are the biggest users of IT equipment. Due to the complexity of banking services, every opportunity to speed up their performance or to make them more accessible for customers is very well welcomed by banks.

Digitization is the conversion of data into a digital form with the adoption of technology. Digitization reduces human errors and, therefore, customer loyalty. Banks of all sizes and in all regions are making large investments in digital initiatives in order to maintain a competitive advantage and offer the maximum to their customers. In addition, digitization leads to intelligence as solid data, which helps banks to approach customers and get closer to the competition. By adopting digitization, banks are now providing better customer services. This provides convenience to custom helps save



time. Today, people have access to banks 24 hours due to online banking. Managing large amounts of cash has also become easier. Banks have benefitted in several ways by adopting newer technologies. E-banking has resulted in reducing costs drastically and has helped generate revenue through various channels.

Digital Revolution in Banking Sector

In the late 1980s, to improve customer service, accounting and record keeping the need for computerization was felt in the Indian banking sector. Then in 1988, the Reserve Bank of India established a committee to study Computerization in bank headed by Dr. C. Rangarajan. The process of computerization gained pace with the reform in the Indian economy in 1991-92. One of the main drivers of this change was driven by the growing entries of private and foreign banks in the Banking industry. Several commercial banks began to move towards digital customer service. Indian banks are now working hard for providing following facilities to their customer for increasing their banking business.

Automatic Teller Machine (ATM): The ATM is the most popular device in India, which allows customers to withdraw their money 24 hours a day, 7 days a week. Apart from cash withdrawals, ATMs can be used for paying utility bills, transfer funds between accounts, deposit cheques and cash, balance inquiries, etc.

Telebanking: Telebanking facilitates the customer to carry out banking transactions not related to cash phone.

Electronic Compensation Service (ECS): The Electronic Compensation Service is a retail payment system that can be used to make bulk payments / receipts of a similar nature. This service is useful for organisations and government administrative divisions to make / receive large volumes of payments instead of making transfers offunds by individuals.

Electronic Funds Transfer (EFT): Electronic Funds Transfer (EFT) is a system where anyone who wants to make payments to another person / company, etc. one can approach bank and make cash payments or give instructions to transfer funds directly from his/her account to the recipient / beneficiary's bank account.

Real-time gross settlement (RTGS): The real-time settlement system, through which banks give electronic instructions to transfer funds from their account to the another bank account. The RBI maintains and operates the RTGS system.

Point of sale terminal: Point of sale terminal is a computer terminal that is connected in line to the computerized files of customer information in a bank and magnetically encoded plastic transaction card that identifies the customer with the computer.



NEW FACE OF BANKING IN INDIA

It has been a challenging year for banks. In spite of the stress of NPAs, banks have been working towards a Digital India, adopting the latest technologies and introducing a number of products and applications to improve customer convenience. After the demonetization drive, the Government has been pushing for a less-cash society and banks have been lending support by boosting the efforts on digital banking – through POS machines, mobile wallets, mobile banking, Aadhaar-enabled payment systems, etc. The GoI strategy of JAM (Jandhan, Aadhaar, Mobile) for financial inclusion has worked well. Linked the Aadhaar – the Unique ID of individuals to their accounts and also linked the mobile numbers into the banking accounts. These three steps have enabled to capture the transactions of even small traders and SMEs into the digital system. After the linkage of Aadhaar with bank accounts started, the subsidy for LPG was directly credited to the consumers' accounts. Later, the Government started crediting the benefits of several welfare schemes like MNREGA, Scholarships, Pensions, etc. directly into the bank accounts of the beneficiaries.

A boost for digitisation

Immediately after the demonetization announcement, the availability of bank accounts with most of the households, thanks to the PMJDY scheme, made it possible for the public to deposit their SDN currency notes into their accounts. Subsequently, in the context of shortage of new currency notes, public were able to make digital transactions through these accounts using IMPS, UPI, BHIM, POS, e-commerce pre-paid instruments, etc. This Digitization mission would ensure that complete data relating to all areas would be in the system helping to achieve better planning of the resources for all stakeholders – the Government, the Corporates and the Public. The demonetization exercise has given a boost to digitalization in India.

New technologies: The last decade brought new technology solutions to the Indian banks through CBS, ATM Networks, Internet Banking, etc. In recent times, many banks have implemented digital banking – POS, MPOS, Mobile/Tablet Apps, mobile wallets, social media to capture the valuable pie of the younger generation.

Since September 2016, more than 51 banks have launched their UPI application, which enables a customer of any bank to make payments to a customer of any other bank, without demanding complete disclosure of account details of the remitter and beneficiary. The BHIM application launched by the Prime Minister on 30 December 2016, has been downloaded by over 16 million customers within a short time of six months. Using BHIM, a customer can send, receive, collect money using virtual payment address (VPA), Account number + IFSC, Scan and Pay using QR code.

Aadhaar-based Payments: The introduction of Aadhaar card and Aadhaar Authentication through UIDAI has been a game changer in the Indian banking technology in the last one year. The E-KYC has made it easy for the customers and banks to open accounts, meaning the KYC requirements. The Aadhaar authentication has brought in a new payment system – AEPS and subsequently the BHIM Aadhaar – a digital POS system, which only requires a smart phone with a biometric device for the merchant and does not require even a phone from the



customer. This increases the reach of digital payments to the masses. The BHIM Aadhaar was launched by the Prime Minister on 14 April 2017 and banks have onboarded thousands of merchants under BHIM Aadhaar. After detailed discussions with banks and NPCI on security aspects, UIDAI had come out with stringent security standards for the biometric devices to be used with BHIM Aadhaar application.

Analysis of Indian Digital Banking Sector : Technological advancements in the digital payment ecosystem are changing lives significantly and providing end consumers with speed, convenience. Thus from the table-01 it can be seen that all the payment systems used in India shows positive percentage growth when compared with the year 2016 in the year 2017 except in the CCIL volume in million. But when we observe the CCIL operated systems in value shows increase in percentage compared with 2016 in the year 2017.

Table 1 : Indicators of Growth in Digital Payment System

Sl. No.	Item	2015-16		2016-17		2017-18	
		Volume in Crores	Value Rs. In Crores	Volume in Crores	Value Rs. In Crores	Volume in Crores	Value Rs. In Crores
1.	RTGS	0.79 (0.1)	8295817 (50.2)	0.833 (0.1)	8645934 (48.7)	0.954 (0.1)	11174370 (51.6)
2.	CCIL	0.023 (0.0)	6564789 (39.7)	0.026 (0.0)	7204493 (40.6)	0.023 (0.0)	8087853 (37.3)
3.	Proper Clearing	9.437 (1.3)	765061 (4.6)	8.826 (0.9)	710817 (4.0)	9.997 (0.9)	755149 (3.4)
4.	Retail Electronic Clearing	21.14 (2.8)	658690 (4.0)	31.689 (3.2)	916902 (5.2)	43.11 (3.7)	1370063 (6.3)
5.	Cards	75.385 (10.0)	229709 (1.4)	92.51 (9.3)	263024 (1.5)	103.538 (8.9)	287717 (1.3)
6.	PPLs (Prepaid Payment Instrument)	7.436 (1.0)	2757 (0.0)	6.93 (0.7)	4672 (0.0)	35.223 (3.0)	10371 (0.0)
Total		754.40 (100)	16516823 (100)	998.96 (100)	17745842 (100)	1168.87 (100)	21665523 (100)

Source : Database of Indian Economy, RBI Report.

Note : Figures in brackets indicates percentage.

The Report submitted by NitiAayog on Digital Payments in July 2018 depicts the important information related to overall payment growth and the instrument wise payment growth trends in India. They are as given below.

Instrument Wise Growth Trends-Volume: The retail payment segment accounted for as much as 99 percent of total volumes in 2017-18. There is a corresponding increase in



electronic compensation actions and cards. Within the category of electronic clearing cards and cards, the PPI followed by the debit card and, to some extent.

Table : 2 : Overall Growth Performance in retail payment

Sl. No.	Year	Volume in Crores	Annual Growth in %
1.	2011-12	95.0 (3.9)	0
2.	2012-13	145.0 (6.0)	52.6
3.	2013-14	220.0 (9.1)	51.7
4.	2014-15	335.0 (13.9)	52.3
5.	2015-16	607.0 (25.1)	81.2
6.	2016-17	1013.0 (41.9)	66.9
7.	2017-18	-	104.4
TOTAL		2415 (100)	--

Source: Data Base of Indian Economy, RBI Report

Note: Figures in brackets indicates percentage.

The total payment the card, in fact, accounted for the largest part (almost 50 percent) of the total volume in 2017-18. The participation of NEFT has generally increased over the years, except for some fall in 2017-18.

Growth of UPI Payment: Table 3 and 4 shows that UPI has shown an exponential growth compared to any other payment product and services. The total volume of the UPI transaction has increased by 24.9 percent in 2017-18. The total value of the UPI transaction has increased by 24.0 percent in 2017-18. The volume of global payments increased steadily during the period 2011-12 to 2015-16. The growth rate volume of global payments accelerated further to 104.4% in 2017-18. Table -2, 3 and 4 indicates trends in digital payments during the period from 2014-15 to 2017-18. The growth in 2017-18 is spectacular and could be attributed to the development of an innovative digital payment platform such as BHIMUPI, BHIM Aadhaar and Bharat QR Code. It is noteworthy that the growth in 2017-18 is much higher than the growth rate of the trend in the last five years (2014-2018). Table 3 and 4. The RBI data shows that the value of transactions through checks as a proportion of the total number of transactions was reduced to 3%.



Table-3 : Online, App based payment transactions in 2014-15 to 2018.

Sl. No.	Year	No. of Transactions in Crores	Total value of Transactions in Crores
1.	2014-15	85.30 (12.2)	10044075.0 (12.3)
2.	2015-16	104.01 (14.8)	14409318.0 (17.6)
3.	2016-17	132.74 (18.9)	15893913.0 (19.4)
4.	2017-18	174.27 (24.9)	196555390 (24.0)
5.	2018-	204.47 (29.2)	21959329.0 (26.8)
TOTAL		700.8 (100)	81962174.0 (100)

Source : Data Base of Indian Economy, RBI Report

Note : Figures in brackets indicates percentage.

Table-4: Percentage Value of Online, APP based Payment transactions in 2014-15 to 2018

Sl. No.	Year	Cheque	RTGS	Mobile
1.	2014-15	5.40	75.13	0.03
2.	2015-16	5.00	55.33	0.09
3.	2016-17	3.90	56.24	0.28
4.	2017-18	3.50	55.41	0.71
5.	2018-19	3.06	57.75	0.54

Source: Data Base of Indian Economy, RBI Report

Strengthening Security: With increase in digital transactions, in recent times there has been a spurt in the number of incidents of organised gangs from few states committing cybercrimes by making calls, sending mails, etc. to gullible customers to get the confidential details like card number, username, password, PIN, OTP, CVV, etc. The Reserve Bank of India has come out with guidelines for strengthening the cyber security of banks and banks are complying with the same. An SOC – security operations center has been set up in every bank to monitor and improve the cyber security defense.

Conclusion: Earlier the banks were focusing on applications which worked internally within the banks and its own customers, now the trend is more on inter-operable apps like UPI, BHIM, Aadhaar pay, etc., where customer of one bank can easily push/pull/request money from customers of other banks. There is more collaboration amongst banks. Aadhaar authentication is going to have major impact on all payment applications. India's digital payment industry, which is currently worth around USD 200 Billion, is expected to grow five-fold to reach USD 1 Trillion by 2023,



as per areport by Swiss financial services holding company, Credit Suisse. Digital payments present a hugeopportunity for various digitization initiatives in thecountry.

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