Digital Banking - New Horizons in A Cash-Light India

“Technology Transforms the Landscape of Banking”

D. Jayarama Reddy¹ & Prof. C. R. Reddy²

¹Department of Commerce, Govt. College (Autonomous), Anantapur (A.P) – 515 001

Email: djayaramareddy@gmail.com

²Emeritus of Commerce Department, 1-1-267 Vivekananda Nagar, Anantapur (A.P) - 515004

Abstract

Healthy and sound operations of banking business imperatively depends upon one strategic input is banking technology. Efficient financial intermediation in the context of overall development of economy and financial stability of banking sector is essentially resorts to adoption of the digital technology to transform results to rise of revenue, enhance of customer's service, minimise of cost structure and manage of enterprise risk ably. The macro-financial linkages and the micro-level sources are underlying the assets quality. Non-cash payments are set to overtake cash payments as digital transactions are growing exponentially.

Digital Banking, a new horizon in a cash-light India through digital payments as faster and more inclusive services to the both micro-and-macro businesses is extremely important to monitor economic progress. Demonetization has revolutionised digital payments in India to drive adaption of adoption. Reach of payment services and increase of value proposition to meet the expectations of customers is the aim of digital payments. It provides as accurate services as possible for brining uniformity growth in the country. Popularise the schema of digital banking is the need of the hour.

Key words: Digital Age, Digital Banking, Digital Technology, Internet, and Mobile Banking.

I. INTRODUCTION

Some profitable banks in India have already in progress destructively innovating digital products and services for customers, to remain contemporary and relevant. Of late, Indian banking has been offer a unique architecture of eKYC system for digital banking. Internet is an integral part of human life. Internet and mobile banking might be the biggest technological move forward affecting the current banking sector as a way for customers to handle themselves their own daily banking transactions. It is a gateway to other mobile applications and technological advances created by digitalization. Mobile banking has become increasingly a more popular method of handling daily banking business. Cash economy being 92 per cent in 2005, the country has already lowered its dependency on cash to 78 per cent by 2018.

Non-cash payments include digital transactions, card transactions and other paper transactions have grown to occupy 22 per cent share of total payment industry. Digital banking system leads in a sharp rise in accessibility as well as affordability for ensuring higher to unused digital payments.

1.1 DIGITAL PAYMENT

Growth trends in digital payments and issues relating to charges and challenges for collecting and disseminating disaggregate data are covered under the Payment and Settlement Act, 2007.

India is moving towards a first digital economy, due to demonetisation efforts started in December 2016 by the Government of India and the customers being forced to embrace the services of non-traditional banking. Success of E-commerce and M-commerce is obviously responsible to the phenomenal growth of technologies of various digital payments - Card Payments. In India, the number of both debit cards and credit cards in operation were 944.3 million and 39.37 million respectively as on June 2018. Thus, today, cashless is a buzzword.

1.2 DIGITAL TRANSFORMATION – A NEW TREND

As a modern trend, digitalization is one of the biggest factors changing the current business atmospheric environment. It works more independent and more in digital environmental situation and finally changes the whole organization. It transforms the corporate culture and consumer behaviour and forces the business organizations to act on. Many of manual office jobs disappear and automated in the era of digitalisation and resulting in many of the offices work more efficiently with lesser costs. An opportunity of digitalisation certainly improves the customer-relations in the business process, creates and adapts new business models. Hence, the digital technology has become an inevitable change process shaping the office work.

As a result, digital and mobile for a bank is a bare necessity to collaborate and conduct business operations to attain optimum goal. Banks have already started to replace of more expensive human interactions by digital technology in feasible investment areas with the automated teller machines and digital kiosks for facilitating and rendering services in account opening and customers' inquiries. Despite the fact that all the measures are fairly common premises among the banks, but arises a wide variation in technology schema and capability of operations across the different players of banking.

1.3 INTERNET AND MOBILE BANKING

Core banking as internal function with banks adopting a 'lift' and 'shift' approach is automatic basic process enabling a single customer and endorses for work optimisation across branch and hub network. Once the tasks controlled with paper money. Internet and Mobile phone virtually enable the customers of banks to get attach them at a time and place convenient. Reality of mobile banking, today, is with more than a hundred billion transactions a month.

1.4 BANKS SURVIVAL AND DIGITAL AGE

Transaction of digital and online have been steadily gaining platform due to the Government thrust for cash-less transaction. “Digital banking is really about behaviour and not technology or channels that influences strategy, content and drives advocacy. It is not about being mobile first or digital first, but being people first”. What Bill Gates said digital banking in 1994 as: “Banking is necessary; banks are not; how banks can survive in the digital age”.

1.5 SEGMENTS OF DIGITAL PAYMENT

The payments system is of two segments namely (A) The Systemically Important Financial Market Infrastructure (SIFMIs) and (B) The Retail Payments.

(A) SIFMIs: The SIFMIS is a multidimensional scheme between the contributing organisations together with the operator, the organization used for purposes of clearing, relaxing or record outlays, safekeeping, results, or other economic transactions.

The four segments of SIFMIs are as:

(i) RTGS: Real Time and Gross settlement means the processing of information on receiving and payment of funds transfer individually respectively on the instructions basis. Real Time Gross Payment covers customer and inter-bank transactions is settlement of funds transfers individually mainly meant for large value transactions and no limit for inter-bank fund transfer.

(ii) CBLO: Payment of Collateralized Borrowing and Lending Obligation (CBLO), Government securities of both outright trade and legs of repo transactions.

(iii) G-Sec: Government Security (G-Sec) may be the Central and State with short-term or long-term frequently called reserves bills or Government bonds with prime of life of less than one year and more than year respectively.

(iv) Forex: The word, Forex stands for Foreign Exchange to trading in currencies from different countries against each other and accepts inter-bank Cash, Tom.

(B) Retail Payments: Ten segments of Retail Payments are as:

(i) Cheque Truncation System: Cheque truncation system (CTS) is online image-based approach to clear cheques quickly on the electronic image of cheque transmitted with key important data for clearing.

(ii) MICR: Magnetic Ink Character Recognition (MICR) technology is for fast and consistent document processing and uses attractively chargeable ink or toner to print a specific nine-digit numerical code on the bottom of cheques with bank to quickly facilitate in the banking industry for clearing funds to customer. By using a special magnetic ink and unique fonts, it prevents financial fraud.

(iii) NON-MICR: It mentions to the procedure of manual clearing of cheque where it is actually moved among the bank branches/banks for clearance.

(iv) ECS DR/CR: The institutions use for making bulk payment or collection of amount through electronic debit/credit clearing system.

(viii) NACH: National Automated Clearing House (NACH) offers repetitive and electronic services to banks aiming to facilitate inter-bank high volume, low value debit/credit transactions. It leverages the Core-Banking Solution of participating banks for centralized posting of inward debit / credit transactions.

(ix) Credit/Debit Card: Bank provides a credit card to the account holder on his credit rating to enable him to borrow funds for making payment towards goods and services purchased by him with a condition that he will pay back the borrowed amount plus any additional agreed-upon charges. Bank issues a debit card to the account holder for daily withdrawal amount, as and when he desires to a limit of withdraw amount and also making payment to the purchases of goods and services that he purchased eliminating no need of carry cash. Once used it, amount is deducted from consumer bank account.

Data on Indian banking digital payments and compound annual growth rate are presented in Table 1.

Table – 1: Digital Payments System and Cagr

(Value ₹ in Billions)
(Volume in Millions)

Particulars	Year						
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Systemically Important Financial Market Infrastructure							
1 RTGS: (a) Value	539308	676841	734252	754032	824578	981904	1167125

Digital Banking - New Horizons in A Cash-Light India “Technology Transforms the Landscape of Banking”

(b) Volume	55.0	68.5	81.1	92.8	98.3	107.8	124.4
CAGR: (a) Value	-	25.50	8.48	2.69	9.36	19.08	18.86
(b) Volume	-	24.55	18.39	14.43	5.93	9.66	15.40
2 Total financial Markets Clearing: (a) Value	406071	501599	621570	672456	721094	1056173	1074802
(b) Volume	1.9	2.3	2.6	3.0	3.1	3.7	3.5
CAGR: (a) Value	-	23.52	23.92	8.19	7.23	46.47	1.76
(b) Volume	-	21.05	13.04	15.38	3.33	19.35	-5.41
3 Total SIFMIS: (a) Value	945379 (88.64)	1178440 (89.78)	1355822 (90.41)	1426488 (90.25)	1545672 (89.69)	2038077 (90.23)	2241927 (88.70)
(b) Volume	56.9 (2.20)	70.8 (2.35)	83.7 (2.24)	95.8 (2.00)	101.4 (1.44)	111.5 (1.01)	127.9 (0.80)
CAGR: (a) Value	-	24.65	15.05	5.21	8.36	31.86	10.00
(b) Volume	-	24.43	18.22	14.34	5.96	9.96	14.71
Retail Payments							
4.Total paper clearing: (a) Value	99012	100182	93316	85439	81861	80958	81893
(b) Volume	1341.9	1313.7	1257.3	1195.8	1096.4	1206.7	1170.7
CAGR: (a) Value	-	1.18	-6.85	-8.44	-4.19	-1.10	1.16
(b) Volume	-	-2.10	-4.29	-4.89	-8.31	10.06	-2.99
5Total Retail Electronic Clearing: (a) Value	20575	31881	47856	65366	91408	132325	193112
(b) Volume	512.5	694.1	1108.3	1687.4	3141.6	4222.9	6382.4
CAGR: (a) Value	-	54.95	50.11	36.53	39.90	44.76	45.94
(b) Volume	-	35.43	59.67	52.25	86.18	34.42	51.14
6Total Card Payments: (a) Value	1563	2052	2575	3325	4484	7421	10607
(b) Volume	678.1	932.5	1261.8	1737.7	2707.2	5450.1	8207.6
CAGR: (a) Value	-	31.29	25.49	29.13	34.86	65.50	42.93
(b) Volume	-	37.53	35.30	37.72	55.79	101.32	50.60
7Total Retail Payments: (4+5+6) (a) Value	121150 (11.36)	134115 (10.22)	143747 (9.59)	154130 (9.75)	177753 (10.31)	220704 (9.77)	285613 (11.30)
(b) Volume	2532.5 (97.80)	2940.3 (97.65)	3627.4 (96.96)	4620.9 (98.00)	6945.2 (98.56)	10879.7 (98.99)	15760.7 (99.20)
CAGR: (a) Value	-	10.70	7.18	7.22	15.33	24.16	29.41
(b) Volume	-	16.11	23.37	16.36	64.54	56.65	44.86
8.Grand Total: (3+7) (a) Value	1066529 (100)	1312555 (100)	1499570 (100)	1580617 (100)	1723425 (100)	2258780 (100)	2527539 (100)
(b) Volume	2589.3 (100)	3011.1 (100)	3741.1 (100)	4716.6 (100)	7046.6 (100)	10991.1 (100)	15888.5 (100)
CAGR: (a) Value	-	23.07	14.25	5.40	9.03	31.06	11.90
(b) Volume	-	16.29	23.25	27.09	49.40	55.98	44.56

Source: Niti Aayog, Digital Payments – Trends, Issues and Opportunities, July 2018

Figures in parentheses are percentage to grand total

Table 1 discloses a variety of digital payments of reporting statistics in terms of value and volume of transactions through 2589.3 million and value of ₹ 1066529.0 billion during the period between 2011-12 and 2017-18. Digital Payments through volume of 2589.3 million in 2011-12; of which (a) SIFMIs is accounted for ₹ 945379 billion through volume of 56.9 million and (b) Retail Payments to the tune of ₹ 121150 billion through volume of 2532.5 million. In 2017-18 total value of payments are ₹ 252739 through volume of 15888.5 million; of which (a) SIFMIs are accounted for ₹ 2242927 billion through volume of 127.9 million while figures for Retail Payments are ₹ 285613 billion through volume of 1560.7 million.

From the analysis, the inferred conclusions are that:

- (1) Under Retail Payments in 2011-12, paper clearing is accounted for 81.73 per cent of ₹ 121150 billion and 52.99 per cent of total volume of 2532.5 million. But electronic clearing scored the top position securing 67.61 per cent of ₹ 285613 billion through 40.50 per cent of total volume of 15760.7 million in 2017-18.
- (2) Digital Expenses have recorded forceful development in 2017-18 both in volume and value terms. In volume terms, the growth during 2017-18 is much greater than the trend growth rate during 2011-16.
- (3) The Real Time Gross Settlement (RTGS) system amongst the electronic modes of payments, the NEFT, credit cards/debit cards have handled robust progressive trend in digital payments. Rising electronic payment means, the banks have absorbed it's their efforts on safety and security of digital transactions.
- (4) Digital payments growth trend has supplemented by the increasing currency in circulation after demonetization. Outstanding currency stock in movement floated around 12 % of Gross Domestic Product during 2011-12 to 2015-16 has declined to 8.8 % during 2016-17 and 2017-18 reflecting demonetization impact.

II. CONCLUSIONS

The combination of high speeding of digital technology and free adaption of technological adoption have helped the banking and other financial institutions able to offer better financial products/services at lower costs to the customers in the market. Unbanked population in India has 230 million that still speaks about bare necessity of technological advancements in rendering the financial services. Technology as a biggest enabler and equalizer today, one-on-one connection in real time and creates massive new trend flows for the underserved or overlooked markets. Reserve Bank India equally has shown enthusiasm about promoting innovation and technology by continuance of the efforts to build up robust and secure digital payments and settlement system to achieve a less-cash society. A key interface issue of technology coupled with other technological advances merely made enablers but not drivers for shifting to the digital payment potentially.

Banking is a complex business to deliver services through a multiple technological channel. The Government should popularise the digital payment system among the people including students through media and also protect the interests of customers by implementing a stringent Cyber Law. The challenge of security and ramifications including cyber-crimes of banking technology should the need of hour in today's digital payment by the means of card payment, electronic fund transfer, payment gateways, smart card, e- payment, mobile money wallet, etc.