

USE OF INFORMATION TECHNOLOGY IN INDIAN BANKING: PROBLEMS AND PROSPECTS

YUGAL KISHORE MARWAHA

Associate Professor, Commerce (Retired), Government Post Graduate College Chamba, Himachal Pradesh

ABSTRACT

For the last two decade Indian Banking has undergone tremendous changes because of Liberlisation, Privatisation and Globalisation and various banking sector reforms. Information technology implies, use of new technology with the aid of computers for providing quick information, quick banking service to the customers at their doorstep. The traditional banking is speedily being transformed into modern banking with use of various technological inputs like internet banking, phone banking, use of POS, ATM's, payment apps like paytm, google pay, bhim, phonepe etc. This paper examines the various changes/trends that have taken place in our banking sector, with the use of new information technologies, problems faced by it and scope for improvement and use of new banking products, New banking threats like cyber Frauds, phishing, new opportunities to enhance banking business.

Keywords: Liberlisation, Privatisation, Globalisation, Information technology, E- Banking, POS, ATM's, RTGS, SWIFT ECS NEFT.

INTRODUCTION

The introduction of prudential norms in Indian banking industry in April 1992 has lead to a greater consistency and accuracy in banking in India owing to clean balance sheet of banks due to income recognition and asset classification. Earlier the banks were showing profits without even bothering for repayment of interest there on even principal amount was not recoverable so initially majority of banks showed losses when this prudential norms were introduced. The capital adequacy norms were introduced and Govt has to infuse capital in to the nationalized banks to strengthen them for their survival.

A combination of regulatory and competitive measures has lead to increasing importance of complete banking automation in the Indian Banking Context. Information technology is basically used in two different ways in banking, firstly in Communication and connectivity and secondly in Business process Re-engineering. Information technology enables sophisticated innovative products development, better market infrastructure, and implementation of reliable techniques for control of perceived risks and helps the financial intermediaries to reach geographically distant

and diversified markets. To compete in today's economic environment of world class banking.

Factually the advancement technology in India started in 1999 when Indian Financial Net was introduced with Wide area satellite using VSAT (Very Small Aperture Terminal Technology) initially for Public sector banks later to all banks and introduction of Information Technology Act 2000 to recognize the electronic data as a valid proof in court of law beside existing NNI Act 1881. The introduction of ATM (Automatic Teller Machine) has brought a sea saw change in banking sector but it is also fraught with risks of frauds. Banks needs to update their soft wares to protect the customers from possible frauds and now banks issues alerts to every customers for safe guards to be taken care of.

Even to have economy of scales banks are being merged all SBI associate group was merged in to SBI to strengthen it and cut down cost to make it figure in 50 top most banks of the world. By 31st March 2022 RBI has directed banks to mention exact date of repayment with principal and interest in loan agreements to avoid NPA's in future

Table 1.1

A Public sector Banks	As On 31-03-2016	As On 01-04-2020
1. Nationalised Group	19 Banks will be	12 wef 01-04-2020*
2 SBI and its Associates	06 Banks wef	01-04-2017** only 01
3.IDBI	01 Bank ***	Public sector bank as OtherPSB but from 01-04-2019 Pvt Bank
4. Bhartiya Mahila Bank	01 Bank as other PSB	merged with SBI**
Total Public Sector Banks 01-04-2016	27 Banks	wef 01-04-2020 only 12*
B Private Sector Banks		
5(i).Old Private Sector Banks	16 Banks	wef 01-04-2020 only 12
5(ii) New Private Sector Banks	07 Banks	wef 01-04-2020 only 09
6. Foreign Banks	40 Banks	
7 Regional Rural Banks	50 Banks	wef 01-04-2020 only 43
C Others Banks		
8 Small Investment Bank	Nil	Presently 06
9. Payment Banks	Nil	presently 10
Total Scheduled Commercial Banks		
D Scheduled Cooperative Banks		
10(i). State Cooperative Bank	16 Banks	wef 01-04-2020 Now 23
10 (ii).Urban State Coop Bank	62 Banks	
Total Scheduled Commercial Banks		

NOTE:-

- One of the nationalised banks New Bank of India was merged with PNB in 1993.
- In 2019 Dena Bank, and Vijaya Bank were merged With Bank of Baroda and only 17 banks were left as on 01-04-2019
- But now wef 01-04-2020. Only 12 Nationalised Banks will be operating in India after mega merger of 10 nationalised banks in to existing 4 big banks
- SBI and its Associates 06 Banks wef 01-04-2017** only 01 bank Even Bhartiya Mahila Bank also merged with it
- IDBI Bank a public sector bank till 31-03-2019 and wef 01-04-2019 is a private sector bank
- Pvt Sector Bank Laxmi Vilas Bank Ltd merged with Singapore based foreign Bank DBS bank India Ltd from 27th Nov,2020

REVIEW OF LITERATURE

Awasthy (2002) concluded that cost per transaction due to use of information technology tools, has come down to $1/8^{\text{th}}$ of the cost it was incurring in traditional banking but adoption of technology is still a difficult challenge. **Dagar: (2003)** reported that there are 10 million internet users. India has small internet base but fast growing E – Commerce is to the tune of 150 Cr rupees. **Pikkarainen et al (2004)** the breakdown of internet connectivity leads to negative impact on adoption of e banking is being used as a new age banking where for the fund transfer and payment of bills, recovery internet facility is used to convenience and flexibility factors. **Rao, D. Surya Chandra (2005)** Studied the reforms in Indian banking sector, and performance of public sector banks due to a sea change during reform process initiated in 1992-93. **Deshmukh and Vijaya (2006)** vice president of ICICI bank ltd studied the evaluation of the IT system used to enhance the efficiency in administration, competitive leap, improving effectiveness in private sector banks of India. **Khanna (2007)** pinpointed that technology has moved from being just a business enabler be a business driver for a banks, when effectively aligned with business strategy to effective development of technology will be the key for banks in their effort to meet business challenges. **Singhal and Padmnabhan (2008)** their paper on “A study on customer perception towards internet banking Identifying major contributing factors explored internet Indian banking industry is undergoing an Information technology revolution. **Chakraborty et al (2009)** their finding of research explored the influence of three drivers on the dimensions of true loyalty (Day, 1969, Dickand Basu, 1994., Rowley 2005) two new drivers on the dimensions of true loyalty were tested stake and value of switching along with customer’s service were tested on three dimensional models. **Devi and Malarvizhi (2010)** found in India though e-banking is fast spreading, yet due to password hacking or online transaction handling people are still hesitant in its adoption. **Kashyap and Sharma (2012)** revealed that internet banking a boon and bane by Associate Professor Monica in her study found that Banking through internet has emerged as strategic resource for achieving higher efficiency and is a powerful

tool for satisfaction of the customers and to stay as competitive bankers. **Kaur and Kaur (2013)** shows that there is no significant difference in facilities determining the customers' usage of internet banking services of Public-sector, Private-sector and Foreign Banks in India. **Shiffu (2014)** in her study she found that online banking due to globalization, increasing use of technology forced the bank to adopt the new channels to have competitive advantage, reduce cost and improve efficiency. **Goyal (2015)** concluded that e-banking is changing the banking industry and have major to the distribution channels of banks and these electronic delivery channels are collectively effect on banking relationships. Technological innovation has been identified to contribute refered to as electronic banking. This study was conducted to explore and determines the factor influencing the consumers' adoption of internet banking in India and hence investigates the influence of perceived usefulness, perceived ease of use and perceived risk of use of internet banking. **Singh and Singh (2016)** in their study they found that banking industry is more competitive and stronger just because of development of banking industry. Indian banking adopted international prudential norms. **Madhushree; Revatiradhakrishnan and Aithal (2018)** predicted that the growth of technology, the computational technology has brought changes in three major functions of the banks viz assess to liquidity, transformation of assets and monitoring of risks. The technology has brought about economies of delivery the delivery of banking and financial services with alternative channels like ATMs PIOS terminals, Paytm, Google pay apps, BHIM app etc that are cost effective , minimize branch expansion , time saving and convenient banking. **Sharma and Sharma (2019)** in their study were regarding banks in Oman. Sample size was 227 Omani residents. It is an empirical study the role of trust and quality dimensions in use of mobile bank services for which service quality and intention to use and customer satisfaction were precedents to actual usage.

RESEARCH METHODOLOGY

Research methodology is the guiding tool in the field of research. It besides showing path to the research provides guidelines in the field of any kind of research, then it will be just as a Multistorey building without any pillar. This is an empirical study based on secondary data collected from books, websites of RBI, published papers involving review of literature and current IT trends in Indian banking industry and using simple arithmetic tools to know the growth or decline in banking profitability.

OBJECTIVES

- To identify the factors that affects the customer's motivation for the use of internet banking or motivates others to use it.

- To know the extent of customer satisfaction level of the IT users
- Risks attached with Information technology adoption in Indian banking.
- To know modern trends in banking.

RECENT TRENDS IN INDIAN BANKING

- **Guided by reserve bank payment & settlement system (DPSS)** vision document for digital penetration following trends were witnessed in Indian banking.
- **RTGS (Real Time Gross Settlement)** Introduced since March 2004 for efficient transfer of bank funds by giving instructions from account of one bank to other as on 31-03-2021 the RTGS facility was available through 1,75,947 bank branches of 227 banks amounting to Rs 1,056 lakh crores reduction by 19.6% over PY due to covid and economic slow down.
- **NEFT (National Electronic Fund Transfer)** it rose by 12.7% Rs30928 lakh crore at the end of 31st March, 2021.
- **EFT (Electronic Fund Transfer)** Any one can transfer or make payment to any other account in any other bank can make payment or authorize his bank to do the same with account no of receiver IFSC code of bank and other detail.
- **ECS (Electronic Clearing System)** is a kind of retail payment system that can be used to make bulk of receipts or payments of similar nature facility extended to Govt deptt and companies `only so far.

Table 5.1: Source: RBI website for various years compiled

Year	RTGS	Total Retail Electronic Clearing (ECS,NEFT,IMPS,NACH)	Cards (debit, credit) At POS terminals	Prepaid instruments Mobile wallet,PPI Cards Paper vouchers	No of ATMS	No of POS in Millions
2014-15	92.8	1687.4	1423.2	314.5	83,379	1.12
2015-16	98.3	3141.5	1959.3	748	1,81,398	1.26
2016-17	107.8	4205.0	3486.4	1963.7	2,22,475	2.53
2017-18	124.4	6382.4	4748.6	3459	2,22,247	3.05
2018-19	136.6	12,466.7	6176.9	4604.3	2,21,703	3.72
2019-20	150.7	21,561.8	7301.2	5331.8	2,34,760	4.53

2020-21 Growth% Over baseYear Ave Growth Rate	159.2 65.73% 10.95%	32,830.8 1845% 307.5%	5784.1 306.42% 51.7%	4939.2 1470% 245%	2,38,575 186% 31%	4.72 321% 53.5%
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PROBLEMS AND CHALLENGES IN USE OF IT

- **Customer Satisfaction:** due to stiff competition among customers are more value oriented as such banks are supposed to take care of them at every point of time.
- **Personal Banking Services:** for it computerization and innovative techniques to handle the customers who are too satisfied with their expectations.
- **Difficulties in Implementation of Technology:** there is a need to have sufficient level of infrastructure and human resource to meet the local requirements as the trust of the people is very important in use of technology.
- **Customer Literacy:** ease of use of technology requires expertise as the customer may not be aware of such technology so bankers should be given adequate training to help the customer to use such technology.
- **Risk of Frauds:** every time now and then, we hear online frauds, phishing, and ATM's frauds. During the period 2019-21 public sector banks accounted for a fraud of Rs. 2.94 Lakh Crore, where as private sector banks accounted for Rs. 86,355 Crore so customers are always scared of such mishappening while using Information technology as new banking tool.
- **Legal problems:** - Though information Technology backs the online transactions but knowledge on the part of its users is essential.

PROSPECTS OF USE OF IT IN BANKING IN INDIA

- **Rural Population:** as 70% of Indian population resides in India which is still untapped needs to have banking facilities in all the remaining villages.
- **Multiple Channels of Banking:** now there are no. of channels to have banking facility even at doorstep such as ATM's, mobile banking, UPI's, POS terminals, to increase the banking business.
- **Customer Channels:** by providing efficient service to the customers who inturn expands the business by marketing the same.

- **Retail Lending and Segmentation:** with market segmentation the retail lending has become a focused area for financing the customers with specific need like housing, vehicle loan, consumer loan, where by risk is also disbursed and consequently profitability increased.
- **Increasing Computer and Financial Literacy:** now a day's internet banking has become an essentiality so knowledge of computer is must also education place a vital role in computer literacy RBI, SEBI, NISM all have taken initiative for financial inclusion and financial literacy. School curriculum must include this topic.
- **Paperless Banking or Environmental friendly Banking:** The digital banking has brought down unnecessary use of papers like cheques, passbook by sending SMS messages hence it has become eco- friendly banking

CONCLUSION

The introduction of Information Technology in Indian Banking has brought about a complete change in traditional banking structure of banks now banks are more competitive with other banks in the world due to globalization and liberalization and due to trickle down effect of it.

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