Original Article

Journal of Social Welfare and Management
Volume 10 Number 2, May - August 2018

Use of Digital Banking for Improving Quality of Service Delivery: An Empirical Study of Selected Indian Banks

Vaishali Pagaria

Abstract

Use of technology in the delivery of banking services is progressively becoming more common as it is being employed to reduce costs and eliminate uncertainties. This research studies the role that technology plays in Indian banking, challenges and issues faced by banks and its impact on the delivery of perceived service quality. The paper further focuses on how different sets of banks i.e. public, private and foreign banks in India are using digital banking for improving the quality of service delivery with the objective of enhancing customer satisfaction. A sample of 531 banking customers covering public, private and foreign banks was taken and statistical tools were applied on the data collected. Results indicate that though most of the customers are satisfied with the digital banking services of their respective banks, still they have some perceptual issues with some aspects like communication with the customers, taking customer feedback, response to the customers' query, etc. on electronic banking. These issues were further discussed with the respective banks to find out challenges faced by them while delivering techno-based services.

Keywords: Digital Banking; Service Quality; Service Delivery.

Introduction

Digital banking has emerged as the most acceptable and successful use of Information and Communication Technology (ICT) by the banking sector not only in its internal operations but also enhancing external relationship for providing better quality of services to its customers. Introduction of new innovative digital technologies and futuristic thought processes have given birth to whole new businesses and social dimensions. Recent government's projects like 'Make in India' and 'Digital India' have given boost to many industrial sectors to switch to introduce technological innovations in their business operations. Further, government also encourages technology adoption and up gradation through its 'Digital Transportation' programme by facilitating connectivity with high speed bandwidth to every nook and corner of the country. One can see the effective reach of telecommunication to the most interior part of India which has made possible projects like digital payments using mobile applications, mobile money, e-wallets, payment aggregation etc.

Use of digital banking system has enabled Indian banks to use their full potential to capture new as well as existing market. With the use of digital banking system, service delivery quality of banking services have also improved than to traditional banking services. Adaptation and implementation of tech-savvy procedures of digital baking such as data integrity, authentication, trust and security require due concentration. This is because digital banking provides significant solutions to bankers for their short term and long term business and technological requirements. In the present scenario, digital banking and mobile technology are the most sought tools by every sort of banks as leverage of these will help banks in enhancing customer satisfaction, speedy delivery of services, high volume, financial inclusion, grater market share, etc.

This research investigates the role that technology plays in Indian banking, challenges and issues faced

Author's Affiliation: Associate Professor, Department of Business Management, Malla Reddy College of Engineering and Technology, Hyderabad, Telangana State, India - 500100.

Reprint's Request: Dr. Vaishali Pagaria, Associate Professor, Department of Business Management, Malla Reddy College of Engineering and Technology, Hyderabad, Telangana State, India - 500100.
E-mail: b.vaishali1979@gmail.com

Received on 13.06.2018, **Accepted on** 21.06.2018

by banks and its impact on the delivery of perceived service quality. The paper further focuses on how different sets of banks i.e. public, private and foreign banks in India are using digital banking for improving the quality of service delivery with the objective of enhancing customer satisfaction.

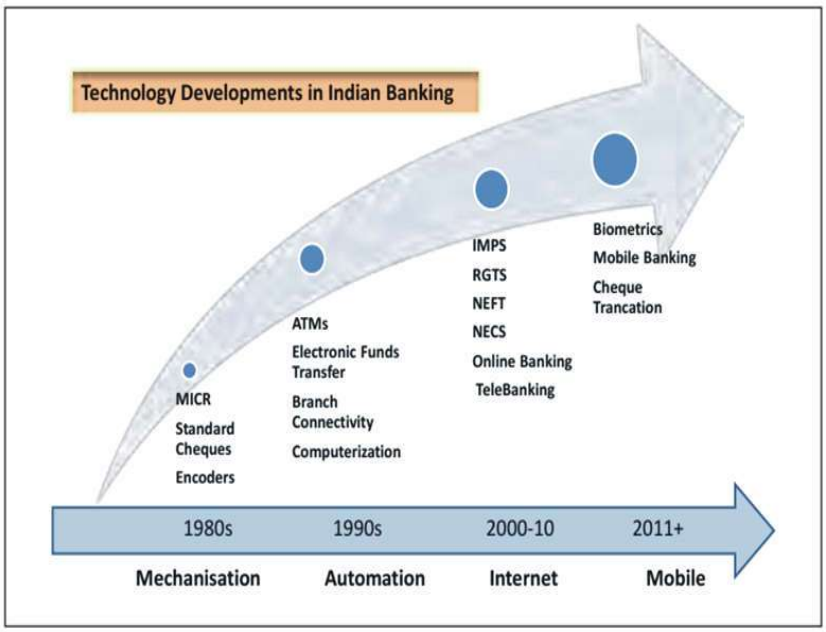
Review of Literature

With the aim of improving customer service, ease in book keeping, reporting and reconciliation, etc. pushed Indian Banking Sector to adopt new computer based technology in the late 1980s. In 1988, Reserve Bank of India set up a committee on computerization in banks headed by Dr. C. Rangarajan; which suggested some critical solution of manual banking especially settlement and clearance operations (MICR based cheque processing). The committee also suggested setting up of a network of Automated Teller Machines (ATMs). A committee on Technology Issues relating to Payments System, Cheque clearing and Securities Settlement in the Banking Industry was formed under the chairmanship of Shri W.S.Saraf, in 1994. The committee recommended establishment of an Electronic Funds Transfer (EFT) system, with the BANKNET communications network as its carrier. These have given boost to the fast adaptation of computerization and use of electronic media in banking sector. Core banking solutions (CBS) with use of information technology helped banks to serve larger number of customers within a given time. Customers' convince were given a priority and they were served at their convenient time anywhere at any-time.

With the introduction of economic policies like Liberalization, Privatization and Globalization (LPG) in 1991-92, the Indian economy opened up and given way to the private and foreign banks. With their entry, public sector banks stared facing competition specifically on the state of art technology used by private and foreign banks to serve customers. This has given further boost to Indian commercial banks moving towards digital banking to gain customer satisfaction in more efficient and effective way.

Over a period of time, commercial banks in India have introduced and implemented various techno-advanced banking practices which reflected into their innovative products and services and which also helped in achieving economies of scale. Especially, digital banking has resulted in reduction of costs at one end and generating revenue through different channels at the other end. As per the information available, the cost of a bank transaction on Branch Banking is estimated to be in a range of Rs.70 to Rs.75 while it is around Rs.15 to Rs.16 on ATM, Rs.2 or less on Online Banking and Rs.1 or less on Mobile Banking.

With the use of digital banking, banks are able to provide error free and more accurate documents to the customers and that to at customer's convenience. The present government is also aggressively promoting digital transaction. The payment system domains such as United Payments Interface (UPI) and



Source: ICMAI, Jan 2017

Bharat Interface for Money (BHIM) are significant move of the government which has made revolution in the instant transfer of funds between accounts in different banks based on the virtual address without mentioning account no. With support from government, the prime agenda for every commercial bank in India is now how to use technology to gain customer satisfaction so as to capture maximum market share.

As stated in RBI Report, 2016-17, there are 2,22,475 ATMs and 25,29,141 Point of Sale devices (POS). New techno-based services like NEFT (National Electronic Fund Transfer), ECS (Electronic Clearing Service), RTGS (Real Time Gross Settlement), Cheque Truncation System, Mobile banking system, Debit cards, Credit Cards, Prepaid cards have all gained wide acceptance in Indian banks as well as by the customers. All these services together are contributing significantly towards the digital revolution in the banking sector.

Looking at the pace at which digital banking is booming in Indian banking sector, a need has arrived to know whether it is actually contributing to enhance customer satisfaction. Is digital banking actually enabling banks to improve quality of service delivery? Are banks ready competing not only at the financial prowess but also at the technology based operational efficiency? Banks must need to address all these questions if at all they want to keep their position in the core markets. The present paper is an attempt to get answers to these questions.

Research Objectives

The present study aims to understand the use of digital banking for improving quality of service delivery in the Indian banking sector. The specific objectives of the paper are as under:

1. To understand the scope of digital banking in delivery of banking services.
2. To find out which digital banking attribute contribute/s in delivery of quality services.

Research Methodology

The research methodologies used are both explorative research and descriptive research. For secondary research, RBI website, online articles and management journals are studied. For primary research, a questionnaire were prepared to capture customers' response from 15 selected banks covering public, private and foreign banks located in Hyderabad and Secunderabad cities of Telangana state of India. Total 531 responses have been gathered and statistical tools like descriptive statistics, t-statistics were applied with the hypothesis that the population mean is less than 3: Mean < 3.

Data Analysis of Individual Digital Banking Service Attributes

As could have been expected, the distribution of responses for level of satisfaction was skewed towards lower scores with all means ranging between "1.77 – 2.46" on a scale of "1-5" (where 1 anchor extremely satisfied to 5 anchors extremely dissatisfied). The averages for all 21 service attributes have been obtained. From these, it can be observed that service attributes 1, 3, 4, 7-11, 13, 14 and 16 (response questions) have the lowest average mean scores ranging between "1.77 – 1.98". Whereas digital service attributes 2, 5, 12, 15 and 17-21 (response questions) have the highest average mean scores ranging between 2.01-2.46. The overall grand mean of all 21 service attributes is 2.02 which is below the average mean i.e. 3.

The 'standard deviation', 'standard error' for all the 21 digital service attributes has been obtained. The 'standard deviation' for all the 21 service attributes are small (ranging 0.5 to 0.92). This means that there is consistency in the 531 responses for all 21 statements. This makes it possible for us to perform detailed statistical analysis.

The 't-statistic' values indicate that for all the 21 service attributes there is a significant difference between the actual observed mean and the expected mean of '3'. This is an indication that for all the service attributes the difference between actual mean and expected mean value is significant. All the 21 service attributes can be regarded satisfactory for service quality in banks.

Findings

The service attributes such as SMS services, transaction settlement time in net banking, mobile-banking, RTGS, NEFT, etc., ability to provide error free and accurate online documents, navigation, download speed and server support in net-banking and mobile-banking, performance of bank's mobile applications, and keeping customer's best interest at heart by maintaining privacy and security of transaction have emerged as satisfactory among customers of all sets of banks. These are the factors that characterize a good bank which satisfies its customers.

Table 1: Individual Digital Banking Service Attributes

Sr. No.	Digital Service Attributes	Mean	Standard Deviation	Standard Error	t-statistics (lower- tailed)
1	A/C related services eg. bank statement, debit card, credit card, ATM, net-banking, mobile banking, RTGS, NEFT, etc.	1.98	0.57	0.02	-41.60
2	Operationality of ATMs	2.34	0.92	0.04	-16.73
3	Transaction Settlement Time in Net Banking, Mobile-Banking, RTGS, NEFT, etc.	1.85	0.63	0.03	-41.93
4	Ability to Provide Error Free online A/C Statement, Interest Statement, etc.	1.92	0.50	0.02	-49.56
5	Clarity of statements, Documents, etc.	2.02	0.62	0.03	-36.80
6	Ability to explain online processes & procedures, schemes, system, banking operations, etc.- User friendly	2.12	0.76	0.03	-26.39
7	Navigation in Net Banking & Mobile-Banking	1.79	0.64	0.03	-43.65
8	Download speed in Net Banking & Mobile-Banking	1.85	0.67	0.03	-39.55
9	Server Support in Net Banking & Mobile-Banking	1.89	0.69	0.03	-37.10
10	SMS Services	1.77	0.69	0.03	-40.90
11	Performance of Bank Mobile Application, if any	1.87	0.70	0.03	-37.19
12	Right Deliver of digital service First time and every time	2.01	0.56	0.02	-40.77
13	Keeping customers' best interest at heart by maintaining privacy of transaction	1.83	0.66	0.03	-40.67
14	Keeping customers' best interest at heart by providing security of transaction	1.83	0.66	0.03	-41.21
15	Realization of errors and recovery	2.16	0.60	0.03	-32.51
16	Communication with customers	1.93	0.73	0.03	-33.77
17	Taking Customer Feedback on regular interval	2.33	0.72	0.03	-21.28
18	Extent to which the feedback from customers is used to improve service standard	2.13	0.73	0.03	-27.58
19	Problem solving speed	2.26	0.83	0.04	-20.65
20	Reasons specified for any query	2.46	0.77	0.03	-16.20
21	Overall standard of the service	2.13	0.59	0.03	-34.11
			t-Table Value		**-1.66**

Bank customers in the era of digitalization, looks online banking as important instrument for availing various banking services as it gives flexibility and ease of doing banking. Similarly, when the present government promoting digital banking, bank which provides online banking backed by secured and speedy navigation and server back-up will have competitive advantage. With the revolution in the ICT, updating customers with their bank transaction become very easy for all banks. Banks are very particular in providing information promptly relating to customer's account, transactions, new-schemes, promotions and any other communication through SMS to their customers.

Digital banking is a new-aged banking contributing highly on the customer satisfaction. All sets of banks have understood this well and provide user friendly mobile banking application which helps them in faster reaching to their customers and as a result capturing higher market share, especially in retail banking. In the demonetization scenario (post Nov. 2016), technological enhanced banking operations and processes have proved boon to customers as they could do banking transaction without standing in a long queue for cash.

On the other hand, service quality attributes which are marked somewhat satisfied by customers of selected PSBs, PvtSBs and FBs are operationality of ATMS, taking customers' feedback online, extent to which the feedback from customers is used to improve service standard, problem solving speed, and reasons specified for any query. These issues were further discussed with the respective banks to find out what are the challenges faced by them while delivering techno-based services. Following are some of the challenges listed out by the bank employees.

- One of the prime characteristic of digital banking is its self-service mode. Most of the customers are not fully aware of the operationality of online banking services. This cause confusion and raise unrelated queries. And when these types of questions not answered, the customers feel unattended.
- Customers' adaptation to the digital banking from conventional banking is also one of the big challenges especially with senior citizens. They fear security and privacy of their transactions. This call for a need for customer segmentation which will not only smooth the interaction, but also enable banks to targeted product placement, thus

increasing the likelihood of further acceptance.

- Lack of proper knowledge and skills among the bank employees is also one of the causes for not responding to customer feedback. There is a need to train bank employees to deal with the new innovative technology in banking sector.

Conclusion

From the above findings, it can be concluded that digital systems used by all sets of banks are helping in delivery of quality services. The bottom line is that the bank must win customers' trust as it deals with their hard-earned money. Until bank gets success in achieving its depositors' confidence, it cannot compete in the market. This can be done only by assuring full proof digital banking operations and processes. Banks' technological advanced system can help to check and monitor its operation to avoid any fraud. CBS is one such example wherein all linked branches have access to track any of their customer's account irrespective of their location. Being in the financial sector, banks have understood to give due importance to maintain secrecy and privacy of each transaction. Customers always prefer a bank where this is guaranteed and they are satisfied with the present system offered by all sets of banks. On the other hand, when it comes to providing quality services, customers' view or feedback is one of the crucial aspects to complete the operational process. This is because, ultimately quality of services are measured based on the level of customers' satisfaction. Therefore, all sets of banks must look at these attributes as discriminating opportunities to offer customer centric quality service.

References

1. Cooper Donald R, Schindler P. Business Research Methods. Eight Edition, Tata McGraw Hills, 1999.pp.55.
2. Deming, W. Edwards, Sample Design in Business Research, New York: Wiley, A classic by the late author, an authority on sampling.
3. Gronroos C. Strategic Management and Marketing in the Service Sector. International conference on Service Management, 1983 May;83-104.
4. Kerlinge Kerlinger, Fred N. Foundations of Behavioral Research, 3rd edition, Holt, Rinehart & Winston, 1986.p.279.
5. Parasuraman, Zeithaml and Berry. Alternative Scale for Measuring Service Quality; Journal of retailing published in investigating service quality dimensions through exploratory factor analysis in a healthcare setting by Rooma – Fowdar; International Conference on Service Management; 1994 March 11-12;211.
6. https://m.rbi.org.in/scripts/PublicationsView.aspx?id=162.
7. http://www.forbesindia.com/article/weschool/digital-revolution-in-the-indian-banking-sector/47811/1.
8. www.rbi.org.
9. http://www.ibef.org/industry/banking-india.aspx .
10. http://banksifsccode.com.
11. http://companiesinindia.in.
12. www.zeenews.india.com.
13. www.indiaranker.com.