
Factors influencing Digital Banking Service Quality: A comparative study between SBI and ICICI bank in Bangalore

Dr. Arti Singh¹, Dr. Sarita Rana², Sridhar M³, Dr. Divya Kumar Agrawal⁴, Dr. Mohammed Khizerulla⁵

Assistant Professor¹, Department of Commerce, Kristu Jayanti College (Autonomous), Bangalore

Assistant Professor², Department of Commerce, MSI, Delhi

Assistant Professor³, PG Coordinator, SEA College of science commerce and arts, Bangalore

Chief Manager (Research)⁴, State Bank institute of credit and risk management, Gurugram

Head - Department of Commerce⁵, HKBK Degree College, Bengaluru.

Abstract

Digital banking services in India plays an important role since 5 years as the customers are looking beyond the traditional way of banking. Digital banking Services like Electronic Fund Transfer(NEFT,RTGS,IMPS), UPI, ATM, Cash deposit machine, Mobile Banking Application, Debit Card, Credit Card are growing exponentially since 2017 due to the several initiative by government like incentives for customers and merchants, Demonetization, financial inclusion and for customer and traders own interest and lastly due to Covid-19. Study conducted in the Bangalore region by using purposive sampling technique. The sample for the study was collected using structured questionnaire with the help of Google form and sample size was 101.

Study found that SBI is strong as compared to ICICI with respect to factors such as Efficiency, System availability, Fulfillment, responsiveness, website design. But whereas ICICI is showing positive significance in the case of Privacy and Website design is concerned.

Keywords: *Digital Banking, Customer Perception, Service Quality, ICICI, SBI.*

Introduction

The banking sector in any country has an important function to play in increasing economic wellbeing of all residents in the country. A strong and vibrant banking sector is major factor responsible for growth and development of economy. For a developing economy like India, the important role of the banking sector needs no overemphasis. Introduction to information Technology has changed the banking operational ecosystem to serve customer. It is used a tool for competitive advantage by banks to compete in the market place. The government initiatives in promoting cashless economy and providing subsidies to vendors and incentives to customers for adopting the digital platform.

The technological advancement in banking sector such as Internet banking, mobile banking (including banking through apps), ATM/Debit card, credit card has led to the advancement in the payments and settlement system (Kaur & Rajneesh, 2014). Digital banking is all about availing banking services without meeting the bank personnel using information technology. The introduction of non-cash payment modules like RTGS, NEFT, IMPS, UPI and digital wallet also plays a major role in the transformation of banking services.

ICICI bank and the State bank of India (SBI) are categorized as Domestic Systemically Important banks by RBI chairman Mr. Shaktikant Das on January 20, 2021.

SBI and ICICI banks are India's largest public and private sector banks in 2021 with respect to the profit earned and the number of branches (Source: RBI). Some recent statistics about the Digital banking operations in India has been given below. Electronic payment interface like BHIM introduced in December 2016 by NPCI, only 31 banks were enrolled for BHIM and the business was 1.85 cr. Now up to December 2019 there are 128 bank partners with a business of 6316.37 cr. The UPI business in August 2016 stood for 3.1 crore and the partner banks were 21. In August 2017 partner banks increased to 51 from 21 and business increased to Rs.3381.2 crore exponentially. In August 2018 partner banks were stood at 114 and business transaction Rs. Rs.54212.26. Lastly in the month of December 2019 partner banks were 143 and business stood at Rs.2, 02,522.74 crore which is an unbelievable achievement.

Review of Literature

Customer satisfaction is the important parameter for the success of any business growth. In the banking sector, it's a great challenge to get maximum satisfaction. It is the obligation of banks to make the profit in addition to their role of developing the economy and people live. (*Bindu K et al 2019*). The banks in India should determine the service quality factors, which are considered to be the main factors for fulfilling the needs and demand of customers. Hence it is necessary to find out the proportions of customer perception of service quality and its relationship with that of customer delight (*Rishi Kant et al 2021*). Customer relationship is being strengthened by Information Technology, which provides cutting edge services to customers. Adoption of Information Technology in banking can reduce cost and it can act as an effective communication tool which gives competitive advantage (*Jharana Rani Patnaik and Anita Patra 2019*). Banking products like cheques, Pay in slips, drafts and other services are slowly being substituted by the Information Technology enabled banking services. Indian banks are very competitive and adopted advance technology in order to serve their customers (*Hardeep Chahal and Kamini Dutta 2021*). With rapid development in technology, new online banking services are being introduced by banking institutions to deliver the superior service. Hence it is necessary for banks to cope up with the changing customer requirements with new technological development. (*Dr. Sarbani Mithra, Dr. Amita Chatterjee 2020*). Banking is one of the important financial institution constantly explores the opportunity of technology enabled services to provide better customer experience (*Dr. V.N. Parthiban 2019*).

Objective of the Study

- To measure the consequences of various factors on the overall service quality of online banking.
- To compare the digital banking service quality provided by the ICICI bank with SBI in Bangalore.
- To examine the relationship between customer perception and service quality factors brought out from the study.

Hypotheses

H1: There is a significant difference between customer perception towards Digital banking services provided by SBI and ICICI bank in Bangalore.

H2: Efficiency has notable impact on customer perception of digital banking service quality.

H3: System Availability has notable impact on customer perception digital of banking service quality. H4: Fulfillment has notable impact on customer perception digital of banking service quality.

H5: Privacy has notable impact on customer perception digital of banking service quality.

H6: Responsiveness has notable impact on customer perception digital of banking service quality. H7: Website Design has notable impact on customer perception digital of banking service quality.

H8: Contact has notable impact on customer perception digital of banking service quality.

Research Methodology

To evaluate customer perception towards the digital banking services, one private (ICICI) and one public sector bank (SBI) is selected based on their net asset, profitability and network which is judgmental sampling technique. An empirical study was conducted in the Bangalore region by using purposive sampling technique. The research design for the study is descriptive research design. The sample for the study was collected using structured questionnaire with the help of Google form and sample size was 101. The sample was collected from selected branches of SBI and ICICI banks in Bangalore.

Responses were collected and examined using a 5 point Likert scale ranging from (1) “strongly disagree” to (5) “strongly agree”. The survey instrument has used 7 constructs and 28 variables adopted from Parasuraman, Zeithmal and Malhotra (2005).

Data Analysis & Interpretation

Demographic Variables

Table-1

Variable	Category	Frequency	Percentage
Gender	Male	65	64.4
	Female	36	35.6
Age	Upto 20	13	12.9
	21-30	65	64.4
	31-40	09	8.9
	41-50	11	10.9
	Above 50	3	3
Occupation	Student	30	29.7
	Housewife or Retired	03	3
	Private Employee	57	56.4
	Government Employee	01	1
	Business	10	9.9
Qualification	Undergraduate	16	15.8
	Graduate	19	18.8
	Post Graduate	66	65.3

Annual Income	0-2.5 Lakhs	44	43.6
	250001-500000	34	33.7
	500001- 10,00,000	16	15.8
	Above 10,00,000	7	6.9

The different demographic variables shown in the above Table-1, it can be seen that majority of the respondents are male i.e. 64.4 percent and female constitutes 35.6 percent. There are 65% respondents belong to the age bracket of 21-30 years. In Occupation, the Private employee is 56.4% followed by students 29.7% and Business people 9.9%. Under qualification 65.3% respondents are post graduates followed by graduates 18.8 percent and undergraduates 15.8%.

Reliability Test

Table-2

Reliability Statistics

Cronbach's Alpha	N of Items
.952	29

Reliability test has been conducted using cronbach's Alpha to quantify the internal consistency reliability among all variables used in the study. It is found from the above table-2 that the cronbach's Alpha is 0.952, which is closer to 1 means there is high internal reliability among all variables.

Factor Analysis

Table-3

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.871
Bartlett's Test of Sphericity	Approx. Chi-Square	2088.567
	df	378
	Sig.	.000

The excel response sheet was imported to SPSS version 22 statistical software for data analysis. Principal component analysis with varimax rotation was performed to identify factor loading of each variable on each extracted factor. From the above table-3, it can be seen that Kaiser-Meyer-Olkin(KMO) the measure of sampling adequacy is .871, which means factor analysis is appropriate as the KMO value is above

Table -4

FACTORS	ITEMS	FACTOR LOADING	EIGEN VALUE S	% OF VARIANCE EXPLAINED
Efficiency	EEFI	.638	12.444	44.442

	EEF2	.766		
	EEF3	.635		
	EEF4	.640		
	EEF5	.756		

	EEF6	.719		
System Availability	SYS1	.721	2.51 6	8.98 5
	SYS2	.746		
	SYS3	.683		
	SYS4	.756		
Fulfillment	FUL1	.767	1.54 5	5.51 6
	FUL2	.717		
	FUL3	.739		
	FUL4	.636		
	FUL5	.706		
PRIVACY	PRI1	.835	1.36 8	4.88 6
	PRI2	.803		
	PRI3	.648		
	PRI4	.697		
Responsiveness	RES1	.579	1.17 2	4.18 5
	RES2	.651		
Website Design	WD1	.777	1.03 8	3.70 5
	WD2	.754		
	WD3	.814		
	WD4	.754		
	WD5	.660		
CONTACT	CON1	.708	0.86 9	3.00 5
	CON2	.774		

As shown in the above table-4, there are seven independent factors that are influencing digital banking service quality. Under the first factor there are six items having factor loading from .638 to .719 which is significantly high score. The Eigen value of factor Efficiency is 12.444 which explains 44.442 variance with respect to overall service quality. Second factor named system availability has factor loading of four statements lies between .721 and .756. The Eigen value for the factor is 2.516 and the variance is 8.985. Third factor is fulfillment which has five items and the factor loadings for the same is .767 and .706. The Eigen value for the factor is 1.545 and variance is 5.516. The fourth factor is privacy which has four items and the factor loadings are .835 to .697 and the Eigen value for the factor is 1.368, total variance explained is 4.886. The fifth factor is Responsiveness which has two items, the factor loading is .579 and

.651 Respectively and the Eigen value is 1.173, total variance explained is 4.185. The sixth factor is website design which has five items and the factor loading are .777 to .660 and the Eigen value is 1.038, total variance explained is 3.705.

CHI-SQUARE ANALYSIS

Table-5

FACTORS	ITEMS	SBI			ICI			Alternate Hypotheses
		Pearson Chi-square value	Degree of Freedom	Tabulated Value	Pearson Chi-square value	Degree of Freedom	Tabulated Value	
EFFICIENCY	EEF1	21.692	8	15.507	14.229	6	12.596	Accepted
	EEF2	18.233	8	15.507	11.807	4	9.488	
	EEF3	17.963	6	12.596	10.849	6	12.596	
	EEF4	16.329	6	12.596	27.523	6	12.596	
	EEF5	15.389	8	15.507	27.631	4	9.488	
	EEF6	21.447	6	12.596	28.428	6	12.596	
SYSTEM AVAILABILITY	SYS1	17.226	8	15.507	21.679	4	9.488	Accepted
	SYS2	13.707	8	15.507	8.384	6	12.596	
	SYS3	21.700	8	15.507	7.827	6	12.596	
	SYS4	23.936	8	15.507	17.793	4	9.488	
FULFILMENT	FUL1	25.528	8	15.507	26.723	8	15.507	Accepted
	FUL2	11.637	8	15.507	29.814	6	12.596	
	FUL3	32.738	8	15.507	10.590	4	9.488	
	FUL4	19.980	8	15.507	21.763	6	12.596	
	FUL5	24.884	8	15.507	17.212	8	15.507	
PRIVACY	PRI1	13.915	8	15.507	17.107	8	15.507	Accepted
	PRI2	23.987	8	15.507	21.215	8	15.507	
	PRI3	13.241	6	12.596	18.901	6	12.596	
	PRI4	9.091	4	9.488	30.448	6	12.596	
RESPONSIVENESS	RES1	19.544	8	15.507	19.547	6	12.596	Accepted
	RES2	32.917	8	15.507	16.525	6	12.596	
WEBSITE DESIGN	WD1	19.002	8	15.507	19.154	6	12.596	Accepted
	WD2	22.017	8	15.507	34.264	6	12.596	
	WD3	14.509	8	15.507	38.046	4	9.488	
	WD4	26.862	8	15.507	15.993	6	12.596	
	WD5	9.791	8	15.507	21.276	6	12.596	
CONTACT	CON1	26.779	8	15.507	20.526	8	15.507	Accepted
	CON2	21.153	8	15.507	24.441	8	15.507	

The above table-5 describes about the chi-square value of SBI and ICICI banks respectively. It can be noted from the above table that all the factors used in the study has strong relationship with customer perception of digital banking service quality. Above table-5 shows the chi-square value of each element in the construct and the same has been compared with chi-square table value to test the hypotheses of the study.

It is observed from the above table that in the SBI majority of the items in the construct have higher chi-square value than tabulated value except SYS2, FUL2 and PRI1. In case of ICICI it can be seen that the chi-square value is lesser than tabulated value in case of SYS-1 and SYS-3. It is inferred that all seven factors Efficiency, System availability, fulfillment, privacy, responsiveness, website design and contact has strong association towards the digital banking service quality provided by SBI and ICICI banks. Thereby, we accept the alternate hypotheses (H2 to H8) formulated in this study.

Table-6

FACTORS	CHI-SQUARE SBI	CHI-SQUARE ICICI	Alternate Hypothesis
EFFICIENCY	18.098	13.412	Accepted
SYSTEM AVAILABILITY	19.463	13.088	Accepted
FULFILLMENT	24.884	21.763	Accepted
PRIVACY	13.578	20.058	Accepted
RESPONSIVENESS	26.230	18.036	Accepted
WEBSITE DESIGN	19.002	21.276	Accepted
CONTACT	23.996	22.483	Accepted

As observed from above matrix(table-6) there is significant difference in customer perception towards digital banking services provided by SBI and ICICI bank in Bangalore hence the alternate hypothesis is accepted. It is evident from the above table that SBI is clear winner as compared to ICICI with respect to factors such as Efficiency, System availability, Fulfillment, responsiveness, website design. But ICICI is strong in the case of Privacy and Website design is concerned.

Conclusion

This empirical paper on digital banking service quality rendered by SBI and ICICI banks in Bangalore to the customer will certainly provide insights for all the stakeholders of the banking ecosystem. The outcome will definitely help the commercial banks to understand about customer perception towards service delivery gaps and may allow them to take corrective measures for improvement. The results from the study will be helpful for the practicing manager of the respective banks to improve the digital banking service quality in the era of technological disruption and changing customer preferences.

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