

Customer's Perception Towards Technology Enabled Services - with Special References to SBI

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ABSTRACT

The business of banking has changed with the development in technology. Technology adoption by the banks has enabled the use of different technology tools in banking, which enable bank to reduce transaction cost, save money and also save more time. The increase in use of information communication technology has enabled banking application to be transformed to electronic banking. Through e-banking customer need not visit the bank in order to carry out banking transactions. E-banking or Online banking or Internet banking has lot of benefits which add value to enhance customer's satisfaction in terms of better quality of service offering and simultaneously enable the banks gain more competitive advantage over other competitors.

This paper contains consumer perception towards the convenience and willingness to use E-banking services are identified and measured. For this study, the data is collected through the structured questionnaire. The information is gathered from the customers of State Bank of India. A sample of 100 customers has been selected using convenient sampling method. The study reveals that mostly customers prefer internet banking over branch banking due to reliability, convenience, speed, safety, security and cost effectiveness, user friendly and even error free system.

Keywords: E-Banking, Information Technology, Customers Satisfaction, Online banking, Mobile banking.

INTRODUCTION

Information and communication technology is playing a vital role across many industries and sectors, resulting in a positive impact on economic development cutting across the geographical barriers. The banking sector in India has seen greater emphasis being placed on technology and innovation. Today, a tech savvy customer is empowered to choose a desired service from a variety of products – card payments, NEFT transfer, RTGS transfer, ECS /NECS payments, mobile payments etc. Technology has been helping in delivering affordable financial services with greater efficiency without compromising on levels of safety, security and reliability.

Banking is a customer oriented service industry, therefore the customer is the focus and customer service is the differentiating factor. The bank business depends upon client service and the satisfaction of the customer is compelling the banks to improve customer service and build up relationship with customers. Customers in urban areas no longer want to wait in long queues and spend hours in banking transactions. The change in customer attitude has gone hand in hand with the development of ATM's, Phone and net banking along with availability of service right at the customer doorstep. In this paper the author highlights the customer perception and satisfaction through service quality provided by the bank- State Bank of India.

REVIEW OF LITERATURE

Lewis and Birmingham (1991) studied the needs, attitudes and behavior of youth market for financial services and found that the youth market is not homogeneous in terms of needs and behavior.

Dutta et al, (2009) studied perception of expectations of customers across all the banks in India. It was found that foreign banks were the most preferred banks followed by private bank and public banks.

Parasuraman (2000) developed a multiple- item scale known as the Technology Readiness Index (TRI). A confirmatory factor analysis of the measurement scale was used to test and validate that a four- dimension model (36 statements) of technological readiness was reasonable. The four dimensions of TRI identified by Berndt et al. (2010) are optimism, innovativeness, discomfort and insecurity. Of the four dimensions, optimism and innovativeness are drivers of technological readiness, while discomfort and insecurity are inhibitors of technological readiness.

Richard Shambre (2013) observed the fact that increased usage of technology is strongly correlated with technology readiness. In other words, the more technological ready customers, the more likely who will use the technology more frequently and regularly. In addition, high levels of technological readiness indicate that customer's are more likely to use a different mix of technologies.

Vandana Tandon Khanna and Neha Gupta(2015) concluded that factors such as technology acceptability, safety, availability, user friendliness and accessibility highly depends on the demographic profile of the customers. Most of the marketing decisions in terms of enhancing the effectiveness of delivery channels can be taken by considering those factors. Also customers are exposed to newer technology, which helps them to generate information by fewer clicks, should be channelized by public sector banks by providing value added services.

Safeena et al. (2010) determines the customer's perspective on internet banking adoption. Finding shows that perceived usefulness, perceived ease of use, customer's awareness and perceived risk are the important determinants of online banking adoption and have strong and positive effect on customers to accept online banking system.

OBJECTIVES

1. To study the perception and awareness level of customers of SBI towards technology enabled services.

- To measure the satisfaction level of people towards E-banking services of SBI.

METHODOLOGY

The methodology used for the data collection and tools and techniques of analysis are as follows.

Sources of Data: The data for the study was collected through primary sources. This data pertaining to customers' perception and satisfaction towards technology enabled services with special reference to SBI was collected through a structured questionnaire. Primary data was collected from customers of SBI (men and women) living in Hyderabad and Secunderabad city.

Sample for the study

The study is restricted to State Bank of India customers and the sample of 100 customers has been selected using convenience sampling method.

Tools of Analysis

The data pertaining to customers was analyzed using Percentages, Mean, SD, Anova and Chi-square.

Hypotheses

H₀₁

There is no significant mean difference in awareness level, perception, efficiency of service towards technology vs demographic variable gender.

H₀₂

There is no significant mean difference in awareness level, perception, efficiency of service towards technology vs demographic variable Age.

H₀₃

There is no significant mean difference in awareness level, perception, efficiency of service towards technology vs demographic variable Education.

H₀₄

There is no significant relation between gender, age and education towards customer satisfaction level on technology.

Table:1
Frequency Distribution of Gender of the Respondent

Source:	Gender	Frequency	Percent	Primary analysis
Data	Male	62	62.0	
	Female	38	38.0	
An	Total	100	100.0	

of the data furnished in Table 1 reveals that, 62 per cent are Male and 38 per cent are Female. Male bank customers were slightly higher in number as compared to female bank customers.

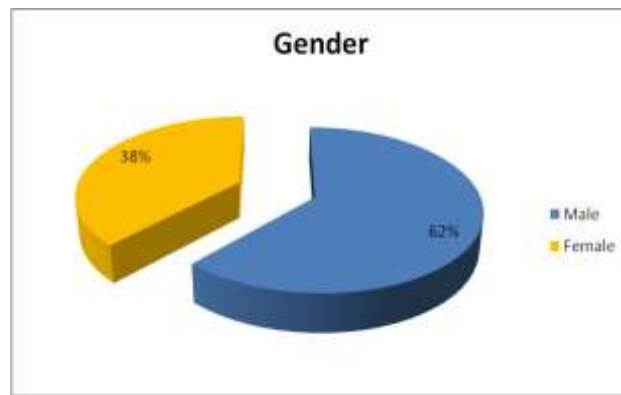


Table:2
Frequency Distribution of Age of the Respondent

Age	Frequency	Percent
18-25	42	42.0
26-30	21	21.0
31-40	21	21.0
41-50	12	12.0
51 and above	4	4.0
Total	100	100.0

Source: Primary Data

An analysis of the data furnished in Table 2 reveals that, 42 per cent of bank customers belonged to the age group between 18-25 years, 21 per cent to the age group of 26-30 years, 21 per cent age group of 31-40 years and 12 per cent age group of 41-50 years. The majority of the bank customers belonged to the group of 18-25 years.

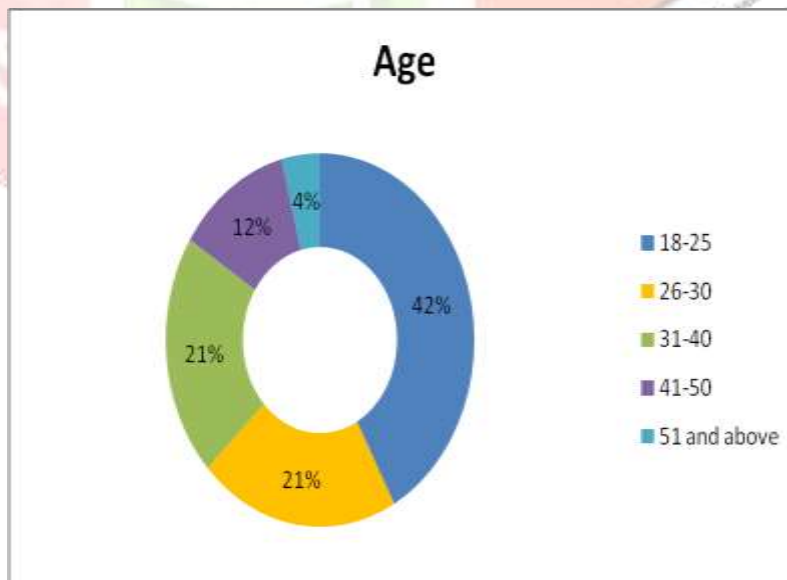


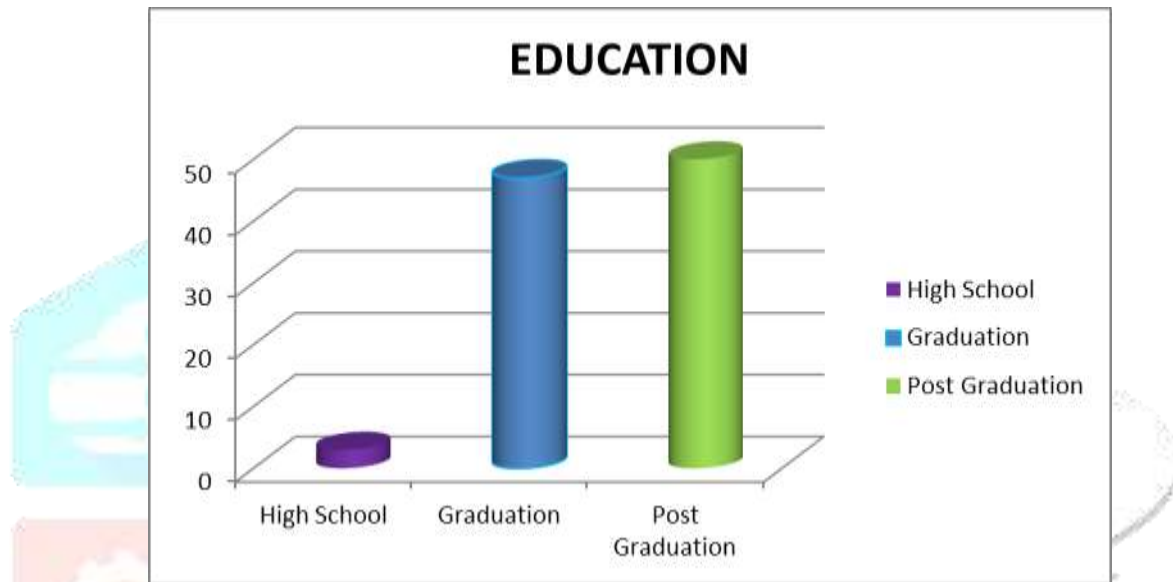
Table: 3
Frequency Distribution of Education of the Respondent

Education	Frequency	Percent
High School	3	3.0

Graduation	47	47.0
Post Graduation	50	50.0
Total	100	100.0

Source: Primary Data

An analysis of the data furnished in Table 3 reveals that, 50 per cent of bank customers are Post Graduates, 47 per cent of bank customers are Graduates and 3 per cent are High school. The majority of the bank customers are Post Graduates.



H₀₁. There is no significant difference in awareness level, perception, efficiency of service towards technology vs demographic variable gender.

Table: 4

Level of Awareness, Perception and Efficiency of Service towards technology With Demographic Feature Gender

Group Statistics						t-test for Equality of Means		
Gender	t-test	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Level of awareness towards technology	Male	62	4.2151	.84521	.10734	.781	98	.437
	Female	38	4.0789	.84783	.13754			
Level of perception on technology	Male	62	3.7742	.78004	.09907	.411	98	.682
	Female	38	3.8421	.83464	.13540			

Efficiency of service	Male	62	3.9032	1.20480	.15301	.038	98	.970
	Female	38	3.8947	.87308	.14163			

Source: Primary Data

An analysis of the data furnished in Table 4 reveals that, Male Mean score is 4.2151, SD is 0.84521, similarly Female Mean score is 4.0789, SD is 0.84783 between male and female in the level of awareness towards technology. Calculated t-value is 0.781, $df = 98$, $p = 0.437 > 0.05$ level of Significance. The critical value at 5% Level significance at 98 degrees of freedom is 1.98.

Conclusion: The Calculated t-value is 0.781 is less than critical value 1.98, hence null hypothesis is accepted, so it can be inferred that there is no significant mean difference between male and female in level of awareness towards technology.

An analysis of the data furnished in Table 4 reveals that, Male Mean score is 3.7742, SD is 0.78004, similarly Female Mean score is 3.8421, SD is 0.83464 between male and female in the level of perception towards technology. Calculated t-value is 0.411, $df = 98$, $p = 0.682 > 0.05$ level of Significance. The critical value at 5% Level significance at 98 degrees of freedom is 1.98.

Conclusion: The Calculated t-value is 0.411 is less than critical value 1.98, hence null hypothesis is accepted, so it can be inferred that there is no significant mean difference between male and female in level of perception on technology.

An analysis of the data furnished in Table 4 reveals that, Male Mean score is 3.9032, SD is 1.2, similarly Female Mean score is 3.8947, SD is 0.87308 between male and female in level of efficiency of service towards technology. Calculated t-value is 0.038, $df = 98$, $p = 0.970 > 0.05$ level of Significance. The critical value at 5% Level significance at 98 degrees of freedom is 1.98.

Conclusion: The Calculated t-value is 0.038 is less than critical value 1.98, hence null hypothesis is accepted, so it can be inferred that there is no significant mean difference between male and female in level of efficiency of service.

H_{02} . There is no significant difference in awareness level, perception, Efficiency of service towards technology vs demographic variable Age.

Table: 5
Level of Awareness, Perception and Efficiency of Service towards technology
With
Demographic Feature Age

ANOVA		N	Mean	Std. Deviation	Std. Error		Sum of Squares	df	Mean Square	F	Sig.
Level of awareness towards technology	18-25	42	3.9524	.54634	.08430	Between Groups	7.386	4	1.847	2.775	.031
	26-30	21	4.3889	1.17063	.25545	Within Groups	63.224	95	.666		
	31-40	21	4.3730	.79740	.17401	Total	70.610	99			
	41-50	12	4.4167	.92250	.26630						
	51 and	4	3.3333	.70711	.35355						

	above										
	Total	100	4.1633	.84453	.08445						
Level of perception on technology	18-25	42	3.9405	.72864	.11243	Between Groups	3.896	4	.974	1.565	.190
	26-30	21	3.4762	.84374	.18412	Within Groups	59.104	95	.622		
	31-40	21	3.7143	.60586	.13221	Total	63.000	99			
	41-50	12	4.0417	1.16802	.33718						
	51 and above	4	3.7500	.50000	.25000						
	Total	100	3.8000	.79772	.07977						
Efficiency of service	18-25	42	4.0179	.50724	.07827	Between Groups	2.160	4	.540	.448	.774
	26-30	21	3.6667	1.48394	.32382	Within Groups	114.590	95	1.206		
	31-40	21	3.9524	1.36844	.29862	Total	116.750	99			
	41-50	12	3.7500	1.43019	.41286						
	51 and above	4	4.0625	.12500	.06250						
	Total	100	3.9000	1.08595	.10860						

Source: Primary Data

An analysis of the data furnished in Table 5 reveals that, Age categories and level of awareness towards technology of Mean and SD of each group is presented. Calculated F-value is 2.775, $p=0.031 < 0.05$ level of Significance. The critical value at 5% Level significance at (4, 95) degrees of freedom is 2.46. The Calculated F-value is 2.775 is greater than critical value 2.46, hence null hypothesis is rejected, so it can be inferred that there is a significant mean difference between Age groups in level of awareness towards technology.

An analysis of the data furnished in Table 5 reveals that, Age categories and level of perception on technology of Mean and SD of each group is presented. Calculated F-value is 1.565, $p=0.190 > 0.05$ level of Significance. The critical value at 5% Level significance at (4, 95) degrees of freedom is 2.46. The Calculated F-value is 1.565 is less than critical value 2.46, hence null hypothesis is accepted, so it can be inferred that there is no significant mean difference between Age groups and level of perception on technology.

An analysis of the data furnished in Table 5 reveals that, Age categories and efficiency of service of Mean and SD of each group is presented. Calculated F-value is 0.448, $p=0.774 > 0.05$ level of Significance. Here critical value at 5% Level significance at (4, 95) degrees of freedom is 2.46. The Calculated F-value is 0.448 is less than critical value 2.46, hence null hypothesis is accepted, so it can be inferred that there is no significant mean difference between Age groups and efficiency of service towards technology.

H₀₃ There is no significant difference in awareness level, perception, Efficiency of service towards technology vs demographic variable education.

Table: 6
Level of Awareness, Perception and Efficiency of Service towards technology
With
Demographic Feature Education

ANNOVA		N	Mean	Std. Deviation	Std. Error		Sum of Squares	df	Mean Square	F	Sig.
Level of awareness towards technology	High School	3	3.7222	.25459	.14699	Between Groups	1.627	2	.814	1.144	.323
	Graduation	47	4.0709	.88720	.12941	Within Groups	68.983	97	.711		
	Post Graduation	50	4.2767	.81623	.11543	Total	70.610	99			
	Total	100	4.1633	.84453	.08445						
Level of perception on technology	High School	3	4.3333	.57735	.33333	Between Groups	.922	2	.461	.720	.489
	Graduation	47	3.8050	.75527	.11017	Within Groups	62.078	97	.640		
	Post Graduation	50	3.7633	.84722	.11982	Total	63.000	99			
	Total	100	3.8000	.79772	.07977						
Efficiency of service	High School	3	4.0000	0.00000	0.00000	Between Groups	.046	2	.023	.019	.981
	Graduation	47	3.9096	.91400	.13332	Within Groups	116.704	97	1.203		
	Post Graduation	50	3.8850	1.26391	.17874	Total	116.750	99			
	Total	100	3.9000	1.08595	.10860						

Source: Primary Data

An analysis of the data furnished in Table 6 reveals that, education categories and level of awareness towards technology of Mean and SD of each group is presented. Calculated F-value is 1.144, $p=0.323 > 0.05$ level of Significance. The critical value at 5% Level significance at (2, 97) degrees of freedom is 3.09. The Calculated F-value is 1.144 is less than critical value 3.09, hence null hypothesis is accepted, so it can be inferred that there is no significant mean difference between education groups and level of awareness towards technology.

An analysis of the data furnished in Table 6 reveals that, education categories and level of perception on technology of Mean and SD of each group is presented. Calculated F-value is 0.720, $p=0.489 > 0.05$ level of Significance. The critical value at 5% Level significance at (2, 97) degrees of freedom is 3.09. The Calculated F-value is 0.720 is less than critical value 3.09, hence null hypothesis is accepted, so it can be inferred that there is no significant mean difference between education groups and level of perception on technology.

An analysis of the data furnished in Table 6 reveals that, education categories and efficiency of service towards technology of Mean and SD of each group is presented. Calculated F-value is 0.019, $p=0.981 > 0.05$ level of Significance. The critical value at 5% Level significance at (2,97) degrees of freedom is 3.09. The Calculated F-value is .019 is less

than critical value 3.09, hence null hypothesis is accepted, so it can be inferred that there is no significant mean difference between education groups and efficiency of service towards technology.

H₀₄ There is no significant difference in satisfaction level towards Gender and Customer Satisfaction.

Table: 7
Customer Satisfaction with Demographic feature Gender

			Customer Service					Total
			Extremely dissatisfied	Dissatisfied	Neutral	Satisfied	Extremely satisfied	
Gender	Male	Count	2	7	24	21	8	62
		%	3.2%	11.3%	38.7%	33.9%	12.9%	100.0%
	Female	Count	0	2	10	21	5	38
		%	0.0%	5.3%	26.3%	55.3%	13.2%	100.0%
Total		Count	2	9	34	42	13	100
		%	2.0%	9.0%	34.0%	42.0%	13.0%	100.0%

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.809	4	.214

Source: Primary Data

An analysis of the data furnished in Table 7 reveals that, chi square calculated value is 5.809, $p=0.214 > 0.05$ Level of significance and table at 5% levels of significance with 4 degrees of freedom is 9.488. The calculated value is $5.809 < \text{table value } 9.488$. Hence null hypothesis is accepted, so it can be inferred that, there is no association between male and female and Customer Satisfaction level.

H₀₄ There is no significant difference in satisfaction level towards Age and Customer Satisfaction.

Table: 8

Customer Satisfaction with Demographic feature Age

			Customer Service					Total
			Extremely dissatisfied	Dissatisfied	Neutral	Satisfied	Extremely satisfied	
Age	18-25	Count	0	5	9	20	8	42
		%	0.0%	11.9%	21.4%	47.6%	19.0%	100.0%
	26-30	Count	2	1	7	8	3	21
		%	9.5%	4.8%	33.3%	38.1%	14.3%	100.0%
	31-40	Count	0	3	9	8	1	21
		%	0.0%	14.3%	42.9%	38.1%	4.8%	100.0%
	41-50	Count	0	0	9	2	1	12
		%	0.0%	0.0%	75.0%	16.7%	8.3%	100.0%

	51 and above	Count	0	0	0	4	0	4
		%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Total		Count	2	9	34	42	13	100
		%	2.0%	9.0%	34.0%	42.0%	13.0%	100.0%

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.692	16	.026

Source: Primary Data

An analysis of the data furnished in the Table 8 reveals that, chi square calculated value is 28.692, $p=0.026 < 0.05$ Level of significance and table at 5% level of significance with 16 degrees of freedom is 18.307. Here calculated value is $28.692 >$ table value 18.307. Hence null hypothesis is rejected, so it can be inferred that there is an association between Age category and Customer Satisfaction level.

H_0 There is no significant difference in satisfaction level towards Education and Customer Satisfaction.

Table: 9
Customer Satisfaction with Demographic feature education

		Customer Service					Total	
		Extremely dissatisfied	Dissatisfied	Neutral	Satisfied	Extremely satisfied		
Education	High School	Count	0	1	0	1	1	3
		%	0.0%	33.3%	0.0%	33.3%	33.3%	100.0%
	Graduation	Count	2	2	15	19	9	47
		%	4.3%	4.3%	31.9%	40.4%	19.1%	100.0%
	Post Graduation	Count	0	6	19	22	3	50
		%	0.0%	12.0%	38.0%	44.0%	6.0%	100.0%
Total		Count	2	9	34	42	13	100
		%	2.0%	9.0%	34.0%	42.0%	13.0%	100.0%

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.555	8	.172

Source: Primary Data

An analysis of the data furnished in Table 9 reveals that, chi square calculated value is 11.555, $p=0.172 > 0.05$ Level of significance and table at 5% level of significance with 8 degrees of freedom is 15.507. The calculated value is $11.555 <$ table value 15.507. Hence null hypothesis is accepted, so it can be inferred, that there is no association between education group and Customer Satisfaction level.

CONCLUSION

The study on customer's perception on technology enabled services dwells upon two factors namely: demographic features of the customers on gender, age & education with level of awareness, perception and efficiency of service towards technology and customers satisfaction in association with gender, age and education.

The data on the customer's perception have been analyzed separately for demographic features with level of awareness, perception and efficient of service and customer satisfaction, using percentage Analysis, t-test, F-test and chi-square.

The findings from the study are:

Young bank customers (84%) (Age between 18-40 years) constituted the major category of users of e-banking services. Post Graduates (50%) were major category of users who have adopted the technological services. Male members (62%) were major users of banking services as compared to female members (38%).

Adoption of technological services by the customers of State Bank of India revealed that, both male and female with education have same level of perception, awareness and analysis towards banking services.

Adoption of technological services by the customers of State Bank of India revealed that the level of awareness of technology is different in the customers of different age groups and all the age group respondents have same perception and are efficient towards banking technology.

The customer satisfaction levels recorded by the bank customers of Sate Bank of India revealed that there was no significant relation in the customer's perception with regard to awareness and efficiency of service towards technology.

The customer's satisfaction levels recorded by the bank customers of State Bank India revealed that there was a significant association in the customer's perception of different age group.

Technology enabled services will be successful for banks only when they have commitment to e-banking along with a deeper understanding of customer needs. The study concludes that, most of the bank customers are aware about all the banking services in the twin cities.

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