

# Customers' Satisfaction and Problems Faced towards E-Banking Services in Select Banks of Erode District

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## Abstract

Banking industry renders various types of banking and subsidiary services to its customers. In the service sector, the banking segment has been the fastest growing segment. Technology is a very dynamic force which drives a paradigm shift in the competitive landscape of the financial services and banking industry, influencing the way their products and services are dispensed with. Consequently, the banking sector is exposed to increased competition and growing consumer awareness necessitating the application of information technology to offer better customer services with efficiency. However, the satisfaction level of banking customers varies according to their experience, perception and social background. It is imperative for the banks to increase the level of satisfaction of its customers in order to build its goodwill. The present study examines the level of satisfaction of the respondents and the problems faced by them in availing E-banking services.

**Keywords:** E-banking, Expectations, Problems, Satisfaction

## 1. Introduction

Banking industry renders various types of banking and subsidiary services to its customers. In the service sector, the banking segment has been the fastest growing segment. Technology is a very dynamic force which drives a paradigm shift in the competitive landscape of the financial services and banking industry, influencing the way their products and services are dispensed with. Consequently, the banking sector is exposed to increased competition and growing consumer awareness necessitating the application of information technology to offer better customer services with efficiency. In the era of fierce competition, there is a significant surge in banking services through net banking from that of traditional banking mode. These two channels supplement each other in ensuring the convenient way of delivering banking services. In tune with the increasing consumer demand blended with the expectation of

convenience and expeditiousness in all the financial dealings, banks have to provide innovative customized services to remain competitive.

In this back drop, the present study explores the level of satisfaction and expectation of the customers along with the problems confronted by them on availing e-banking services.

## 2. Review of Literature

Aki<sup>1</sup> focused on the goals of managing technology in banking services in Finland. Rao<sup>2</sup> pinpointed the various steps towards improving customer services in banks. Arora<sup>3</sup> asserted that technology was a facilitator only for banking services. Bhaskar<sup>4</sup> concluded that the banking sector is brisk and energetic because of technology. Kamakodi<sup>5</sup> examined the factors determining the preferences towards banking habits. Mishra and Jain<sup>6</sup> probed various aspects of

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customer satisfaction on banking services and concluded that the customer satisfaction alone could provide an unmatched competitive edge. Sharma et al.<sup>7</sup> analyzed the chief aspects of banking services yielding customer satisfaction. Liao et al.<sup>8</sup> stressed upon the factors contributing to the success of e-banking services. Uppal<sup>9</sup> exposed the customer satisfaction towards e-delivery channels of banks. Vanniarajan and Nathan<sup>10</sup> compared the SERVPERF scale on various service quality factors and analyzed its impact on the customers' satisfaction. Aashish Shashikant Jani<sup>11</sup> evaluated the perception and satisfaction of customers towards banking services. Nishi Sharma<sup>12</sup> analyzed the customer's perspective towards e-banking services and has suggested that to secure the patronage of the users; banks must provide timely transaction receipts and maintain accurate records as a part of reporting.

### 3. Statement of the Problem

Generally, human perception changes from time to time and from individual to individual. It is therefore, necessary for banks to assess and reassess continuously how customers perceive the various e-banking services. In the globalised and IT era, the expectations are increasing as the customers have wider choice of products and services and the concept of generation to generation banking services have also undergone changes drastically in respect of operation/function. Further, customer loyalty is conditioned by the quality of the product and its delivery mechanism. Thus, the banks have to provide better and excellent customer service on par with world class service.

Hence, it is worth analysing the satisfaction level of the customers towards e-banking services of SBI and ICICI and the problems faced by them while availing e-banking services.

### 4. Objectives

- To ascertain customer satisfaction on utilizing various e-banking services.
- To assess the level of expectation of the customers and the problems confronted with on availing e-banking services.

### 5. Methodology

The required primary data was collected from the respondents who were using e-banking services in Erode District, Tamil Nadu by framing a well structured Interview Schedule. The secondary data was tapped from the earlier studies,

newspapers, books, journals, magazines and internet web resources. The study is confined to Erode district only.

### 6. Sample Design

In Erode District, there are five taluks namely Erode, Perundurai, Gobichettipalayam, Sathyamangalam and Bhavani. By using Random Sampling Technique, the bank customers were selected from all the taluks of Erode District. On the basis of the records of Divisional Office, it was found that approximately 3,750 and 3,000 customers were using e-banking services everyday at SBI and ICICI respectively. Though aimed at 10% of the total customers using e-banking services per day in SBI and ICICI at each of the five taluks of Erode District to constitute a sample size of 675 respondents, owing to difficulties of customers' non-response, inconsistency and other reasons the data collected from 500 respondents were finally considered for the study. The data was collected during April to June 2013.

### 7. Data Analysis

The level of satisfaction was measured by using Chi-square Test, Factor Analysis and Regression Analysis. The expectations of and the problems faced by the E-banking customers on availing ATM services and Internet banking were examined with Henry Garrett's Ranking Technique.

### 8. Analysis of Level of Satisfaction towards E-Banking Services

The level of satisfaction of the respondents has been analyzed by assigning scores to factors relating to satisfaction towards e-banking services. Further, a null hypothesis has been framed to analyse the significance of association between independent variables (Level of awareness, Level of Usage and Facilities Availed) and level of satisfaction.

$H_0$ : "There is no significant association between various independent variables (Level of Awareness, Level of Usage and Facilities Availed) and level of Satisfaction towards E-Banking services".

The association between the independent variables and level of satisfaction is shown in Table 1.

From Table 1, it is inferred that there is a significant association between facilities availed and level of satisfaction towards e-banking services. However, there is no significant association between level of awareness and level of usage with that of the level of satisfaction of the respondents towards e-banking services.

**Table 1.** Level of satisfaction towards E-banking services (Chi- square test)

Factors	Calculated Value	Table Value	D.F	Result
Level of Awareness	3.880	9.49	4	Not Significant
Level of Usage	3.747	9.49	4	Not Significant
Facilities Availed	10.495	9.49	4	Significant

Source: Compiled from Primary data

**Table 2.** KMO Bartlett's test

Kaiser-Meyer-Olkin Measure of sampling adequacy		0.813
Bartlett's test of Sphericity	Approx. Chi-Square	22975.250
	df	1711
	Sig.	.000

Source: Primary data

**Table 3.** Total variance explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.417	29.666	29.666	7.417	29.666	29.666	5.941	23.762	23.762
2	4.559	18.238	47.904	4.559	18.238	47.904	3.492	13.968	37.730
3	2.661	10.645	58.549	2.661	10.645	58.549	3.110	12.442	50.172
4	2.424	9.696	68.245	2.424	9.696	68.245	2.809	11.235	61.407
5	1.586	6.345	74.590	1.586	6.345	74.590	2.637	10.550	71.956
6	1.324	5.294	79.884	1.324	5.294	79.884	1.982	7.928	79.884
7	.925	3.701	83.586						
8	.549	2.196	85.782						
9	.531	2.126	87.908						
10	.493	1.973	89.880						
11	.457	1.828	91.708						
12	.376	1.506	93.214						
13	.345	1.380	94.594						
14	.310	1.241	95.834						
15	.259	1.036	96.870						
16	.212	.846	97.716						
17	.196	.785	98.501						
18	.139	.557	99.058						
19	.124	.497	99.555						
20	.073	.294	99.849						
21	.023	.094	99.943						
22	.014	.057	100.000						
23	.000	.000	100.000						
24	.000	.000	100.000						
25	.000	.000	100.000						

Source: Primary data

In order to extract the factors from the group of variables considered to evaluate the level of satisfaction, factor analysis is used. A correlation matrix is constructed based on the rating made by the respondents for the 25 factors. The matrix revealed that the inter correlation between all the variables are in good fit and hence, it is appropriate to use factor analysis.

Further, Bartlett's test of Sphericity and Kaiser-Meyer-Olkin (KMO)<sup>13,14</sup> measure of sampling adequacy are applied to the resultant correlation matrix to test the significance of the relationship among the variables. The Bartlett's test of Sphericity is used to test whether the correlation matrix is an identity matrix. The details of the findings of KMO and Bartlett's test are shown in Table 2.

It is found from Table 2 that the test value is 22975.250 at 1% level of significance. As the significance level is so small, it is evident that the correlation matrix is not an

identity matrix. It implies that there exists correlation between the factors. The value of test statistics is 0.813 which is more than 0.5. This indicates that the factor analysis for the selected factors is appropriate.

The total variances for the factors have been extracted and are shown in Table 3.

It is found from Table 3 that there are 6 variables that can be extracted which have value more than one. By retaining only the variables with eigen values greater than one, it is inferred that 29.666% of variance is explained by factor 1, 18.238% of variance is explained by the factor 2, 10.645% of variance is explained by factor 3, 9.696% of variance is explained by factor 4, 6.345% of variance is explained by factor 5 and 5.294% of variance is explained by factor 6.

The variables of all the six factors are extracted by employing principal component analysis and the component matrix is shown in Table 4.

**Table 4.** Component matrix of satisfaction variables

Variables	1	2	3	4	5	6
VAR00018	.880	-.312	.128	-.023	.005	.055
VAR00023	.862	-.309	.146	-.047	-.015	.041
VAR00019	.839	-.370	.272	.018	.200	-.134
VAR00024	.839	-.370	.272	.018	.200	-.134
VAR00017	.830	.083	-.108	-.043	-.202	.370
VAR00022	.830	.083	-.108	-.043	-.202	.370
VAR00025	.827	-.396	.253	.028	.184	-.147
VAR00020	.827	-.396	.253	.028	.184	-.147
VAR00016	.549	.515	.072	.149	-.204	.353
VAR00013	.396	.709	-.010	.222	-.016	-.362
VAR00014	.481	.697	-.032	.070	-.143	-.331
VAR00015	.514	.663	-.094	.053	-.260	-.056
VAR00012	.168	.648	-.068	.403	.263	-.311
VAR00021	.571	.633	-.049	.078	-.294	.165
VAR00002	.147	.532	.203	-.458	.361	.073
VAR00001	.022	.430	.031	-.390	.372	.139
VAR00007	-.314	.056	.725	.325	-.183	.071
VAR00008	-.262	-.064	.715	.409	-.111	-.078
VAR00006	-.298	.161	.678	.206	-.281	-.136
VAR00005	-.160	.336	.594	-.217	-.149	.264
VAR00004	-.239	.393	.514	-.402	.232	.070
VAR00010	.002	.182	-.196	.675	.409	.334
VAR00009	-.259	-.275	.157	.541	.240	.466
VAR00003	-.065	.395	.283	-.518	.363	.124
VAR00011	.067	.466	-.054	.514	.496	.020

Extraction Method: Principal Component Analysis.

6 components extracted

Table 4 reveals the component loading that is the correlation between the variables and the components. To make the data uniformly distributed, the rotation sum of squared loadings method is used. The rotated factor matrix is shown in Table 5.

It can be found from Table 5 that the factor for which the Eigen values are more than 1 are selected as the principal component factors. The variables for which the values are more than 0.6 were extracted from each principal component.

On the basis of the above analysis six factors have been extracted and named and their component variables influencing the level of satisfaction of the respondents are given with their corresponding values in Table 6.

## 9. Association between Level of Satisfaction and Demographic Variables

The dependence of level of satisfaction on various demographic variables which are independent (Gender ( $x_1$ ),

Age group ( $x_2$ ), Marital Status ( $x_3$ ), Size of the Family ( $x_4$ ), Educational Qualification ( $x_5$ ), Occupation ( $x_6$ ), Geographical Area ( $x_7$ ) and Income ( $x_8$ )) is measured by using regression analysis.

Table 7 shows the model summary of regression analysis.

It is clear from Table 7 that the value of Multiple R is 0.984 and  $R^2$  is 0.969.

The overall variations have been tested by using ANOVA and the results are shown in Table 8.

Table 8 reveals that the calculated value of F is 2.657 which are significant at 1% level.

The regression co-efficient has been analyzed with t-test and the findings are revealed in Table 9.

It is found from Table 9 that the analysis of multiple regression model for satisfaction on E-banking services shows that the overall significance of the model is well fitted. The co-efficient of determination  $R^2$  value shows that these variables put together explained the variations of satisfaction towards e-banking services to the extent of 97%.

**Table 5.** Rotated component matrix

	1	2	3	4	5	6
VAR00019	.982	.050	.066	-.032	-.029	-.008
VAR00024	.982	.050	.066	-.032	-.029	-.008
VAR00020	.975	.041	.052	-.040	-.064	-.018
VAR00025	.975	.041	.052	-.040	-.064	-.018
VAR00018	.869	-.007	.331	-.121	-.091	-.063
VAR00023	.856	-.008	.323	-.103	-.082	-.097
VAR00013	.065	.883	.203	.031	.096	.067
VAR00014	.094	.847	.321	-.022	.115	-.104
VAR00012	-.049	.789	-.022	.007	.096	.382
VAR00015	.047	.671	.564	-.060	.082	-.077
VAR00017	.492	.081	.763	-.236	-.022	-.013
VAR00022	.492	.081	.763	-.236	-.022	-.013
VAR00016	.147	.342	.759	.079	.123	.155
VAR00021	.081	.537	.738	-.020	.094	-.002
VAR00007	-.094	-.072	-.036	.863	.007	.104
VAR00008	.033	-.029	-.183	.841	-.096	.131
VAR00006	-.136	.106	-.077	.818	.019	-.103
VAR00005	-.151	-.074	.245	.550	.471	-.132
VAR00003	-.054	.020	-.012	.020	.805	-.059
VAR00002	.038	.231	.107	-.067	.787	-.025
VAR00004	-.142	.013	-.080	.336	.740	-.091
VAR00001	-.081	.114	.063	-.177	.661	.059
VAR00010	-.082	.107	.100	-.059	-.120	.872
VAR00011	-.037	.458	-.029	-.004	.137	.711
VAR00009	-.046	-.427	-.034	.279	-.180	.663

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 8 iterations.

**Table 6.** Factor definition

I Factor (Physical Facilities)	Usage of virtual keyboard	.982
	Availability of sufficient guidance	.982
	Encryption technology	.975
	Access regardless of time and place	.975
	Phishing Activity	.869
II Factor (Quality of Services)	Fast and effortless transaction with bank	.856
	Provide innovative products / services with attractive facilities	.883
	Hassle free transaction	.847
	Provide better quality products / services	.789
III Factor (Technical Services)	Quick Connectivity	.671
	Web Security	.763
	Each transaction password approval by customers	.763
	Web page loads quickly	.759
IV Factor (Help Desk Services)	Menu navigation with help	.738
	Respond to customer needs immediately	.863
	Provide timely and better solutions	.841
V Factor (Ancillary Services)	Help in customizing solutions to fulfill clients requirements	.818
	Makes financial transactions easier	.805
	Speed up of delivery time	.787
	Help to reduce errors	.740
VI Factor (Other Services)	Provide smoother and free flow of information	.661
	Make work easier	.872
	Provide service with reasonable charges	.711
	Improve personal efficiency	.663

Source: Primary data

**Table 7.** Regression analysis-model summary

Multiple R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Standard Error	Durbin-Watson
.984	.969	.859	.12893	2.436

**Table 8.** ANOVA-level of satisfaction

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	11407.389	8	1425.924	2.657	.007
Residual	263510.553	491	536.681		
Total	274917.942	499			

## 10. Analysis of Expectations of E-Banking Customers and the Problems Faced

In order to study the expectations of the e-banking customers in using e-banking services, Henry Garrett's Ranking Technique is used. The details of Garret point and the mean score are shown in Table 10.

It is found from Table 10 that among the various significant expectations of e-banking services, the respondents

prefer e-service for "Personalized Services" (25825 points). It is followed by Simplification and Openness of Rules, Formats, Procedures etc.

## 11. Problems Faced by the Banking Customers using E-Services

There are various problems faced by the banking customers using e-services. The problems faced by them while using

**Table 9.** Regression co-efficient

Variables	Beta Co-efficient	Standard Error	t	Sig.
Satisfaction (Intercept)	1.571	3.872	.406	.724
GEN (X <sub>1</sub> )	-.112	.039	-2.878	.102
AGE(X <sub>2</sub> )	.464	.171	2.718	.113
MARIT(X <sub>3</sub> )	-4.819	2.384	-2.021	.181
SIZE(X <sub>4</sub> )	2.644	2.030	1.303	.322
EDU(X <sub>5</sub> )	.458	2.832	.162	.886
OCCU(X <sub>6</sub> )	-.005	.004	-1.282	.328
LOCAT(X <sub>7</sub> )	.01	.02	-.736	.538
INCOME(X <sub>8</sub> )	-.117	.565	-.207	.836

Source: Primary data

**Table 10.** Customers' expectations in using e-banking services

S. No.	Statements	Garrett Scores and Rank		
		Total Score	Average	Rank
1	Personalized services	25825	51.7	I
2	Gearing up grievance redressal	23918	47.8	X
3	Simplification and openness of rules, formats, procedures etc.	25195	50.4	II
4	Making working days / hours more flexible	24389	48.8	VII
5	Building trust with customers	24501	49.0	VI
6	Periodical meeting with customers	24070	48.1	IX
7	Adopting Information Technology	25090	50.2	III
8	Creating Awareness programmes for customers	24706	49.4	V
9	Polite and cordial behaviour with customers	24873	49.7	IV
10	Updation of Technology	24167	48.3	VIII

Source: Primary data

ATM and Internet banking services have been analyzed using Garrett Ranking Technique and the results are shown in Table 11 and 12 respectively.

### 11.1 Problems in using ATM Services

Various problems faced by customers in using ATM services are shown in Table 11.

It is inferred from Table 11 that the most important problem faced by the respondents while using ATM services is "Crowd and Queue in Peak Hours" (26192 points).

### 11.2 Problems in using Internet Banking Services

Various problems faced by the customers in using internet banking services are shown in Table 12.

It is revealed from Table 12 that the most important problem faced by the respondents in using internet banking services is "Wrong Transfer of Fund" (26507 points).

## 12. Key Findings

- The Chi-Square analysis has revealed that there is a significant association between facilities availed and the level of satisfaction.
- There is no significant association between level of awareness and level of usage, and that of the level of satisfaction towards E-banking services.
- The factor analysis carried out with 25 variables initially, which however was reduced to 24 variables with value of more than 0.6. The rotated component matrix extracted 6 variables, which were named as physical

**Table 11.** Problems in using ATM services

S. No.	Problems	Garrett Scores and Rank		
		Total Score	Average	Rank
1	High Minimum Balance	25144	50.3	III
2	Restricted amount for withdrawal	25623	51.2	II
3	Problem regarding use of ATM during operation	23072	46.1	VI
4	Crowd and queue in peak hours	26192	52.4	I
5	Limited access of ATM Centers	24244	48.5	IV
6	Limitation of denomination of the currency to be used	23799	47.6	V
7	No proper cash dispense	22388	44.8	VII

Source: Primary data

**Table 12.** Problems in using internet banking services

S.No.	Problems	Garrett Scores and Rank		
		Total Score	Average	Rank
1	Victim of Fraudulent cheating	23473	46.9	V
2	Wrong transfer of fund	26507	53.0	I
3	Delay in transaction	22850	45.7	VI
4	Poor network connectivity	25801	51.6	II
5	Security	24612	49.2	III
6	Updating of Technology	24168	48.3	IV

Source: Primary data

facilities, quality of services, technical services, help desk services, ancillary services and other services.

- The co-efficient of determination  $R^2$  (0.969) confirms that the variables (gender, age group, marital status, size of the family, educational qualification, occupation, geographical area and income) put together explain the variations of satisfaction towards E-banking services to the extent of 97%.
- Henry Garrett Ranking Technique has brought to the fore that, of the various expectations of the customers towards E-banking services, the expectations of “personalized services” had stood the top.
- Among the problems confronted with by the e-banking customers on availing ATM and Net Banking services, the problems of “crowd and queue in peak hours” and “wrong transfer of funds” respectively were the foremost problems.

### 13. Conclusion

The present study explores the level of satisfaction of the respondents towards e-banking services, their expectations and the problems faced on availing the same. Adequate

and stringent security measure is the need of the hour. To increase the level of usage of e-banking services, the customers must be educated regarding operation of various e-channels delivered by banks. Further, to gain confidence among the users, the banks must offer transparency in rendering their valuable services.

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## Annexure - I : Abbreviations

E-banking - Electronic banking  
 SBI – State Bank of India  
 ICICI – Industrial Credit and Investment Corporation of India.  
 IT – Information Technology

## Annexure - II:

State your level of satisfaction in using E-banking services.

S. No.	Reasons	HS	S	N	DS	HDS
1	Provide smoother and free flow of information					
2	Speed up of delivery time					
3	Makes financial transactions easier					
4	Help to reduce errors					
5	Help in checking frauds					
6	Help in customizing solutions to fulfill clients requirements					
7	Respond to customer needs immediately					
8	Provide timely and better solutions					
9	Improve personal efficiency					
10	Make work easier					
11	Provide service with reasonable charges					
12	Provide better quality products / services					
13	Provide innovative products / services with attractive facilities					
14	Hassle free transaction					
15	Quick Connectivity					
16	Web page loads quickly					
17	Web Security					
18	Phishing Activity					
19	Usage of virtual keyboard					
20	Encryption technology					
21	Menu navigation with help					
22	Each transaction password approval by customers					
23	Fast and effortless transaction with bank					
24	Availability of sufficient guidance					
25	Access regardless of time & place					

HS - Highly Satisfied  
 S - Satisfied  
 N - Neutral  
 DS - Dissatisfied  
 HDS - Highly Dissatisfied