

A Study on E-Banking Service Quality and Customer Satisfaction

Rambabu Lavuri

Ma, Mba(Ugc - Jrf, Net), Pgdsrd-Nird, (Ph.D) Dept. Of Business Management,
Osmania University, Hyderabad
E-mail: rambabu.lavuri@gmail.com

ABSTRACT:

The paper studied that E-banking service quality on customer satisfaction and also it evaluates major EBSQ factors like Reliability, Responsiveness, Tangibility, Empathy and Accuracy on customers satisfaction. Moreover, the paper also aims to understand the correlation between respected factors towards customer satisfaction. For that a structure questionnaire was used to measure the consumer satisfaction, with sample size 427 respondents and tested via descriptive statistics, percentages ANOVAs, Correlations and Multiple regressions. For conducting customers survey likert scale based questionnaire was developed. Collecting data was analysed using principle component using SPSS 20.0. The results of the ANOVA showed that there is a significant different with EBSQ and demographical variables, and Customer satisfaction, and followed with correlation results showed that there is a strong correlation between EBSQ and Customer satisfaction and Age in years and Multiple regression results showed that Age in years, Education, Responsiveness and Reliability will have higher positive evaluation on e-banking service quality towards customer satisfaction.

Keyword: Customer, E-Banking, Reliability, Responsiveness, Tangibility, Empathy, Accuracy, service quality.

1. INTRODUCTION

Banking Services in India The banking scenario in India is of a highly developed nature, even though it is still far from

achieving world standards in terms of size, products and services. Indian banks have realized that along with organic growth there is a need to grow inorganically as well, in order to be competitive with other players in the market. In this scenario, banking has been the focus of attention for the banking industry. The emergence of new economies and their rapid growth have been the most important contributing factors in the resurgence of banking. Changing lifestyles, rapid improvements in information technology and other service sectors, as well as increasing levels of income, have contributed to the growth of banking services in countries like India that are developing at a good pace. A decade ago, the banking sector was tough on a finger tip. But now it is possible. All the bank transactions with a connection to mobile handsets technology is the latest innovation means necessary to make. In addition, SMS Banking, Mobile Banking in India, and all the modernization are the major steps taken by banks towards Internet banking and ATMs. With all these tools and systems, banking has become a complete freedom to experience. Accounting, fund transfer and payment for centuries, has been followed in physical bank check which is now modernized. But the standing for hours in front of the cash counter and time to withdraw your own money is in foundation. The Indian banks are vying with one another to grab a pie of the banking service sector which has

tremendous potential over the GDP in India. It also has its share of challenges in retaining customers, introduction of tech-savvy facilities and investments in such facilities, security concerns, Know Your Customer (KYC) norms, credit evaluation norms, etc. Concept of Service Quality Lewis and Booms (1983) had suggested that service quality results from a comparison of what customers expect from a service-provider with the provider's actual performance. According to them, "service quality is a measure of how well the service level delivered matches customer expectations. Delivering quality service means conforming to customers expectations on a consistent basis." Dimensions of Service Quality While evaluating service quality, consumers examine the following aspects: tangibility, reliability, responsiveness, assurance and empathy. Tangibility includes the service-provider's physical facilities, its equipment and appearance of the employees. Reliability is the ability of the firm to perform the service promised dependably and accurately. Responsiveness is the willingness of the firm's staff to help customer and to provide him with prompt service. Assurance refers to the knowledge and courtesy of the company's employees and their ability to inspire confidence in the customer. Empathy is caring and the individualized attention that the service firm provides to each customer. Managing Service Quality Gronross, a service marketing expert, proposed that a service firm, in order to simultaneously attain success, must develop its service quality. Firstly, it must define how the consumers perceive service quality and secondly, determine in what way service quality is

influenced. He also suggested that the functional quality is an important dimension of perceived service than the technical quality. Therefore, the essence of effectiveness in managing services lies in improving the functional quality of a firm's service by managing the buyer-seller interaction as compared to traditional marketing activities.

2. REVIEW OF LITERATURE

The study of service quality of banking services and satisfaction level of bank customer has to start with a review of earlier works conducted and theories developed in this area to give a formal design to the present task. The reviews on the banking sector and the services involved with are elaborated along with the literature studies of service quality and customer satisfaction dimensions as follows: Khan, Nisar Ahmed et al. (2005) conducted a study to examine the performance of scheduled commercial banks in general and public sector banks in particular during the post reform period. It also analyzed the performance of three categories of banks viz., public, private and foreign banks by comparing their capital adequacy, asset quality, profitability and participation in rural areas. It revealed that profitability and efficiency of these banks have improved considerably during the period, but the participation in rural areas in terms of number of offices, growth of credit, growth of deposits etc., have significantly declined during the reform period.

Krishnaveni, R. et al. (2005) analyzed the existing Indian banking scenario in the light of liberalization and globalization reforms in the country. They also studied

the perceptions of the corporate customers regarding the service quality of their bankers. The study found that there is a wide gap between the strategies followed by the Indian banks when compared to the foreign banks. The situation is same in the case of customer perceptions of service quality.

Gopalakrishnan, V (2004) has inquired the challenges of Indian financial services market. This study revealed that the entry of new foreign banks and private sector banks with their advanced knowledge base of automation in the banking operations and aggressive marketing strategies has pushed public sector banks to a tight corner. He wants the public sector banks, to survive and succeed by identifying their marketing areas, develop adequate resources, and convert these resources into healthy and efficient services and distribute them effectively satisfying the manifold tastes of customers.

Prabha, Divya et al. (2006), in their study analyzed the service quality perceptions of the corporate customers in Coimbatore regarding the services provided by their banks. For the study they considered both product and service based sectors and SERVQUAL scale based questionnaire for the survey. By this study it has been revealed that even though customers are more satisfied with the competence and customer orientation dimensions of service quality, still banks need to focus upon the aspects of communication, modernization and quickness of service.

Bhat, Mushtaq A. (2005) studied service quality perceptions of Indian banks in comparison with that of foreign banks. SERVQUAL instrument developed by Parasuraman et al. in the year 1988 and its

five dimensions such as reliability, responsiveness, empathy, assurance and tangibility were used for collecting primary data. A major finding of the study was that Indian banks fall much below the perceptions of their customers on all dimensions of service quality. Foreign banks are exceeding the perceptions of their customers on tangibility and reliability dimensions of service quality.

Krishna Chithanya, V. (2005) studied the meaning, nature and scope of financial activities in India and its features and to frame marketing strategy to attain service quality and to suggest effective channel of distribution. By this study, service quality is the difference between the perceptions of actual service quality and expectation of customers and the customer courtesy, credibility and security. It proposed a two way channel for distributing financial services such as, remote - T.V, Phone, PC etc., and face- to-face traveling, visiting offices etc.

Bauer, Hans H. et al. (2005) empirically examined characteristics of a website that transform into an extensive e-banking portals and to analyze different facets of the quality of services delivered through e-banking portals in order to process a service quality measurement model. The measurement model constructed in this study was based on different dimensions such as security and trust, basic service quality, cross-buying service quality, added value, transaction support and responsiveness. Here, the identified dimensions were classified on the basis of its nature as core services, additional services and problem solving services.

3. OBJECTIVES

Following are the objectives of the present study

- To find out the correlation between E-Banking services quality and demographical variables of customers?
- To find out the relationship between E-banking Service quality factors and customers satisfaction?

4. HYPOTHESIS

The following are the hypothesis designed with above objectives

- **HO¹:** There is no significant correlation between E-Banking services quality factors (EBSQ) and demographical variables.
- **HO²:** There is no significant impact of E-banking service quality factors on customer satisfaction

5. RESEARCH METHODOLOGY

- **Research Design:** Descriptive research

6. DISCUSSIONS

Demographic Variables: The frequency distribution of demographic variables is presented in the following table

Table-1: Demographic Analysis

Particulars	Classification	No of Responses	Percentage
Age	20-25	95	22.2
	26-30	117	27.4
	31-35	115	26.9
	36-40	75	17.6
	41 and above	25	5.9
Gender	Male	296	69.3
	Female	131	30.7
Education	SSC	34	8.0
	Intermediate	26	6.1
	Degree	183	42.9
	Pg degree	121	28.3
	PhD and above	63	14.8
Occupation	Student	54	12.6
	Govt Employee	96	22.5
	Private Employee	166	38.9

	Business	60	14.1
	Self Employed	51	11.9
Monthly income (in rupees)	Below 20,000	35	8.2
	20,001-30,000	143	33.5
	30,001 - 40,000	123	28.8
	40,001-50,000	77	18.0
	50,001 and above	49	11.5
Total		n = 427	100%

The descriptive analysis of all the demographical variables is shown in the above Table, from that more than 27% of respondents in the group of 26-30 years and 26% of respondents in the group of 31-35 years, followed by 70% of the respondents belonged male and 30% of respondents belonged female, and 42% of respondents studied Graduation and with followed 28% of respondents studied Below Post Graduation, 38% of respondents working as a Private

Employees, 22% are the Govt. Employee, and 33% of respondents earned Rs.20,001-30,000 for month and 28% of respondents earned above Rs. 30,001-40,000 respectively.

ANOVA: It is conducted in order in order to understand whether there is any significant difference in opinions of respondents on E-banking services and Service quality factors, the results are presented in the following table.

- ***Ho¹: There is no Significant Correlation Between EBSQ factors and Demographical Variables.***

Table-2: ANOVA

Demographical Variables	F	Sig.
Age in years	3.076	.000
Gender	1.275	.200
Education	1.360	.000
Occupation	.889	.003
Income in rupees	1.041	.002

It is evident that from the above table, dimensions like E-banking services, service quality factors of the F value is found to be significant, meaning there by there is significant different with demographical

variables like age, education, occupation and income in rupees. and followed with except gender, remaining all demographical variables significant different with service quality factors

- ***HO²: There is no significant affect of E-banking Service quality factors on customer satisfaction***

Table-3: ANOVA with service quality factors and E-Banking services

<i>EBSQ factors</i>	<i>F</i>	<i>Sig.</i>
Reliability	2.154	.000
Responsiveness	1.532	.002
Tangibility	1.542	.003
Empathy	1.342	.159
Accuracy	1.729	.001

It is evident that from the above table, E-Banking Service quality factors like Reliability, Responsiveness, Tangibility, Empathy and Accuracy of the F value is found to be significant, meaning there by there is significant different with Customer satisfaction, so finally there is significant different with Customer satisfaction by the E-Banking service quality.

CORRELATIONS: It is used to describe the linear relationship between two continuous variables. In general, correlation tends to be used when

there is no identified response variable. It measures the strength (qualitatively) and direction of the linear relationship between two or more variables.

In order to develop further understanding of relationships among all the Customer satisfaction and E-banking dimensions constructs, the Pearson correlation technique was calculated in the study. Numerical values of the correlation coefficients reflect the degree of association between each of the Customer satisfaction dimensions constructs.

Table-4: Correlations

	Age In Years	Gender	Education	Occupation	Income In Rupees	EBSQ	Customer satisfaction
Age in Years	1	.225**	.154**	-.374**	.145	.276**	.211
Gender	.225**	1	.244**	.021	-.122*	.241	.140
Education	.154**	.244**	1	.015	.252**	.192	.212
Occupation	-.374**	.021	.015	1	.200**	.235	.252
Income in Rupees	.145	-.122*	.252**	.200**	1	.100*	.121
EBSQ	.276**	.241	.192	.135	.100*	1	.282
Customer satisfaction	.211	.140	.212	.252**	.121	.282	1

EBSQ: E-Banking service quality

From below Table, correlation results show that there is a strong correlation between EBSQ and Customer satisfaction ($r = 0.282$) at the 1 per cent significance level and between EBSQ and Age in years ($r = 0.276$).

MULTIPLE REGRESSION:

MULTIPLE REGRESSION: Multiple regression analysis is a set of statistical processes for estimating the relationships among variables. it helps to understand how the typical value of the dependent variable changes when any one of the independent variables is varied, while the

other independent variables are held fixed. It also helps to determine the overall fit of the model and the relative contribution of each of the predictors to the total variance

explained. So In order to understand relationships between the E-Banking service quality and demographical variables, Customer satisfaction.

- ***Ho¹: There is no Significant Correlation Between EBSQ factors and Demographical Variables.***

Table-5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
1	.242 ^a	.059	.048	.30589	5.249	.000 ^b

a. Predictors: (Constant), income in rupees, age in years, gender, education, Occupation

From the above table, it reveals that R2 value is found to be 0.059, meaning there by that 59% of the variation in dependent variable is explained by predictors. Since the F value is found to be significant, the

null hypothesis is rejected and the alternative is accepted , meaning thereby that there is a significant difference in the variation caused by predictors towards E-banking services.

Table-6: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.489	.100		34.998	.000
	Age in years	.092	.054	.234	4.421	.000
	Gender	.041	.034	.060	1.200	.001
	Education	.066	.045	.088	1.724	.004
	Occupation	-.039	.024	-.071	-1.357	.076
	Income in rupees	.045	.024	.092	1.816	.070

a. Dependent Variable: E-banking service quality

From the Table, it is evident that Age in years (.092) emerged as the most important demographic variable, followed with Education (.066). It concluded that higher education qualification of

respondents will have higher positive evaluation on e- banking service quality, and also results shown that there is negative impact of Occupation with E-banking service quality,

- ***HO²: There is no significant impact of E-banking service quality factors on customer satisfaction***

Table-7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
1	.300 ^a	.090	.079	.30073	8.344	.000 ^b

a. Predictors: (Constant), Accuracy, Reliability, Responsiveness, Empathy, Tangibility

From the above table, it reveals that R2 value is found to be 0.090, meaning there by that 90% of the variation in dependent variable is explained by predictors. Since the F value is found to be significant, the

null hypothesis is rejected and the alternative is accepted, meaning thereby that there is a significant difference in the variation caused by predictors towards E-banking services.

Table-8: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.415	.209		16.355	.000
	Reliability	.098	.029	.161	3.332	.001
	Responsiveness	.170	.035	.239	4.856	.000
	Tangibility	-.035	-.027	.064	-1.288	.019
	Empathy	.075	.028	.129	2.703	.007
	Accuracy	-.022	.030	-.035	-.728	.002

a. Dependent Variable: Customer satisfaction

From the Table 8, it is evident that Responsiveness (.170) emerged as the most important EBSQ factor, followed with Reliability (.098). It concluded that higher Responsiveness of EBSQ will have higher positive affecting on Customer satisfaction. And also results shown that there is negative impact of Tangibility of EBSQ.

7. CONCLUSIONS

The present paper studied that customer satisfaction through better service quality provided by E-banks, there are two major objective and data collected with through questionnaire. It was analysed by the percentages, ANOVAs, Correlation and multiple regression. As per the results 27%

of respondents in the group of 26-30 years and 26% of respondents in the group of 31-35 years, followed by 70% of the respondents belonged male and 30% of respondents belonged female, and 42% of respondents studied Graduation and with followed 28% of respondents studied Below Post Graduation, 38% of respondents working as a Private Employees, 22% are the Govt. Employee, and 33% of respondents earned Rs.20,001-30,000 for month and 28% of respondents earned above Rs. 30,001-40,000. followed with the results of the ANOVA showed that there is a significant different with EBSQ and demographical variables, and Customer satisfaction, and followed with correlation results showed that there is a strong correlation between

EBSQ and Customer satisfaction ($r = 0.282$) and Age in years ($r = 0.276$) and Multiple regression results showed that Age in years (.092), Education (.066) Responsiveness (.170) and Reliability (.098). will have higher positive evaluation on e- banking service quality towards customer satisfaction.

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