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## EVALUATION OF CUSTOMER SATISFACTION-SERQUAL SCALE

SNEHA DAS\*, SAURABH KESWANI, KAIWALYA JOSHI AND AMIT MEENA

Symbiosis Institute of Business Management, Symbiosis International (Deemed University),  
Pune, India

\*Corresponding Author: E Mail: [Punesaurabh.keswani.mba22@associates.sibmpune.edu.in](mailto:Punesaurabh.keswani.mba22@associates.sibmpune.edu.in)

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### ABSTRACT

Today's world is one with increasing online access to services. One part of this which is growing rapidly is online banking. Customer satisfaction is imperative for the incessant survival of any organization around the world. Purpose – This study aims to provide an analysis of the customer attitude and customer satisfaction toward three banking services technologies namely, automated teller machines (ATMs), mobile banking and internet (online) banking. The study started by conducting an correlation and Regression analysis, on the valid responses received from a convenience sample of bank customers. This research work intends to investigate the impact of E-banking variables on Customer Attitude and customer satisfaction in Nagpur District. Data has been gathered through questionnaire from 200 E-banking users as respondents, from different region in Nagpur district. Results of the study have revealed that there is momentous relationship between service quality dimensions and customer satisfaction in E-banking in Nagpur District. Through this study we can conclude that service quality in E- quality dimensions have a significant impact on the customer satisfaction of internet banking customers. Each of the dimension namely efficiency, system availability, fulfillment, privacy, e contact, responsiveness and contact individually contribute 70% to the overall customer satisfaction in internet banking.

**Keywords: E-banking Services Quality, Customer Satisfaction, Customer Attitude**

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## I. INTRODUCTION

Technology has played a vital role in today's world. Internet has made this world a Global village and the same has revolutionized the banking industry. Conversion from the manual based ledger system to systemized processes and the overture to internet based facilities has given a new facet to the banking sector. The competition in banking sector augmented over the last few years and to stay competitive, banks are espousing novel tools and techniques to attain customer retention and satisfaction and E- Banking is one tool towards it.

### A. Definition

"E-banking is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels. E-banking is of paramount significance in meeting user anticipations. Customer satisfaction leading to gain loyal customers can be achieved by delivering high quality services. The rest of the world, Asian consumers are on the quick move to digital banking. There are no doubts that automation of banking procedures has unlocked new door of prospects for banking sector in Nagpur District. The main Endeavour of this article is to study the relative importance of service characteristics,

identified through customer satisfaction that are needed to be ensured by the provider of e-banking facility in gaining customer satisfaction in Nagpur District.

### B. Concept of Customer Satisfaction

Internet banking is an electronic payment system that enables customers of a financial institution to conduct financial transactions on a website operated by the institution, such as a retail bank, virtual bank, credit union or building society. Online banking is also referred as Internet banking, e-banking, virtual banking and by some other terms. This new channel has added a new dimension to the concept of customer satisfaction and how it can be affected in a positive way. All organizations exist and strive to become an integral part of the lives of their customers and therefore always strive harder to keep satisfying their customers through better channels of delivering their offerings.

### C. Measurement of service quality

There are many factors which have an impact on customer satisfaction, one of the most important being service quality. Due to the varying nature of the products offered in manufacturing sector and in the services sector the definition and measurement of service quality, it was seen could not be the same for both. Especially, in the present era,

with the emergence of internet as a major channel of service delivery, the need for a scale to measure the service quality in electronic media of services was felt strongly. Hence, service quality was taken up by the research scholars specifically in terms of the e- services which lead to the development of various models that helped in measuring e-service quality in the services sector.

#### **D. Consumer attitudes**

Consumer attitudes toward the usefulness of and willingness to use Internet e-retail banking were identified and measured. The customers' attitude toward various bank technologies is not the same and is influenced by different factors.

## **II. REVIEW OF LITERATURE**

Goudarzi (2013) provide an overview of the extant research into the relationships between trust and Internet banking adoption as perceived by banks' customers. They covered empirical studies on the factors of trust and the adoption of Internet banking. Hanafizadeh, Keating (2014) focused on Internet banking adoption. Their findings revealed that interest in the topic of Internet banking adoption had grown significantly. Keskar and Pandey (2018) identify relevant works in Internet banking between 2002 and 2016. Their findings indicate that issues such

as cyber-security, trust, and web-design and their effects on customer loyalty, customer retention, and customer satisfaction have not been investigated in depth. The major limitation of the study is that the authors failed to present the antecedents of customer satisfaction in the Internet banking literature. Thus, this literature review aims to fill this gap in our current knowledge about the antecedents predicting customer satisfaction in Internet banking.

## **III. E-SERVICE QUALITY AND INTERNET BANKING**

As the channels of service delivery shifted from traditional to electronic, the need for a scale to measure the e-service quality was felt. Scale was based on twelve dimensions namely: informational fit to task, interaction, trust, response time, design, intuitiveness, visual appeal, innovativeness, flow, emotional appeal, integrated communication, business processes, and substitutability. The researchers have tried to use the conventional e-service quality models for the measurement of service quality in internet banking.

#### **A. E- Banking Services**

- Efficiency
- System Availability
- Fulfillment
- Privacy
- Contact

➤ Responsiveness

➤ Website Design

### **B. Bill Payment Service**

Almost all banks have tie-ups with various utility companies, service providers and insurance companies, across the country. One can facilitate payment of electricity and telephone bills, mobile phone, credit card and insurance premium bills. To pay bills, all we need to do is complete a simple one-time registration for each biller. We can also set up standing instructions online to pay your recurring bills, automatically.

### **C. Fund transfer**

One can transfer any amount from one account to another of the same or any another bank. Customers can send money anywhere in India. Once we login to our account, we need to mention the payees' account number, his bank and the branch. The transfer will take place in a day or so, whereas in a traditional method, it takes about three working days.

### **D. Credit Card With Internet Banking**

Customer's Credit card users have a lot in store. With Internet banking, customers can not only pay their credit card bills online but also get a loan on their cards. Not just this, they can also apply for an additional card, request a credit line increase and we can forbid if we lose our credit card, we can

report lost card online.

### **D. Railway Pass**

Indian Railways has tied up with ICICI bank and we can now make our railway pass for local trains online. The pass will be delivered to us at our doorstep. But the facility is limited to Mumbai, Thane, Nashik, Surat and Pune. The bank charge quite nominal service tax for these services.

### **E. Investing Through Internet Banking**

Opening a fixed deposit account cannot get easier than this. One can now open an FD online through funds transfer. Online banking can also be a great friend for lazy investors. Now investors with interlinked demat account and bank account can easily trade in the stock market and the amount will be automatically debited from their respective bank accounts and the shares will be credited in their demat account. Moreover, some banks even give the facility to purchase mutual funds directly from the online banking system.

### **F. Recharging Your Prepaid Phone**

Now there is no need to rush to the vendor to recharge prepaid phone, every time when talk time runs out. We just need to top-up our prepaid mobile cards by logging in to Internet banking. By just selecting our operator's name, entering our mobile number and the amount for recharge, our phone is

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again back in action within few minutes.

### **G. Shopping at Your Fingertips**

Leading banks have tie ups with various shopping websites. With a range of all kind of products, we can shop online and the payment is also made conveniently through our account. We can also buy railway and air tickets through Internet banking.

### **H. E-Service Quality and Customer Satisfaction**

Customer Satisfaction is a phenomenon of particular importance in the evaluation process of a shopping, consumption, or product or service usage experience and is therefore vital in long term consumer responses. Oliver defined customer satisfaction as a judgment that a product or service feature, or the product or service itself, provide a pleasurable level of consumption related fulfillment, including levels of under or over fulfillment.

### **I. Company To Improve Reputation & Image**

Customer satisfaction is considered to be one of the most important competitive factors and as the best indicator of a company's profitability. Additionally, customer satisfaction will impel company to improve their reputation and image, to reduce customer defection, and enhance attention towards the customer needs. This will lead to

creation of barriers to switching, and improvement in business relationships with their customers.

### **J. Quality Services Boost Customer Satisfaction**

Service quality has been recognized as a dominant factor in keeping competitive advantage and sustaining satisfying relationships with customers. Service quality is one of the factors contributing to customers' satisfaction judgments. Service quality in banking websites may boost customer satisfaction because in internet banking a customer can access a variety of financial transaction. They found that e-service quality dimension: efficiency, interactivity, security, information, ease of use and content were the key factors to affect customer satisfaction in the e-banking service.

### **K. Determine Customers Satisfaction**

The attributes of e-service quality which predict customer satisfaction, tried to determine if satisfied customers use more online banking features than less satisfied customers and also tried to identify characteristics of less satisfied customers. They found that satisfaction could be generated by improving courtesy, content, timeliness and product and services offered. The services offered being the most

important factor in driving internet banking satisfaction.

#### L. Internet Banking

- **Efficiency:** The ease and speed of accessing and using the site.
- **Fulfillment:** The extent to which the site's promises about order delivery and item availability are fulfilled.
- **System availability:** The correct technical functioning of the site.
- **Privacy:** The degree to which the site is safe and protects customer information.
- **Responsiveness:** Effective handling of problems and returns through the site.
- **Website design:** The degree of ease of navigating through and using the website. Which the site compensates customers for problems.
- **Contact:** The availability of assistance through telephone or online representatives.
- **Dimensions:** a framework was developed for the present study, to develop the relationship between E-service quality in Internet Banking and customer satisfaction.

### III. STATEMENT OF THE PROBLEM

Earlier while traditional banking was the only option, the customers had to go to the bank in person to conduct any banking transaction such as money transfer, withdrawal, deposits etc. Then emerged the

concept of Electronic banking which provides various services to the customer's satisfaction. Electronic banking services include Internet banking, Automated Teller Machines, Debit/Credit cards, e-cheque, smart cards, RTGS, NEFT etc. These services help to manage and use one's bank account such as verifying balance of the accounts, transfer of money from one person to another.

### IV. SCOPE OF THE STUDY

The study helps in knowing how far the modern banking services are used by the customers. The study further extends and helps to develop an increasing association with the customer's satisfaction through modern Technology services. Today the customer demands the banking services for 24 hours. In the modern age, the entire banking structure has been changed due to widespread internet technology. Now all the aspects of economy such as commerce, trade, import, export, purchase and sale of goods is relying upon electronic banking services. Future research can be done in analyzing the comparative performance of E-Banking services provided by private sector as well as public sector banks. The study has been done on the usage of these services by the customer's satisfaction.

### V. OBJECTIVES

➤ To Identify the Various Dimensions of Internet Banking Service Quality in Nagpur District.

➤ To Examine the Relationship Between the Customer Satisfaction and the Various Internet Banking Service Quality Dimensions in Nagpur District.

➤ To Study the Impact of the Internet Banking Service Quality Dimensions on the satisfaction of customers & Customer Attitude in Nagpur District.

#### **SAMPLING SIZE**

The samples of the survey were people living in Nagpur District that have been users of Internet Banking system of SBI and Indian bank for at least one year. This ensured that all respondents had sufficient experience in internet banking. The resulting sample (valid) comprised of 194 valid questionnaires out of 200 people that were asked to participate in the survey.

#### **SAMPLING DESIGN**

The man of science should decide the approach of choosing a sample or what's popularly referred to as sample style. Samples may be either chance samples or non-probability samples. In this study, we used non-probability samples.

#### **SAMPLING TECHNIQUE**

The convenient sampling method is used in our study. When population parts area unit

designated for inclusion within the sample supported the convenience of access, it can be called as convenient sampling.

#### **PERIOD OF THE STUDY**

The study has been conducted for a period of one year from January 2020 – Dec 2020.

#### **AREA OF THE STUDY**

The study has been undertaken only in Nagpur District.

#### **SOURCE OF DATA COLLECTION**

The data required for the study is collected from both primary data and secondary data.

#### **PRIMARY DATA**

Questionnaire is main tool for collecting primary data. Questionnaire has been designed in a systematic manner covering adequate and relevant questions which covers all aspects of the study. It is the foremost extensively used methodology in varied economic and business surveys.

#### **SECONDARY DATA**

The background of the present study was collected from various sources which include Books, journals, website and other related research work.

#### **V. HYPOTHESIS**

From the above objectives the following set of hypothesis were framed:

**H1:** Efficiency has a significant positive association with on Customer Satisfaction

**H2:** System availability has a significant

positive association with Customer Satisfaction

**H3:** Fulfillment has a significant positive association with Customer Satisfaction

**H4:** Privacy has a significant positive association with Customer Satisfaction

**H5:** Responsiveness has a significant positive association with Customer Satisfaction

**H6:** Website design has a significant positive association with Customer Satisfaction

**H7:** Contact has a significant positive association with Customer Satisfaction

## VI. DATA COLLECTION AND METHODS

- **Customer demographics:** The questions in this section were related to gender, age and education.
- **E-S-QUAL scale:** Respondents in this section rated the Web site's performance on each scale item using a 5-point scale (1=strongly disagree, 5=strongly agree).
- **E-RecS-QUAL scale:** Respondents in this section rated the Web site's performance on each scale item using a 5-point scale (1=strongly disagree, 5=strongly agree).
- **Customer satisfaction:** Respondents in this section were asked to rate their satisfaction level with the E-Service quality of the banks using a 5-point scale. (1=strongly disagree, 5=strongly agree).

## VII. DATA ANALYSIS

The Data collected through questionnaires was analyzed by testing it through Correlation and regression analysis. Before conducting correlation on the data collected, it was put to descriptive analysis to reveal the demographic characteristics of the respondents.

From the **Tables 1 and 2**, social-demographic characteristics of respondents indicate that majority of the respondents who used internet banking is less than 25 years of age representing 61.9 percent. The users of internet banking were mostly students, followed by the employees from the private sector, while as the self-employed people and the ones employed in public sector used internet banking the least. The majority of the users were males numbering 37 representing 58.7 percent while only 26 representing 41.3 percent were females. In terms of educational attainment, a great majority of them, that is 44 respondents representing 69.8 percent have were postgraduates, while only 30 percent were undergraduates. These findings indicate that internet banking users are mostly young males and are mostly individuals with a good level of educational attainment.

Table 1: Demographic Characteristics of Respondents

	variables	Frequency	Percent	Valid percent	Cumulative percent
<b>Occupation</b>	Public Sector	38	19.6	19.6	19.6
	Valid Private sector	41	21.1	21.1	40.7
	Business	5	2.6	2.6	43.3
	Student	110	56.7	56.7	100.0
	Total	194	100.0	100.0	
<b>Age</b>	<20 years	2	1.0	1.0	1.0
	Valid 20-29 years	131	67.5	67.5	68.6
	30-39 Years	40	20.6	20.6	89.2
	40 and above	21	10.8	10.8	100.0
	Total	194	100.0	100.0	
<b>Gender</b>	Male	111	57.2	57.2	57.2
	Valid Female	83	42.8	42.8	100.0
	Total	194	100.0	100.0	
<b>Education</b>	Secondary higher secondary	2	1.0	1.0	1.0
	valid Graduation	44	22.7	22.7	23.7
	Post- graduation	129	66.5	66.5	90.2
	Others	19	9.8	9.8	100.0
	Total	194	100.0	100.0	
<b>Residential Area</b>	Urban	164	84.5	84.5	84.5
	valid Semi urban	19	9.8	9.8	94.3
	Rural	11	5.7	5.7	100.0
	Total	194	100.0	100.0	
<b>Annual Income</b>	<200000	73	37.6	37.6	37.6
	Valid 200000-400000	46	23.7	23.7	61.3
	400000-600000	33	17.0	17.0	78.4
	>600000	42	21.6	21.6	100.0
	Total	194	100.0	100.0	

Table 2: Correlations

		Correlation & Co-efficient	EFF	SA	FUL	PRI	RES	CON	WD	CS
Spearman's rho	EFF	Correlation Coefficient	1.000	0.662**	0.634**	0.519**	0.603**	0.418**	0.565**	0.706**
	SA	Correlation Coefficient	0.662**	1.000	0.625**	0.429**	0.591**	0.500**	0.550**	0.628**
	FUL	Correlation Coefficient	0.634**	0.625*	1.000**	0.488**	0.599**	0.478**	0.596**	0.649**
	PRI	Correlation Coefficient	0.519**	0.429**	0.488**	1.000	0.458**	0.479**	0.432**	0.679**
	RES	Correlation Coefficient	0.603**	0.591**	0.599**	0.458**	1.000	0.634**	0.644**	0.663**
	CON	Correlation Coefficient	0.418**	0.500**	0.478**	0.479**	0.634**	1.000	0.524**	0.541**
	WD	Correlation Coefficient	0.565**	0.550**	0.596**	0.432**	0.644**	0.524**	1.000	0.703**
	CS	Correlation Coefficient	.706**	0.628*	0.649**	0.679**	0.663**	0.541**	0.703**	1.000

\*\* Correlation is significant at the 0.01 level ( 2- tailed)

The correlation analysis showed the various relationships that exist between various service quality dimensions and customer satisfaction in internet banking. The detailed analysis of the correlation matrix is as follows:

### **VIII. EFFICIENCY AND CUSTOMER SATISFACTION**

The first variable according to frame of reference discussed in this research is the efficiency of internet system, which refers to the ease of getting into the website of the bank and finding their required products and services associated with it. Analysis of correlation matrix shows that the correlation between efficiency and customer satisfaction is estimated to be 0.706]. This value indicates that there is a very significant and positive correlation between the variables at 70%. This is the most highly correlated dimension with customer satisfaction. The result confirms hypothesis1 which proposed a positive significant relation between efficiency and customer satisfaction, the correlation exists at a confidence level of 0.01.

#### **A. System Availability And Customer Satisfaction**

System availability refers to the correct technical functioning of the site. Analysis of correlation matrix shows that the value of

correlation between system availability and customer satisfaction is 0.628. This value indicates that there exists a significant and positive relation between the two which implying a strong relation between the two. The result obtained, which shows a positive relation between the two at confidence level of 99%, confirms hypothesis 2 which stated that there exists a positive significant relation between system availability and customer satisfaction.

#### **B. Fulfilment And Customer Satisfaction**

Fulfillment is the extent to which the site's promises about order delivery and item availability are fulfilled. Analysis has shown that the value of correlation is 0.649 which indicates that there is a positive and significant relationship between fulfillment and customer satisfaction. This confirms hypothesis 3 at a significance level of 0.01.

#### **C. Privacy And Customer Satisfaction**

Privacy is the major issue that the banks are now-a-days facing. Privacy includes providing security regarding their personal information, data should not be shared and credit card information should be kept secure. The study shows that privacy and customer satisfaction are positively correlated with each other with the value of correlation being 0.679, revealing a positive and significant correlation, hence confirming hypothesis 4.

**D. Responsiveness And Customer Satisfaction**

Responsiveness refers to the customers' representative services offered to fulfill their requirement, handle their queries and solve complaints etc. customer representative services are very attractive and helpful in solving their problems. It also involves the timeliness i.e. prompt action to the customers' complaints, mailing transactions slips immediately and calling the customer back quickly in order to resolve their matter. Analysis shows that the value of correlation is 0.663 indicating that there is a strong positive relationship between responsiveness and customer satisfaction indicating that as the responsiveness goes higher the customer satisfaction too goes in that higher direction. Confirming hypothesis 5, the relationship between the two dimensions is significant at 0.01.

**E. Contact And Customer Satisfaction**

The availability of assistance through telephone or online representatives. This dimension has the strongest correlation with customer satisfaction according to the analysis above. The value of correlation between the two is 0.541, which means that the customer are highly satisfied with this dimension and as better contact is established between the bank and the customers the customer satisfaction goes higher significantly. Thus, accepting hypothesis 6 which proposed a positive significant relation between contact and customer satisfaction.

**F. Website design and customer satisfaction**

The degree of ease of navigating through and using the website which the site compensates customers for problems. According to the correlation matrix, there is a significant and strongly positive relationship between website design and the customer satisfaction in internet banking. Website design has a correlation of 0.704 with customer satisfaction, significant at 0.01, hence confirming hypothesis 7, which proposed the same.

**G. Regression**

The data was also analyzed through regression analysis. Regression analyses helped to understand the impact of the e-service quality dimension on customer satisfaction. The regression analysis results are as follows.

The values of the coefficients in the above **Table 3** reveal the dimensions which have the most and the least impact on the customer satisfaction through the p value that exists for each of them. The analyses reveals that efficiency, privacy and website design have the highest impact on customer satisfaction as the value of p is less than 0.05 for all the three dimensions. Hence, it's concluded that these dimensions namely, that efficiency, privacy and website design contribute most highly towards customer satisfaction.

Table 3: Dependent Variable

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.421	.217		-1.942	.054
	EFF	.248	.070	.224	3.534	.001
	SA	.084	.061	.085	1.374	.171
	FUL	.095	.064	.089	1.480	.141
	PRI	.316	.056	.275	5.606	.000
	RES	.089	.054	.101	1.666	.097
	CON	7.332E-005	.040	.000	.002	.999
	WD	.281	.054	.292	5.213	.000

a. Dependent Variable: CS

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.845a	.715	.704	.34272

a. Predictors: (Constant (WD, PRI, CON, SA, FUL, RESEFF); Dependent Variable: CS

The value of R square at 0.715 shows that the 71% of the variation in the customer satisfaction can be attributed to the e-service quality dimensions while as the other 29.5% of the satisfaction is due to factors other than the e-service quality of the banks. Hence it is clear by the above results that internet banking service quality does have an impact on the customer satisfaction in internet banking in Nagpur District.

### IX. LIMITATIONS OF THE STUDY

Every research is carry out under some limit and this research is not an exemption. Limitation of the study are summarized as follows,

- The sample size of only 200 respondents was taken from the large population of Nagpur District.
- The inferences apply only to the respondents of Nagpur District. It is not

applicable to any other place in Maharashtra.

### X. Findings of The Study

- It's concluded that these dimensions namely, that efficiency, privacy and website design contribute most highly towards customer satisfaction.
- These findings indicate that internet banking users are mostly young males and are mostly individuals with a good level of educational attainment.
- It is clear by the above results that internet banking service quality does have an impact on the customer satisfaction in internet banking in Nagpur District.

### XI. Suggestions of The Study

- There is lack of awareness about E-Banking usage among rural people.
- Banks should take necessary steps to create awareness among them about the various services of E-Banking that are available and also the advantages of using such services.

- Demonstration of E-Banking should be provided to the customers to promote Electronic banking. The banks should focus on the security issues regarding the confidential credentials which are under the risk of hacking in the cyber world.
- The cost involved in using the Internet Banking services can be minimized in order to increase the number of users of Internet banking.
- The E-Banking system should be enhanced to make online enquiry and online payment much easier to the customers.

## XII. CONCLUSION

This research paper aims to make an original contribution to the existing knowledge by investigating the impact of internet banking service quality on customer satisfaction and customer attitude in Chennai District. The capital city of Maharashtra has various dimensions of the internet banking service quality that were taken into consideration while making the study were: Efficiency, System Availability, Fulfillments, Responsiveness, Privacy, Contact and website design. The study revealed that efficiency, privacy and website design are the major integral determinants of internet banking services quality. The empirical results show that there is a direct relationship between internet banking service quality

dimensions and customer satisfaction in the banking industry. An understanding of the factors, revealed in the study, allows bank managers and policy makers to undeviating efforts and resources most effectively and efficiently to increase the bank business in the long run and encourage new customers to adopt internet banking and to retain the existing ones.

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