

# RELATIVE IMPORTANCE OF SERVICE QUALITY DIMENSIONS AND THEIR IMPACT ON CUSTOMER SATISFACTION IN PUBLIC SECTOR BANKS FROM NORTHERN INDIA

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## ABSTRACT

*The study aims to extract the service quality factors influencing customer satisfaction of Internet banking users. An attempt has also been made to analyze the impact of service quality factors on overall customer satisfaction with context to public sector banks in Northern India. The data has been collected in the months of January-March 2017 from 250 customers of public sector banks in five states of Northern India. Factor analysis and Multiple Regression techniques have been applied to analyze data and extract results. The study has come up with ten service quality factors named accessibility, ease of use, cost, communication, courtesy, reliability, product portfolio, security, assurance and website characteristics. A customer satisfaction model has been developed which depicts that out of the ten service quality factors, three factors named accessibility, reliability and security have positive and significant contribution towards overall customer satisfaction in public sector banks of Northern India. The results of this study have practical implication for bankers as they can plan their strategies accordingly to improve the quality of Internet banking services by considering the important service quality factors and consequently improve overall customer satisfaction.*

**Keywords:** customer satisfaction, internet banking, service quality, reliability, convenience.

## INTRODUCTION:

Research on customer satisfaction is often closely associated with the measurement of quality (East, 1997). Customer satisfaction often depends on the quality of product or service offering (Anderson & Sullivan, 1993); (Levesque & McDougall, 1996). Service quality and customer satisfaction are inarguably be two core concepts that are at the crux of marketing theory and practice (Spreng & Mackoy, 1996). (Parasuraman et al., 1988) defined service quality as "a global judgment or attitude, relating to the overall superiority of the service". Service quality has been described in the form of attitude that results from the comparison of expectations with performance (Cronin & Taylor, 1992); (Parasuraman et al., 1985). (Sureshchander et al., 2001) identified five factors of service quality as critical from customers' point of view. These factors are namely core service or service products, human elements of service delivery, systematization of service delivery. (Yang et al., 2004) identified five online service quality dimensions such as responsiveness, reliability, competence, access and security. In today's world of intense competition, the key to sustainable competitive advantage lies in delivering high quality service that will in turn result in satisfying customers (Shemwell et al., 1998). Now due to the globalization and technological advancements, banks are also bestowing many new and advanced facilities/services to their customers to fulfill their needs as per their expectations. The advanced way of providing services to the banking customers is electronic banking. The various services through electronic banking are Internet banking, Electronic Fund Transfer (EFT), Electronic Clearing Services (ECS), ATMs, National Electronic Fund Transfer (NEFT) system and card based payment systems. Internet banking is the major focus of modern banking system which has resulted in increasing number of customers switching from traditional banking to such banking channel which can be accessed through Internet. It is important for the banks to recognize the importance of improving Internet banking services so that existing customers can receive desired level of service quality and at the same time newer customers can also be attracted also.

A thorough review of literature on customer satisfaction in banking industry has shown that there are very less studies which could analyze the customer satisfaction due to Internet banking operations in Northern India. Accordingly, the researcher has conducted this study to fill the research gap relating to the analysis of customer satisfaction with regard to Internet banking operations in Northern India.

## LITERATURE REVIEW:

(Liao & Cheung, 2002) in their study titled 'Internet Based e-Banking and Consumer Attitudes: An Empirical Study' identified and measured the consumers' attitude towards and willingness to use internet based e-banking. The analysis showed that expectations of accuracy, security, network speed, user-friendliness, user involvement and convenience were the most important quality attributes underlying perceived usefulness (Verma & Sehdev, 2004) in their paper titled 'Relative Importance of Service Quality Dimensions: A Multi-Sectoral Study' attempted to explore relative importance of service quality dimensions out of the five quality dimensions named responsiveness, reliability, empathy, tangibility and assurance. Three methods named zone of tolerance, regression and direct evaluation were used to find the relative importance of service attributes and to establish consistency in their order of importance. It was found that in banking, assurance came at the first place, then responsiveness at the second place, followed by reliability, empathy and tangibility in the order of importance. It was observed that the perceived performance was below the 'adequate' level of performance in the four i.e. reliability, responsiveness, assurance and empathy of the five service dimensions It was also found that banks performed better in case of tangibility dimensions. (Qureshi et al., 2008) in their article titled 'Customer Acceptance of Online Banking in Developing Economies' conducted a study in Pakistan. The study concluded that majority of customers were accepting online banking culture because of the favourable factors. The study revealed that almost 50% of the clients shifted from traditional banking to online banking system. The core reason of this transfer was usefulness, security and privacy provided by online banking. The other factor of this shift was the stature of information provided to the customers by different means like advertisement through print and electronic media about online banking. Finally, the results of study found that security and privacy provided by online banking system offered entertaining environment to its customers. It was also found that by increasing one unit of perceived enjoyment, customer acceptance can also be increased which means this variable has an impact on customers' acceptance of online banking. (Singhal & Padhmanabhan, 2008) in their study titled 'A Study on Customer Perception towards Internet banking: Identifying Major Contributing Factors' explored the major factors responsible for Internet banking based on respondents perception on various Internet applications. The study also tried to examine whether there was any relation with the demographic variable (e.g. gender) and respondents' perception about internet banking and whether there was difference between user and

non-user perception. The major five independent set of factors associated with the internet banking features were extracted from the factor analysis, which were utility request, security, utility, ticket booking and fund transfer. Khan et al., (2009) in their study titled 'Service Quality Evaluations in Internet Banking: An Empirical Study in India' identified six quality dimensions viz. reliability, accessibility, user-friendliness, privacy/security, responsiveness and fulfillment. The study showed that customers were satisfied with quality of service on five dimensions such as reliability, accessibility, privacy/security, responsiveness and fulfillment. They were least satisfied with user-friendly dimension. (Khurana, 2009) in her study titled 'Managing Service Quality: An Empirical Study on Internet Banking' identified the customer preferences towards Internet banking and aimed to fulfill the objective of various service quality dimensions that affect customer satisfaction in Internet banking. The perception of Internet banking users was studied through the relationship between demographic characteristics of users along with the five independent factors such as responsiveness, reliability, efficiency, privacy of information and easiness to use. It was suggested that banks should take important steps to make their websites more reliable and more responsive to give more value and satisfaction to customers. (Hazra & Srivastava, 2009) in their paper titled 'Impact of Service Quality on Customer Loyalty, Commitment and Trust in the Indian Banking Sector' carried out the study by collecting data from 300 customers of public sector banks and private sector banks using structured interview schedules. The results showed that the dimensions of service quality such as assurance-empathy, reliability and tangibles significantly predict customer trust and commitment. The results indicated that service quality was positively associated with customer loyalty. It was found that private bank customers are more committed and loyal as they receive better quality of service. It was suggested that public sector banks should try to provide better services to win customers' loyalty and commitment. (Nupur, 2010) for his study titled 'e-Banking and Customers' Satisfaction in Bangladesh: An Analysis' collected data from 250 customers between 2006 to November, 2009. The purpose of this research was to understand the impact of variables of e-banking on customer satisfaction in Bangladesh. Five service quality dimensions namely reliability, responsiveness, assurance, empathy and tangibility were established on the basis of SERVQUAL model and literature review. The study showed that these five factors were the core service quality dimensions for customer satisfaction in e-banking. The study also explored that reliability, responsiveness and assurance had more contribution to satisfy the customers of e-banking in Bangladesh. (Akram & Asghar, 2012) in their paper titled 'An Empirical Analysis of Customer Satisfaction on Adoption of Internet Banking in Pakistan' analyzed the relationship between customer satisfaction and adoption of online banking in Pakistan. The variables such as technology, ease of use, web design, security, speed, information content, interaction with online banking, quick response and satisfaction were taken for the purpose of study. It was found that security was the main problem in online banking because there was a chance of being hacked and there was no privacy. Along with it, speed was also found to be another problem since some customers had problems in connection, page loading speed, login and logout time. Quick response and personal contact were found to be significant for establishing good relationship and gaining trust. (Alam & Soni, 2012) conducted a study titled 'Customer Satisfaction of Internet Banking and Theory of Big Push: an Analytical Study with Special Reference to Selected Customers in Vadodara City', the purpose of which was to find out the satisfaction of Internet banking users which led to make more loyal customer. The study found that satisfaction of Internet banking users depended upon reliability, responsiveness, security, ease of use and tangibility. (Sharma & Malviya, 2014) in their paper titled "Internet Banking Service Quality and its Impact on Customer Satisfaction in Indore District of Madhya Pradesh" had studied various factors for betterment of banking service quality. In this study, the main objective was to explore and analyze customer satisfaction with the help of multi regression statistical techniques and to measure relation between service quality and customer retention. It was found that confidence and responsiveness also played a huge role in customer satisfaction apart from significant factors like comfort and accessibility. (Abbas, 2015) in their paper titled "Internet banking services quality and its impact upon customer satisfaction in Pakistan" had evaluated the banking performance. The main objective of the study was to provide efficient and effective services and to determine and measure the relationship between internet banking and customer satisfaction. In this study, deductive approach and close ended questionnaire was used. The number of respondents was 400 and random sampling method was used to collect the data. The study had elaborated positive relationship between E- banking and customer satisfaction. It was found that banks should provide more effective and interactive services to ensure better customer awareness. (al, 2016) in their paper titled "Understanding customer satisfaction of internet banking: A case study in Malacca" studied the customer satisfaction of internet banking. The major purpose of this research was to search and examine the factors which influence the customer satisfaction towards internet banking. The survey was done on 200 people. The five factors named service quality, web design & content, security & privacy,

convenience and speed were taken. It was found that these five factors were closely linked to the customer satisfaction towards internet banking. The web design & content, convenience and speed were found to be the top three factors which had huge impact on customer satisfaction.

## **METHODOLOGY:**

### **Research Objectives:**

1. Extraction of service quality factors influencing the Internet banking users of Northern India.
2. To analyze the relationship between service quality factors and overall customer satisfaction in regard to public sector banks.
3. To analyze relative importance of service quality factors impacting the customer satisfaction level of internet banking users.

**Null Hypothesis:** There is no significant relation between service quality factors and customer satisfaction.

## **METHODS:**

Relevant to the objectives of this research, the related data has been obtained from secondary as well as primary sources. The various secondary information sources used for the present research include various magazines and journals named Journal of Bank Marketing, E-service Journal, Journal of Marketing, Journal of Internet Banking and Research and Internet Research, etc. The primary data has been collected from 250 respondents of three public sector banks i.e. State Bank of India (SBI), Punjab National Bank (PNB), Canara bank. A representative sample has been drawn from major cities of selected five states i.e. Punjab, Haryana, Jammu and Kashmir, Himachal Pradesh and New Delhi. A well-structured questionnaire was prepared and distributed to the customers of SBI, PNB and Canara bank. Non- probability sampling techniques such as convenience sampling and Judgment sampling have been used for the purpose of sampling. Convenience sampling involves selecting sample respondents as per the convenience of the researcher while Judgment sampling is based upon the intuitive knowledge of the researcher. Convenience sampling along with judgment sampling have been used in this research because only those respondents had to be selected for the purpose of study who had the knowledge of Internet banking and had been using it for more than one year. Moreover, those respondents have been selected for study who were willing to fill up the questionnaire. Data was collected from January to March 2017. 46 variables, taken from available literature or self intuition, measured on 5 point Likert scale, where answers have been taken from “strongly agree” to “strongly disagree”, expressed correspondingly in numbers 5-1, on which factor analysis has been deployed to extract service quality factors influencing customer satisfaction. Factor analysis and multiple regression techniques have been applied to analyze data by using Statistical Package for the Social Sciences 22.00 (SPSS).

## **DISCUSSION AND FINDINGS:**

In accordance with the objectives of this study which is: 1. to extract the service quality factors influencing Internet banking users. 2. to analyse the relationship between service quality factors and overall customer satisfaction in regard to public sector banks. 3. to analyze the relative importance of service quality factors impacting customer satisfaction level of internet banking users, the research findings described the findings into three parts.

### **Extraction of Service Quality Factors Influencing Internet Banking Users:**

An attempt has been made here to extract the service quality factors that influence customer satisfaction. But before applying factor analysis, the reliability of data has been checked with Cronbach’s alpha as it is the most accepted statistic used to appraise reliability of data. Hence, after checking data reliability, finally 39 variables have been left for further data analysis i.e. seven variables have been deleted to improve the reliability of data. Now, after checking the scale reliability, the appropriateness of sample and collected data has been examined by using the following measures:

- I. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy has been calculated to test the adequacy of the sample size which is shown in Table No. 1. It is the ratio of squared correlations among variables to squared partial correlations among variables (Kaiser, 1970). It has been found to be 0.763 which indicates that the sample is statistically significant to proceed for factor analysis.
- II. Bartlett’s test of sphericity is the statistical test applied to verify the appropriateness of the data. In this study the test value has been found to be 6416.030 which is highly significant ( $P < 0.00$ ). The result of Bartlett’s test of sphericity indicates that data is appropriate for factor analysis.

**Table No. 1: KMO and Bartlett’s Test of Sphericity**

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</b>		0.763
Bartlett's Test of Sphericity	Approx. Chi-Square	6416.030
	df	741.000
	Sig.	0.000

Thus, this requirement of factor analysis has been fulfilled and it is fit to deploy factor analysis. Now, after calculating the inter-correlations among variables through correlation matrix, the data has been examined by using Principal Component method as an extraction method and Varimax technique has been used for rotation of factors. The factors with eigen value greater than one have been retained for analysis. The variables with factor loadings of greater than .50 from Rotated Components Matrix have been retained for further process of analysis. Table 2 shows the final results of factor analysis, representing the factor loading, eigen values, percentage of variance explained and cumulative percentage of variance. It shows that ten factors have been identified by using factor analysis technique. These factors have been named as accessibility, ease of use, cost, communication, courtesy, reliability, product portfolio, security, assurance and website characteristics. These factors have been found similar in corollary of various studies. The factor named ‘reliability’ corroborates with the results of a study by Khurana (2009). The extracted factors named ‘ease of use’, ‘cost’ and ‘accessibility’ are consistent with the work of (Li & Worthington, 2004). The factor named ‘security’ extracted after factor analysis is consistent with the study of (Mattila & Mattila, 2005).

**Table 2: Service Quality Factors Influencing Internet Banking Users**

Sr. No	Factor wise Dimensions	Factor Loading	Eigen Value	% of Variance Explained	Cumulative % of Variance
F1	Accessibility				
a	Internet banking is a convenient way of doing bank transaction	0.817	9.489	24.33	24.33
b	There is fast logout after accomplishing transaction	0.705			
c	There is fast login while performing transaction	0.690			
d	All the information is available on the bank’s website	0.667			
e	Internet banking doesn’t require lot of mental effort	0.653			
f	The speed of downloading of forms/statements is fast	0.555			
F2	Ease of Use				
a	It is easy to perform online transaction	0.891	4.035	10.347	34.677
b	The Internet banking system is easy to understand	0.859			
c	The language of website is easy to understand	0.842			
d	It is easy to find notices or other type of policy statements on the website of bank	0.614			
F3	Cost				
a	The cost of acquiring Internet connection is lower	0.741	2.942	7.542	42.219
b	Internet banking charges no hidden cost	0.723			
c	The service charges are lesser	0.712			



d	The transaction cost is lower	0.670			
e	The cost of computer and other peripherals is affordable	0.593			
F4	Communication				
a	It connects immediately to the service	0.736	2.289	5.869	48.088
b	It provides immediate response to online requests	0.641			
c	Bank provides support to Internet banking customers by the way of demo versions through web site	0.587			
d	Transactions through Internet banking are processed accurately	0.533			
F5	Courtesy				
a	The bank compensates if any error occur on the part of or by the bank	0.779	2.087	5.351	53.439
b	Customer service representative can be approached online in case of need	0.720			
c	Bank has proper awareness campaign/programmes for Internet banking service	0.654			
F6	Reliability				
a	The bank's website doesn't freeze after customer put in all information	0.870	1.72	4.41	57.849
b	The bank's website works properly all the time	0.785			
c	The chance of successful service is available at any point of time	0.532			
F7	Product Portfolio				
a	It provides all banking services with features that customer needs	0.668	1.465	3.757	61.606
b	The bank's website provides wide-range of service packages through Internet banking	0.542			
F8	Security				
a	Internet banking doesn't misuse personal information	0.700	1.367	3.504	65.11
b	Customer feel secure in providing sensitive information for Internet banking transaction	0.696			
c	Customer feel safe with online transaction	0.657			
F9	Assurance				
a	It performs online transaction correct in the first time	0.763	1.222	3.134	68.244
F10	Website Characteristics				
a	Instant links or icons are provided on the website to resolve the queries of Internet banking customers	0.675	1.035	2.654	70.899
b	Quick confirmation for any transaction is provided by the bank's website	-0.547			

Source: SPSS Output, 2017

### Epigrammatic Explanation of the Factors Extracted from Factor Analysis

F<sub>1</sub>: Accessibility: This is the most important factor considered by respondents and derived after factor analysis. It consists of six variables related to accessibility. It explains 24.33% of variance in the data with Eigen value of 9.489. The highest loading i.e. .817 goes to 'Internet banking is a convenient way of doing bank transaction' followed by 'There is fast logout after accomplishing transaction' (.705), 'There is fast login while performing transaction' (.690), 'All the information is available on the bank's website' (.667), 'Internet banking doesn't require lot of mental effort' (.653) and 'The speed of downloading of forms/statements is fast' (.555). Accessibility is very crucial for everyone in today's hectic schedule which indicates that now-a-days users want to use convenient services.

F<sub>2</sub>: Ease of Use: This is the second important factor drawn from factor analysis. Four variables related to ease of use of Internet banking are grouped under this factor. It explains 10.347% of variance in the data with Eigen value of 4.035. The highest loading i.e. .891 is for the variable 'It is easy to perform online transaction' followed by 'The Internet banking system is easy to understand' (.859), 'The language of website is easy to understand' (.842), and 'It is easy to find notices or other type of policy statements on the website of bank' (.614). This factor demonstrates that users want easy system to use.

F<sub>3</sub>: Cost: This is the third important factor which consists of five variables of cost. It explains the 7.542% of variance in data with Eigen value of 2.942. The highest factor loading goes to 'The cost of acquiring Internet connection is lower' (.741) followed by 'Internet banking charges no hidden cost' (.723), 'The service charges are lesser' (.712), 'The transaction cost is lower' (.670) and 'The cost of computer and other peripherals is affordable' (.593).

F<sub>4</sub>: Communication: This is the fourth factor comprises of four variables. It explains 5.869% of variance in data with Eigen value of 2.289. The variable with highest loading is 'It connects immediately to the service' (.736), followed by 'It provides immediate response to online requests' (.641), 'Bank provides support to Internet banking customers by the way of demo versions through web site' (.587) and 'Transactions through Internet banking are processed accurately' (.533).

F<sub>5</sub>: Courtesy: This factor covers three variables which explains 5.351% of variance and has an Eigen value of 2.087. The variable with highest loading under this factor is 'The bank compensates if any error occur on the part of or by the bank' (.779) followed by the variable 'Customer service representative can be approached online in case of need' (.720) and 'Bank has proper awareness campaign/programmes for Internet banking service' (.654).

F<sub>6</sub>: Reliability: This factor accounts for 4.41% of variance with an Eigen value of 1.72. This factor explains three variables. The highest loading is for variable 'The bank's website doesn't freeze after customer put in all information' (.870) followed by variable 'The bank's website works properly all the time' (.785) and variable 'The chance of successful service is available at any point of time' (.532).

F<sub>7</sub>: Product Portfolio: This is the seventh factor extracted through factor analysis which consists of two variables. It explains the 3.757% of variance in data with Eigen value of 1.465. The variables titled 'It provides all banking services with features that customer needs' with factor loading .668 and 'The bank's website provides wide-range of service packages through Internet banking' with factor loading .542 come under this factor.

F<sub>8</sub>: Security: This is the eighth factor consists of three variables related to security. It explains the 3.504 % of variance in data with Eigen value of 1.367. The variables loaded under this factor are 'Internet banking doesn't misuse personal information' (.700), 'Customer feel secure in providing sensitive information for Internet banking transaction' (.696) and 'Customer feel safe with online transaction' (.657).

F<sub>9</sub>: Assurance: This is the ninth factor derived after Factor analysis. It explains 3.134% variance in data with Eigen values of 1.222. The only variable loaded in this is 'It performs online transaction correct in the first time' with .763 of factor loading.

F<sub>10</sub>: Website Characteristics: This is the tenth factor which comprises two variables. It explains 2.654% variance in data with Eigen value of 1.035. The variable 'Instant links or icons are provided on the website to resolve the queries of Internet banking customers' is loaded with factor loading of .675 followed by loading of -.547 to 'Quick confirmation for any transaction is provided by the bank's website'.

Hence, the factor analysis summarized 33 variables of service quality in public sector banks under ten service quality factors.

### Relationship between Service Quality Factors and Overall Customer Satisfaction:

Multiple Regression Analysis has been deployed to analyze the relationship between the factors affecting service quality and overall customer satisfaction. "Multiple Regression analysis is useful when more than

one independent variables are likely to be associated with a dependent variable and ascertaining the contribution of all such independent variables in accounting for variation in dependent variable is necessary” (Parasuraman et. al, 2008, 485). In this section, ten service quality factors extracted during factor analysis have been taken as independent variables and overall customer satisfaction as dependent variable. First of all, before applying Multiple Regression Analysis, correlation has been studied between dependent and independent variables by applying Pearson’s Correlation Method and then the following analysis has been done:

**Table 3: Model Summary**

Model	R	R <sub>2</sub>	Adjusted R <sub>2</sub>	Std. Error of Estimate	Durbin-Watson
1	.697	.485	.464	.638	1.783

**Table 4: ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	91.657	10	9.166	22.547	.000
Residual	97.159	239	.407		
<b>Total</b>	<b>188.816</b>	<b>249</b>			

Table 3 and table 4 show the model summary and ANOVA results respectively. The results of this model summary have been summarized as under:

1. After having idea on which independent variables may be predictors of the dependent variable, predetermined model in regression can be used and test it for significance through F-test (Nargundkar, 2012). The value of F comes to be 22.547 which is significant at 1% level of significance. Value of F confirms the model’s ability to predict the dependent variable.
2. R= 697 is the value of correlation between predictors and outcome. It represents the correlation between the extracted service quality factors and customer satisfaction.
3. The measure of strength of association in the regression analysis is given by the coefficient of determination expressed by R<sup>2</sup>. R<sup>2</sup> value of the model tells the percentage of the variation in the dependent variable by all independent variables in the model (Nargundkar, 2012). Here, the value of R<sup>2</sup> is .485 which describes that variation in overall customer satisfaction as explained by the factors is 48.5%.
4. The Durbin Watson statistic informs about whether the assumption of independent errors is acceptable. It tests the correlation between errors. (Field, 2009). Table 3 depicts the value of Durbin Watson as 1.783 (should be nearer to 2). Hence, it fulfils the condition.

**Relative importance of service quality factors impacting customer satisfaction level of internet banking users:**

Table 5 shows the further analysis of ten extracted factors named accessibility, ease of use, cost, communication, courtesy, reliability, product portfolio, security, assurance and website characteristics. It depicts the value of the Un-standardised Coefficients, Beta Coefficients and t-value of the individual factor along with their relative significance level. This analysis exemplifies that factor named ‘Accessibility’ is having highest standardized beta coefficient (.372) with t value of 5.508 which is statistically significant at 1% level of significance. Hence, maximum variation is explained by this factor. It depicts that improvement in different variables of factor named ‘Accessibility’ will definitely increase customer satisfaction. ‘Reliability’ has been found to be the second highest influencing factor with Beta Coefficient .181 and t value 3.209 which is statistically significant at 1% level of significance. Further, ‘Security’ also contributes a little in overall customer satisfaction, the contribution of which has been found to be statistically significant. The other factors named ‘Cost’, ‘Courtesy’, ‘Product Portfolio’, ‘Assurance’, ‘website characteristics’, ‘Ease of Use’ and ‘Communication’ have been influencing customer satisfaction positively but have not been found statistically significant. It depicts that these factors are not contributing significantly in the overall customer satisfaction.

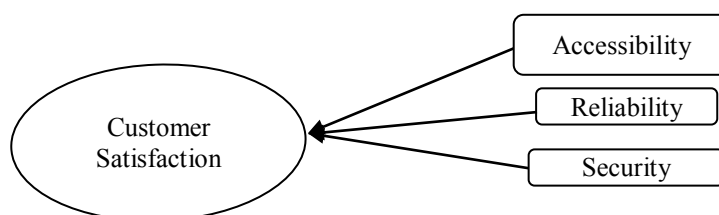


**Table 5: Determinants of Customer Satisfaction in Public Sector Banks**

Independent Variables	Dependent Variable	Un standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
Constant		1.154	0.293		3.945	0
Accessibility		0.052	0.009	0.372	5.508	0
Ease of Use		0.023	0.015	0.089	1.602	0.11
Cost		0.01	0.01	0.056	1.009	0.314
Communication	Overall Satisfaction	0.033	0.017	0.157	1.877	0.062
Courtesy		0.024	0.022	0.059	1.094	0.275
Reliability		0.044	0.014	0.181	3.209	0.002
Product Portfolio		0.004	0.037	0.009	0.102	0.919
Security		-0.064	0.024	-0.13	-2.669	0.008
Assurance		0.009	0.034	0.014	0.254	0.8
Website Characteristics		0.037	0.029	0.076	1.251	0.212

Source: SPSS Output, 2017

It can be concluded from data analysis that factors named accessibility, reliability and security have positive and significant contribution towards overall customer satisfaction in public sector banks. Therefore, null hypothesis i.e. ‘there is no significant relation between service quality factors and customer satisfaction’ cannot be accepted. It proposes that if public sector banks make improvement in these three service quality factors then customer satisfaction can be improved. Thus, it can be concluded here that service quality has positive influence on customer satisfaction. This finding corroborates the findings of some earlier studies, some of which are Cronin & Taylor (1992), (Amin & Isa, 2008) and Alam & Soni (2012). Thus, service quality has become a critical prerequisite for satisfying and retaining valued customers in banks (Taylor & Baker., 1994); Cronin and Taylor, 1992).



**Figure 1: Customer Satisfaction Model (for public sector banks of Northern India)**  
 Source: SPSS Output from Primary Data, 2017

Thus, the above model has been developed after deployment of multiple regression analysis. This model demonstrates that improvement in these three service quality factors will definitely bring significant improvement in satisfaction of public sector Internet banking customers.

**FINDINGS:**

The findings of the study are as follows:

1. The analysis come up with ten service quality factors named accessibility, ease of use, cost, communication, courtesy, reliability, product portfolio, security, assurance and website characteristics.
2. It has been found that factors named accessibility, reliability and security have positive and significant contribution towards overall customer satisfaction in public sector banks. Therefore, it proposes that if public sector banks make improvement in these three service quality factors then customer satisfaction can be improved. Thus, it can be concluded here that service quality has positive influence on customer satisfaction.
3. The other factors named ‘Cost’, ‘Courtesy’, ‘Product Portfolio’, ‘Assurance’, ‘Website characteristics’, ‘Ease of Use’ and ‘Communication’ have been influencing customer satisfaction positively but have not

been found statistically significant . It depicts that these factors are not contributing significantly in the overall customer satisfaction.

## CONCLUSION:

Thus, in today's competitive environment, banking sector need to pay attention towards the factors concerned with Internet banking. The results of this study have practical implication for bank managers as they can consider the factors which come-out after this analysis. These factors are accessibility, ease of use, cost, communication, courtesy, reliability, product portfolio, security, assurance and website characteristics. The results of this study also signified that three factors named accessibility, reliability and security have positive and significant contribution towards overall customer satisfaction. Along with, it can be concluded that improvement in service quality obtains increase in customer satisfaction.

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