Measuring Quality of Services (QoS) on the Basis of Customer Satisfaction of Banks in Bangladesh

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Abstract: *Quality of Services (QoS) of an organization is how better it satisfies its customers with its service activities. Thus, quality of service plays a vital role in business which is directly related to customer satisfaction and which in return, strongly related to progress of any service oriented business. So service quality measurement is very important so that organization can make better decision which service to introduce, which to change, which to improve and which to discard. In this hypothesis driven research, we have set reliability, responsiveness, assurance, empathy, tangibles as indices of QoS measurements and shown how they are related to customer satisfaction with correlation and regression analysis on data collected from many banks.*

Keywords: *Service quality, SQ, Customer satisfaction.*

1. Introduction

Service quality plays a vital role in a service industry to gain the optimum level of customer satisfaction. For a bank it is mandatory to bond a relationship with their customers through their products and services as the maximum profit of the organization depends on their services.

With the phenomenal increase in the country's population and the increased demand for banking services; speed, service quality and customer satisfaction are going to be key differentiators for each bank's future success. Thus it is imperative for banks to get useful feedback on their actual response time and customer service quality aspects of retail banking, which in turn will help them to take positive steps to maintain a competitive edge. Organizations are increasingly interested in retaining existing customers while targeting new customers; measuring customer satisfaction provides an indication of how successful the organization is at providing products or services to the marketplace. So to improve customer satisfaction level, measurement of customer satisfaction is must.

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With better understanding of customers' perceptions, companies can determine the actions required to meet the customers' needs. They can identify their own strengths and weaknesses, where they stand in comparison to their competitors, chart out path future progress and improvement. Customer satisfaction measurement helps to promote an increased focus on customer outcomes and stimulate improvements in the work practices and processes used within the company.

2. Objectives of the Study

This study entails the following objectives:

- To identify the factors of service quality and this have impact on customer satisfaction.

- To identify whether customer satisfaction is dependent on the five dimensions of service quality.

- To identify the level of customer satisfaction in different leaders.

3. Methodology

An appropriate methodology is required for a successful execution of a research work. It helps to get the objectives of the research work through a systematic process. This study was exploratory in nature. This study was carried out to test the hypothesis and to show a cause and effect relationship of the independent and dependent variables. This study was mainly based on primary data; the data were collected by designed questionnaire. The sample size was 250 and the whole survey was conducted with the customers who have an account in the different banks. To design questionnaire we have used SERVQUAL Instrument. The dimensions of SRVQUAL instrument are Reliability, Responsiveness, Assurance, Empathy and Tangibles. The interviews have been conducted using a structured questionnaire containing 29 questions representing the five dimensions of customer satisfaction measurement for obtaining quantitative primary data in this research. Customers responses have been recorded by using 7 point SERVQUAL Scale where the customer were asked to evaluate each statement to rate their degree of agreements or disagreements. These degrees of agreements or disagreements are plotted on the 7 point SERVQUAL Scale where point 1 indicates ―Strongly Disagree and point 7 indicates ―Strongly Agree with the statement. Using this scale, how the customer appreciates the services was measured to evaluate the significance of those. Some secondary data had been collected from different books, journals, websites, company reports etc. For analysis and interpretation we have used SPSS and Microsoft Excel.

4. Literature Review

Service quality is commonly noted as a critical prerequisite for establishing and sustaining satisfying relationships with valued customers. Satisfaction represents a modern approach for quality in enterprises and organizations and serves the development of a truly customer-focused management and culture. Customer satisfaction is a key and valued outcome of good marketing practice.

According to Drucker (1954) the main objective of a business is to create satisfied customers. Specific tools for measuring customer satisfaction have been developed in the past, including SERVQUAL (Parasuraman, Berry, and Zeithaml 1988, 1991). That is why, there is extensive existing study on customer satisfaction measurement. Zeithaml et. al (1993) described some detail factors including Reliability, Responsiveness, Assurance, Empathy, Tangibility define a greater amount of customer satisfaction. A good quality of service gives a competitive advantage to any business. However, it is particularly important for banks. Al-Hawari and Hartley (2005) have mentioned that customer service quality has a significant influence on the success of banking industry.

The relationship between service quality and customer satisfaction has emerged as a topic of significant and strategic issue (e.g. Bolton and Drew, 1991; Cronin and Taylor, 1992; Taylor and Baker 1994). Other related aspects, such as supplier responsiveness to customer inquiries influence how customers evaluate a core product as well as their overall satisfaction as well (Goodman et. al, 1995).

Customer satisfaction is defined as an "evaluation of the perceived discrepancy between Prior expectations and the actual performance of the product" (Tse and Wilton, 1988, Oliver 1999). Gardial & Woodruff (1996) defined customer satisfaction as a customer's positive or negative attitude toward the value of using a business service in a specific situation. Bennet (2004) mentioned that high level of customer satisfaction is not always a result of high level of customer loyalty. According to Muffatto (1995), customer satisfaction makes a business competitive and facilitates its future planning. Hansemark (2004) said that, good relationship with a customer can create satisfied feelings.

Cohen et al (2006), mention on his consumer satisfaction that positive marks by the respondents as factors that would influence their decision to stay with or leave their current banks.

Customer satisfaction can be defined as the feeling or attitude of a customer towards a product or service after it has been used or consumed (Metawa & Almossawi, 1998; Wells & Prensky, 1996). According to Oliver (1980) customer satisfaction covers the full

meeting of customer expectations of certain products and services. If the perceived performance matches or even exceeds customers' expectations of service, then they will be satisfied. If it does not, then they are dissatisfied (Wulf, 2003). Formerly a number of scholars have described the necessity of using service quality as a measure of customer satisfaction particularly in the context of service literature. According to the disconfirmation paradigm, customer satisfaction is understood as the customer's emotional response to the perceived difference between performance appraisal and expectations (e.g., Oliver 1980; Rust, Zahorik, and Keiningham 1996; Yi 1990).

Research has revealed that service quality has been increasingly recognized as a critical factor in the success of any business (Parasuraman et al., 1988) and as well as for the banking sector. Service quality has been extensively used to evaluate the performance of banking services (Cowling and Newman, 1995). The banks realize that customers will be loyal and satisfied if they receive greater value than from competitors (Dawes and Swailes, 1999) and on the other hand, banks can earn high profits if they are successfully able to position themselves better than their competitors within a specific market (Davies et al., 1995). Therefore, banks need more focus on service quality as a core competitive strategy (Chaoprasert and Elsey, 2004). Moreover, banks all over the world offer similar kinds of services, and try to rapidly match their competitors' new innovations. In addition customers assess banks' performance mainly on the basis of their personal contact, services and interaction (Gronroos, 1990).

Furthermore, various researchers agree that service quality can be decomposed into two major dimensions (Gronroos, 1984; Lehtinen and Lehtinen, 1982). The first on is referred by Zeithaml et al. (1985) as ―outcome quality and the second by Gronroos (1984) as ―technical quality. However, the first dimension is concerned with what the service delivers and on the other hand; the second dimension is concerned with how the service is delivered: the process that the customer went through to get to the outcome of the service.

McCleary and Weaver (1982) indicated that good service is defined on the basis of identification of measurement behaviors' that are important to customers. The finding of the study emphasize that customer satisfaction is linked with performance of the banks. Levitt (1981) suggests that customers use appearances to make judgments about realities. Lewis and Booms (1983) propose that service quality resides in the ability of the service firm to satisfy its customer needs i.e. customer satisfaction.

From the above discussion it is clear that previous researchers found direct or indirect link between service quality and customer satisfaction. From this we were motivated to test how the relation is in the banking sector of Bangladesh.

5. Data analysis and findings

In this study, mainly primary data had been used to analyze and interpret information in order to comprehend the variable of interest.

5.1 Hypothesis

For the quantitative analysis the following hypothesis has been developed:

H1: Reliability, Responsiveness, Assurance, Empathy, Tangibles has impact on Customer satisfaction.

5.2 Variables of the Hypothesis

In this study, the dependent variable is "Customer satisfaction". To finds out the dependency of this variable, 5 independent variables are selected. These independent variables are: Reliability, Responsiveness, Assurance, Empathy and Tangibles.

a) **Reliability: Delivering on Promises:** Of the five dimensions, **reliability** is the most important determinant of perceptions of service quality. **Reliability is defined** as the ability to perform the promised service dependently and accurately.

b) **Responsiveness: Being Willing to Help: Responsiveness** is the willingness to help customers and to provide prompt service. This dimension emphasizes attentiveness and promptness in dealing with customer requests, questions, complaints and problems.

c) **Assurance: Inspiring Trust and Confidence: Assurance** is defined as employees' knowledge and courtesy and the ability of the firm and its employees to inspire trust and confidence.

d) **Empathy: Treating Customers as Individuals: Empathy** is defined as the caring, individualized attention the firm provides its customers.

e) **Tangibles: Representing the Service Physically: Tangibles** are defined as the appearance of physical facilities, equipment, personnel and communication materials.

5.3 Findings

5.3.1 RATER Score Analysis

This has five parameters and the score of the parameters are given below.

a. **Ability of Employees to Perform Promised Service Dependently and Accurately:** According to customers' response, performance of all the dimensions listed under ─**Reliability** head (acting according to promises, sincerity in problem solving, performing the service right at the first time etc.) are quite satisfactory and the mean score in this area is 4.66. So, the employees are able to perform promised services dependently and accurately.

b. **Response & Willingness of Employees in Providing Service:** The study shows that the employees are always willing to help customers but there are lacking in providing prompt services. These points are shaping the average─**Responsiveness** SERVQUAL mean score which is 4.43.

c. **Assurance of Competency, Courtesy, Credibility and Security:** From customers' point of view, employees' behavior instills enough confidence in customers. All other dimensions listed under ─**Assurance** head (safe felling in transactions, consistent good courtesy of employees & having decent knowledge of employees in answering customers queries) are quite satisfactory and its mean score is 4.83.

d. **Performance in Personal Care, Understanding Customers & Offered Banking Hour:** The survey result proved that the bank is offering its customers convenient banking hours and the employees have the best interest of customers in their heart. Beside these two satisfactory points there are some unsatisfactory items also. Some customers think that they are not getting proper individual attention. These disappointing factors are forming average ─**Empathy** mean score to 4.44.

e. **Tangible Appearances in Satisfying Customers:** Customers of the bank are satisfied with tangible appearances (equipment's, materials, physical facilities & employees) inside the bank. Average ─**Tangibles** SERVQUAL mean score of 5.04(see at appendix table no. 07).

f. **Overall Evaluation of Customer Satisfaction:** The overall SERVQUAL mean score is 4.27 and (see at appendix table no. 08) which is indicating a satisfactory stage in the level of customer satisfaction.

So, from the quantitative analysis it is found that although in some dimensions customers are not properly satisfied, the overall result is pointing to a satisfactory level of customer' satisfaction of banks. There are some points where it needs to improve performance to increase the level of customer satisfaction. These are- providing customers individual attention, understanding special needs of customers, providing information exactly when service will be provided, providing quick service, response timely to customers, etc.

g. **Calculation of customer Satisfaction Index:** The Customer Satisfaction Index represents the overall satisfaction level of that customer as one number, usually as a

percentage. This can be achieved by calculating the Satisfaction Index using an importance weighting based on an average of independent variables. Calculate the average of all the weightings given by the customer. Divide the individual weightings by this average to arrive at the weighting on the basis of average of the variables. The averages of the Customers Importance Scores are calculated and each individual score is expressed as a factor of that average. Thus Customer Satisfaction can be expressed as a single that tells the organization where it stands today.

Table 1: Calculation of weighted average score for finding Overall customer satisfaction (Source: Primary data)

Calculation of weighted average score for finding overall customer satisfaction

Independent variables	Rating score of variables	Average score	Weight	weight*Average score	Overall Customer satisfaction/CSI
Reliability	5	4.66	1.553333	7.238533333	
Assurance	4	4.42	1.178667	5.209706667	
Tangibles	3	4.83	0.966	4.66578	
Empathy	2	4.4	0.586667	2.581333333	
Responsiveness	1	5.04	0.336	1.69344	
Weighted Average scores	**15**	**4.67**	**0.924133**	**21.38879333**	**4.277758667**

5.3.2 Statistical Analysis

Statistical analysis is divided in two Parts.

   a) Correlation analysis

   b) Regression analysis

A) Correlation analysis

Correlations measure the degree to which the variables are related with each other. Correlations range in value from zero to one. The higher the value is, the greater the level of correlation. The values can be positive or negative, signifying positive or negative correlation.

Table 2: Descriptive Statistics (Source: Primary data)

Descriptive Statistics

	Mean	Std. Deviation	N
Customer Satisfaction	3.7080	1.04071	250
Reliability	4.6567	1.08336	250
Responsiveness	4.4150	1.05830	250
Assurance	4.8350	.87363	250
Empathy	4.4020	1.12649	250
Tangibles	5.0435	.85916	250

The descriptive statistics gives us the values of the means and standard deviations of the variables in our regression model. Here we see the means and standard deviation of the related variables.

H1: Correlation between Reliability, Responsiveness, Assurance, Empathy, Tangibles and Customer satisfaction.

Analysis:

By analyzing the correlation table (See appendix 2, Table 1) the **Pearson'**s **r** for the correlation between reliability, responsiveness, assurance, empathy, tangibles and Customer Satisfaction is (r = .770, .636, .569, .703,.496) that represents Pearson's r is strong which means that there is a strong relationship between these variables. This suggests that changes in one variable very strongly correlated with changes in the second variable. So we could conclude that our variables very strongly correlated. The Sig. (1-Tailed) value in the analysis is **.000** which is less than **.05**. Because of this we can conclude that there is statistically very significant correlation between the independent variables and the dependent variable customer satisfaction. That means, increases or decreases in one variable do significantly relate to increases or decreases in second variable.

B) Regression Analysis

We have tested all the variables altogether with the dependent variable. And in Reality all the variables work together to determine the customer satisfaction (dependent variable).It is known as multiple regression analysis.

i. Results of Hypothesis testing

Hypothesis: Reliability, responsiveness, assurance, empathy, tangibles have no impact on customer satisfaction

Results: Reliability, responsiveness, assurance, empathy, tangibles have impact on customer satisfaction.

From the above hypothesis another hypothesis raised which needs to be discussed. That is:

Hypothesis: Customer satisfaction is not dependent on the five dimensions of service quality (reliability, responsiveness, assurance, empathy, tangibles)

Results: Customer satisfaction is dependent on the five dimensions of service quality (reliability, responsiveness, assurance, empathy, tangibles).

Table 3: Model Summary (Source: Primary Data)

Model Summery				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.840[a]	.706	.700	.56981

Predictors: (Constant), Tangibles, Reliability, Assurance, Responsiveness, Empathy

Review the model summary, giving specific attention to the value of R-square. This statistics tells us how much of the variation in the value of the dependent variable is explained by our regression model. In this model the value of R-square is 0.706 which explained that 70 percent of variance in the dependent variable (customer satisfaction) is explained by the independent variables. And ANOVA table (See appendix 2, Table 2) tells that a linear relationship exists among the variables and also coefficient table (See appendix 2, Table 3) summarizes the results of our regression equation.

Analysis:

The critical P-Value is 0.05 because the confidence interval is 95% and the calculated P-value for the variables is 0.000, 0.023, 0.011, 0.000 and 0,052. So, from the above analysis we can say that reliability, responsiveness, assurance and empathy has impact on customer satisfaction but tangibles has no impact on customer satisfaction because it is

greater than .05. So, it means reliability, responsiveness, assurance, empathy have impact on customer satisfaction but tangibles has no impact on customer satisfaction (Source: Discovering statistics using SPSS).

By testing hypothesis and from the above analysis we also find that customer satisfaction is dependent on the on the five dimensions of service quality which are reliability, responsiveness, assurance, empathy, tangibles. (Source: Discovering statistics using SPSS).

ii. Interpretation

The Independent Variables (reliability, responsiveness, assurance, empathy, tangibles) were tested altogether to find any linear relationship with the dependent variable which is Customer Satisfaction. After the tests were being run we have found that responsiveness, assurance, empathy were the variables which were proven to be statistically significant.

6. Conclusion

In Bangladesh, banks are reliable sources of financial intermediation. Their potentiality in terms of growth and performance is vitally required for their smooth functioning. This paper mainly focuses on customer satisfaction level of both national and private commercial banks of Bangladesh. It is found that factors like reliability, responsiveness, and assurance etc. influences customer satisfaction level of banks and further research could be done to study relationship among customer satisfaction, service quality and job satisfaction with the use of all the five SERVQUAL dimensions, to measure the satisfaction level of customers. So in this context, what appropriate measures should be taken at what context - is an issue for further research. Moreover, further comprehensive research work can be initiated to find out various pros and cons of each category of banks as well as of the entire banking sector of Bangladesh as a whole.

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