

## **Determinants of Customer Satisfaction in the Banking Sector in Bangladesh**

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**Abstract.** The purpose of this paper is to evaluate the customer satisfaction of the banks sector in Bangladesh, based on customer perception regarding service quality. This is an empirical study using mainly primary data collected through a well-structured questionnaire. The findings based on three different independent variables (service quality, service charge and perceive value) showed that all these variables influenced consumers satisfaction in Bangladeshi banking sector. There is a positive impact and significant relationship between the customer satisfaction and two variables service quality and service charge. Finally, bank managers are recommended to convey operations and marketing strategies that focus on desires of customers to improve level of satisfaction.

**Keywords:** customer satisfaction; service quality; service charge; perceive value

**AMS Mathematics Subject Classification (2010):** 62P25

### **1. Introduction**

In modern economics, service sector plays important role side by side industrial and other sectors. Banking sector performs its activities economically and informally in a Country. Service managers of such service factory are more worried about their quality of service and client satisfaction (Olorunniwo & Hsu, 2006). Bangladesh Bank is the supreme Authority of financial sector, and it regulates all banks and non-bank financial institutions. They also offer corporate banking, loan Syndication, real-time online banking for corporate clients. Service quality, service Charges, perceived value and customer satisfaction are the key sources of success in any Service factory (Olorunniwo, et al., 2006). Issues that affect service quality and customer satisfaction have operational and marketing orientations. To understand the dimensions of service quality and for measurement of customer satisfaction it is important to know under which typology commercial banks are belong. In this regard, the classification given by Schmenner (1986) is important. Schmenner divided services under four quadrants based on labor intensity and customer interaction. Labor intensity is the ratio of labor cost to the machinery and equipment value. On the other hand, customer interaction is defines as, the joint measure of customer contact and customization of services. Under this categorization, commercial banking services belong to mass service category. In commercial banking sector, there are high labor intensity and low customization of

Akm Emdadul Hoque

services. Mass service also includes retailing, wholesaling, schools, traditional long-distance ground trucking. Another three quadrants of services are: service factory, service shop, and professional service.

The improvement of service quality, perceived value, and satisfaction ensure customer loyalty (Kuo, 2009; Lai, 2009; Wu & Liang, 2009). Since the studies regarding service quality, perceived value, and customer satisfaction issues in banking industry is limited and there is no available measurement scales for service quality and customer satisfaction, especially in Bangladesh, this study efforts to propose the measurement scales for factors affecting customer satisfaction and for customer satisfaction itself. The objectives of this study are firstly, to recognize the influencing factors of customer satisfaction and post-purchase intentions. Secondly, to examine the interrelationship between customer satisfaction and influencing factors of satisfaction such as service quality, service charge, and perceived value. The result of this study has managerial and academic implications. Managers of commercial banking service providers can use the findings as sources of reference to manage their business and improve their service quality, and academicians can use the finding for application of service marketing field and further extension of this topic or related topics.

The rest of the paper is structured as follows. The next section provides the theoretical discussion and hypotheses of the study. The following two sections outline research methodology and offer statistical analysis and major findings of the study. The last section presents discussion, theoretical and managerial implications, limitations of this study, and guidelines for further study.

## **2. Theoretical framework and hypothesis**

This study examines the impact of service quality dimensions which are Service Quality, and service charge and perceive value as independent variables and customer satisfaction is dependent variable.

Referring to relevant literature and using typical variables, this study will try to test the following 3 theoretical hypothesis, which could demonstrate the determinants of customer satisfaction and also their relationships in Bangladesh bank industry.

Service quality is correlated with high perceived value. And experience about service quality positively and significantly persuade perceived value of a customer (Chen & Chen, 2010). On the other hand. According to the satisfaction model customer satisfaction is influenced by service quality. When customers get expected service quality, it leads to higher satisfaction (Hutchinson, et al., 2009). Service quality is the determinant of customer satisfaction (Cronin & Taylor, 1992) and by ensuring good service quality; service providers can enrich customer satisfaction. Service quality has direct positive influence on customer satisfaction and post-purchase intentions (Gerpott, et al., 2001; Kim, et al., 2004; Lin & Wang, 2006). Customers are always cost concern. Reduction of outlays related with purchasing process, is one the way to enhance perceived value (Chen & Hu, 2010). Customer value is a function of service quality and service charge. It provides a competitive advantage when firms take cost-cutting imitative to ensure customer value. Real price competitiveness is an important determinant of customer value.

## Determinants of Customer Satisfaction in the Banking Sector in Bangladesh

H1: Service quality has positive impact on customer satisfaction of financial transactions in banking services.

H1a: Service quality has positive impact on customer satisfaction of financial transactions in banking services.

H1b: Service quality has positive impact on customer satisfaction of financial transactions in banking services.

Price has an impact on customer buying behavior and value perception. Price/service charge needs special consideration to assess value perception of customers, not generalized along with other factors (Lockyer, 2005). Again, Customer satisfaction is affected by the price/service charge awareness (Varki & Colgate, 2001). Price level, value for money and special offers may result in both satisfaction and dissatisfaction and price fairness, price perceptibility and price processibility may result in dissatisfaction for customers (Zielke, 2008).

In addition to the various levels of product/service price, a mixture of price awareness dimensions have potentiality to intimidate the customers' satisfaction. Perceptions of customers about price/service charge fairness have been major concern due to huge interest of mass people (Martin, 2009). Therefore, we propose.

H2: Fair service charge has positive impact on customer satisfaction of financial transactions in banking services.

H2a: Fair service charge has positive impact on customer satisfaction of financial transactions in banking services.

H2b: Fair service charge has positive impact on customer satisfaction of financial transactions in banking services.

Customer satisfaction is positively influenced by perceived value. The extent of satisfaction depends on extent of perceived value and higher level of perceived value lead to higher level of customer satisfaction (Kuo, et al., 2009). Customer satisfaction tends to positive post purchase behavior, thus, satisfaction plays a mediating role in the relationship of perceived value and behavioral intentions (Lin & Wang, 2006). Among the determinants of satisfaction perceived value is the important one (Chen & Chen, 2010) and perceived value plays mediating role between service or product quality and customer satisfaction. Service quality and fair service charge both have significant, direct effects on perceived value. Then, perceived value influences on customer satisfaction that lead to positive behavioral intentions, i.e. customer loyalty (Lai, et al., 2009).

H3: Perceived value has positive impact on customer satisfaction of financial transactions in banking services.

H3a: Perceived value has positive impact on customer satisfaction of financial transactions in banking services.

Akm Emdadul Hoque

H3b: Perceived value has positive impact on customer satisfaction of financial transactions in banking services.

### **3. Empirical research**

#### **3.1. Data collection**

Data was obtained for this study from a simple random sample of bank customers in the Most Bangladeshi cities without limited to specific city, or specific branch. Sampling is taking a fraction of a population to represent the whole population but the researcher only managed to find 150 people to become respondents. Population is a group of people that can involve in the research. Selection of the population is depending on the research conducted by the researcher. Respondents for questionnaire were randomly selected from customer who visited the sampling locations during the chose time intervals, in order to eliminate the sampling frame errors and ensure the representation of the population under the study in the sample units. However, Sampling is taking a fraction of a population to represent the whole population but the researcher only managed to find 249 people to become respondents. Population is a group of people that can involve in the research. Selection of the population is depending on the research conducted by the researcher.

Samples are to be made of groups of research. It is a subset or sub-groups in the population selected. Sample reflects the population selected. Researcher use convenience sampling as sampling method. Researcher use this method in order to determine the sample involve in this research. Through this convenience sampling, each customer who makes transaction with Islamic banking has equal opportunity to be selected as respondents. They are representing of the populations research. Purposely researcher chose this method in order to avoid an imbalance in the selection.

The basic objective of this study is to test the research hypotheses, based upon the conceptual framework of this study. This study has used quantitative research approach. The statistical software SPSS version 23 was employed to ensure the relevant issues is examined in a comprehensive manner. Both simple and advanced statistical tools and methods are used where appropriate for analyzing the relationship among the variables in the model. Therefore, usage of statistical techniques is accordance to commonly accepted research assumptions and practices. Multivariate statistical analysis is performed to analyze the data of this study. The questionnaire divided to four parts. The first part was particular to the DV variable which “customer satisfaction”, it’s appear six questions which test how the customers satisfied with their Banks. The second part was particular to the first V variable which “service quality”, it’s appear five questions that test the degree of customer loyalty for their Bank. The third variable “service charge” has tested by two questions and the last variable “perceive value” has tested by three questions to determination its relationship with the customer satisfaction.

#### **3.2. Variables**

In this study the researcher will examine how the independent variables affect the dependent variable. Hence the dependent variable is customer satisfaction, and the independent variables are, Service Quality, service charge and perceive value. Control variable is Gender, Age, Profession, Account, and Income.

## Determinants of Customer Satisfaction in the Banking Sector in Bangladesh

**Table1:** Variables

<b>Variable</b>	<b>Measurement</b>
Customer satisfaction	1. Are you satisfied with your financial transaction with the bank? 2. Are you satisfied with the general service provided by the bank?
Service quality	1. Do you think that your bank caters all your banking needs? 2. Do you think that your bank have core banking facility for the customers?
Service charge	3. Do you think that your bank charge unnecessarily for not maintaining minimum balance in your account? 4. Do you think your bank offers competitive interest rate?
Perceived value	5. Do you feel that the producer to open an account with the bank was difficult? 6. Do you get always prompt service whenever you visit the branch? 7. Do you agree that minimum account limit is not high and easy to maintain?
Gender	(a)Male (b) female
Age	(a)Under 20 (b) 21-25 (c) 26-30 (d) 31-35 (e) 36-45
Profession	(a)Service (b) student (c) household (d) employee (e) others
Account	(a)Current (b) Saving (c) Loan (d) fixed (e) joint
Income	(a)Below 10000 BDT (b) 10000-20000 BDT (c) 20000-30000 BDT (d) 30000-40000 BDT (e) 100000 above

### **4. Data analysis and results**

#### **4.1. Data description**

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#### **4.2. Reliability analysis**

Reliability analysis refers to the fact that a scale should consistently reflect the construct it is measuring. ... Statistics Solutions is the country's leader in statistical data analysis and can assist with reliability analysis for your dissertation, thesis or research project.

**Table 2:** Reliability test

Description	Cronbach's Alpha Value
Service quality	.586
Service charge	.534
Perceive value	.692
Customer satisfaction	.616

Cronbach coefficient alpha is the most common accepted formula for assessing the reliability of measurement scale with multi point item. The reliability of the construct is considered acceptable, as Cronbach's alpha and composite reliability coefficients offer values which, in all cases are appreciably higher than the recommended value of 0.5. The reliability of each construct is: Service quality 0.586; Service charge 0.534; Perceive value 0.692 and Customer satisfaction 0.616. Therefore, all constructs are valid.

#### **4.3. Correlation analysis**

Correlation analysis to test the correlation between dependent valuable and independent valuable are very significant. That mean it is meaningful to test the causal relationship.

Correlation, linear and multiple regressions will be used for inferential statistics. The Pearson correlation will be used to measure the significance of linear bivariate between the independent and dependent variables thereby achieving the objective of this study. Multiple regressions will be used to determine the relationship between independent and dependent variables, the direction of the relationship, the degree of the relationship and strength of the relationship. Moreover, simple linear regression enables us to find the straight line most appropriate for representing the connection between two sets of observed values. Because the line that we ‘fit’ to our data can be used to represent the relationship it is rather like an average in two dimensions, it summarizes the link between the variables. Basically, a correlation describes a statistical relationship between two

### Determinants of Customer Satisfaction in the Banking Sector in Bangladesh

variables based on each observation, in other words, correlation is the extent to which two or more things are related to one another. The correlation range is from +1.00 to –1.00 (both of these values indicate perfectly correlated variables) thus the values between 0 to –1.00 which has minus sign indicate to a negative correlation, the meaning of that as one value for a variable increases the value of the other variable diminishes. On contrast, the positive correlation presented by the values fall in between 0 to +1.00, the positive correlation indicates that as one value increases, the value for other variable also increases. Likewise the size of the correlation value indicates the accuracy of the prediction in the direction indicated – larger correlations indicate greater accuracy.

**Table 3:** Correlations

		<b>SAFT</b>	<b>SAGS</b>	<b>SQ</b>	<b>SC</b>	<b>PV</b>
<b>SAFT</b>	Pearson Correlation	1	.445**	.485**	.510**	.527**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	99	99	98	99	99
<b>SAGS</b>	Pearson Correlation	.445**	1	.373**	.424**	.539**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	99	99	98	99	99
<b>SQ</b>	Pearson Correlation	.485**	.373**	1	.600**	.569**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	98	98	98	98	98
<b>SC</b>	Pearson Correlation	.510**	.424**	.600**	1	.612**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	99	99	98	99	99
<b>PV</b>	Pearson Correlation	.527**	.539**	.569**	.612**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	99	99	98	99	99

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

#### 4.4. The regression model

There are two dependent variables SAFT and SAGS, thus we established the following two regression models.

$$SAFTY_1 = \alpha + \beta_1 SQ + \beta_2 SC + \beta_3 PV + \beta_4 gender + \beta_5 age + \beta_6 profeson + \beta_7 income + \beta_8 account$$

$$SAGSY_2 = \alpha + \beta_1 SQ + \beta_2 SC + \beta_3 PV + \beta_4 gender + \beta_5 age + \beta_6 profeson + \beta_7 income + \beta_8 account$$

SAFT means satisfied with your financial transaction with the bank

SAGS means satisfied with the general service provided by the bank

**Table 4:** SQ means service quality

service quality	Do you think that your bank caters all your banking needs?
	Do you think that your bank have core banking facility for the customers?

**Table 5:** SC means service charge

service charge	Do you think that your bank charge unnecessarily for not maintaining minimum balance in your account?
	Do you think your bank offers competitive interest rate?

**Table 6:** PV means perceive value

perceive value	Do you feel that the producer to open an account with the bank was difficult?
	Do you get always prompt service whenever you visit the branch?
	Do you agree that minimum account limit is not high and easy to maintain?

Multiple regression is an extension of simple linear regression. It is used when we want to predict the value of a variable based on the value of two or more other variables. The variable we want to predict is called the dependent variable (or sometimes, the outcome, target or criterion variable). Linear regression attempts to model the relationship between two variables by fitting a linear equation to observed data. One variable is considered to be an explanatory variable, and the other is considered to be a dependent variable.

Since there are two dependent variables and three main determinants, and five control variables, there will be two categories of regression models with six sub-models. Regression results with dependent variable of SAFT are shown in table 7.

**Table 7:** Regression results with dependent variable of SAFT

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
SQ	0.266* (0.081)	0.327** (0.033)	0.321** (0.037)	0.326** (0.034)	0.333** (0.034)	0.332** (0.035)
SC	0.309** (0.054)	0.223 (0.170)	0.254 (0.124)	0.246 (0.139)	0.250 (0.136)	0.245 (0.149)
PV	0.232** (0.014)	0.264*** (0.006)	0.235** (0.017)	0.23** (0.017)	0.236** (0.017)	0.232** (0.021)
Gender		0.055 (0.781)	0.011 (0.954)	0.001 (0.997)	0.004 (0.985)	0.001 (0.998)
Age			0.145 (0.272)	0.135 (0.299)	0.129 (0.327)	0.133 (0.321)
Profession				0.058 (0.506)	0.059 (0.500)	0.056 (0.535)
Income					0.036 (0.765)	0.031 (0.801)
Account						0.022 (0.842)

Note: Note: \* represents the value of sig is lower than 0.1, \*\*represents the value of sig is lower than 0.05, \*\*\* represents the sig value is lower than 0.001.

Above we see the coefficients for each model tested. Notice that all models are statistically significant with p-value less than .05( $p < .05$ ) the meaning of that every single predictor variable has contribution in the outcome variable.

The result indicates that both SQ and PV plays significant positive impacts on customer satisfaction of financial transactions. These results suggest that service quality and perceived value are important factors in influencing customer satisfaction. Therefore, hypotheses H1a and H3a are supported, which assume that there are positive relationship

Determinants of Customer Satisfaction in the Banking Sector in Bangladesh between service quality and perceived value and customer satisfaction in the banking sector in Bangladesh. Service charge does not impact customer satisfaction when control variables are considered illustrating that hypothesis H2a is not supported.

Regression results with dependent variable of SAGS are shown in table 8.

**Table 8:** Regression results with dependent variable of SAGS

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
SQ	0.63 (0.692)	0.032 (0.842)	0.022 (0.892)	0.030 (0.848)	0.041 (0.798)	0.041 (0.800)
SC	0.144 (0.388)	0.164 (0.340)	0.221 (0.200)	0.207 (0.232)	0.231 (0.220)	0.206 (0.244)
PV	0.402*** (0.000)	0.402*** (0.00)	0.351** (0.001)	0.352** (0.001)	0.352** (0.001)	0.346** (0.001)
Gender		0.284 (0.174)	0.206 (0.325)	0.188 (0.371)	0.193 (0.360)	0.188 (0.378)
Age			0.256* (0.060)	0.244* (0.073)	0.235* (0.089)	0.241* (0.086)
Profession				0.098 (0.281)	0.101 (0.274)	0.095 (0.313)
Income					0.061 (0.628)	0.053 (0.681)
Account						0.035 (0.753)

Note: \* represents the value of sig is lower than 0.1, \*\*represents the value of sig is lower than 0.05, \*\*\* represents the sig value is lower than 0.001

From this table 8, we can see the coefficients for each model tested. Notice that all models are statistically significant with p-value less than .05( $p < .05$ ) the meaning of that every single predictor variable has contribution in the outcome variable.

The above results indicate that only PV plays significant positive impacts on customer satisfaction of general service. This result suggests that perceived value is an important factor in influencing customer satisfaction. Therefore, hypotheses H3b is supported, which assume that there is positive relationship between perceived value and customer satisfaction in the banking sector in Bangladesh. However, hypothesis H1b and H2b are not supported.

## 5. Conclusion and discussion

The scales developed for service quality, service charge, perceived value, and customer satisfaction were tested using a diversified data set collected by a questionnaire survey in Bangladesh. The results demonstrate that service quality and fair service charge both have direct positive influence on customer satisfaction. They have also indirect role on customer satisfaction through perceived value. This study contributes in the branch of consumer behavior in terms of theory development and managerial implications especially in banking industry in a developing country like Bangladesh. This study finds service quality and fair service charge both have significant positive impact on customer satisfaction in banking industry of Bangladesh. This result is consistent with finding of

## Akm Emdadul Hoque

other scholars. Usually, service quality is the important predictor of customer satisfaction, but this study establishes service charge fairness has great impact on customer satisfaction simultaneously with service quality. This result has managerial implications. In order to successfully operate the banking business managers should emphasize the quality and charge fairness. It is a complex process to make customers satisfied and maintenance of satisfaction and that require investment of tangible and intangible resources. Thus, the positive effect of quality, and fairness of service charge, makes customers satisfied. Managers should have planning to ensure service quality, competitive service charges.

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Determinants of Customer Satisfaction in the Banking Sector in Bangladesh

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