

SERVICE QUALITY, CORPORATE IMAGE AND CUSTOMER'S SATISFACTION TOWARDS CUSTOMERS PERCEPTION: AN EXPLORATORY STUDY ON TELECOM CUSTOMERS IN BANGLADESH

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Abstract

The purpose of this paper is to find out the determinants that are significantly influencing telecom customer's perception in Bangladesh. The study surveyed 450 telecom customers in Bangladesh from Dhaka city to determine the key influential factors that significantly influence on their perception. The data analyses were conducted by exploratory factor analysis, confirmatory factor analysis and structural equation modeling to test the hypothesis. The results of the statistical analysis reflected that most of the telecom customers are highly concerned about service quality followed by corporate image. Few studies have explored over the years under this market regarding this research issue. Moreover, this is a relatively new issue that remains largely undiscovered by researchers under underdeveloped country's telecom operator's perspective. It is hoped that the findings may assist the mobile phone operators in production of their services and promotion of their services. **Key words:** Consumer perception, service quality, brand image, customer's satisfaction, Bangladesh.

Due to privatization and liberalization of policy telecommunication sector is experiencing phenomenal global change all over the world (Beard & Hartmann, 1999). In Bangladesh due to increase in the mobility and the emerging complex business environment people are moving from one place to another. Therefore, they want to talk with the connected people for taking the right decision at the right time during their movement. So in a country like Bangladesh where the land line is very hard to come by most of the consumers now a day's depend on cell phone to communicate with each other. Mobile or Cell phone is such a vehicle that made the communication easier even for the rural people as well. That is why the penetration rate of telephone in Bangladesh rose up to 540 percent between 1985 and 2000 (Lee, 2001). Bangladesh enters the mobile world through the City Cell Company in 1993. Later Grameen Phone, Aktel, Banglalink, Tele Talk and Warid Telecom got license from the government. Because of the stiff competition companies are trying to capture the maximum share of the market by providing various services to satisfy the customer's needs, wants and demands. As competition has escalated among the operators. So it is necessary for them to learn about the consumer's perception about the service quality, brand image and customers satisfaction.

Furthermore, there exists a significant research gap linking service quality, brand image and customers satisfaction towards mobile phone operators customers perception in Bangladesh. Particularly, empirical research is scarce enhancing the new research in this area. The present study aims to gather primary data from the users of telecom consumers from multi age respondents which will present the findings about the degree of influence of service quality, brand image and customers satisfaction towards user's perception on telecom operators in Bangladesh. This paper presents a conceptual and exploratory analysis of the relevant variables which will direct for further empirical studies.

Literature Review

In recent times Mobile telecom operators play an important role which enhance social interactions between and among individuals, groups, organizations, and the governments alike and which ultimately create a strong network of global environment. That is why Deutsch (1953) states this trend as "a web of nations". Today's development of communication technology ignores the global border and makes the world as "global village" (McLuhan, 1964).

Services Quality

Customer's perceived quality construct has received considerable attention in the marketing literature (Holbrook & Corfman 1985; Jacobson & Aaker 1987; Olshavsky 1985). Customer perceptions of the quality of a service are traditionally measured immediately after the person has consumed the service. Plamer and O'Neill (2003) mentioned about the perception of service quality at the time of the next purchase decision which influence consumers repeat buying behavior attitude. Crosby et al., (2003) noted that an understanding of quality is not necessarily something that is perceived in the mind of the consumer upon the first impression. Phusavat and Kanchana (2008) described quality represented the most important competitive priority. Quality was given the highest weight of 36.4 percent, while service provision, customer-focus, and know-how were at 20.4, 12.9 and 12.5 percent, respectively. The remaining weights were 9.8 percent for costs, and 8.0 percent for flexibility. In spite of that, Omotayo and Joachim (2008) find the relationship between customers' services on customer retention in telecommunication industry in Nigeria. They reached that if retention is not managed, customer's loyalty may be lost. The hypotheses of their research were supported indicating strong relationship between customer service, satisfaction and retention in the communication industry in Nigeria. Besides that, in hypercompetitive environments like the wireless industry, keeping existing customers is one of the most effective ways to drive profitability, as it is more costly to attain a new customer than to retain an existing one (Mobile, 2005). Anderson and Olsen (2008) concluded that customer service is an important driver of customer equity and as such should be a high priority when attracting and keeping the right profitable customers. So this study creates the following hypothesis for further examination.

H1: Service quality has a significant influence on consumer perception in selecting a mobile telecom operator.

Consumer Satisfaction

Satisfaction can be defined as the extent of the emotional reaction from a service experience (Oliver, 1980). Buchanan (1985) said "the positive feelings of contentment results from the satisfaction of felt or unfelt need of the individual". It can also be defined as an evaluative summary of (direct) consumption experience, based on the discrepancy between prior expectation and the actual performance perceived after consumption (Yi, 1990).

Lin and Chen (2006) explored that product knowledge and product involvement all has a significantly positive effect on consumer's purchase decision. Meanwhile product evaluations based on direct experience are strong predictors of behavior (Fazio & Zanna, 1978, 1981). Satisfaction is based on direct past experience; it is likely to be accessible and to affect behavioral intentions independent of other considerations. However, little empirical evidence had shown that customer satisfaction actually translates into loyalty (Jones & Sasser 1995). Oliver (1997) argued that even a loyal consumer is vulnerable to situational factors (e.g., competitors' coupons or price cuts) and so satisfaction is not likely to be the sole (reliable) predictor loyalty (Reichheld, 1996). The following hypothesis is going to be tested for further analysis:

H2: Customers Satisfaction plays a significant influence on customer's perception in selecting mobile telecommunication service provider.

Corporate Image

Nguyen and Leblanc (1998; 2001) claimed that corporate image is related to the physical and behavioral attributes of the firm, such as business name, architecture, variety of products/services, and to the impression of quality communicated by each person interacting with the firm's clients. A seller's reputation effects the perceptions of the quality of the products sold by that seller (Cabral, 2000) confirmed this hypothesis in his study of product stretching. Haque et al. (2006) depicted consumer familiarity and confidence significantly depend on brand of the products and a company's sales history. In general, familiarity is created when there are long sales history, strong brand images of a company and previous satisfaction of using the product (Coltman et al., 2000; Wen –Yeh et al., 2004). Confidence was also derived from consumers' attitudes that directly influence their purchasing intentions (Donnavieve & Sivakumar, 2002). According to Aydin and Zer (2005) corporate image, perceived service quality, trust and customer switching costs are the major antecedents of customer loyalty, and loyal customers may buy more, accept higher prices and have a positive word-of-mouth effect. Consequently, corporate image as an attitude must affect behavioral intentions such as customer loyalty (Johnson et al., 2001). Nguyen and Leblanc (2001) demonstrated that corporate image relates positively with customer loyalty in three sectors (telecommunication, retailing and education). So this research can draw the following hypothesis:

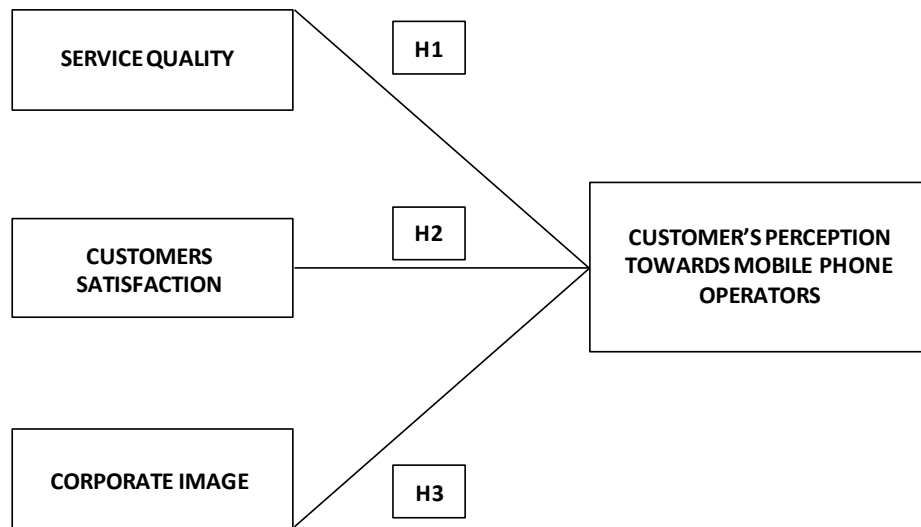
H3: Corporate image plays a significant influence on customer's perception in selecting mobile telecommunication service provider.

Conceptual Framework

Above all researchers in this research found that there is very limited literature focusing on consumer's perception in the choice of a mobile phone operator where service

quality, corporate image and customers satisfaction play a significant influence. Based on the literature review; this study proposes a conceptual framework of studying dynamics of consumers perception and their behavior towards selection of an operator. This framework emphasizes on the following independent variables like service quality, corporate image and customers satisfaction towards customers perception of selection an operator's services. The schematic diagram is presented below:

Figure 1: Conceptual Framework of The Proposed Study



Methodology

Data was collected through distributing structured questions by following convenient sampling procedure to the consumers of telecom operators in various part of the Dhaka city the capital of Bangladesh. The capital was selected because significant number of consumers of telecom operators is available in Dhaka compared with other city of Bangladesh. This study used 450 respondents to complete the research objective. Out of 450 samples around 60% of respondents were from Grameen phone, 35% were from Banglalink and 5% of the respondents were from others operators. Questionnaires were distributed to the respondents according to the market share of the operators in the particular market for minimizing the biasness. A self-administered questionnaire was developed to identify the consumer perceptions towards mobile phone operators. Section one to three designed to measure the participant's perceptions of the operator's services in terms of service quality, corporate image and customer's satisfaction. The responses of this measurement were

scored using a 7- point rating scale. The measurement items of those variables were both drawn from existing theories and self-created questions based on the literature and the discussions with the marketing professors. The data analysis of this study was organized into three stages. The first stage of the data analysis conducted an exploratory factor analysis (EFA) to identify the factor structure. The second part of the data analysis employed a confirmatory factor analysis (CFA) to confirm the factor. In this study, the goodness of fit testing was conducted by using several criteria, including chi-square test, root mean square error of approximation (RMSEA), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), normed fit index (NFI), and comparative fit index (CFI) (Hair, et al., 2006). SEM (Structural Equation Modeling) was used to test hypothesis 1 to hypothesis 3. A total of 500-instruments were distributed among the potential respondents for this study, of which 450 questionnaires were received and proved to valid for further studies. This represents a success rate of 85%, which is considered to be extremely good in view of time, cost, certainty and geographical constraints.

Results and Discussion

Reliability Coefficient of All the Items in the Instruments

This research were used Cronbach alpha to measure the reliability for a set of two or more constructs where alpha coefficient values range between 0 and 1 with higher values indicating higher reliability among the indicators (Hair et al., 2006). In accordance with the Cronbach alpha test, the total scale of reliability for this study varies from .80, indicating an overall higher reliability factors. From table 1 it is showed that the reliability of this study is substantial in every perspective.

Table 1: Reliability Analysis for all Variables

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
.802	.803	20

Factor Analysis

The survey results obtained from 450 respondents have been explained in this section through the principal

component analysis (PCA). It was carried out to explore the underlying factors associated with 15 items. Result for the Bartlett's Test of Sphericity and the KMO revealed from this study were highly significant. So this research concluded that this variable was suitable for the factor analysis (Table 2).

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		
		.832
Bartlett's Test of Sphericity		
Approx. Chi-Square		964.586
Df		92
Sig.		.000

For this study, the general criteria were accepted items with loading of 0.60 or greater. The result showed in explained total variance explained by the two factors was 43.060%. The values of the following Table 3 indicated the affiliation of the items to a factor. The higher loading (factor) indicates the stronger affiliation of an item to a specific factor. The findings of this study indicate that each of the three dimensions (service quality, customer's satisfaction and corporate image) was homogeneously loaded to the different factors.

Table 3: Factor Loading Matrices Following Rotation of four-factor Solutions

Items	Service Quality (SQ)	Customer's Satisfaction (CS)	Corporate Image (CI)
Genuine interest in solving customers' (SQ1)	.65		
Performs service right the first time (SQ2)	.64		
Error-free service (SQ3)	.63		
Prompt service (SQ4)	.62		
Trust with the operator (CS1)		.61	
Operator's customer representative have tendency of willingness to help customers (CS2)		.62	
Trust customer services staffs of my operators (CS3)		.66	
Experience with my current operator is very important (CS4)		.69	
Involvement by business with community's (CI1)			.61
Social responsibility is needed to balance company's power (CI2)			.62
Involvement in socially responsible activities (CI3)			.63
Consumers and general public will bear the costs of business social involvement (CI4)			.66

Notes: Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 5 iterations.

Reliability Test of Each Item under Each Factor after Factor Analysis

According to Hair et. al., (2006) reliability measures shows greater consistency than less reliable measures (Table 4). The reliability coefficients for the four factors: service quality, customers satisfaction and corporate image were 0.81, 0.82 and 0.78 respectively. As Table shows, all alpha coefficients for the data exceed the minimum standard for reliability of 0.70 recommended by Nunnally (1978). Thus, the results indicate that these multiple measures are highly reliable for measuring each construct.

Table 4: The Reliability Coefficients for Derived Factors

Factor	Number of Cases	Number of Items	Cronbach's Alpha
Consumer's Perception (CP)	450	4	0.81
Age	450	4	0.82
Gender	450	4	0.78

Confirmatory Factor Analysis

The second phase of data analysis consisted with confirmatory factor analysis. To this end the structural equation method (SEM) was applied, using maximum likelihood estimation method to test the hypothesis of the study (Bentler, 1995). Although this research has employed EFA for verifying grouping and loading pattern of measuring scale items, it has further attempted to screen EFA examination by conducting CFA among all the exogenous variables (service quality, customer's

satisfaction and corporate image) with measuring items retained by EFA.

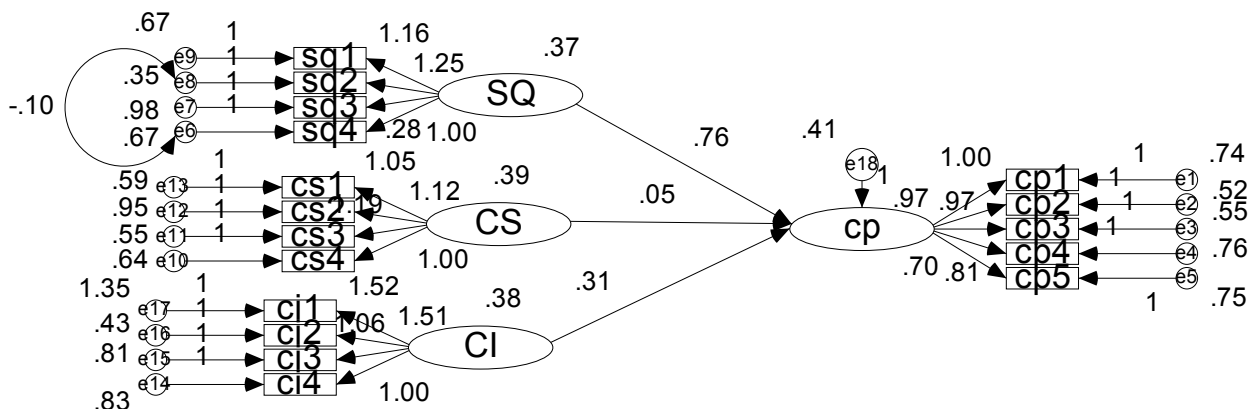
Service Quality

From the result of EFA as shown in Table 3, have retained 4 measuring items for consumer's perception towards choosing a restaurant. This study have retained all these items after conducting CFA, as all those indicators were loaded with loading factor more than 0.60. For service quality, the modification indices for the covariance between the measurement errors of SQ2 ("Performs service right the first time") and SQ4 ("Prompt service") was 13.834. The correlation of these errors was logically possible; therefore the model was revised to incorporate this path (Figure 4.3). After adding this parameter, the measurement model fit indices of price showed an adequate fit: $\chi^2/d.f. = 1.78$ ($\chi^2=23.226, d.f=13$); GFI=.98, AGFI=.97, CFI=.98, NFI=.96, TLI=.97 and RMSEA=.040.

Customer's Satisfaction and Corporate image

From EFA as shown in table 3, have retained 4 measuring items for age, gender and income variable. This study have retained all these items after conducting CFA, as all those indicators were loaded with loading factor more than 0.60. The measurement model fit indices of customer's satisfaction and corporate image showed an adequate fit: $\chi^2/d.f. = 1.222$ ($\chi^2=13.452, d.f=11$); GFI=.97, AGFI=.96, CFI=.96, NFI=.95, TLI=.94 and RMSEA=.060; $\chi^2/d.f. = 1.20$ ($\chi^2=16.852, d.f=14$); GF=.962, AGFI=.95, CFI=.95, NFI=.93, TLI=.93 and RMSEA=.050.

Figure 2: Service quality, Corporate and customers satisfaction towards customers perception default model (note: cp= consumer's perception; SQ= service quality, CS= customer's satisfaction, CI= corporate image)



Statistical Significance of Parameter Estimates

In this stage this of data analysis this research utilized critical ratio (C.R) value, which represents the parameter of an estimate divided by its standard error. Based on a probability level 0.05 the test statistic needs to be $> \pm 1.96$ before the hypothesis (that estimates equals 0.0) can be rejected. On the other hand, it is also important to note that nonsignificant parameters can be indicative of a sample size that is too small (Byrne, 2001).

Hypotheses Testing

The structural equation model was examined to test the relationship among the constructs. After adjustment of the model by observing the modification indices value goodness-of-fit indicates for this model were chi-square/df = $(159.769 / 61) = 2.61$, GFI = 0.92, AGFI = 0.91, CFI =

0.89, NFI = 0.82, RMSEA= 0.06. Figure 2 depicts the full model. After observing the statistical test it is been clear that all the paths are not significant at $p < 0.05$. (H1) Service quality has a significant influence on consumer perception in selecting a mobile telecom operator. From the statistical result the null hypotheses H1 is accepted at 0.5 level of significance $p > 0.000$. Regarding the H2: customer’s Satisfaction plays a significant influence on customer’s perception in selecting mobile telecommunication service provider. This null hypothesis is not accepted at $p < 0.000$. On the other hand H3: corporate image plays a significant influence on customer’s perception in selecting mobile telecommunication service provider this null hypothesis is accepted at $p < 0.000$. Among all the significant variables, service quality has the highest influence on consumer’s perception of choosing a particular operator’s services followed by corporate image. On the other hand consumer’s satisfaction is not fully influenced on their perception to choose a particular operator’s services.

Table 5: Standard Estimation of the Main Model

Standardized regression weight			Estimate	S.E.	C.R.	P value	
H1	Service Quality (SQ)	←	Consumers’ Perception (CP)	.762	.125	6.076	***
H2	Customer’s Satisfaction (CS)	←	Consumers’ Perception (CP)	.052	.074	.704	.481
H3	Corporate Image (CI)	←	Consumers’ Perception (CP)	.313	.079	3.973	***

Conclusion and Implementation

This study has provided empirical evidence for the development of customer’s perception towards the mobile phone operators involving corporate image, customer’s satisfaction, and service quality. In this study, respondents were directly asked to provide their perceptions or evaluations of the comparisons, using a seven point scale. The results indicated that the adequate measurement model was a good fit with the data. This study was undertaken to examine and understand the consumer’s perception in the choice of selecting a mobile telecommunication service providers in Bangladesh. As a general notion, consumer’s perception is widely varied with the service quality, corporate image and customer’s satisfaction. From the current research it is being revealed that in Bangladesh most of the consumer’s are very concern about the service

delivery and corporate image on the other hand the satisfaction is not very important concern for them. The competition among the mobile phone service providers in Bangladesh is more intense now than ever before. They compete not only for networking quality by a large amount of investment in network quality, network extension and upgrading, but also for the acquisition of new customers and retention of old customers by direct and indirect price reduction. Network quality is one of the important factors of overall service quality. According to this study the mobile phone operators in Bangladesh must put their attention on service quality, corporate image to influence the current and potential customers.

Above all, an understanding of direct effect by the key factors like (corporate image, customers’ satisfaction, and service quality) affecting the customers perception in mobile phone operators (service providers) will put the practitioner

in a better position to design appropriate strategies to deal with marketing practices that will enhance the benefit of the operators.

Limitation of the Study and Direction to Future Research

This research still predict that further research efforts are being needed to examine these factors in Bangladesh with additional samples before generalization can be made. In this research customers satisfaction is not proof very significant. Further research must consider customers satisfaction as a mediating role in between service quality and corporate image.

Further studies could examine a customers' perception towards mobile services and their influencing factors in the choice of service providers for a particular mobile phone operator's using a larger sample covering the entire province in Bangladesh with prepaid and postpaid customers. The results would be useful for cellular phone operators and differentiation. In addition, further research is needed to measure the relationship of overall satisfaction and behavioral intention to the consumers' perceptions of the service quality of a particular operator. The results of such studies could identify the determinant service attributes to help ensure consumers satisfaction and purchasing behaviors in different operators.

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