Evaluating Customers' Perceptions of Service Quality: An Empirical Study on A Leading Telecom Service Provider of Bangladesh

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Abstract

In Bangladesh, telecom is the fastest growing industry. Competition in this industry is getting stiffer day-by-day where large local and international players are offering their services. Success in this industry largely depends on delivering quality service and achieving customer loyalty. The purpose of this study is to use SERVQUAL model to analyze customers' perception towards the service provided by GrameenPhone Limited (the leading telecom service provider in Bangladesh). In this study sample was taken from the group of people who are GrameenPhone subscribers. The geographic scope of this study is Khulna (a major city and a divisional head quarter of Bangladesh) metropolitan area. A simple linear regression model has been used to interpret the relationship between the variables. The result shows that reliability, responsiveness, tangibles and assurance dimensions are the key to customers' perception of GrameenPhone's service. The findings of this study can be useful for the researchers in the area of service marketing. This will also aid the telecom service providers to generate further ideas on how to enhance their customers' positive perception to achieve heightened business goals.

Keywords: SERVQUAL Model, Customer's Perception, Service Quality, GrameenPhone.

1. Background of the Study:

In this twenty first century people are very fast and advanced in doing most of their works. Today's business world needs to shape up accordingly to serve its customer base. Customer service has become a buzzword in today's service industry. Telecom industry is also a pure service industry that provides variety of services like voice, data, contents and so on to the subscribers. Telecom sector is significantly contributing to the economic growth and development of Bangladesh. 3G connections and more efficient data connectivity through mobile phones are pivotal tools for making Bangladesh government's 'Digital Bangladesh' slogan into a reality. According to the Bangladesh Telecommunication Regulatory Commission, total number of mobile subscribers in the country has reached 44.625 million as of March 2015. Moreover "Bangladesh Economic Review 2014" suggests that services contributed 54.27% of the total GDP in the fiscal year of 2013-14. At present there are six mobile phone operators in Bangladesh. Over the past few years there has been intense competition among these six service providers to gain market share, customer loyalty, growth, customer satisfaction and so on. GrameenPhone is the leading telecom service provider in Bangladesh in terms of market share. The study focuses on the service quality of GrameenPhone and how it affects the customers' perception. Parasuraman et al. (1988) mentioned that service quality has become a significant differentiation tool in the service industry, which gives organization a competitive edge. There is a clear positive relationship between service quality and customer satisfaction (Kearney, 2007). For an organization to gain competitive advantage in terms of service quality, it must measure its service quality on a regular basis. Thus the study is expected to contribute to the telecom service providers' (in this case GrameenPhone) understanding of their customer satisfaction, which in a way will help them to devise their marketing strategy.

2. Objectives of the Study:

2.1 Primary Objective:

The primary objective of this study is to identify the relationship between service quality dimensions and customer's perception of GrameenPhone Limited in Khulna city.

2.2 Secondary objective:

The secondary objective of the study is to:
- ✓ Identify whether there is any difference on customer perception in terms of different demographic variables e.g. age, profession income and gender level.

3. Methodology:

3.1 Population: The target population of this study is the GrameenPhone subscribers in the Khulna metropolitan area.

3.2 Sample: The sample size of this study is 200. The reason for this relatively small sample is largely cost constraints as well as time limitation.

3.3 Instrument development: The questionnaire for this study has been developed in the context of SERVQUAL model. Questionnaire consists of two parts. Part one consists of general demographic information and part two is about the questions on SERVQUAL model. Five dimensions have been used for this study, which are the dimensions of SERVQUAL model. These are tangible dimension, reliable dimension, responsive dimension, assurance dimension and empathy dimension. It has been prepared by using a five-point Likert scale (1 = strongly disagree and 5 = strongly agree). Here dependent variable is customer perception.

3.4 Data collection & Analysis: The process of gathering information has been facilitated through a face-to-face interview of the customers of GrameenPhone Limited. This study has conducted the data analysis with the application of SPSS software version 22.0. A simple linear regression model has been used to identify the relationship between the variables. In addition to this independent sample, t test and ANOVA have been used to compare mean among different demographic variables.

3.5 Reliability: Table 3 shows the reliability statistics in terms of Cronbach's Alpha. Results show that items are reliable ($\alpha > 0.70$).

4. Limitations of the study:

The study has the following limitations:

- ✓ Here sample size is relatively limited because of cost as well as time constraints.
- ✓ Further the study is limited within a certain geographic region, which is Khulna city. A nationwide survey could help to get a more comprehensive scenario on customer perception towards mobile service providers.

4. Literature Review:

4.1 SERVQUAL Model:

The SERVQUAL model was originally developed by A. Parasuraman, Valarie A. Zeithaml, and Leonard L. Berry in 1988 and later refined in 1991 as a multidimensional scale to capture customer perceptions and expectations of service quality, which involves the calculation of the differences between expectations and perceptions on a number of pre-specified criteria. This is currently one of the most popular measures of service quality. The scale currently contains 21 pairs of items considering consumer perception and expectation factors that are distributed throughout the five service quality dimensions. These are reliability, responsiveness, assurance, empathy & tangibles (Zeithamal 2004). Reliability dimensions consist of consistency and dependability of the service of the organization. This dimension provides customers the message about the services that the firm provides (Lovelock, 2010). Responsiveness dimensions indicate the timeliness of the service of the firm. Customers think about the commitment for timely service, willingness and preparedness of employees when they are asked to comment on the satisfaction (Lovelock, 2010). Assurance dimensions consist of competence, courtesy and security while measuring satisfaction. Empathy dimensions work with respectfulness to the customers' emotion (Lovelock, 2010). Tangible dimensions are those that indicate the overall outlook of the organization. Customers perceive about the service after observing the outlook and visual appeal of the organization (Lovelock, 2010). SERVQUAL model has widely been used for measuring service quality of service organizations.

4.2 Perception of Quality and SERQUAL Model:

The definition of quality varies from person to person, situation to situation and culture to culture. Parasuraman (1988) defines quality as the degree and discrepancy between the consumer's perception and expectation. Zeithaml et al. (1990) defines quality as the consumer's overall impression of the relative inferiority or superiority of the organization and its services. Perceived service quality results from a comparison of consumers' expectations with their perceptions of the service actually delivered by supplier e.g. providing services that are not provided by others (Kangis and Voukelatos, 1997). According to Brown et al. (1992), customers prefer organizations that deliver higher service quality, and suppliers can charge a premium for superior service qualities. SERVQUAL model is one of the widely used tools to assess service quality. The model was developed in 1988. Ever since it has been widely used in case of telecommunication industry studies; across diverse cultural contexts. It has bee regarded with high reliability and validity (Hoffman & Bateson, 2001). For example, Arokiasamy & Abdullah (2013) in their research used the SERVQUAL model to define customer satisfaction with mobile phone service in Malaysia. They found that all five-service quality dimensions can positively influence customer satisfaction, which in the process enhances loyalty and impacts attitudes. Also

their t-test results showed that there was a significant gap between the perceived satisfaction and expectation (P-E) on all of the service quality dimensions. Joshi et al. (2010) also used similar model to conclude that, the Indian telecom sector is passing through a dynamic transitional phase, as it is clearly undergoing the operation of market forces of demand and supply. From their hypothesis it is found that all the dimensions are significant to have positive attitude of customers towards the service quality of telecom service providers. Lovelock (2010) stated that if the service organization ensures the service quality, the customer will become loyal to the service organization. As a result the main duty of the service organization is to ensure the quality of the services to the prospective customers. Bloemer, et al. (1998) have presented a model to show how the mental picture, service quality, and customer satisfaction influence customer loyalty. Findings of the research showed that the mental picture indirectly and through service quality, influences loyalty. Chakravarty (2003) found that there is a meaningful negative relation among service quality dimensions, responsiveness, empathy, and reliability, with customer's tendency to abandon the bank. This study on India's banks showed that the concept of service quality in developing countries is of a multi-dimensional structure. Therefore, like many other previous studies this model can be used to measure service quality in the context of Bangladesh telecom sector as well.
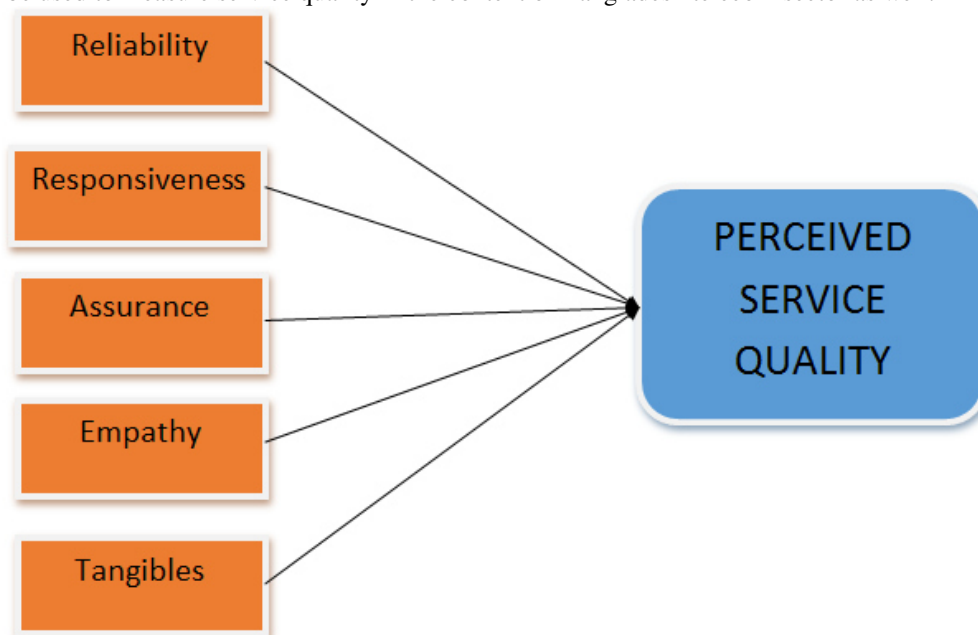

Figure 1: The Parasuraman, Zeithamal & Berry (1988) theory of the determinants of service quality.
Following SERVQUAL model, the regression equation for this study is the following:

$$Y = \beta_0 + \beta_1 R + \beta_2 Re + \beta_3 A + \beta_4 E + \beta_5 T + u$$

Where,

Y	=	Customer Perception
β_0	=	Constant
R	=	Reliability
Re	=	Responsiveness
A	=	Assurance
E	=	Empathy
T	=	Tangibles
u	=	Error terms

4.2 Overview of GrameenPhone Limited:

GrameenPhone widely known as GP, is the leading telecommunications service provider in Bangladesh with more than 52.006 million subscribers as of (March 2015). GrameenPhone is the largest mobile phone operator in the country. It is a joint venture enterprise between Telenor and Grameen Telecom Corporation (a non-profit sister concern of the internationally acclaimed microfinance organization and community development institute named Grameen Bank). Telenor, the largest telecommunications company in Norway, owns 55.8% shares of Grameen Phone whilst Grameen Telecom owns 34.2% and the remaining 10% is publicly held. GrameenPhone was the first company to introduce GSM technology in Bangladesh. It also established the first 24-hour Call Center to support its subscribers ('Grameen Phone' n.d).

Mission: Leading the industry and exceed customer expectations by providing the best wireless

services, making life and business easier.

From their mission it is quite obvious that they want to create value to the customer by providing exceptional service and thereby form a loyal customer base. That makes this research even more meaningful.

Vision: We exist to help our customers get the full benefit of communications services in their daily lives. We want to make it easy for customers to get what they want, when they want it. We're here to help.

Brand Promise: Go Beyond

Product & service: GrameenPhone offers different packages that include Xplore, Nischinto, Apon, Bondhu, Djuice, Ekota and so on. Services include international roaming, 3G, EDGE, mobile bill payment, voice sms, news alert, wide range of value added services (VAS) and so on. There are plenty of customer service centers throughout the country. It also offers online customer service to its customers.

5. Study Hypothesis:

Based on the previous literatures the study has developed some hypothesis. The hypotheses of this study are the followings:

H1: There is a relationship between Reliability and customer perception.

H2: There is a relationship between responsiveness and customer perception.

H3: There is a relationship between assurance and customer perception.

H4: There is a relationship between empathy and customer perception.

H5: There is a relationship between tangibles and customer perception.

6. Data Analysis & Interpretation:

Regression statistics in Table 1 shows that R^2 is 0.423 or 42.3%, which means 42.3% of the variation in customer perception can be explained by the independent variables e.g., reliability, responsiveness, assurance, empathy and tangibles. This table also indicates that reliability, responsiveness, assurance and tangibles are statistically significant in determining the customer perceptions of GrameenPhone. The F value (10.198) is also found to be significant at 5% level of significance (0.000). Table 3 also shows the reliability statistics of the dimensions used in this study. Reliability from the sample showed a reasonable level of reliability ($\alpha > 0.70$).

Table 1: Regression Statistics

Variables	Standardized Beta
Reliability	0.37**
Responsiveness	0.441*
Assurance	0.420*
Empathy	0.093
Tangibles	0.170**
F = 10.198**, **R²** = 0.423, **N**=200, Durbin-Watson = 1.721 **P<0.01, *P<0.05	

Source: Author's estimation from primary data

Two major methods were used to determine the presence of multicollinearity among independent variables in this study (Table 2). These were tolerance test and variance inflation factor. The variance inflation factor and tolerance fall within acceptable range (VIF = 1–10), tolerance = 0.1–1.0). This states that there is no multicollinearity problem in the regression model used for this study. The Durbin-Watson statistics (Table 1) shows that the serial correlation of residuals is 1.721 which is acceptable (range = 1.5–2.5). This indicates that there is no auto correlation problem in the data. This concludes that the regression model used in this study is adequate or in other words, the model is fit.

Table 2: Collinearity Statistics

Variables	Tolerance	VIF
Reliability	0.934	1.071
Responsiveness	0.197	5.085
Assurance	0.192	5.220
Empathy	0.938	1.066
Tangibles	0.918	1.089

VIF= Variance Inflation factor

Table 3: Reliability Statistics

Variables	Coefficient Alpha
Reliability	0.754
Responsiveness	0.845
Assurance	0.801
Empathy	0.747
Tangibles	0.782

7. Result of Hypothesis:

H_1 states that there is a relationship between reliability and customer perception. The regression result also supports this hypothesis ($P<0.05$). This also indicates that there is a positive relationship between reliability and customer perception in case of GrameenPhone. This clarifies that the more GrameenPhone focuses on its ability to perform the promised service dependably and accurately, the more it is likely that their customer's perception will be positive. Therefore H_1 is accepted. H_2 states that there is a relationship between responsiveness and customer perception. The regression result also supports this hypothesis ($P<0.05$). This also indicates that there is a positive relationship between responsiveness and customer perception in case of GrameenPhone. This further signifies that the more GrameenPhone focuses on helping customers and providing prompt service, the more it is likely that their customer's perception will be positive. Therefore H_2 is also accepted. H_3 states that there is a relationship between assurance and customer perception. The regression result also supports this hypothesis ($P<0.05$). This also indicates that there is a positive relationship between assurance and customer perception in case of GrameenPhone. This means that the more GrameenPhone focuses on motivating its employees to build trust and confidence, it is more likely that their customer's perception will be more positive. Therefore H_3 is also accepted. H_4 states that there is a relationship between empathy and customer perception. But regression result states that empathy is not statistically significant with customer's perception ($P>0.05$) and therefore implies no relationship with customer perception. However if there is a relationship, it will be positive. Therefore H_4 is rejected. H_5 states that there is a relationship between tangibles and customer perception. The regression result also supports this hypothesis ($P<0.05$). This also indicates that there is a positive relationship between tangibles and customer perception. This means that the more GrameenPhone stresses on appearance of physical facilities, equipment, personnel, and written materials, the more their customers will have positive perception. Therefore H_5 is also accepted.

8. Results of ANOVA and t test:

Table 4: ANOVA result (Customer's perception & Age)

ANOVA					
Customer's perception					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.431	30	4.216	18.966	.175
Within Groups	32.673	170	.222		
Total	41.104	200			

9.

Table 5: ANOVA result (Customer's perception & profession)

ANOVA					
Customer's perception					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.500	27	1.417	6.213	.000
Within Groups	32.605	173	.228		
Total	41.104	200			

Table 6: ANOVA result (Customer's perception & income level)

ANOVA					
Customer's perception					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.956	21	.478	1.750	.000
Within Groups	40.148	179	.273		
Total	41.104	200			

Table 7: t test result (Customer's perception between male & female)

Independent Samples Test						
		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Customer's perception	Equal variances assumed	.576	.449	1.488	148	.139
	Equal variances not assumed			1.461	72.093	.148

10.

Table 4 shows ANOVA result of customer's perception in terms of different age of customers. Result shows that there is no difference in customer's perception in terms of different ages (P<0.05). On the other hand table 5 also shows that there is a difference in customer's perception among different professions of the respondents (P>0.05). Additionally table 6 also indicates that there is no difference in customer's perception in terms of income level of different respondents (P<0.05). Furthermore independent sample t test in table 7 also shows that there is a difference in customer's perception between male and female (P>0.05).

9. Concluding Remarks:

An evaluation of customer's perception is essential for service industries. This is very much necessary for the telecom industry as well, where there is intense competition in terms of gaining market share and achieving customer satisfaction. Today with the rapid growth of service industry, marketers of different service organizations are facing huge challenges to meet up customers' expectations. Therefore firms need to identify their problems in service delivery and modify their service offering mechanism as required. The study found that most of the dimensions of service quality are significantly related to the customers' perception. Which means GrameenPhone is doing well in creating positive perception among customers through offering quality service. However GrameenPhone needs to give more emphasis on Empathy dimensions, which failed to prove any significant relation to customers' perception. This essentially proves that GrammenPhone has room for improvement in showing more care and providing individualized attention to its customers. The study is however limited within a certain geographic region. A nationwide survey on cellular service subscribers can help to get a deeper insight in to customer's perception towards the service offerings of the telecom companies in Bangladesh. Nonetheless, with the help of this study, GrameenPhone can identify the level of customer perception in Khulna city and make necessary changes to the way they offer their services. Thus the study is expected to contribute to the overall managerial decision making process in the context of service industries.

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