

Measuring Student Satisfaction towards Mobile Service Provider in Bangladesh: With Special Reference to Grameen Phone Limited

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Abstract

Customer satisfaction is an important word that commonly uses in marketing. It is a proportion of how products and services provided by an organization meet or enhance client desires. This research work looks to examine student fulfillment and its impacting variable of the cell phone industry in Bangladesh. This research work is led to 320 Grameenphone (GP) clients in Bangladesh. Over the span of data analysis, recurrence rate, bar graphs, the trial of unwavering quality, KMO-Bartlett test, exploratory factor investigation, correlation, and linear regression investigation have been utilized. The outcome shows that a noteworthy relationship exists between consumer loyalty and service quality, network, call rate, web facility, and social duty. The outcome likewise shows that all these services are noteworthy indicators of consumer loyalty. Present research work concluded that the satisfaction level of students of Grameenphone constrained isn't sufficient.

Keywords: Grameenphone, Mobile, Telecom Industry, Service Quality, Customer Satisfaction.

Introduction

Bangladesh is a profitable market for the telecom service provider. The mobile sector in Bangladesh is developing rapidly. As indicated by the Bangladesh Telecommunication Regulatory Commission (BTRC) data, the quantity of overall mobile phone users is 15.97 crores at the end of March 2017. The real number of mobile clients would be less; numerous individuals utilize different service providers or SIMs. The nation's biggest mobile phone service provider is Grameen Phone Limited. Their total subscriber is 7.40 crore in March 2017 (Daily Newage, April 2017). The mobile users are not utilizing mobiles just to make calls rather use it for different add-on services like SMS, video-calling, money-related services, social insurance services, entertainment, web-based shopping apps, and web perusing. The Telecom industry is enormously affecting the development prospect of Bangladesh and the government of this nation is additionally reassuring the increase of this industry (Uddin et al, 2014). Students are an important part of mobile phone users in Bangladesh. They are very conscious about mobile phone call rates, internet packages, service quality and different offers provide by mobile phone operators.

Customer satisfaction is the consumer perception of the degree to which the customer requirements have been fulfilled (Bala et al, 2018). Service providers commonly place superior precedence on consumer loyalty, since it has been viewed as a precondition to client retention. Because of marketing activities, high consumer loyalty prompts creat do again item buys and informal promotion to companions, while low consumer loyalty has been related to griping conduct. A satisfied client every now and again remains loyal longer and is probably going to help the firm later on in the future. Consumer loyalty gives the most significant marker of consumer purchase intention and commitment. The significance of the telecommunication sector in the financial improvement of the nation is tremendous. Present-day media transmission innovation and services including cell phones and the Internet have made the life of general individuals simple and agreeable. It has improved the way of life of the individuals, expanded the GDP, and generated considerable new employment, just as diminished the 'Digital Divide' inside geographic, financial, and sexual orientation gatherings. Telecommunication is necessary and a prime supporter of materialize „Digital Bangladesh'. Grameenphone is the largest mobile phone administrator in Bangladesh. GP introduced its service on the Independence Day of Bangladesh on March 26, 1997. At the present Grameenphone is the most significant media communications service supplier in the nation

with all the more associating 75.33 million subscribers as of June 2017, giving individuals access to web-based and other digital services. There is enormous ups and down in the mobile phone industry in Bangladesh. At present, there are four mobile operators in our nation. As indicated by the number of endorsers and profitability Grameen Phone Ltd. is in the top position and Robi Axiata Limited (Robi) limited is in the second position among four service providers. The mobile service providers and the number of subscribers of various mobile operators in Bangladesh are present in table 1.

Table 1. Number of Subscribers of Different Mobile Operators

S.L.	Operators	Subscriber (In Millions)
1.	Grameen Phone Ltd (GP)	75.330
2.	Robi Axiata Limited (Robi)	47.939
3.	Banglalink Digital Communications Limited (Banglalink)	34.667
4.	Teletalk Bangladesh Ltd (Teletalk)	3.836
	Total	161.772

Source: Bangladesh Telecommunication Regulatory Commission (BTRC), June 2017.

Problem Statement

In Bangladesh, the telecommunication sector is very much competitive and this competitive tendency is expanding step by step. Subsequently, the subscribers presently have an assortment of choices to favor as per their comfort. In this way, to maintain the top spot in the market, mobile operators need to make out the elements identified with consumer loyalty and dependability. Uddin et al. 2014 express that in Bangladesh saw quality greatly affect consumer loyalty; organizations should attempt to improve their service quality and offer new services to increase consumer loyalty. Present reports about the expanding client disappointment because of poor service quality recommend that service quality would be a significant determinant of consumer loyalty among Bangladesh telecommunications consumers. Thus, the question that asks the current research focus is the factors impact consumer loyalty in the telecommunications business in Bangladesh. To put it plainly, a far-reaching study is required that examines the full scope of components influencing consumer loyalty of the telecommunications sector in Bangladesh.

Literature Review

Numerous scientists have conducted research that deals with different parts of consumer loyalty in the telecommunication sector in Bangladesh and abroad. A few significant exact research discoveries have been taken into consideration:

Nurysh, et al. (2017): In their examination demand by past scientists on the need to analyze the significant factors, for example, perceived value and service quality that can legitimately influence consumer loyalty in Malaysian mobile phone service provider. The moderating impact of the engaging quality of options has been additionally tried between factors. So, the empirical finding, which depends on quantitative research and furthers various regression analyses, shows that both perceived value, as well as service quality, has a positive relationship with consumer loyalty. Yet, the arbiter was starting that the communication of the two factors with the appeal of choices has no impact to improve or upgrade the satisfaction.

Bala, et al. (2018): In their investigation attempt to discover the critical factors which for the most part impact the degree of fulfillment of the mobile phone clients in college students of Bangladesh. The analysts gathered data through a questionnaire survey form a differentiated representative sample. The outcomes showed that network coverage, internet offer, tariff offer are the fundamental factor for influencing client which assists withholding the client and to make client dependability.

Miah, et al. (2018): The major objective of this work is to decide the components that would impact consumer loyalty toward telecom ventures in Malaysia. The fundamental target of this research is to recognize these elements and the level of their persuasions over consumer loyalty who are getting the telecommunication services. This research work explored the various components which influence consumer loyalty or which can build consumer loyalty, for example, factors like price, quality in service, and brand reputation. The discoveries of this examination indicated that only the cost and brand reputation of the telecom service supplier has a critical positive relationship with consumer loyalties towards the telecom business. However, this research work didn't discover any connection between the nature of service and consumer loyalty towards the telecom business. All through in this research, the researchers have found some covered up and significant variables that have affected the level

of price, service quality, and brand reputation that impacts the consumer loyalties of the telecommunication organizations in Malaysia.

Rashid, et al. (2016): The goal of this paper is to analyze the effect of consumer loyalty in the telecommunication sector. Non-probability sampling techniques were utilized for the determination of the sample. The research work concentrated on the effect of consumer loyalty in the telecommunication sector Pearson product-moment relationship and regression analysis was utilized. The outcomes show that apparent expectation, quality, client retention, price tolerance have empowering though client protest has a critical and negative impact on consumer loyalty. This research work enables the expert on how they can develop a competitive edge by upgrading their consumer loyalty level in the telecommunication sector. Future rules and confinements are also discussed.

Rizomyliotis, et al. (2018): the research work was to create and test a staggered model on the predecessors of client devotion utilizing exact data from the UAE mobile telecommunication sector. The authors endeavor to examine the concurrent impact of apparent service quality, perceived value, consumer loyalty, and trust in client faithfulness. The outcomes every tested variable had a noteworthy constructive outcome on loyalty, except perceived value. Trust was found to best anticipate client faithfulness. In view of these discoveries, the researchers recommend suggestions for supervisors with the end goal of improving the outcome of service suppliers in the mobile telecom industry.

Danish, et al. (2015): The ultimate objective of this research work is to dissect various variables that influence client retention, for example, fulfillment, trust, corporate image, responsibility level, steadfastness, and switching behavior of clients. The results show that through Trust, bliss, and devotion client retention is expanded. Consumer's repurchase intention is expanded when they are happy with organization products and services and are getting enthusiastic and functional advantages.

Strenitzerova and Gana. (2018): This research furnishes data about consumer loyalty with the nature of electronic communications services and shows the aftereffects of the utilization of the European Customer Satisfaction Index (ECSI) model completed in Slovak Electronic Communications Market. The research brought up that the ECSI model can give an improved comprehension of the intricate connections of the factors of client faithfulness and consumer loyalty and their effect on the manageability of the Slovak Telecom Supplier.

Research Gap

It was thought that an extensive review of various empirical studies on customer satisfaction. Some authors Nurysh, et al. 2017; Bala, et al. 2018; and Rizomyliotis, et al. 2018 suggested that service quality and reasonable price have a circuitous effect on consumer loyalty of a mass service industry. Miah, et al. 2018 proposed that network quality is one of the significant factors in the overall service quality of the telecommunication sector. Several research works have been done on various aspects of customer satisfaction by the renowned researchers but no comprehensive study has been conducted due to changes in time, technology, and environment. In this context present study has been undertaken.

Research Questions

This research work is embarked to address the accompanying inquiries:

- i. What is the satisfaction level of Grameenphone subscribers in Bangladesh?
- ii. What are the variables considered by mobile telecommunications subscribers in Bangladesh while picking between networks?

Objectives of the Study

Objectives of this study are as per the following:

- i. To explore consumer loyalty in the telecommunications sector in Bangladesh and to look at the degree to which mobile telecommunications subscribers in Bangladesh are happy with the services conveyed by Grameenphone.
- ii. To recognize the elements considered by mobile telecommunications subscribers in Bangladesh while picking between networks.

Methodology

Grameen phone Limited has been decided for the research for the accompanying reasons as on the grounds that it is the biggest mobile telecommunications network (as per the number of Subscribers) in the nation. The investigation followed a quantitative approach to deal with accomplish the destinations of this examination, which was descriptive in nature. For selecting the respondents Simple Random Sampling method was used. Students are considered as respondents whose ages were over 20 years to 26 years for this study.

Moreover, Fisher's formula (Fisher, et. al. 1998) was used in determining the minimum number of respondents. In this way, a total of 384 respondents were taken from Islamic University, Kushtia and Jhenaidah government KC College. A structured questionnaire with a five-point Likert scale (1=Very Dissatisfied, 2 = Dissatisfied, 3 = Neither Satisfied nor Dissatisfied, 4 = Satisfied, 5 = Very Satisfied) was distributed among 384 Grameen phone users. Out of 384 Grameen phone users, 320 respondents have answered the question and returned it. Out of 320 respondents, 194 or 60.60% were male and 126 or 39.40% were female. Here, the following formula is used for calculating the size of the sample.

$$n = \frac{z^2 pq}{d^2}$$

Where,

n = estimated the size of the sample (when the population is greater than 10,000).

z = the standard normal deviate using set at 1.96 which corresponds to the 95% confidence level.

p = the population estimated to have a particular characteristic. There is no rational estimate then use 50% (0.50)

q = 1-p = the probability of failure and

d = the desired degree of accuracy usually set at 0.05.

$$n = \frac{z^2 pq}{d^2}$$

n = 384

Primary data have been collected for achieving the purpose of the study. Among the various methods of obtaining primary data, the researcher was selected the following methods: i) the interview method and ii) the observation method. The gathered data are handled through PC based Statistical Package for Social Science (SPSS) created by Nie et al., (1975). Prior to taking care of the data into the PC, all data were changed over into numerical codes and the subtleties of these coding were recorded in a codebook. A sum of 22 variables is taken into contemplations to accomplish the destinations of the investigation. Out of 22 variables, 04 were demographic variables, 17 were independent variables and the last one was the

dependent variable. The descriptive insights dependent on the recurrence rate, mean, the standard deviation is conducted. Next, Reliability Test, KMO-Bartlett Test are used which will give confirmation to Factor Analysis. Finally, Multiple Regression Analysis has been used to see the relationship among all the factors, variables and satisfaction.

Table 2. Reliability analysis of independent and dependent variables

Cronbach's Alpha	N of Items
.769	22

Source: Field Survey

It is seen from Table-2 that the Cronbach's alpha value (α) was found 0.7688 from 22 independent variables and 01 dependent variable, which was higher than the minimum acceptable level 0.70 suggested by Nunnally (1978).

Descriptive Statistics of dependent and independent variables of the mean are depicted in table 3.

Table 3. Descriptive Statistics of Dependent and Independent variables of mean

Name of variables	Mean	Std. Deviation
Satisfied with the service experience.	3.22	1.067
Selected the right network.	3.44	.918
Reliable network.	3.49	.930
Competent persons for connectivity and network issues.	3.35	.901
Employees helping attitude.	3.08	1.063
Secrecy of information.	3.49	.913
Employees attention towards individual customer	3.03	.906
Satisfied with service diversification.	3.04	.924
Paying a fair price.	2.61	.948
Paying a competitive price.	2.72	.931
Grameenphone is socially responsible.	3.21	.923
Grameenphone is very innovative.	2.95	.964
Service-related problems solved successfully.	2.53	.791
Free rechargeable credit.	2.48	1.068
Satisfied with network-related risk.	3.15	.936
The customer care center situated on easy distance.	3.36	1.080

Satisfied with the internet facility.	3.51	1.032
Overall customer satisfaction.	3.18	.856

Source: Field Survey

The mean and standard deviation of the selected variables are given in the 2nd and 3rd column of table 3. Among the 18 (dependent and independent) variables, satisfied with the internet facility possesses the highest mean value (3.51) and free rechargeable credit possesses the lowest mean value (2.48).

Overall level Customer Satisfaction is depicted in table 4.

Table 4. Distribution of Respondents in terms of Overall level of Satisfaction

Level of Satisfaction/Dissatisfaction	Frequency	Percent	Cumulative Percent
Very Dissatisfied	6	1.9	1.9
Dissatisfied	68	21.3	23.1
Neither Satisfied nor Dissatisfied	115	35.9	59.1
Satisfied	124	38.8	97.8
Very Satisfied	7	2.2	100.0
Total	320	100.0	

Source: Field Survey

The above table provides general customer satisfaction level information. Table 4 shows that the majority of respondents 124 or 38.8 % are satisfied, 7 or 2.2% of respondents are very satisfied, 115 or 35.9% of respondents are neither dissatisfied nor satisfied, 68 or 21.3% of respondents are dissatisfied, and 6 or 1.9 % respondents are very dissatisfied.

KMO and Bartlett's Test Results

The KMO and Bartlett's test Sphericity is useful for knowing the suitability of exploratory factor analysis. The KMO measures the sampling adequacy and it should be more than 0.60 for satisfactory factor analysis to proceed. Table 5 shows that the KMO measure is 0.722, this indicates the data is appropriate for exploratory factor analysis. At the same time, Bartlett's test of Sphericity should be significant for exploratory factor analysis if its probability is less than 0.05.

Table 5 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.722
Bartlett's Test of Sphericity	Approx. Chi-Square	1188.349
	df	136
	Sig.	.000

Source: Field Survey

Table 5 shows that Bartlett's test of Sphericity is 0.00, this indicates the data is appropriate for exploratory factor analysis. It also means that the correlation matrix is not an identity matrix. Both the test results demonstrate that the collected data is appropriate or suitable for factor analysis.

Factor Analysis Test Results

Exploratory factor analysis has been carried on after the test of reliability. Primarily, we have considered twenty-two variables for factor analysis.

After removing five variables from the study, again factor analysis has been made and the factor analysis test results are depicted in table 6.

Table 6. Factor Analysis of Statistics

Factors	1	2	3	4	5	6	Communalities
Service experience	.846						.727
Overall satisfaction	.730						.755
Right network	.705						.661
Reliable network	.626						.545
Very innovative		.778					.663
Competitive price		.676					.674
Service diversification		.582					.601
Network risk			.761				.729
Customer care			.750				.641
Price is fair			-.501				.565
Willing to help				.732			.734
Connectivity				.664			.750
Individual attention				.531			.531

Internet facility					.824		.733
Socially responsible						.905	.848
Eigen Values	4.189	1.87	1.329	1.198	1.136	1.031	
% of Variance	17.428	12.255	11.566	10.159	8.25	7.551	
Extraction Method: Principal Component Analysis.							
Rotation Method: Varimax with Kaiser Normalization.							

Source: Field Survey

After the rotation in table 6, it has been found that four variables like service experience, Overall satisfaction, the right network, and reliable network with factor loading score 0.846, 0.730, 0.705 and 0.626 respectively have been created together the first factor named “network quality”. On the other hand, very innovative, Competitive price and service diversification with loading score 0.778, 0.676 and 0.582 respectively have been created together with the second factor “Unique offer”. Again, variables like network risk, Customer care and the price is fair respectively with loading score 0.761, 0.705 and -0.501 have been formed the third factor named “service package”. At the same time, three more variables like willing to help, connectivity and individual attention with loading score 0.732, 664 and 0.531 respectively have been created together the fourth factor named “Individual care”. Again, internet facility variable with score 0.824 has been created the fifth factor named “Internet service” and the socially responsible variable with loading score 0.905 has been created the sixth factor named “Ethical sense”. Again, all the variables were having acceptable communalities score which is more than 0.5.

The factors and variables that are explained above helped for clarifying as quality indicators for customer satisfaction of telecommunication sectors in Bangladesh. This result demonstrates that these seventeen quality indicators can provide positive information for customer satisfaction of telecommunication sectors in Bangladesh.

Correlations of independent variables and dependent variables are depicted in Table 7.

Table 7. Multiple Regression Analysis between Overall Customer Satisfaction and Factors

Model	Unstandardized Coefficients	t	Sig.	Collinearity Statistics			
				B	Std. Error	Tolerance	VIF
1	(Constant)	3.181	.024	132.988	.000		
	Factor 1 (network quality)	.625	.024	26.082	.000	1.000	1.000
	Factor 2 (Unique offer)	.191	.024	7.952	.000	1.000	1.000
	Factor 3 (Service package)	.041	.024	1.731	.084	1.000	1.000
	Factor 4 (Individual care)	.214	.024	8.929	.000	1.000	1.000
	Factor 5 (Internet service)	.261	.024	10.880	.000	1.000	1.000
	Factor 6 (Ethical sense)	.100	.024	4.183	.000	1.000	1.000
	R = 0.87	R Square = 0.755		Adjusted R Square = 0.75		Std. Error of the Estimate = 0.43	
Durbin-Watson Statistic = 1.95							

Source: Field Survey

Tables 7 represent the results of multiple regression analysis. The analysis shows that the R-Square value is 0.755. It indicates that a good proportion of variation (75.50%) exists between the dependent variable (customer satisfaction) is explained by the identified six factors. Here it has been found that out of six five factors like network quality, unique offer, individual care, internet service, ethical sense are significant as their significant value is less than the P-value 0.05. On the other hand, the 3rd factor named service package has been found an insignificant score. Here, the Durbin-Watson score is 1.95 which is less than 4 indicate that there is no problem. Again, the VIF score found less than 2 which also indicates that data is free from multicollinearity.

Table 8 .Multiple Regression Analysis between Satisfaction and Variables

Model		Unstandardized Coefficients		t	Sig.	Collinearity Statistics
		B	Std. Error			VIF
2	(Constant)	-1.080	.245	-4.401	.000	
	VAR00005	.270	.037	7.297	.000	1.679
	VAR00006	.128	.046	2.766	.006	1.952
	VAR00007	.063	.042	1.512	.132	1.614
	VAR00008	.157	.037	4.264	.000	1.184
	VAR00009	.061	.036	1.692	.092	1.557
	VAR00011	.068	.041	1.678	.094	1.467
	VAR00012	.233	.041	5.630	.000	1.570
	VAR00013	.063	.036	1.740	.083	1.267
	VAR00014	-.014	.039	-0.363	.717	1.396
	VAR00015	.123	.036	3.422	.001	1.179
	VAR00016	.002	.040	0.043	.965	1.608
	VAR00019	.082	.041	1.998	.047	1.587
	VAR00020	-.018	.034	-0.530	.597	1.484
	VAR00021	.108	.032	3.389	.001	1.173
R Square = 0.613		Adjusted R Square = 0.595			R = 0.783	
Durbin-Watson = 1.991		Std. Error of the Estimate = 0.54			Prof. of F-stat = 0.00	

Source: Field Survey

Tables 8 represent the regression analysis between customer satisfaction and variables. The analysis shows that the R-Square value is 0.613. It indicates that a good proportion of variation (61.30%) exists between the dependent variable (customer satisfaction) is explained by the total variation of the 17 independent variables. From all the independent variables significant values of only Six variables, like – i) Satisfied with my service experience, ii) Selected the right network, iii) Competent persons for connectivity and network issues, iv) Satisfied with service diversification, v) I feel that Grameenphone is socially responsible, and vi) Satisfied with the internet facility significant value are less than the P-value 0.05. It indicates that Grameenphone customers think service experience, network, network issues, service diversification, social responsibility and internet facilities are the important compensation issues for their consideration. Here, the Durbin-Watson score is 1.991 which is

less than 4 indicate that there is no problem. Again the VIF score found less than 2 which also indicates that data is free from multicollinearity.

Major Findings of the Study

The main findings of the study conducted on “Measuring Student Satisfaction towards Mobile Service Provider in Bangladesh” are summarized below:

- The overall level of student’s satisfaction from 320 respondents 124 are satisfied, 07 are very satisfied, 115 are neither dissatisfied nor satisfied, 68 are dissatisfied 06 are very dissatisfied.
- Most of the students are not satisfied with the call rate of Grameen phone. They think that Grameen phone call rate is a higher rate than other cellular company in Bangladesh.
- From observation, Grameen phone offers different package such as Bondhu, Ekota, Djuce, etc. but no one package is perfect for the customer. Each package is produced to fulfill the company’s objectives not to satisfy the customer properly.
- Grameen phone hotline (121) service is not satisfactory because it takes a huge time to connect a customer manager and it is also costly.
- Grameen phone promotion strategy creates a boring situation for the customers. Grameen phone sends a huge number of SMS for their customers and makes a call to know the customers about their product per day. Most of the customers dislike it.
- Grameen phone subscribers use more than two companies SIMs.
- On average, every student uses more than three SIMs.

Conclusion and Recommendations of the Study:

The competitive nature of the telecom business in Bangladesh obliges mobile service suppliers to get ready and execute appropriate fulfillment and retention techniques. Organizations that manage to keep glad their clients, save hold of them for whatever length of time that conceivable, and ideally transform them into faithful clients, will surely be in a better competitive position and accomplish better financial performance. Presently, Customer fulfillment turns into a key parameter of corporate achievement. In this manner, the present corporate manager profoundly worried about boosting consumer loyalty through quality

products and services. Grameenphone is the market head in the telecommunication business of Bangladesh. This is the era of globalization- age of competition. Every mobile company is trying to attract customers by offering lucrative products, better customer service and more importantly to make the customer brand loyal by satisfying its subscribers with their daily communication needs. The study revealed that all the independent variables have significant relation with customer satisfaction. Service quality, customer care services, network, mobile internet and social responsibility are influenced by customer satisfaction. Overall the customer satisfaction levels of Grameen phone are not up to the mark. So, it is necessary for Grameen phone telecom operators to make the network accessible all over the place and without fail, enhance the capacity of their network, decrease network clog and poor signals, provide good internet facilities with the lowest cost, increase service quality and improve corporate social responsibility.

Scope of Future Research: This research work has explored the determinants of Satisfaction Level of Students towards Telecommunication Service in Bangladesh utilizing an investigation on Grameen phone. The research has added to the current assemblage of information on the topic by developing a good questionnaire. The present study did not provide full customer satisfaction pictures in lack of time, cost, and other logistic support use only one Phone Company out of four and only one category respondents like students. In future works, researchers might consider focusing on four company subscribers and all category respondents.

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