

DETERMINANTS OF CUSTOMER SATISFACTION AND LOYALTY TOWARD MOBILE PHONE OPERATORS IN BARISHAL DIVISION OF BANGLADESH

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Abstract

The study was carried out to analyze marketing and other variables that influence on customer satisfaction and loyalty toward mobile phone operators in Bangladesh. The study was conducted through development of structured questionnaires and distributed among 100 respondents who were mobile phone subscribers. The respondents were selected from Barishal Davison (Barishal sadar, Barisal University, Patuakhali sadar, Patuakhali Science and Technology University) through simple random sampling. The reliability and validity of the questionnaires were checked by Cronbach's Alpha, factor loading, composite reliability, and average variance extracted. The results were subsequently analyzed through Pearsons correlation, and multiple regression analysis. The results showed that product and customer service had a positive significant impact on customer satisfaction. Moreover, commitment had a positive significant impact on customer loyalty.

Key Words: Customer service, Customer satisfaction, Customer loyalty, Mobile phone operators in Bangladesh.

Introduction

Customer's preference is the first priority in modern marketing philosophy (Kotler and Keller, 2006). Anderson (1973) identified that world is becoming globalized and markets are being saturated because of intense industrial development. That's why Service industries, especially mobile phone operators are chasing for customer's satisfaction and loyalty. Customer satisfaction and loyalty can be achieved through marketing and other variables. Mobile phone operators make people's lives easy by solving distance problems (Picard, 2005). It's not a single organization rather it combines Grameen Phone Ltd. (GP), Banglalink digital Communications limited, Robi Axaita limited (Robi), Airtel Bangladesh Limited (Airtel), and Teletalk Bangladesh Ltd. (Teletalk) (Btrc.gov.bd, 2018). Subsequently, marketing variables and other variables are going to be discussed. Anderson and Sullivan (1993) suggested that product solves the customer's problems. Mobile phone operators try to make customers satisfied and loyal by providing superior value to them. Aminu and Hartini (2008) argued that price is the monetary charge against the products/services. Price plays a vital role for customer's satisfaction of mobile phone operators (Aminu and Hartini, 2008). of goods and services from manufacturers to customers. Grepott and Schindler (2001) found that Customer satisfaction and loyalty also depend on distribution process which includes distribution outlets, availability of products, and ease of products delivery, etc. Chang *et al.* (2009) discussed that promotion makes customers aware about the products. Serenko *et al.* (2006) found that Customer service is the focal point of customer relationship management. Adebayo (2008)

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argued that customer satisfaction is a situation when products perform according to customer's expectations. Schiffman and Kanuk (2007) opined that trust comes from the conformance of promise and performance of the products. Garbarino and Johnson (1999) found that trust is the effective determinant of customer loyalty. Oliver (1999) discussed that Commitment is the determination of performing according to the promise. Social network is the communication via social media, such as Facebook, Twitter; You Tube, etc. with customers (Wasserman and Faust, 1994). Customer loyalty is a situation when customers find that products are trustworthy and reliable (Hassan, 2008; Boora and Singh (2011).

There are only a few studies on customer satisfaction and customer loyalty toward mobile phone operators in Bangladesh. Ashaduzzaman *et al.*. (2011) found that 89.7% customers of Grameen phone are extremely satisfied. Customers are satisfied if they get available service options (Rahman, 2012). Therefore, our objective is to address this gap through identifying factors influencing on customer satisfaction and customer loyalty in Bangladesh.

Objectives of the study

The main objective of the study is to analyze the factors that affect on customers' loyalty toward mobile phone operators in Bangladesh. The specific objectives of the study are as below:

1. to investigate the marketing variables that affect on customer's satisfaction;
2. to know the trust, commitment, and social network affect on customer's loyalty;
3. to know the customer's satisfaction affect on customers' loyalty.

Methodology

The study was descriptive in nature through proposing hypothesis and testing the hypothesis. The study was conducted through data collection. Primary data was collected through personal interview by developing a structured five point Likert scale questionnaires for all variables except demographic variables where (1) Indicates strongly disagree and (5) indicates strongly agree. Secondary data were collected from the websites, journals, and newspapers. Demographic data of respondents were also considered such gender, age, marital status, education, and income. The duration of data collection was six (06) months from April 1, 2017 to October ,1 2017. The area of data collection was Barishal Divison (B.M. College, Sher-e-Bangla Medical College, Barishal University, and Patuakhali Science and Technology University). The sampling frame was the list of 4000 students of which 1000 students for each institute of mobile operator subscribers and 100 respondents were selected through simple random sampling. The pilot study was conducted on 30 respondents through systematic sampling of mobile phone operator subscribers in order to detect any ambiguities or questions that were not easily understood by the respondents and checked by expert opinion before the study was initiated. The value of Cronbach's Alpha determines internal consistency and reliability of the items (Peterson, 1994). The Cronbach's

Alpha of Product (.630), Price (.618), Distribution (.589), Promotion (.614), customer service (.578), Customer satisfaction (.625), Trust (.644), Commitment (.631), Social Network (.678), and Customer loyalty (.609) indicated acceptable construct reliability. Kaiser-Meyer-Olkin (KMO) sample adequacy test and Bartlett’s sphericity tests were applied to test whether the data set is suitable for factor analysis. If, KMO value is greater than 0.5 and ‘p’ value is less than 0.05 in Barlett’s test, it is said that data set is adequate for factor analysis (Joan and Brian, 1993). Table 1 shows KMO value = .522, and Barlett’s test result (0.000) significant. That means that the data set is adequate for factor analysis.

Table 1. KMO and Bartlett’s Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.522
Bartlett's Test of Sphericity	Sig.	.000

Conceptual Framework

Researchers have proposed the conceptual framework based on the objective and hypothesis of the study and the conceptual framework represents the interrelationships among the variables according to the objectives.

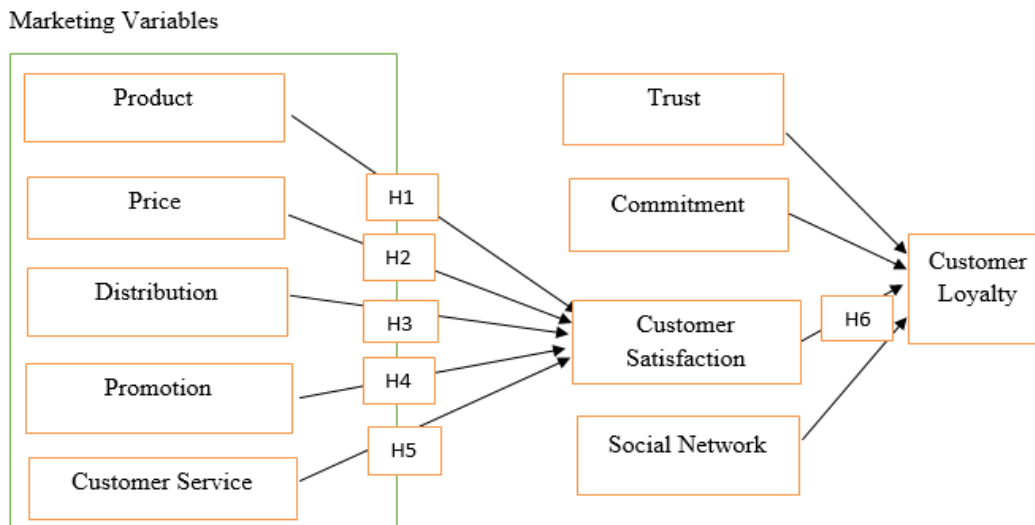


Figure 1. Research Framework

Hypothesis statement

H1: The product (core service) has a positive significant impact on customer satisfaction toward mobile phone operators.

H2: The price has a positive significant impact on customer satisfaction toward mobile phone operators.

H3: The distribution has a positive significant impact on customer satisfaction toward mobile phone operators.

H4: The promotion has a positive significant impact on customer satisfaction toward mobile phone operators.

H5: Customer service has a positive significant impact on customer satisfaction toward mobile phone operators.

H6: Customer satisfaction is the only determinant of customer loyalty toward mobile phone operators.

Results and Discussion

Table 2 shows that Grameen Phone Ltd. (GP) has the highest number of subscribers and Teletalk Bangladesh Ltd. (Teletalk) has the lowest amount of subscribers in Bangladesh. In addition, Robi Axaitalimited (Robi) has the highest growth rate and Teletalk Bangladesh Ltd. has the lowest growth rate from January 2017 to January 2018.

Table 2. Mobile phone operators in Bangladesh

Mobile operators	Subscribers (In millions)	
	January, 2017	September, 2018
Grameen Phone Ltd. (GP)	58.689	71.413
Banglalink digital communications limited	31.309	33.699
RobiAxaita limited(Robi)	26.443	46.753
Airtel Bangladesh Limited (Airtel)	8.050	
Teletalk Bangladesh Ltd.(Teletalk)	3.791	3.945
Total	128.281	155.810

Source: (Btrc.gov.bd, 2018)

Table 3 shows that among the 100 respondents, majority (64%) are male and (87%) are unmarried. Majority (91%) respondents have income below 20,000 taka per month.

Table 4 shows that the composite reliability of all variables are greater than 0.6 and average variance extracted of all variables is greater than 0.30 which indicates that the statements are reliable and valid.

Table 3. Demographic profile of respondents

No:	Description	Frequency		Percentage	
1	Gender	Male	64	64	
		Female	36		36
2	Age	18 to 23	71	71	
		24 to 29	24		24
		Above 29	05		05

Table 3. Cont'd.

3	Marital status	Unmarried	87		87
		Married	23	23	
4	Education	HSC	60		60
		Honors	32	32	
		Masters	8	8	
5	Income	Below 20,000 taka	91		91
		20,000 to 30,000 taka	8	8	
		Above 30,000 taka	1	1	

Table 4. Reliability and validity analysis

Factors	Items	statements	Factor loading	Composite reliability	Average Variance Extracted
Product (core service)	4	The operator is easy to use.	.685	0.795192	0.492794
		The operator provides service manual.	.711		
		The operator has strong network capacity.	.678		
		The core services of the operator is convincing to customers.	.732		
Price	4	Call rate of the operator is reasonable.	.855	0.749106	0.451965
		Balance-Loan system is available for this operator	.669		
		Bundle pricing is available for this operator.	.300		
		Price is set including taxes.	.734		
Distribution	2	The operator has available outlets for selling its products/services.	.823	0.605234	0.451076
		Customers don't face problems at receiving products/services.	.475		
Promotion	3	Customers become aware through telecast advertisements.	.558	0.634628	0.377916
		Customers are given sample gifts.	.780		

Table 4. Cont'd.

		The operator provides convincing and informative about the services.	.462		
Customer service	5	Approaches of customer's service providers are good to customers.	.337	0.714561	0.352592
		Service agent provides proper services to customers.	.674		
		The services are designed according to customer's preference.	.828		
		The operator provides quick services to customer's complaints.	.472		
		Service agent consider consumers like "consumers are always right"	.536		
Customer satisfaction	5	I am very much satisfied with the performance of the operator.	.803	0.829916	0.49746
		I am pretty satisfied with the quality of the services.	.774		
		I am satisfied with the commitment of the services.	.576		
		I am satisfied with the service distribution process.	.639		
		I am satisfied with the service providing employees.	.709		
Trust	3	I rely on the operator.	.361	0.648642	0.400007
		If, this operator provides any new offers, I will undoubtedly accept it.	.711		
		I never think that this operator will betray with me.	.751		
Commitment	4	The operator keeps the promise.	.492	0.683532	0.367114
		The operator refunds to customers, if promise is violated.	.844		
		The operator fulfills service promises.	.577		
		The operator provides customers promised strength of network.	.425		

Table 4. Cont'd.

Social network	4	The operator has official social pages.	.743	0.694069	0.374851
		I am connected with the social pages.	.615		
		The operator provides the least information/ offers through its social sites.	.662		
		The operator quickly responds over the complaints in their official social pages.	.362		
Customer loyalty	5	I will always subscribe the same operator.	.603	0.743028	0.403153
		I love to recommend others to try the operator.	.837		
		I will switch to other operators, if I get better opportunities.	.135		
		In spite of incising call rate, I will subscribe the preferred operator.	.731		
		I will subscribe my preferred offer of the operator.	.631		

Table 5 of correlation coefficients shows that product, distribution, and customer service have a positive significant correlation with customer satisfaction. The correlation coefficients are respectively ($r=.406, p=.000<.05$), ($r=.208, p=.037<.05$), and ($r= .421, p=.000<.05$). Price and promotion have a positive insignificant correlation with customer satisfaction toward mobile phone operators. The correlation coefficients are ($r=.006, p=.950>.05$), and ($r=.128, p=.203>.05$), respectively.

Table 5. Correlation coefficients of product, price, distribution, promotion, customer services, and customer satisfaction

Correlations		Product	Price	Distribution	Promotion	Customer services
Customer Satisfaction	Pearson Correlation	.406**	.006	.208*	.128	.421**
	Sig. (2-tailed)	.000	.950	.037	.203	.000
N	100	100	100	100	100	100
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

Table 6 of correlation coefficient shows that trust and commitment have a positive significant correlation with customers' loyalty toward mobile phone operators. The correlation coefficients are ($r = .199, p=.047<.05$) and ($r = .321, p=.001<.05$), respectively. Customer satisfaction and social network have a positive insignificant correlation with customer loyalty. The correlation coefficients are, respectively, ($r=.182, p=.070>.05$), and ($r =.013, p=.901>.05$).

Table 6. Correlation coefficients of customer satisfaction, trust, commitment, social network, and customer loyalty

Correlations		Customers' satisfaction	Trust	Commitment	Social networks
Customer loyalty	Pearson Correlation	.182	.199*	.321**	.013
	Sig. (2-tailed)	.070	.047	.001	.901
	N	100	100	100	100
**. Correlation is significant at the 0.01 level (2-tailed).					
*. Correlation is significant at the 0.05 level (2-tailed).					

Determinants of customer's satisfaction

Table 7 shows that R-square is .304 and F value is 8.229 with $p=.000$ ($.000 < .05$) level of significance which implies that the regression model has achieved satisfactory fitness for explaining the variation of the dependant variable by the independent variables. It implies that independent variables explain 30.4% variation of the dependent variable in this study.

Table 7. Model Summary

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.552 ^a	.304	.267	.41202	.304	8.229	5	94	.000
a. Predictors: (Constant), Customer Service, Distribution, Price, Product, Promotion									

The table 7 and 8 explain the relationship between marketing variables and customer satisfaction. Table 8 shows that independent variables (Product, Customer Service) have positive significant impact on customers' Satisfaction and independent variables (price, distribution, and promotion) have positive insignificant impact on customers' satisfaction. Product ($\beta = 0.343$) has the highest impact on customers' satisfaction followed by that of Customer service ($\beta = 0.316$), Distribution ($\beta = 0.132$), Promotion ($\beta = 0.055$), and Price ($\beta = -.014$).

Table 8. Regression for determination of customers' satisfaction

Coefficients ^a			
Variables	Unstandardized Coefficients	Standardized Coefficients	Sig.
	B	Beta	
Product	.343	.309	.001
Price	-.014	-.017	.848
Distribution	.132	.173	.056
Promotion	.055	.064	.491
Customer Service	.316	.321	.001
a. Dependent Variable: Customer Satisfaction			

Determinants of customer’s loyalty

Table-9 shows that R-square is .121 and F value is 3.282 with p= .014 (.014<.05) level of significance which implies that the regression model has achieved satisfactory fitness for explaining the variation of the independent variables with customer loyalty. It implies that independent variables explain 12.1% variation of the dependent variable in this study.

Table 9. Model Summary

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.348 ^a	.121	.084	.45465	.121	3.282	4	95	.014

a. Predictors: (Constant), Social Networks, Trust, Customer Satisfaction, Commitment

Table 9 and 10 explain the relationship between customers’ satisfaction and customers’ loyalty. Table 10 shows that independent variables (Customers’ satisfaction, Trust, and Social network) have positive insignificant impact on customers’ loyalty and the independent variable (Commitment) has positive significant impact on customers’ loyalty. Commitment ($\beta =0.211$) has the highest impact on customers’ loyalty followed by that of customers’ satisfaction ($\beta =0.097$), Trust ($\beta =0.045$), and social network ($\beta = -.080$).

Table 10. Regression for determination of customers’ loyalty

Coefficients ^a			
Variables	Unstandardized Coefficients	Standardized Coefficients	Sig.
	B	Beta	
Customer Satisfaction	.097	.098	.353
Trust	.045	.061	.580
Commitment	.211	.289	.012
Social Networks	-.080	-.108	.295

a. Dependent Variable: Customer loyalty

The study has developed a research model to examine the strength of relationship between marketing variables and customers’ satisfaction and also examine the impact of customers’ satisfaction on customers’ loyalty toward mobile phone operators. The product has the highest impact on customers’ satisfaction which indicates that customer’s satisfaction depends on product (core service) quality. Price

has insignificant relationship with customers' satisfaction and has a negative impact. This indicates that customers are not price sensitive to mobile phone operators. Subsequently, commitment has the highest impact on customers' loyalty which indicates that commitment has a positive relationship with customers' loyalty. It also indicates that customers' loyalty depends on keeping promise with customers. Social network has insignificant relationship with customers' loyalty and has a negative impact. This implies that mobile phone subscribers are little influenced by the social communities and social networks. Customers' satisfaction has a positive insignificant relationship with customers' loyalty and has a positive insignificant impact on customers' loyalty. This indicates that customers' satisfaction is not enough to make customers to be loyal. Commitment, trust, and social network have also positive influence on customers' loyalty. This implies that customers' satisfaction is not only the determinant of customers' loyalty.

Conclusion and Recommendations

This study will contribute to identify the marketing variables which influence on customers' satisfaction. It will also contribute to identify the marketing variables and other variables which largely influence on customers' loyalty toward mobile phone operators in Bangladesh. Customers' satisfaction sufficiently depends on product quality and customer services. On the other hand, customers' loyalty largely depends on commitment. Therefore, mobile phone operators should give attention to better product quality, reliable customer services, and promised value delivery to customers to make them to be loyal.

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