



A STUDY ON CUSTOMER RETENTION AND BRAND IMAGE: AN EMPIRICAL EVIDENCE OF MOBILE OPERATORS IN BANGLADESH

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ARTICLE HISTORY:

Received: 22-Nov-2020

Accepted: 14-Feb-2020

Online available: 24-Feb-2020

Keywords:

Brand positivity,
Brand familiarity,
Brand image,
Customer retention,
Mobile operators

ABSTRACT

Due to increasing competition and the opportunity to change subscribers, customer retention has become the most challenging job for the mobile telecommunication service providers in Bangladesh. This study is carried out to know the relation between customer retention and activities related to brand image undertaken by mobile telecommunication organizations. A Likert Scale of five dimensions was utilized to collect data from the subscribers with a structured questionnaire. A convenient sampling method was utilized. Reliability test, KMO & Bartlett's test were carried out to identify the statistical significance of data. An exploratory factor analysis (EFA) performed to find out latent variables. Finally, linear regression was measured to test the hypothesis. Firstly two latent variables named brand positivity and brand familiarity were found from factor analysis and then it was shown that these two variables are positively associated with customer retention.

Contribution/ Originality

This study has a greater implication on mobile telecommunication service providers in Bangladesh, especially on the retention of customers. At the time of making decisions, this research will help the manager to focus on some specific factors such as brand familiarity and brand positivity. There are not enough researches related to the brand image in the context of Bangladesh. This is how the study is different from current work of literature.

DOI: [10.18488/journal.1007/2020.10.2/1007.2.65.73](https://doi.org/10.18488/journal.1007/2020.10.2/1007.2.65.73)

ISSN (P): 2306-983X, ISSN (E): 2224-4425



How to cite: Md. Rakeullah Chowdhury (2020). A study on customer retention and brand image: an empirical evidence of mobile operators in Bangladesh. Asian Journal of Empirical Research, 10(2), 65-73.

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1. INTRODUCTION

Telecommunication, the most useful way of communication, changes the whole concept of the communication process that has existed in the past centuries. Almost all sectors of business communication highly depend on telecommunication. From the user perspective, it makes life easy but from the service provider perspective, it is becoming more challenging. With many other factors, changing needs of customers make it difficult to survive in this industry. Customers are now more conscious about the telecommunication service. They focus on various things but the brand image of the organizations is one of the precious factors of taking any services relating to telecommunication.

Mobile operators are the most influential part of the telecommunication process. Currently, mobile operators become an inescapable part of human life with their multidimensional services. They are currently providing 3G, 4G or 5G services all over the world with speedy data services. Mobile communication services are awe-inspiring phenomena, as it becomes prevalent in daily life and capabilities look like more than desktop computers (Al-Debei and Al-Lozi, 2014).

During the last couple of decades, the users of mobile telecommunication services have dramatically increased in Bangladesh. In 2012, there were 87 million subscribers but in the next seven years, about 75 million subscribers have increased. The subscribers of mobile phone operators were counted 161.772 million in the last of June 2019 (BTRC, 2019). An overview of the subscribers of different mobile operators in Bangladesh is revealed below:

OPERATOR	SUBSCRIBERS (Millions)
Grameen Phone	75.330
Robi	47.939
Banglalink	34.667
Teletalk	3.836
Total	161.772

Source: BTRC 2019

In the highly growing market, there arises a new threat for mobile service providers. Mobile number portability (MNP) is a service by which mobile phone users can easily change their operators without changing their existing mobile numbers. From 1st October 2018 MNP services are available in Bangladesh (The Daily Star, 2018). This option wasn't available before the given date. After the option became available a huge number of subscribers requested to change their operators. A total of 6,90,550 mobile phone users have successfully switched their operators without changing their existing 11 digits number using mobile number portability (MNP) service in the first one year of its launch, according to a BTRC report. At the same time, another 2,56,733 customers attempted to switch their network but failed on different grounds, said the report circulated by the Bangladesh Telecommunication Regulatory Commission (The Daily Star, 2019). So, it has begun a great challenging task for the operators to retain their customers.

2. LITERATURE REVIEW

Customer retention can be described as the process of building customer loyalty toward a particular brand, thus having customers to repurchase its products or services over time (Cannie, 1994; Danish *et al.*, 2015). Customer retention emphasizes repetitive patronage which is mainly associated with consumer's repurchase behavior and brand loyalty (Buttle, 2004). In other words, customer retention entails a long-lasting customer commitment toward a brand and maintaining such a relationship as a result of positive perceptions and past experiences (Boohene *et al.*, 2013; Mohamed and Borhan, 2014). As argued by Dawkins and Reichheld (1990), 25% to 95% net present value of customers

could be enhanced in broader business environments by only five percent enhancements of customer retention. Further, this was claimed by (Reichheld and Kenny, 1990; Reichheld, 1996) that the cost of acquiring new customers is higher than the cost of retaining existing customers and this would increase the profitability of the organization. From numerous organizational objectives, customer retention is the most important objective. Presently in the highly competitive business era, many organizations are investing a huge amount of financial resources as well as spending time to build a long-term and constructive relationship with their customers. The reason behind this is to enhance the level of business and marketing performance (Bataineh *et al.*, 2015). It was also exposed by Anderson and Sullivan (1990) that the financial return can be gained from customer retention as getting fresh customers is pricier than holding existing ones. Associated costs are related to the advertisement, promotion, persuasion, etc. to change the purchasing behavior.

The overall impression relies on the brand image of a company. A brand is defined as “a name, term, sign, symbol, or design, or a combination of them, intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of the competition” (Keller, 2003). According to King and Grace (2008) a brand intends to differentiate a product or service from its competitors by determining the product or service. Most of the prominent organizations have involved in various promotional activities as well as creating a superior brand image for the cause of acquiring and retaining customers. The more transformed the concept of the brand that it manipulates the demand satisfaction and customer experience (Ind, 2007). So, the brand should be given more priority than the related product and services. Customer satisfaction will be present if their perception regarding mobile operator is trustworthy, reliable, and has a wider familiarity demonstrated by Deng *et al.* (2010). Islam (2010) has argued that consumer satisfaction is predicted by the brand image of the service provider. Moreover, if a company has a high degree of positive brand image, then the customers are more likely to remain with that company. It is like a contractual relationship between mobile operators and their subscribers (Gerpott *et al.*, 2001). Customers will be satisfied if their expectations are met by the services or products provided by the business organizations. Satisfied customers only continue using the current services. One of the significant factors of customer certification and maintenance phenomena is customer satisfaction (Kumar *et al.*, 2013; Kim *et al.*, 2015a; Kim *et al.*, 2016).

Intensive studies are conducted by Segarra-Moliner and Moliner-Tena (2016) and Chuah *et al.* (2017) depicted that satisfaction is a foremost aspect of shaping subscriber loyalty. When subscribers have a high degree of satisfaction toward a certain brand, then they are pleased to be able to buy most of their products/services from that particular brand. Moreover, a flourishing customer-brand relationship magnetizes more customers than the price incentives provided by the competitors. From the above pieces of literature I have developed the following null and alternative hypotheses:

Ho: There is no affinity between the brand image and customer retention.

H1: There is a constructive affinity between brand image and customer retention.

3. RESEARCH DESIGN

The mobile phone subscribers from all five operators (Grameen Phone, Robi, Teletalk, Banglalink, and Airtel) available in Bangladesh are the respondents of this research. Different age groups, occupations (students, service providers, and businessman) and educational levels (SSC, HSC, Graduation & Post-graduation) were considered in choosing respondents. A convenient sampling method was utilized to choose respondents. A structured questionnaire was developed consisting of 12 statements, 11 statements are about the brand image (independent variables) and 1 is about customer retention (dependent variable). A Likert scale of five dimensions was set up for each statement. All the factors of each statement were taken from previous studies for making this study more valid. Particularly the elements relating to brand image were customized from Chuah *et al.* (2017). According to Hair *et al.* (2010) five respondents per variable to be analyzed as the lower

limit, but the most acceptable way of determination is a 10:1 ratio (10 respondents for one variable). Roscoe (1975) argued that the suitable sample size for a research should be 30 to 500. After editing the collected data 238 responses were kept for final analysis which is supported by literature. To know the reliability of data Cronbach's Alpha (α) was tested and then KMO & Bartlett's test was carried out to identify the statistical significance of data. An exploratory factor analysis (EFA) was carried out to discover a set of latent variables. A linear regression model was drawn to measure correlation and regression; and also to examine the hypothesis. All the calculations were done using SPSS Statistics 17.0 software.

3.1. Factor analysis

Cronbach's Alpha (α) was computed to verify the reliability of the questionnaire. The value of Cronbach's α is 0.892 which is higher than the standard value. It means the result is shown greater reliability (Nunnally, 1978). This result is presented in the given table:

Table 1: Results of reliability test

Reliability Statistics	
Cronbach's Alpha	Number of Items
0.892	11

To know the latent variables, an Exploratory Factor Analysis (EFA) was conducted by using SPSS software. All outputs are presented through Table 2 to Table 4. The standard value of Kaiser-Meyer-Olkin (KMO) is 0.60 which means if we get KMO value more than 0.60, then further analysis of the data is allowed (Kaiser, 1974). Here the value is 0.908 that permits further analysis, and by Bartlett's test of sphericity statistical, significance was found at the significance value is 0.000 (Bartlett, 1954). These results are shown in Table 2 below. From the result of KMO and Bartlett's Test, it can conclude that the data are factorable which means EFA is now possible for the data set.

Table 2: Results of KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	Bartlett's Test of Sphericity		
	Approx. Chi-Square	df	Sig.
0.908	1244.648	55	0

From the selected eleven components, two common factors were found. Total contributions of these two factors are 61.417% of the total variance which looks good. Out of this 61.417%, factor-I is contributing 41.145% and factor-II contributing 20.272%. The result is shown in Table 3.

Table 3: Explanation of total variance

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.375	48.864	48.864	5.375	48.864	48.864	4.526	41.145	41.145
2	1.381	12.553	61.417	1.381	12.553	61.417	2.23	20.272	61.417
3	0.738	6.708	68.125						
4	0.69	6.269	74.395						
5	0.603	5.481	79.875						
6	0.495	4.502	84.377						
7	0.455	4.139	88.516						
8	0.401	3.649	92.165						
9	0.335	3.041	95.206						
10	0.293	2.664	97.87						
11	0.234	2.13	100						

Extraction Method: Principal component analysis

The factor loading of all items is exceeding 0.5 which means the convergent validity is more than the expected level as showed in Table 3. Two common factors from the given eleven items were found. Factor-1 consists of item 01 to item 03 and factor-2 consists of item 04 to item 11. Factor-1 named as ‘Brand Familiarity’ and factor-2 named as ‘Brand Positivity’.

Table 4: Component matrix of brand image

Items	Factors	
	1	2
Item01		0.810
Item02		0.827
Item03		0.699
Item04	0.756	
Item05	0.812	
Item06	0.761	
Item07	0.806	
Item08	0.602	
Item09	0.702	
Item10	0.647	
Item11	0.806	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

3.2. Hypothesis testing

A hypothesis was developed from the literature review as the first step but from factor analysis, two variables of the brand image named Brand Positivity and Brand Familiarity were identified. For that reason, the main hypothesis was divided into two sub-hypotheses which are as follows:

H_{0a}: There is no affinity between brand positivity and customer retention.

H_{0b}: There is no affinity between brand familiarity and customer retention.

To know whether these two hypotheses are accepted or rejected a simple linear regression method was utilized. In regression analysis, two variables name Brand Familiarity and Brand Positivity determined as independent variables and customer retention as the dependent variable. SPSS output results are shown from Table 5 to Table 7.

From Table 5, R-value was found 0.652 which shows the simple positive correlation and therefore, designates a high degree of correlation between independent and dependent variables. The r-square value represents the level of dependency between the dependent variable and independent variables, and the value is 0.425 which explains that the dependent variable is 42.5 percent depends on independent variables.

Table 5: Effect on customer retention

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	0.652 ^a	0.425	0.42	0.6511	0.425	86.731	2	235	0

a. Predictors: (Constant), Brand Familiarity, Brand Positivity

From Table 6, it can be seen that the significance value is 0.000 which means the model allows further regression analysis.

Table 6: Analysis of variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	73.552	2	36.776	86.731	.000 ^a
	Residual	99.646	235	0.424		
	Total	173.197	237			

a. Predictors: (Constant), Brand Familiarity, Brand Positivity

b. Dependent Variable: Customer Retention

We know that, if the p-value of a coefficient is less than alpha, then the null hypothesis is rejected. From Table 7, p-values of brand familiarity and brand positivity are less than alpha value 0.05 which are 0.000 for both variables. So, both the null hypotheses (H_{0a} & H_{0b}) are rejected and alternative hypotheses are accepted in this study. From our result, it could be concluded that there is a positive affinity between brand image and customer retention.

Table 7: Coefficients of brand familiarity and positivity

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	3.777	0.042		89.49	0	3.694	3.86
1 Brand Familiarity	0.491	0.042	0.575	11.611	0	0.408	0.574
Brand Positivity	0.263	0.042	0.308	6.216	0	0.18	0.346

a. Dependent Variable: Customer Retention

4. DISCUSSION AND CONCLUSION

Customer retention is the prime objective of sustainable relationship marketing and it has been considered as a significant managerial theme, particularly in the case where organizations experience a low growth rate in the acquisition of new customers over a period of time (Ahmad and Buttle, 2002). From this study, it was found that brand image is a sensitive aspect for mobile operators. The brand has a constructive affinity with customer retention. More than forty percent of customer retention is achievable by increasing brand positivity and brand familiarity. Therefore, employers in the telecommunication industry should be cautious about the brand image. They should study more on how to increase the image of a brand.

There are some limitations to this study. Mainly, it is conducted only in the perspective of Bangladesh and the sample size was not enough as compared to the population. This study could be conducted more widely to get a more generalized result. Only the brand image is considered for analysis. Customer retention can be affected by some other factors also. By considering other factors at the same time the study could be more versatile. Some general factors related to the brand image are considered in this study. More specific elements could be included for further study. By removing these limitations researchers can do more intensive study on this field. It will facilitate mobile operators to maintain the expected number of existing subscribers.

Finally, it can be wrapped up that brand image is an influential aspect of subscriber retention strategies of mobile operators. Managers should be more concerned about the brand image if they want their customers to continue using their existing services.

Funding: This study received no specific financial support.

Competing Interests: The author declares that s/he has no conflict of interests.

Contributors/Acknowledgement: All the designing and estimation of current research done by sole author.

Views and opinions expressed in this study are the views and opinions of the authors, Asian Journal of Empirical Research shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.

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