

A CAUSATIVE ANALYSIS OF FACTORS AFFECTING EMPLOYED PERSONNEL AS LOYAL CUSTOMERS OF WIRELESS TELECOM INDUSTRY IN BANGLADESH

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ABSTRACT

This study has scrutinized the patterns and directions of influence of trust, corporate image and switching cost on employees of various private and public organizations as loyal customers of Wireless Telecom Industry in Bangladesh. Consequently, a random sample of 615 employed personnel from different public and private organizations have been surveyed at systematically chosen eleven shopping malls in Dhaka Metropolitan City with a self administered close ended questionnaire. After rejecting the incomplete feedbacks, reliability of data, normality and existence of multicollinearity has been tested for correlation and regression analysis. Bivariate correlation, standard multiple regression and sequential multiple regression analysis has been conducted in required stages to address the objective of the study. According to the inferences drawn here, it is hoped that findings attained in this study will assist the service providing operators of Bangladeshi Wireless Telecom Industry to craft their marketing strategy with regard to the attainment of sustainable competitive advantage in long run.

Keywords: Loyalty, Trust, Switching Cost, Corporate Image

INTRODUCTION:

As reported by Bangladesh Telecommunication Regulatory Commission (BTRC), the number of 'Mobile Phone Active Subscribers' was 72.963 million at the end of March 2011 and at the end of February 2012, this total number of 'Mobile Phone Active Subscribers' has been increased by 14.924 million new subscribers and reached at 87.887 million with an compound annual growth rate (CAGR) of 20.45% per year. Moreover, according to the fifth national census (BBS, March 2011) conducted by Bangladesh Bureau of Statistics, the population of Bangladesh stands at 142.319 million with the almost equal ratio between males and females (71.255 million males and 71.064 million females). This reveals that approximately 51.26 % people of Bangladesh have been engaged in using mobile phone services. This enormous market coverage by Wireless Telecom Industry has proven that, though the Peoples' Republic of Bangladesh is a country of a growing economy with a very low Per-capita income, buying power of customer could not impose any hinder on peoples' consumption of cellular data transmission technology's services provided by the service providing operators in this industry. Actually the market of Bangladesh, up to now, has enjoyed the wireless infrastructure of remote voice communication in two main methods known as Code-Division Multiple Access (CDMA) and Global System for Mobile communications (GSM). However, the exact matter of fact is, there are only six service providing operators namely 'Grameen Phone Limited (GP)', 'Orascom Telecom Bangladesh Limited (Banglalink)', 'Robi Axiata Limited (Robi)', 'Airtel Bangladesh Limited (Airtel)', 'Teletalk Bangladesh Limited (Teletalk)' and 'Pacific Bangladesh Telecom Limited (Citycell)' in this industry who are providing this wireless communication services via cellular phone with finite airwaves. Except Citycell, the sole service provider in CDMA method, other five operators are providing services to their customers in GSM method. Though this massive market can be spitted into various segments, the demographic market segment of this Wireless Telecom Industry evolved by employed personnel of various private and public organizations has been addressed for this study. With a view to unfold the strength, direction and contribution of the causative factors liable for the extent of exposed loyalty by employed personnel as customers this study deals with the following questions:

- a. How well do the factors of customer loyalty can predict loyalty of employed personnel as customer of Wireless Telecom Industry in Bangladesh?
- b. How much variance in loyalty of employed personnel scores can be explained by scores on the identified factors?
- c. Which one, if several, is the best predictor of employed personnel's loyalty as customers of Wireless Telecom Industry?
- d. If we control for the possible effect of other Independent Factors, is this set of identified factors still be able to predict a significant amount of variance in loyalty of employed personnel as customer of Wireless Telecom Industry in Bangladesh?

LITERATURE REVIEW:

According to the Longman Dictionary (2003 p.966) a word loyalty refers to the "quality of remaining faithful to your friends, principles, country etc. It is usually a feeling of support for someone or something". According to Oliver (1999 p. 34) customer loyalty is defined as " a deeply held commitment to re-buy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior". As illustrated in the above definition, loyalty has both an attitudinal and behavior dimension (Dick and Basu, 1994). It is assumed that customers who are behaviorally loyal to a firm display more favorable attitudes toward the firm vis-à-vis to its rival. Conversely, other researchers, Jones and Sasser (1995) classified two kinds of loyalty namely false and true long-term loyalty. A further study by Hofmeyr and Rice (2000) has divided loyalty into behavioral loyalty and committed (emotional) loyalty and argued that emotional loyalty is much stronger and longer lasting than behavioral loyalty. Butz and Goodstein further added that, more often than not, highly bonded customers not only make repeat purchasing but at the same time recommend providers that they are bonded to others and they also defend providers of their services or products to others (Butz and Goodstein, 1996 p.65).

However, though customer loyalty usually expresses an intended behavior related to the service, product and/ or the company and also includes the likelihood of future renewal of service/products or contracts, several researches had focused on probing the association of customer loyalty with its antecedents (Yi & Gong, 2008; McMullan & Gilmore, 2008; Ibanez et al. 2006; Liu et al. 2005; Aydin & Ozer, 2005; Sirdeshmukh et al. 2002; Cronin et al. 2000). Literatures in this field indicates that corporate image (Nguyen and Leblanc, 2001), customer switching costs (Jones et al., 2002) and trust (Lau and Lee, 1999) have significant effects on customer

loyalty as well as behavioral intentions of consumers have been the most significant factors of business success for either manufacturers or service providers and switching cost; corporate image and trust have significant impact on it (Nguyen & Leblanc, 2001; Parasuraman, Zeithaml, & Berry, 1988; Zeithaml, Berry, & Parasuraman, 1996).

This study had selected these three independent factors (Switching Cost, Corporate Image and Trust) emphasized by Nguyen & Leblanc (2001), Jones et al. (2002), Zeithaml et al. (1996), Lau and Lee, (1999) and Parasuraman et al. (1988) to understand their impact on loyalty of employed personnel as customer of Wireless Telecom Industry in Bangladesh.

TRUST:

Researchers have established that, trust is essential for building and maintaining long-term relationships (Rousseau, Sitkin, Burt, & Camerer, 1998; Singh & Sirdeshmukh, 2000; Ghouri et al. 2011). According to Moorman et al. (1993, p. 82) trust refers to “a willingness to rely on an exchange partner in whom one has confidence”. Morgan and Hunt (1994, p. 23) added that, trust exists “when one party has confidence in an exchange partner’s reliability and integrity”. Thus, it is obvious that, customers’ requirements need to be fulfilled to develop trust; the marketers need to have the ability and willingness to deliver a quality product or service as it is expected (Ganesan, 1994; Eberl, 2004).

More significantly, trust can be analyzed from two different perspectives (Geyskens et al., 1996; Kumar et al., 1995; Moorman et al., 1992, 1993):

- First, it can be considered as a compartmental component refers to the “willingness to rely on the partner” (Geyskens et al., 1996; Kumar et al., 1995; Moorman et al., 1992, 1993).
- Second, trust can be measured as a cognitive component (Anderson and Narus, 1990; Doney and Cannon, 1997).

Considering trust as a cognitive component, the literatures suggest that trust may be defined by three types of beliefs, namely, competence, honesty and benevolence. Competence means the capability of service provider to complete a relationship with their existing and potential clients and satisfy their needs in accordance with their requirements. Honesty is the belief that the second party will keep their word, fulfill their promises and be sincere (Gundlach and Murphy, 1993; Doney and Canon, 1997). A benevolent attitude examines the behavior of the party when an unpredicted condition arises (Ganesan, 1994).

RELATIONSHIP BETWEEN TRUST AND CUSTOMER LOYALTY:

In business environment, to build and maintain long-term relationship, trust has been found to be a very important factor (e.g. Geyskens et al., 1996; Rousseau et al., 1998; Singh and Sirdeshmukh, 2000). A number of researchers have advocated that trust is fundamental in developing customer loyalty (Moorman et al., 1993; Morgan & Hunt, 1994). In service industries, it has been found out that, trust is positively related to customer loyalty (Verhoef et al., 2002). Ranaweera and Prabhu (2003) also found that, in order to maintain a long-term contractual relationship with the service provider, trust is likely to be a strong driver of customer retention. To measure and unfold the influence of Trust on Customer Loyalty, this study considered both compartmental and cognitive component of trust and consequently assumed these hypotheses:

- H₁:** There is a positive influence of Service Provider’s Reliability on Trust
- H₂:** There is a positive influence of Compliance with Customers’ Expectation on Trust
- H₃:** There is a positive influence of Availability of Supports-Services on Trust
- H₄:** There is a positive influence of Integrity of Service Provider on Trust
- H₅:** There is a positive relation between Trust & Customer Loyalty

CORPORATE IMAGE:

Corporate image can be described as the overall impression made on the minds of the public about a firm (Barich & Kotler, 1991). It is the result of a process (MacInnis and Price, 1987), ideas, feelings and consumption experiences with a firm that are responsible to create that process and transformed into mental images from memory (Yuille and Catchpole, 1977). More elaborately, in the process of overall evaluation of the service of a company, corporate image is one of the important factors (Gummesson & Gronroos, 1988) which influences customers’ opinion about the services offered (Andreassen & Lindstedt, 1988), and the minds of the public about firm’s overall impression (Nguyen & Leblanc, 2001). In other words, it (Corporate Image) is argued to be what comes to the mind of a customer when they hear the name of a firm (Nguyen, 2006).

RELATIONSHIP BETWEEN CORPORATE IMAGE AND CUSTOMER LOYALTY:

According to Grönroos (1990) “(corporate) image is a filter which influences the perception of the operation of the company”. Corporate image being an attitude is functionally related to customer’s behavioral intentions such as customer loyalty (Johnson, Gustafsson, Andreassen, Lervik & Cha, 2001). Furthermore, Nguyen and Leblanc (2001) have proved that corporate image relates positively with customer loyalty in three sectors namely, telecommunication, retailing and education. To measure and disclose the influence of Corporate Image on Customer Loyalty, this study considered the literature of MacInnis and Price (1987), Andreassen & Lindstedt (1988) and Nguyen & Leblanc (2001). Consequently it assumed hypotheses as follows:

H₆: There is a positive influence of Goodwill of Service Provider on Corporate Image

H₇: There is a positive influence of Quality of Products-Services on Corporate Image

H₈: There is a positive influence of Overall Impression of Service Provider on Corporate Image

H₉: There is a positive relation between Corporate Image & Customer Loyalty

SWITCHING COST:

Usually switching cost varies from customer to customer (Shy, 2002; Khan et al. 2010). Despite customers have been served by ensuring superior quality of product they may not always be loyal to a particular service provider because of the additional cost that they incur which keeps them away from trying new alternatives (Sharma and Patterson, 1999). Gremler and Brown (1996) defined Switching cost as the investment of time, money and effort that, in customers’ perception, made it difficult to switch. In addition to measurable monetary costs, switching costs also include time and psychological effort involved in facing the uncertainty of dealing with a new service provider (Porter 1998; Dick & Basu, 1994; Hellier, Rickard, Carr, and Geursen, 2002; Kim, Kliger, & Vale, 2003).

RELATIONSHIP BETWEEN SWITCHING COST AND CUSTOMER LOYALTY:

Fornell (1992) argues that switching cost is one of many factors that affect the relationship of customer satisfaction and customer loyalty. Although it is proposed that high switching barriers or lack of real alternatives might make the customers loyal (Andreassen and Lindestad, 1998), in many researches, it is found that switching cost has a direct influence on customer sensitivity to price level and thus influences customer loyalty (e.g. Eber, 1999; Jones et al., 2002; Bloemer et al., 1998; Burnham et al., 2003; Feick et al., 2001). To measure and disclose the influence of Switching Cost on Customer Loyalty, this study considered the literature of Sharma et al. (2000) and Kim et al (2003) and assumed these hypotheses:

H₁₀: There is a positive influence of Costs of Changing Service Provider on Switching Cost

H₁₁: There is a positive influence of Risks of Changing Service Provider on Switching Cost

H₁₂: There is a positive relation between Switching Cost & Customer Loyalty

CUSTOMER LOYALTY:

For conceptualizing the term Customer loyalty, it has typically been divided into two typologies—behavior and attitude (Jacoby & Chestnut, 1978 & Dick Basu, 1994).

CUSTOMER LOYALTY FROM THE PERSPECTIVE OF THE BEHAVIORAL SCHOOL:

The behavioral aspect of customer loyalty represents- actual repeat purchase of products or services that includes purchasing more and different products or services from the same company, recommending the company to others, and reflecting a long-term choice probability for the brand (Feick & Lee, 2001).

CUSTOMER LOYALTY FROM THE PERSPECTIVE OF THE ATTITUDINAL SCHOOL:

On the contrary of behavioral school, Jacoby and Chestnut (1978) have explored this psychological meaning of loyalty in an effort to distinguish it from behavioral (that is referring to repeat purchase) definitions. Jacoby and Chestnut (1978) conclude that consistent purchasing as an indicator of loyalty could be invalid because of happenstance buying or a preference for convenience, and that, inconsistent purchasing could mask loyalty if customers are multi-brand loyal. Thus customers’ attitudinal component represents notions like: repurchase intention or purchasing additional products or services from the same company, willingness of recommending the company to others, demonstration of such commitment to the company by exhibiting a resistance to

switching to another competitor (Cronin & Taylor, 1992; Narayandas, 1996) and willingness to pay a price premium (Parasuraman, Zeithaml & Berry 1988). To measure and understand the degree of employed personnel's loyalty as customer of Wireless Telecom Industry in Bangladesh, this study considered the ideology of attitudinal school and consequently assessed these hypotheses:

- H₁₃.** Resistance to switch to another competitor has a positive influence on Customer Loyalty
- H₁₄.** Purchasing additional products and services has a positive influence on Customer Loyalty
- H₁₅.** Willingness of recommending others has a positive influence on Customer Loyalty
- H₁₆.** Willingness to pay a premium price has a positive influence on Customer Loyalty

METHODOLOGY:

This study was aimed to verify insights of previously developed hypothesis and research findings in the study of Nguyen & Leblanc (2001), Jones et al. (2002), Zeithaml et al. (1996), Lau and Lee, (1999) and Parasuraman et al. (1988) to understand the direction, influence and contribution of Trust, Corporate Image and Switching Cost as significant factors affecting the extent of customer loyalty in a specific market segment of Wireless Telecom Industry in Bangladesh evolved by Employed Personnel of various private and public organizations. For this reason, the most appropriate type of research design for this study was 'Confirmatory Study' which is also known as 'Conclusive Research' as it is used to 'confirm' a hypothesis and hence focused on obtaining as well as analyzing specific data to address specific questions.

To comply with this requirement, out of 35 major shopping places (See Annex 1), a random sample of 615 respondents had been surveyed at systematically selected eleven establishments (every 3rd observation from alphabetically listed names of shopping places) namely, Bashundhara City Shopping Mall (Karwan Bazar, Dhaka), DCC Market (Gulshan-2, Dhaka), Eastern Mallika (Old Elephant Road, Dhaka), Farmview Super Market (Farmget, Dhaka), Mascot Plaza (Uttara, Dhaka), Orchard Point (Mirpur Road, Dhaka), Navana Shopping Center (Gulshan-1, Dhaka), Multiplan Center (New Elephant Road, Dhaka), Police Plaza Concord (Gulshan Avenue, Dhaka), RAK Tower (Uttara, Dhaka) and Royal Plaza (Uttara, Dhaka). Altogether, primary data was collected with a self-constructed 5 point Likert-Scaled Questionnaire, with 5 being "strongly agree" and 1 being "strongly disagree". Total 65 incomplete questionnaires were rejected and 550 completed feedbacks were accepted. Thus the response rate calculated was 89.45% of which 86.7% respondents were male and 13.3% were female. Moreover, out of 550 respondents, 75.72% respondents were frontline managers, 18.62% were midlevel managers and 6.03% were top level managers from various private and public organizations in and around Dhaka Metropolitan City, Bangladesh.

To test whether the scales are reliable or not, the value of the Chronbach's alpha had been estimated. The 'Bivariate' correlation analysis by using Pearson product-moment correlation coefficient had been conducted to explore the relationships and directions between dependent and Independent Factors. Here interpretation had done according to the standards suggested by Cohen (1988) where 'r = .10 to .29 or r = -.10 to -.29' stands for 'small'; 'r = .30 to .49 or r = -.30 to -.49' for 'medium' and 'r = .50 to 1.0 or r = -.50 to -1.0' for 'large' relationships.

Further more, after measuring the multicollinearity and normality of the collected data, Standard Multiple Regression and Sequential Multiple Regression analysis was conducted to know:

- a. How well do the three factors of customer loyalty (Trust, Corporate Image and Switching Cost) predict loyalty of employed personnel as customer of Wireless Telecom Industry in Bangladesh?
- b. How much variance in loyalty of employed personnel scores can be explained by scores on these three factors?
- c. Which one is the best predictor of employed personnel's loyalty as customers of Wireless Telecom Industry: control of Trust, or control of Corporate Image, or control of Switching Cost?
- d. If we control for the possible effect of Designation, Type of SIM-Card, Number of SIM-Cards and Length of Using Cell Phone is this set of factors still be able to predict a significant amount of variance in loyalty of employed personnel as customer of Wireless Telecom Industry in Bangladesh?

FINDINGS AND ANALYSIS :

TESTING THE RELIABILITY OF THE SCALE :

Although a coefficient of 0.7 or above is desirable (Hair et al, 1998) a Chronbach's alpha value of between 0.5-0.6 indicates sufficient reliability of the scale for the early stage of any research (Nunnally, 1978). In this study the Cronbach alpha coefficient was 0.807.

TABLE 1: ITEM TOTAL STATISTICS OF INDEPENDENT FACTORS

Factors	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Service Provider's Reliability	40.85	59.456	.461	.793
Compliance with Customers' Expectation	41.28	59.643	.434	.795
Availability of Supports-Services	41.28	59.607	.408	.797
Integrity of Service Provider	41.22	59.482	.420	.796
Goodwill of Service Provider	41.25	58.002	.488	.790
Quality of Products-Services	41.31	59.589	.396	.798
Overall Impression of Service Provider	41.35	58.880	.455	.793
Costs of Changing Service Provider	41.76	56.949	.466	.792
Risks of Changing Service Provider	41.64	56.816	.461	.793
Resistance to switch to another competitor	41.93	56.505	.459	.793
Purchasing additional products and services	41.91	56.997	.462	.793
Willingness of recommending others	41.36	60.128	.389	.798
Willingness to pay a premium price	41.18	59.063	.438	.795

Number of Independent Factors = 13

In table 1 the column marked 'Corrected Item Total Correlation' give an indication of the degree to which each item correlates with the total score and low values (less than 3.00) here indicate that the item is measuring something different to the scale as a whole. In this study lowest value among the other 13 values under this column is 3.89 which actually assuring the consistency. In the column headed 'Alpha if Item Deleted' is representing the impact of removing each item from the scale. Hence it was absolutely confirmed that the Cronbach alpha coefficient (0.807) and Cronbach alpha based on standardized item (.808) was optimum.

PEARSON PRODUCT-MOMENT CORRELATIONS BETWEEN FACTORS AND VARIABLES:

In Table 2, scrutinized correlation coefficients of the Independent Factors (Service Provider's Reliability with $r = .688$, Compliance with Customers' Expectation with $r = .677$, Availability of Supports-Services with $r = .758$, Integrity of Service Provider with $r = .740$) demonstrate a strong and positive influence on the dependent variable 'Trust'. Since the alpha (α) value (two tailed test) was $<.05$, predefined hypotheses H_1, H_2, H_3 and H_4 were accepted. Another group of examined correlation coefficients of the Independent Factors (Goodwill of Service Provider with $r = .731$, Quality of Products-Services with $r = .696$, Overall Impression of Service Provider with $r = .660$) shown strong and positive influence on the dependent variable 'Corporate Image'. Since the alpha (α) value (two tailed test) was $<.05$, predefined hypotheses H_6, H_7 and H_8 were accepted. Obtained correlation coefficients of the Independent Factors, namely, 'Costs of Changing Service Provider with $r = .874$ ' and 'Risks of Changing Service Provider with $r = .879$ ' indicated a strong and positive relationship with the dependent variable 'Switching Cost' with the alpha (α) value $<.05$. Thus H_{10} and H_{11} were accepted.

TABLE 2: CORRELATIONS AMONG INDEPENDENT FACTORS AND DEPENDENT VARIABLES

Independent Factors	Dependent Variables			
	Trust	Corporate Image	Switching Cost	Customer Loyalty
Factors of Trust				
Service Provider's Reliability	.688**	.432**	.302**	.245**
Compliance with Customers' Expectation	.677**	.433**	.163**	.297**
Availability of Supports-Services	.758**	.347**	.149**	.246**
Integrity of Service Provider	.740**	.314**	.210**	.268**
Factors of Corporate Image				
Goodwill of Service Provider	.421**	.731**	.330**	.343**

Quality of Products-Services	.385**	.696**	.244**	.257**
Overall Impression of Service Provider	.299**	.660**	.227**	.495**
Factors of Switching Cost				
Costs of Changing Service Provider	.274**	.330**	.874**	.370**
Risks of Changing Service Provider	.227**	.344**	.879**	.397**
Factors of Customer Loyalty				
Resistance to switch to another competitor	.196**	.333**	.407**	.762**
Purchasing additional products and services	.328**	.327**	.268**	.735**
Willingness of recommending others	.235**	.405**	.191**	.606**
Willingness to pay a premium price	.256**	.390**	.318**	.626**
Trust	1	.530**	.286**	.368**
Corporate Image	.530**	1	.385**	.523**
Switching Cost	.286**	.385**	1	.438**
Loyalty	.368**	.523**	.438**	1

Pearson Product-Moment Correlations, N = 550

** Correlation is significant at the 0.01 level (1-tailed)

Besides, from table 2, obtained correlation coefficients of the Independent Factors ‘Resistance to switch to another competitor (r = .762)’, ‘Purchasing additional products and services (r = .735)’, ‘Willingness to pay a premium price (r = .606)’ and ‘Willingness of recommending others (r = .626)’, consecutively shown under the row headed ‘Factors Of Customer Loyalty’, unfolded strong and positive relationship with the dependent variable ‘Customer Loyalty’. Here, in each case, the obtained alpha (α) value was $<.05$. Therefore **H₁₃**, **H₁₄**, **H₁₅** and **H₁₆** were accepted. Though the Independent Factors, namely, ‘Trust with r = .368’ and ‘Switching Cost with r = .438’ expressed a moderately positive relationship with dependent variable ‘Customer Loyalty’, ‘Corporate Image with r = .523’ established a strong, positive relationship with it. As in each and every case the alpha (α) value obtained was $<.05$, predefined hypotheses denoted as **H₅**, **H₉** and **H₁₂** had also been accepted. For more accuracy, these hypotheses (**H₅**, **H₉** and **H₁₂**) were further tested on regression model (see Table 4).

ANALYSIS OF REGRESSION BETWEEN INDEPENDENT FACTORS AND DEPENDENT VARIABLES : TESTING THE MULTICOLLINEARITY :

Table 3 represents the outputs of Collinearity Diagnostics which was actually performed as part of multiple regression program. Here the values given in the column headed ‘Tolerance’ was calculated by the formula: $1-R^2$ for each variable. Multiple Regression assumes that, if these value is very low (near 0), then this indicates the possibility of muticollinearity. This study, as the tolerance values for the three Independent Factors (.711, .660 and .843) are quite respectable, did not appeared to have violated this assumption.

TABLE 3: COEFFICIENTS^A ON OF TRUST, CORPORATE IMAGE, SWITCHING COST AND CUSTOMER LOYALTY

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.860	.160		5.372	.000		
	Trust	.105	.045	.096	2.339	.020	.711	1.406
	Corporate Image	.394	.046	.368	8.642	.000	.660	1.516
	Switching Cost	.195	.027	.268	7.118	.000	.843	1.187

a. Dependent Variable: Customer Loyalty

ASSESSMENT OF NORMALITY:

Normality was assessed by ‘Normal Probability Plot of Regression Standardized Residuals’ which is illustrated by figure 1 below. Here it can be observed that points were positioned in a reasonably straight diagonal line from bottom left to top right indicating no major deviation from normality.

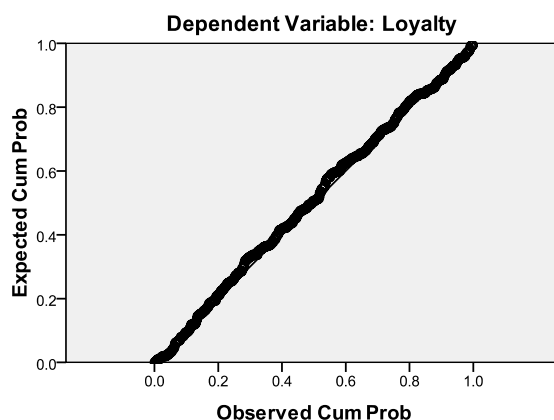


FIGURE 1: NORMAL P-P PLOT OF REGRESSION STANDARDIZED RESIDUALS

ASSESSMENT OF NULL HYPOTHESIS BY SIMPLE LINEAR REGRESSION IN ENTER METHOD :

In table 4, the F Value was derived from dividing the Mean Square Model (42.969) by the Mean Square Residual (0.447), which was equal to 96.127. Consequently, the P value associated with this F value, shown under the column headed ‘Sig.’, was less than 0.001. It indicated that independent factors (Trust, Corporate Image and Switching Cost) of this study reliably predicted the dependent variable (Customer Loyalty) providing strong evidence against the null hypothesis. As a result, **H₅**, **H₉** and **H₁₂** had been accepted finally without any doubt.

TABLE 4: ANALYSIS OF VARIANCE (ANOVA^B)

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	128.906	3	42.969	96.127	.000 ^a
	Residual	244.268	546	.447		
	Total	373.173	549			

a. Predictors: (Constant), Switching Cost, Trust, Corporate Image

b. Dependent Variable: Loyalty

EVALUATING THE MODEL OBTAINED FROM STANDARD MULTIPLE REGRESSION:

The column’s value in table 5 under the heading R Square indicates that 34.5% (.345 X 100) variance in the dependent variable (Customer Loyalty) was explained by the model. It is to be noted that the ‘Adjusted R Square Statistics’ corrects the value of R square, in case of small sample size, to provide better estimate of the true population value. Here the adjusted R Square was 34.2%.

TABLE 5: MODEL SUMMARY OF THE STANDARD MULTIPLE REGRESSION

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.588 ^a	.345	.342	.669

a. Predictors: (Constant), Switching Cost, Trust, Corporate Image

b. Dependent Variable: Customer Loyalty

EVALUATING THE INDEPENDENT FACTORS CONTRIBUTED IN STANDARD MULTIPLE REGRESSION:

The Beta Value of independent factors under the column Standardized Coefficients in table 3 represents which of the factors included in the model contributed to the prediction of dependent variable. The largest standardized beta coefficient found among these three factors was .368 (Corporate Image) which represents that this variable made the most strongest and significant unique contribution to explain the dependent variable ‘Customer Loyalty’ by dint of significant value was less than .05 (Sig = .000).

EVALUATING THE MODELS OBTAINED BY SEQUENTIAL MULTIPLE REGRESSION:

Sequential Multiple Regression was used to understand that, if we control the possible effect of Designation, Type of SIM-Card, Number of SIM-Cards and Length of Using Cell Phone (Additional Independent Factors),

whether or not, this set of factors still be able to predict a significant amount of variance in loyalty of employed personnel (Dependent Variable) as customer of Wireless Telecom Industry in Bangladesh.

TABLE 6: MODEL SUMMARY OF THE SEQUENTIAL MULTIPLE REGRESSION

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	.192 ^a	.037	.030	.812	.037	5.238	4	545	.000
2	.595 ^b	.355	.346	.667	.318	88.885	3	542	.000

a. Predictors: (Constant), Designation, Type of SIM-Card, Number of SIM-Cards, Length of Using Cell Phone
 b. Predictors: (Constant), Designation, Type of SIM-Card, Number of SIM-Cards, Length of Using Cell Phone, Corporate Image, Switching Cost, Trust

According to the demonstration of the Model Summary of the Sequential Multiple Regression in table 6, it can be realized that, after the factors in the Block 1 (Designation, Type of SIM-Card, Number of SIM-Cards and Length of Using Cell Phone) had been entered, the overall model (Model 1) explained 3.7% (.037 X 100) of the variance. Alternatively, after the factors in the Block 2 (Designation, Type of SIM-Card, Number of SIM-Cards, Length of Using Cell Phone, Corporate Image, Switching Cost and Trust) had been entered, the model (Model 2) as a whole explained 34.7% (.347 X 100) of the variance.

Moreover, the column labeled 'R Square Change' in table 6 on the line marked Model 2 represents that the R Square Change value was .318. This value indicates that Trust, Switching cost and Corporate Image explained an additional 31.8% (.318 X 100) of the variance in Loyalty of Employed Personnel as Customers of Wireless Telecom Industry in Bangladesh, even when the effect of Designation, Type of SIM-Card, Number of SIM-Cards and Length of Using Cell Phone were statistically controlled for. This also was a statistically significant contribution, as indicated by the Sig. F change value for this line (.000). Additionally, the Beta Value of independent factors under the column Standardized Coefficients in table 7 represents which of the factors included in the Model 2 contributed to the prediction of dependent variable as well as the degree of their individual significance of unique contribution.

TABLE 7: COEFFICIENTS OF FACTORS CONTRIBUTING IN MODEL 1 & MODEL 2

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.697	.138		26.792	.000
	Designation	-.084	.065	-.059	-1.301	.194
	Length of Using Cell Phone	-.198	.056	-.162	-3.546	.000
	Number of SIM-Cards	-.026	.042	-.027	-.619	.536
	Type of SIM-Card	.074	.055	.058	1.333	.183
2	(Constant)	1.024	.213		4.818	.000
	Designation	-.118	.053	-.082	-2.212	.027
	Length of Using Cell Phone	-.031	.047	-.025	-.654	.513
	Number of SIM-Cards	-.003	.035	-.003	-.073	.942
	Type of SIM-Card	.049	.046	.039	1.070	.285
	Trust	.113	.046	.103	2.484	.013
	Corporate Image	.387	.046	.362	8.478	.000
Switching Cost	.187	.028	.258	6.769	.000	

From table 7, in the Model 2 row, by scanning the Sig. column, it can be unfolded that out of seven only four factors made a statistically significant contribution (less than .05). In accordance with their importance they are: Corporate Image (beta = .362), Switching cost (beta = .258), Trust (beta = .103) and Designation (beta = -.082). In contrast, Type of SIM-Card, Number of SIM-Cards and Length of Using Cell Phone did not appear to make a statistically significant contribution.

CONCLUSION:

As the bargaining power of the customer seems to be high with lofty growth rate of the market and lack of the

availability of substitute products as well as low threats from potential new entrants in this industry, market share of each service provider is gradually increasing to keep pace with the growth rate of the market. Therefore to achieve sustainable competitive advantage over competitors, 'Customer loyalty', as a concept, is a critical strategic option for today's Telecommunication Sector of Bangladesh. Not only that, but also the employed personnel, as loyal customers for service providing operators of Wireless Telecom Industry in Bangladesh, should be considered as the most sustainable and stable target market.

RECOMMENDATION:

Yankee (2001) indicated that mobile operators approximately incur seven times higher cost to acquire new client than that of retaining existing clients on an average basis. Therefore, telecom service providers must realize the necessity of studying and understanding various antecedents (viz. service quality, switching cost, trust, corporate image, and customer satisfaction) of the customer loyalty which might help them to develop a loyal customer base (Sharp & Sharp, 1997). As it can easily be understood from the literature that, customers assess Trust, Corporate Image and Switching Cost as identified factors before deciding to stay with a company for a long time, inference from this study suggests the service providing operators to control the factors of switching cost by synchronizing trust with enhanced level of superior corporate image more effectively and efficiently to attain a distinct competitive advantage.

LIMITATIONS OF THE STUDY:

In accordance with the category of products and services, in generic sense, customer loyalty varies over time. Additionally, this study has excluded the other factors which are not established by any of the previous literatures on this ground and only has been conducted on a specific market segment of Wireless Telecom Industry. Therefore, findings of this study can not be applied generally on other industrial sectors of Bangladesh. To validate the findings of this study, for the upcoming research, it is recommended to integrate the excluded factors.

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