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Dyadic Relationship on Consumer Retention: An Assessment on Telecommunication Sector of Bangladesh

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Abstract

Customer retention is getting attention day by day as well as the new customer generation. Managers are emphasizing more and more on the satisfaction of the existing customer as it makes the firm unbeatable in the complex and competitive business world. This paper deals with the customer retention especially form psychological perspective. Paper mainly focuses on the dyadic relation among the consumers to retain them to survive in the perfect competitive market. To do that, scenarios of telecommunication sector of Bangladesh have been exposed and have been matched with the perception of consumer to reveal an empirical result.

Keywords: Psychological aspects, dyadic relation, telecommunication sector, FnF (friends and family), customer support, customer retention

1. Introduction

Globalization and open market have broadened the area of customer choice, which consequently makes the business area more complex than ever before. Not only customer satisfaction but also retention is getting focal point to be succeeded in the complex business arena.

With the increased chances of losing current customers and the enhanced cost of attracting new customers in today's intensely competitive market, companies are devoting themselves to more strategic efforts to retain customers (Fornell C & Wernerfelt B, 1987). It is argued that the firm that satisfies its customer is virtually unbeatable. However, the relationship between satisfaction and actual retention has been found to be fairly weak (Anderson E.W. & Sullivan M W, 1993; Hennig-Thurau T & Klee A, 1997).

The telecommunication sector of Bangladesh is facing high competition during that day. There are six service providers in the telecommunication industry of Bangladesh. Although the telecommunication industry is relatively new in Bangladesh, the growth is very high compare to other industries due to the aggressive market oriented business strategy. Due to this scenario, customer retention is getting more focus to set the strategy. To retain the customer, companies are providing various customer supports. FNF (Friends and Family) is one such support that is giving on, considering the dyadic relation of consumer. Under this strategy, subscribers are allowed to talk with some selected numbers at a cheaper rate than the regular rate.

2. Methodology

For this study both the primary and secondary data and information have been used. Primary information has been collected through interview and document analysis whereas secondary data and information have been collected from internet, newspaper, magazines, existing literature, etc. Personal observation has been a key source for data validity and reliability.

To collect the primary data from the subscribers of telecommunication service Likert scale (5 points scale) have been used. The objective of primary data collection was to test the effectiveness of the F & F (Friends and family) strategy. Data has been analyzed from various points of view.

3. Literature Review and Theoretical Underpinnings

3.1 Customer Retention

Recruiting new customers is more difficult and expensive than retaining existing customers. Service providers are well enough informed about the preference of existing customers. Moreover, in a saturated or mature market, it's hardly possible to acquire new subscribers as they are already consumer of other service providers.

In case of retention of existing customers, there is a potential and opportunity value of customers gained over a long period of time (Kim, Park, & Jeong, 2004). Telecommunication, especially wireless service is a continue service rather than one time in which customer might be offered new features in future. Because of these reason loosing of existing customer has multiple and complex impact.

There are many research works on the acceptance and adaptation of wireless services(Malhotra & Segars, 2005). But, there are little researches works that have paid attention on the retention behavior of customer, especially from psychological perspective.

Basically, researchers have identified two major groups of factors affecting customer retention or switching behavior, one is factors related to switching costs and another is factors related to customer

satisfaction (Kim et al., 2004). Switching costs involved with the various costs that is needed to get service from another service providers. Customer satisfaction refers to the different customer perception of service quality(Kim et al., 2004; Zeithaml, Berry, & Parasuraman, 1996). However, service quality composed of several factors, such as customer support and the quality characteristics of service (Gerpott, Rams, & Schindler, 2001; Kim et al., 2004). Between the main two factors, there is a dynamic relationship.

Switching costs play a significant role in customer retention or switching behavior(Chen & Hitt, 2002). In case of customer satisfaction, three factors: call quality, price, and customer support, have been identified by the researchers that are related to retention behavior in wireless service markets(Bolton, 1998).

2.2 Relation Typology among the Consumers

There are so many factors that critically impact on the human mind. Developing a model from psychological perspective is difficult. It is argued that all economic activity is embedded in social relations and that such relations influence the establishment of business and the art of running a business (Dacin, Beal, & Ventresca, 1999; Granovetter, 1985; Uzzi, 1997). To graph or to develop a model to show how cultural shapes or human behavior regarding individual thoughts and action influenced business is difficult. Shweder (1990) stated that "psyche and culture, person and context…..dynamically, dialectically and jointly make each other up"(Shweder, 1990; Stigler, Schweder, & Herdt, 1990). In the book "Evolutionary Social Psychology" Caporael and Baron (1997) States that people naturally associates with the four evolutionary core configurations. And for the human mind these configurations assembled repeatedly as the "natural environment"(Caporeal & Baron, 1997). These are; Dyads, Teams (work/family groups), Bands, and Macrobands. Later, Holly Arrow and K.L Burns (2004) graph the Caporael and Baron configurations to make a simple explanation(Arrow & Burns, 2004). However, here the model has been simplified in accordance with the objective of this paper. The transition of the behavioral change can be better explained by the Dynamic Social Impact Theory (DSIT) developed by Latané and others(Latané, 1981). Radar shaped figure inside of the model represents the DSIT theory, where 'I' represents immediacy, 'N' represents number and 'S' represents Strength.

Figure 1 shows multilevel of relation in a society among people. In figure 1, **a** indicates macro band and large aggregates of human being, **b** indicates band where relation diffuse or differentiate, **c** indicates small group composed on same culture, **d** indicates dyadic coordination and **e** indicates individual psychological mechanism. **f** works as a transmission route.

Basically, at **a** and **b** culture set in. However, at **c** people form the group based on same culture i.e., human behavior. So, from business perspective **c** is the main level of interest. **C** is also affected by **d** and **e** to form and change with the nature of DSI radar.

However, this paper objective is to explore nature of **d** and the influence of **d** on **C** consisting with the literature review.

4. Telecommunication Sector of Bangladesh

According to the data released by BTRC (Bangladesh Telecom Regulatory Commission), the number of mobile phone subscribers in Bangladesh reached 40.34 million with addition of 1.41 million new subscribers in April 2008 by six mobile operators. All companies are competing against each other under the perfect competitive market. However, GrameenPhone (GP) is the market leader in the mobile operating sectors. Every company is giving two types of packages; prepaid and postpaid. Moreover, categorizing the customer, in some cases they are offering more packages.

Table 1 shows the concern of the mobile company to the dyadic relation of the consumer through the standard call rate and FNF call rate. The table shows that, in every case there is a tendency of the companies to give more facility to some number. Competition in those cases is quite aggressive. It seems that companies are fighting against each other through FNF number to boost up their performance.

Primarily this table indicates that dyadic relation among the consumer has a great impact on the telecommunication business in Bangladesh.

5. Opinion of the Consumer

5.1 Survey Procedure

To collect the opinion of the consumer, a survey was conducted among the subscribers of the telecommunication service of Bangladesh. Basically, data has collected from the subscribers, who are staying at the capital of Bangladesh, Dhaka. To conduct the survey questionnaire was formulated consisting with the generally accepted psychological principals. Likert Scale (5 points, from strongly disagree to strongly agree) has been used to set the measurement scale. To set the dependent variable opinion has been taken on consumption of credit through amount, time and frequency.

5.2 Response Rate

Response rate is about 55%. Among 150 questionnaires 85 are collected including 2 incomplete questionnaires.

5.3 Findings

Subscribers are more interested about the FNF (Friends and Family) numbers. Empirical analysis shows that they are spending more credit for FNF number.

Mathematical model may be expressed as $y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + u$

Where $y =$ consumption of credit,

$x_1 =$ spend credit for 4 number,

$x_2 =$ spend credit for 7 number,

$x_3 =$ frequency of changing FNF number, and

$u =$ unobserved factors.

So we can write $y = \alpha + .5482 x_1 + .3988 x_2 + .0344 x_3 + u$

Analysis form table 3 reveals that packages that contain 4 FNF number has strongest impact (.5482) on the consumption of the credit with the highest confidence level (more than 99.99%). Package of 7 FNF number has a strong impact on the consumption of credit (.3988) with the strong statistical confidence level also. Low beta of changes of FNF ultimately supports the result of previous variable. The result shows that subscribers like to spend more on FNF number that ultimately retain not only the caller of phone but also the receiver of the call as in maximum case call rate is cheap under same operator.

The R-squared is 0.7980, meaning that approximately 79.80% of the variability of the consumption of credit is accounted for by the variables in the model i.e., FNF number. Adjusted R-squared indicates that about 79.03% of the variability of the consumption of credit is accounted for by the model; even after taking into account the number of predictor variables in the model.

6. Future Research

The empirical results of this paper have been drawn without considering the classification of the consumer's profession or social status of the consumer. There is a scope to do that in future. Moreover survey can be conducted in a wider area. Information can also be obtained from alternative sources.

7. Conclusion

Dyadic relation among the consumers impacts positively to retain consumers in the telecommunication sector. In this sector of Bangladesh, all companies are using this dyadic relation to retain the consumer. To handle the dyadic relation among the consumer to retain, there are still many things that have to be empirically investigated and theoretically synthesized. However, this paper simply explores the role of dyadic relation to retain consumer as well as to compete in the complex business environment.

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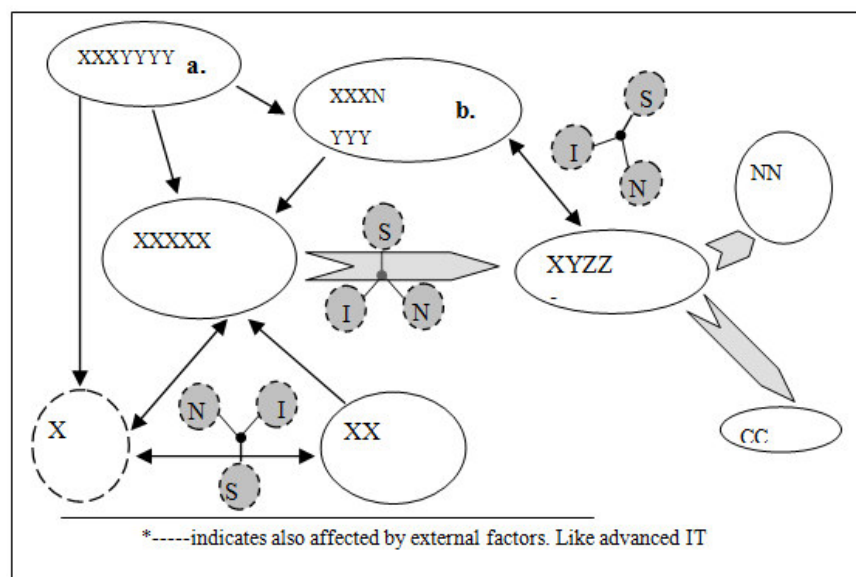

Figure 1. Formation and transition of human behavior and social relation

Table 1. FNF number with the respective call charge compare with the regular call charge

	Subscribers (Approx.)	Package	FNF Number	Charge rate			
				Own* (Stad.)	Others** (Stad)	Own (FNF)*	Others (FNF) **
GrameenPhone (GP)	18.6 million	Prepaid					
		Aapon	3	0.49 – 1.25	0.99 – 1.49	0.49	N\A
		Bondhu	7	0.99	0.99	0.49	N\A
		PostPaid	4	0.49 – 1.30	1.30	0.50	0.50
Aktel (Telekom Malaysia) (Robi)	7.75 million	Prepaid	5	0.44 – 1.48	0.68 – 1.48	0.44	0.88
		Postpaid	5	1.00	1.00	0.25	0.68
Banglalink	8.6 million	Prepaid					
		Desh	7	0.45 – 1.25	0.69 – 1.45	0.45	0.99
		Postpaid	4	0.45 – 1.25	0.99 – 1.25	0.45	0.79
CityCell	1.6 million	Prepaid	0	0.25 – 0.98	0.98	N\A	N\A
		Postpaid	4	0.25 – 0.98	0.98	N\A	0.90
Teletalk Bangladesh	-----------	Prepaid					
		Shadheen	4	0.75	1.25	0.25	0.90
		Shadheen66	4	0.75	1.25	0.25	0.55
		Postpaid	5	0.80	0.90	0.25	0.80
Warid	2.93 million	Prepaid	0	0.59 – 1.19	0.59 – 1.19	N\A	N\A
		Postpaid	15	0.25 – 0.94	0.25 – 0.94	0.25 – 0.65	0.25 – 0.65

* indicates call to the same operator
**indicates call to the other operator
*** All amount are shown in BDT (Bangladeshi Currency)

Table 2 summarize of the variable

Variable	Obs.	Mean	Std. Dev.	Min	Max
Consumption	83	4.2210	0.5469	2.67	5
Four number	83	4.1205	0.6878	3	5
Seven number	83	3.7831	0.5641	3	5
Change of FNF	83	3.6145	0.6955	2	5

Table 3 multiple regression analysis

Variable	Coef.	Std. Err.	t	P>| t |	Beta
Four number	0.4359	0.0582	7.49	0.000	0.5482
Seven number	0.3866	0.0779	4.97	0.000	0.3988
Change of FNF	0.0271	0.0647	0.42	0.677	0.0344
Constant	0.8645	0.1964	4.40	0.000	-

n=83, $F_{(3, 79)}$=104.03, Prob>F=0.0000, R-squared = 0.7980, Adj R-squared = 0.7903

Appendix

A. Dependent variable

Consumption of credit

In the past several months, have you seen singnificant changes in each of the following items as a subscriber of telecommunication? (Five points scale have been used, from strongly disagree to strongly agree)

- Spent of time on phone
- Recharging credit
- Frequecy of recharge of credit

B. Measurement Tools

STATA software, version 10 has been used. After data input, varisous commands have been used to get the ruesults of the data from different perspective. However, only relevant and concise information that are capable to reflect the total scenario have been presented.

C. Exploratory factor analysis

Only for independent variable

Method: principal-component factors

Rotation: (unrotated)

Table I

n=83, Retained factors = 1, Number of params = 3

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor 1	2.39912	2.04906	0.7997	0.7997
Factor 2	0.35006	0.09935	0.1167	0.9164
Factor 3	0.25081	-	0.0836	1.0000
LR test: independent vs. Saturated: Chi2 (3) = 126.42, Prob>chi2 = 0.0000				

Table II

Factor Loadings (pattern matrix) and unique variances

Variable	Factor 1	Uniqueness
Four number	0.8730	0.2379
Seven number	0.9008	0.1886
Change of FNF	0.9086	0.1744

Rotation: Orthogonal varimax (Kaiser off)

Table I

n=83, Retained factors = 1, Number of params = 3

Factor	Variance	Difference	Proportion	Cumulative
Factor 1	2.39912	-	0.7997	0.7997
LR test: independent vs. saturated: Chi2(3) = 126.42, Prob>chi2 = 0.0000				

Table II

Rotation factor loadings (pattern matrix) and unique variances

Variable	Factor 1	Uniqueness
Four number	0.8730	0.2379
Seven number	0.9008	0.1886
Change of FNF	0.9086	0.1744

Table III

	Factor 1
Factor 1	1.0000

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