SWITCHING COST AND CUSTOMERS LOYALTY IN THE MOBILE PHONE MARKET: THE NIGERIAN EXPERIENCE

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Abstract

Switching cost is one of the most discussed contemporary issues in marketing in attempt to explain consumer behaviour. The present research studied switching cost and its relationships with customer retention, loyalty and satisfaction in the Nigerian telecommunication market. Based on questionnaire administered to customers in the mobile telecommunication industry; the study finds that customer satisfaction positively affects customer retention and that switching cost affects significantly the level of customer retention. However, the effect of switching barriers on retention is only significant when customers consider to exit.

Introduction

Switching costs are costs that are incurred by buyers for terminating transaction relationships and initiating a new relation. Porter (1980) defined Switching cost as a one time cost facing a buyer wishing to switch from one service provider to another. Jackson (1985), however, defined switching cost as the psychological, physical and economic costs a customer faces in changing a supplier. Jackson's definition reflects the multi-dimensional nature of switching cost, especially as relates to the telecommunication industry

In the telecommunication sector there are a number of critical costs that must be considered when switching. These includes the costs of informing others of the change (friends, colleagues and business associates), the cost of acquiring new lines, cost associated with breaking long standing relationships with a service provider, cost of learning any new procedures in dealing with the new service provider and cost of finding new service provider with comparable or higher value than the existing firm. Apart from these there is time and psychological effort of facing uncertainty with the new service provider (Dick and Basu, 1994; Guiltina, 1989)..

Consequently, switching cost is more pronounced in mobile telecommunication because mobile telecommunication companies spread high fixed costs over an installed customer base. Departing customer, therefore, lowers future revenue streams, but not fixed costs. Even for new customers, it is argued that it costs more to acquire new customers than to prevent them from defecting (Zeithaml, Berry and Parasuraman, 1996). An inquiry into customers' deflection and its attendants cost promised to be a profitable exercise. Therefore, the objective of this study is to examine, on the strength of empirical evidences, the relationship between switching costs and customers' loyalty. We are also concerned with the effect of switching barriers on the relationship that exist between customers' satisfaction and retention.

Literature Review

Switching cost had been investigated extensively in literature. It is argued that switching is related to poor service quality in banks (Benkenstein and Stuhlreier, 2004); reaction to high price (Gerrard and Cunniningham, 2004); and customer satisfaction (Bowen and Chen, 2001).Some other researchers, however, had different argument. There is an argument in literature of the benefits of switching cost to prevent consumers from switching service providers (Ganesh, Arnold and Reynolds, 2000; Keaveney and Parthasarathy, 2001).

In terms of classification, Burnham, Frels and Mahajan (2003), classified switching cost as procedural switching costs, financial switching costs, and relational switching costs. These costs were found to be negatively correlated to consumers' intention to switch service providers. Klemperer (1995) developed three types of switching cost: artificial cost, learning cost and transaction cost. In utility, however the most appropriate cost is the transaction cost. A consumer must be aware that he can switch service providers before he takes steps. The next step is to decide whether to search and then whether to switch.

The effect of customers' defection or switching could be significant on revenues and service continuity. Therefore, to reduce the level of customers switching to other service providers in a dynamic competitive environment, service providers develop strategies to respond to consumers' switching cost (Farrell and Shapiro, 1988;

Zauberman, 2003). More importantly, time is found to be a critical factor that influence consumers' switching costs and lock-in (Zauberman, 2003). Empirical evidence, however, showed that reducing customer defections by five per cent increased profit by seventy five per cent and that defections have a stronger impact on profitability than market share, unit costs and many other factors usually associated with competitive advantages (Reichheld and Sasser, 1990).

Furthermore, a number of factors have been identified in literature as determinants of switching costs some of these are: poor service quality (Yavas, Benkenstein and Stuhldreier, 2004); price (Gerrard and Cunningham, 2004); customer dissatisfaction (Bowen and Chen, 2001). Research evidences indicate that customers can stay with a service provider when they perceived the service quality to be high and behave conversely when the service is perceived to be low (Keaveney, 2001; Jones and Sasser, 1995). Roos, Edvardsson and Gustafsson (2004) and Gerrard and Cunningham (2004), however found that price has an overwhelming effect on switching cost in insurance and banking industries. Brand trust is also found to increase customers' commitment and this makes customers' propensity to switch weaker (Morgan and Hunt, 1994). Other reasons identified in literature to influence switching cost include seeking variety (Givon, 1984), impulse (Stern, 1962) and situational context (Skoglam and Siguaw, 2004).

Jones, Mothersbaugh and Beatty (2000) and Sharma and Patterson (2000) suggested that switching costs are determinants themselves in determining switching. Bumham, Frels and Mahajam (2003) investigation in cross- industry indicate that switching cost such as monetary loss and uncertainties with the new service provider deter consumers from switching to other service providers despite dissatisfaction. Reference and peer group expectations, norms and pressure for conformity could also discourage customers from switching through peers, expectation, norms and conformity (Yi and Jeon, 2003).

This present study is based on the subscription market. Consumers subscribe to mobile services with no initial intention to switch, and they are expected to remain loyal until some factors trigger them to switch. It appeals to reason to suggest that customers loyalty is should be highly influenced by customer satisfaction. This is because customers with higher satisfaction tend to use the service continuously. However, studies showed that customer satisfaction is not enough to explain customer retention despite the fact that it is an important factor in customer retention (Anderson, 1994; Jones et al. 2002).Therefore, the transition from loyalty to switching is determined by changes in the numerous underlying factors. Based on the above the following is proposed:

Hypothesis 1: Customer satisfaction has positive effect on the customer retention

Switching cost is identified as a main cause of customer retention (Bumham, Frels and Mahajam, 2003).In addition, increase in switching cost leads to increase in risk and burden of the consumers as well as the high dependency on the service provider (Jones et al. 2000; Morgan and Hunt, 1994). There are a number of benefits for a long term relationships between a company and the customers, such benefits include fellowship, personal recognition, reduction in anxiety and credit, discount and time-saving and customer management (Berry, 1995; Peterson, 1995). From the above it can

be inferred that interpersonal relationship between the company and the customer is as important as switching cost.

The possibility of a customer switching service provider in the light of the distinguished image of the available alternatives is low (Jones et al, 2000). Where the alternatives are attractive, it becomes a component building of switching barrier. From the above it can is proposed as follows:

Hypothesis 2: The switching barrier will have an effect on the customer retention

Customer satisfaction is an important factor for the customer retention but not a sufficient one (Jones, et al. 2000). Evidences exists that switching barrier has direct effect on the customer retention and adjusts the relationship between the customer satisfaction and the customer retention (Lee et al., 2001; Jones, et al. 2001). Therefore, the switching barrier can have an influence on customer retention with the interaction with the customer satisfaction. Therefore we proposed:

Hypothesis 3: Switching barrier will have an adjustment effect on the relationship between the customer satisfaction and the customer retention.

Materials and Methods

The study design utilized for this study is the survey research method. Customers of the three major mobile telecommunication firms in Nigeria were sampled for the study. According to the Nigerian Communication Commission the mobile telecommunication companies used for this study control over 70% of the telcom mobile market in Nigeria. However, the study is limited to customers of these mobile telecommunication companies in Lagos, Nigeria. Lagos is Nigeria commercial nerve center with a population of over 10 million people. It is former federal capital with high level of population density. All the telecommunication mobile companies used for this study have their headquarters in Lagos. Thus, the fact that it represents a substantial part of business activities in Nigeria may be an excuse for this apparent limitation. A convenient sample size of 1000 was chosen, 300 were returned, and 37 rejected because of large unfilled parts of the questionnaire, as such 263 were used for this study. This results in a 26.30 per cent response rate. The research instrument used was a structured questionnaire. The design of the questionnaire benefited from extant literature dealing with the effects of switching cost and barrier on consumer retention. Specifically, the following works were used Berne, et al (2001) and Colgate, et al (2001).

The research instrument attempted to isolate among others emphasis on consumer satisfaction, retention, emphasis on switching barriers, and recovery strategies. The study used a 5-point Likert scales ranging from strongly agree to strongly disagree. The questionnaire was divided into two main sections. Section A dealt with the dimensions of switching barriers; section B dealt with the retention strategies. The entire questionnaire was subjected to face validity. Senior university academics specializing in marketing validated the instrument. Relevant research literature was used for the content validity of the study (Shoham and Kropp 1998). The comment of these academics led to a number of changes in the instrument.

The data for the study was analyzed using the SPSS computer package. The hypotheses were tested with multiple regression analysis. The suitability of

the data on switching cost and retention measure for factor analysis was assessed using Bartlett's test of sphericity (p=0.000) and Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy for company A (0.859); company B (0.680) and company C (0.590) . This means that the data-set for this measure could be considered adequate for the application of factor analysis (Kaiser, 1970; Kaiser and Rice 1974; Stewart 1981; Hart, Webb and Jones, 1994). The factor analysis for the data of the three companies studied using specific service quality dimensions are shown in table 1.

Table 1: Factor Analysis for Service Quality mensions

Dimensions	Component 1	Component 2	Component 3
Reliability	.573	.874	.724
Assurance	.710	.827	.768
Empathy	.533	.814	.674
Loyalty	.633	.757	.695
Exit	.684	.730	.710

Construct validity of switching cost construct was also ascertained by conducting a factor analysis following research approach of Deshpande (1982). There were significant intercorrelations among some of the switching cost variables, factor analysis was undertaken to identify a set of underlying dimensions (Kim and Lim (1988). The sample size is relatively large certain criteria of factor analysis were met. It was suggested that at least 50 respondents are required for factor analysis (Hair, et al. 1979). Data from three mobile telecommunication companies were subjected to Cronbach's alpha analysis to determine the reliability of the research measures. Cronbach's alpha coefficient served as additional evidence of convergent validity (McColl-Kennedy and Fetter (1999). Reliability is a condition for validity, as unreliable research measures lessen the correlation between research measures (Peter, 1979).

The evaluation of the magnitude of reliability of coefficient does not have any stringent rule. Nunnally (1967) made certain suggestions: modest reliability coefficient in basic research should range between 0.5-0.6 and for applied research a reliability coefficient of 0.9 is desirable standard. The results of these analyses are shown in the tables below

Bivariate frequency distribution of the respondents, according to age, gender and length of usage was presented. Descriptive statistics were computed to examine different levels of satisfaction.

Results and Discussions

Table 2 shows the distribution of respondents' age, sex and length of usage. The following sub-sections provide the discussion of the respondents' profile.

Gender: the gender distribution of the respondents was skewed towards the female. o167 (67.07%) of the respondents were female while 82 (32.93%) were male.

Age: Majority of the respondents are within the working class age bracket with only 17 (7.2%) and 28 (11.2%) outside official working age group. Though it was not part of the objective of this study it can be inferred that majority of the respondents are persons with a means of livelihood. Only 7.2% of the respondents are less than 18 years of age.

Table 2: Background of the Respondents

	Frequency	Percent
Gender		
Male	82	32.93
Female	167	67.07
Age group (years)		
<18	17	7.2
19-25	38	15.2
25-34	85	34
35-44	81	32.4
+45	28	11.2
Marital Status		
Single	66	26.4
Married	81	32.4
Divorced	52	20.8
Single Parent	51	20.4
Length of Usage (years)		
One	52	20.8
Two	73	29.2
Three	45	18
Four	18	7.2
Five	22	8.8
Six	40	16

Length of usage:

More than 80% of the total respondents have used their mobile phones for more than a year. However, a significant percentage of the respondents started to use mobile phones in the last two years: one year 52 (40.8%) and two years 73 (29.2%).

Table 3: Test of Collinearity

Variable	Tolerance	VIF
Reliability	.614	1.630
Assurance	.491	2.037
Exit	.598	1.673
Empathy	.518	1.961
Loyalty	.626	1.598

A relatively large sample was used for this study (263), therefore, there is no question of normality of data since Central Limit Theorem could be applied. Non-existence of Muticollinearity is assessed in normality test of the SPSS. Table 3 shows the tolerance test for the independent variables through Collinearity in SPSS. The tolerance values are quite respectable i.e. > 0.01 or not less than 1.00. One other method of testing multicollinearity is estimating Variance Inflation Factor (VIF). As a rule of thumb, if VIF exceeds 10, the variable is highly collinear and could pose a problem to regression analysis. From table 3 all the variables have VIF values of less than 10. The VIF values range between 1.598 and 2.037.

Regression Results:

After examining the multicollinearity and normality of our variables multiple regression analysis was conducted using loyalty as the dependent variable. The results of the multivariate regression allow us to assess the relationship between a dependent variable (loyalty) and several independent variables. The results are shown in table 4 below

Table 4: Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.688(a)	.473	.469	.35113

Predictors: (Constant), assurance, reliability

Dependent Variable: loyalty

The results show that assurance of service and reliability of the service account for 0.473 i.e. 47.3 per cent of customer loyalty, $p<0.005$. It can be inferred that when customers are satisfied they tend to be loyal. The results of the regression show that

that assurance and reliability are positively related to customer loyalty. This confirms findings of other studies that loyalty programmes are determinants of switching and loyalty. Customers find loyalty as a switching deterrent (Yi and Jeon, 2003). Therefore, loyalty programmes are meant to lure customers from competitors and to keep them with the firms.

To test for the relationships between switching barrier and customer retention, exit is used as independent variable while customer loyalty is the dependent variable. The regression analysis for simple regression is shown in table 5 below. The R2 value is 0.329 (32.9%), p<0.005. This indicates that the switching barriers in place by the mobile telecommunication companies account for only 32.9 per cent loyalty. Switching barriers are critical to loyalty. Several switching barriers are employed by the mobile telecommunication companies' e.g. price and service quality. A number of other factors may account for loyalty and customer retention. Table 5 shows that loyalty can only account for 32.9 percent of those that exit from the mobile telecommunication companies. This result contradicts several other findings that relate service quality principally to loyalty (Fornell, 1992; Mittal and Kamakura, 2001)

Table 5: Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.574(a)	.329	.327	.39533

Predictors: (Constant), exit

Dependent Variable: loyalty

The evaluation of the effects of switching barriers on the relationships between customer satisfaction and customer retention is tested by making exit (switching barrier) dependent variable while assurance and reliability are independent variables. The results of the regression analysis are shown in tables 6 and 7 below. The R2 is 0.442 i.e.44.2 per cent, p<0.005. That means that switching barrier effect on the relationships between customer satisfaction and customer retention account for about 44.2 per cent. The F-ratio in table 7 is 97.45 when p< 0.001

Table 6: Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.665(a)	.442	.438	.46381

Predictors: (Constant), assurance, reliabilty

Dependent Variable: exit

Table 7: ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41.929	2	20.964	97.454	.000(a)
	Residual	52.920	246	.215		
	Total	94.849	248			

Predictors: (Constant), assurance, reliabilty

Dependent Variable: exit

Managerial Implications and Conclusion

The major contribution from this study is that switching barriers affect significantly the level of customer retention, and also affect the relationship between customer satisfaction and customer retention. It does seem that switching costs could be used to predict consumers' behaviour in the mobile telecommunication sector. Customer satisfaction has positive effects on the customer retention. Thus, manager may need to emphasize total satisfaction programme in an attempt to retain customers in the competitive telecommunication market.

However, the moderating role of switching barriers in the relationship between customer satisfaction and retention is indicative that for low involvement services as telecommunication services switching barriers may play a big role in customers retention programme. Managers therefore, must significantly consider switching barriers and dimensions of customer satisfaction when making plans or focusing efforts in customer retention. The study attempts to differentiate the consequences of consumers' behaviour in terms of exit and loyalty. However, the effect of switching barriers on consequence is significant only when customers consider to exit.

One major area of future research is the role of government policy in creation and removal of switching barriers especially in a developing economy where government participation is crucial.

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