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AN ANALYSIS OF SWITCHING COSTS MODERATION ON CUSTOMER SATISFACTION AND LOYALTY

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Abstract

The aim of this study is to identify the determinant factors of customer loyalty of prepaid segment in the telecommunication industry. This study examines the relationships between customer satisfaction with customer loyalty and switching cost as a moderator factor towards customer loyalty. Hypothesized relationships are tested using survey responses from a sample of 398 respondents. Results revealed a positive relationship between customer support service, service reliability, emotional value and trust with customer loyalty. Switching cost does not moderate the relationship between customer satisfaction and customer loyalty. This study is important as the subject matter focused on the non contractual relationship where customer switch or churn would be easy. Results are compared with earlier findings and implications for future research are discussed.

Keywords: *Customer Loyalty, Customer Satisfaction, Switching Cost*

Introduction

Mobile phone services is one of the promising and high growth areas in telecommunication industry, with more than 1.7 billion global subscribers and about 80 percent of the world's population are covered by mobile networks (MCMC, 2014). In Malaysia, competition for customers among telecommunication service providers is fierce (Awang & Jusoff, 2009). Various strategies may be used to in order to remain competitive such as reducing operational costs, introducing new services, attracting new customers and maintaining customers' loyalty. However, research has found that acquiring customers is much more expensive than keeping them (Reichheld & Sasser, 1990). This research addresses the theoretical gap in terms of customer loyalty in one of the non-contractual service industry. Another theoretical

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gap which is not addressed is the simultaneous examination i.e. examination of both the mediating and moderating variables that may affect the relationship between the various independent variables and customer loyalty. This paper seeks to address the previous research gap in terms of examination moderating variable (switching cost) that may affect the relationship between the various independent variables (perception of service quality, trust and value) and customer loyalty.

In addition, this research also utilises the Reciprocal Theory in order to address the gap. According to this theory, if subjects (customers) are given the possibility of terminating (via switching cost as moderator), subjects often terminate defectors (loyalty behaviour of unsatisfied customers), even if termination is costly. This is the first application of the theory in explaining the customer loyalty behaviour. In this study, the theory is examined in terms of the loyalty behaviour i.e. the customer's will reciprocate the perceived kindness (perception on service quality, perceived value and trust) via his or her action, that is either by being kind (loyal) or unkind (churn). This theory may reveal the customers satisfaction and their perception on whether service providers have provided quality services and good value for money services.

Based on these research gaps and facts, this study is conducted to identify the factors that influenced them towards customer loyalty; especially in the Malaysia telecommunication industry and particularly the Prepaid market segment, which is the largest contributor i.e. 77 per cent of the overall mobile market, share in Malaysia, this study aims to solve the following problems:

1. What is the level of customer loyalty in the Malaysian mobile phone services?
2. Does switching cost moderate the link between customer satisfaction and customer loyalty?

Literature Review

Customer loyalty is simply defined as customer's intention or tendency to repurchase from the same firm (Edvardsson *et al*., 2000). Customer loyalty is one of the marketing research themes which have turn out to be a vital concern for managers and this growing interest is generally due to strong competition, especially in service industries (Bodet, 2008). Customer loyalty now is one of the key factors can help a company win long-term success (Kuusik, 2007). According to Singh and Sirdeshmukh, (2000), customer loyalty is quickly becoming, "the marketplace currency of the twenty-first century". However, Anderson and Narus, (2004) believe customer retention is a more effective business strategy than continuously trying to acquire new customers in order to replace the defecting customers. To face future challenges, acquiring new customers is also costly (Cao & Gruca, 2005; Lewis, 2006) and each acquired customer is not necessarily profitable. Pfeifer (2005) added, "It costs five times more to acquire a new customer than to retain an existing one".

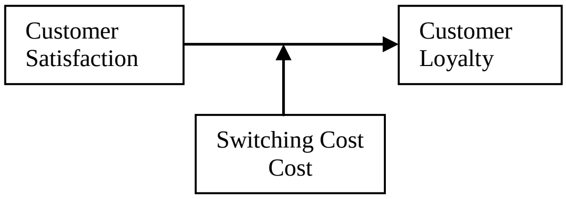
Oliver (1980) identified satisfaction and dissatisfaction in terms of the disconfirmation of consumers' expectation. A positive disconfirmation leads to customer satisfaction and a negative disconfirmation leads to customer dissatisfaction. He suggests that customer satisfaction is said to have occurred when the product positively disconfirms consumers' expectation by performing better than expected and when the product confirms consumers' favourable pre-purchase expectations. Oliver and Swan (1989) further defined customer satisfaction as a total psychological state when there is a discrepancy between the emerging emotion and expectation, and such an expectation is a consumers' feeling anticipated and accumulated from their previous purchases. In the 21st century, customer expectations towards the service they want to receive are increasingly sophisticated, educated, confident and informed. They have high expectations of the service they want to receive. According to Parasuraman et al. (1991) in a world of increasingly global competition, understanding customers' expectations is critical if superior service quality is to be delivered. Customer will fell disappointed when the expected services are violated and the service provider is held responsible for it (Zeelenberg & Pieters, 2004).

Customer satisfaction has always been considered as the main contributor to customer loyalty in the telecommunication industry. Satisfied customers of the telecommunication sector have high extent of usage and intentions to repurchase in future (Henkel et al., 2006). Research has shown that customer satisfaction has significant effects on customer loyalty in the mobile telecommunications services. Santouridis and Trivellas (2010) in their study of residential non-business mobile phone users in Greece found that customer satisfaction has a significant positive impact on customer loyalty. Oyeniyi and Abiodun (2010) in their study of customers of the three major mobile telecommunication firms in Nigeria found that customer satisfaction positively affects customer retention. Deng et al. (2009) in their study of mobile instant messaging users in China found that customer satisfaction directly enhance customer loyalty. In general, it can be concluded that customer loyalty is facilitated by the customer satisfaction. In the absence of satisfaction, customers are unlikely to spend more on company services and recommend the services to others. Therefore, it is crucial that customer satisfaction is selected as one of the main factors determining customer loyalty in this study.Customer satisfaction is one of the most important factors contributing to customers' loyalty (Turel & Serenko, 2006; and Wong & Zhou, 2006). Satisfaction is also about meeting expectations; the more consumers fulfill their expectations during their service usage, the higher the probability that consumers will repeat their purchase in the same establishment (Wong & Sohal, 2003). Satisfied customers not only conduct repeat business, but they also advocates and may even be less price sensitive (McCollough, 2000). Satisfied customers of the telecommunication sector have high extent of usage and intentions to repurchase in future (Henkel *et al*., 2006). Research has shown that satisfaction has significant effects on customer loyalty in the mobile telecommunications services (Santouridis & Trivellas, 2010; Oyeniyi & Abiodun, 2010; Deng *et al*., 2009; Lai *et al*., 2009). Accordingly, the following hypothesis is proposed: *H1. The higher the level of customer satisfaction, the higher the levels of customer loyalty towards the service provider.*

A general rule of thumb is that satisfied customers will remain loyal. However, satisfied users may still switch to another provider if the switching cost is low (Lam *et al*., 2004). This could happen in a highly competitive market where many attractive packages offered by the alternative service provider with minimal or zero switching cost, especially with the implementation of MNP. Some customers appear to be loyal, although they are dissatisfied and they do not changes service providers due to high switching costs (Lee *et al*., 2001). Mobile phone customers remain loyal although are not satisfied with certain services due to switching cost such as afraid of having to change their telephone number and the needs to update their family and friend on the new number. However, mobile phone number portability implementation has allowed customers the flexibility of carrying their existing number. The relationship between customer satisfaction and customer loyalty is not linear and customer loyalty only increases when customer satisfaction exceeds certain critical level (Dick & Basu, 1994). The non-linearity in the customer satisfaction and customer loyalty relationship is also due to variable like switching cost (Aydin *et al*., 2005). Switching cost is also studied as a moderator variable in the customer satisfaction and customer loyalty relationship (Lam *et al*., 2004; Lee *et al*., 2001; Wangenheim, 2003). Accordingly, the following hypothesis is proposed: *H2. Switching cost moderates the relationship between customer satisfaction and customer loyalty*

Research Model

This paper primary focuses is on the major determinants of customer loyalty. The independent variables of this study are customer satisfaction. The customer's loyalty is the dependent variable. The relationship between customer satisfaction and customer loyalty is predicted to be moderated by switching cost. Based on the literature review and research problems, an integrated framework below was developed.



Methodology

The collection of primary data was accomplished using a survey method instrument to answer the study's research questions. Likert scales were used to measure responses since this scale is widely used in market research and has been extensively tested in both marketing and social science (Garland, 1991). To ensure consistency among variables and to avoid confusion among respondents, all items will measured using one to five point Likert scale (Ackfeldt & Coole, 2003).

The measure for customer loyalty proposed in this study is adapted from Dimitriade's (2006) study. In this study customer loyalty is operationalized as two dimensions: i.e. behavioral loyalty and attitudinal loyalty. Attitude loyalty is defined as an individual's overall attachment to a product or service and the company. Behavioural loyalty is defined as continuous purchase, frequent purchase, scope of a relationship and recommendations to other people (Hallowell, 1996). In this paper, customer satisfaction is operationalised by two dimensions that are transaction specific satisfaction dimension and cumulative satisfaction dimension, adapted from Walsh, Dinnie, and Wiedmann (2006); Aydin and Gokhan Ozer (2005b); and Kang and James (2004). Transaction specific satisfaction is defined as customer's evaluation of his or her experience with a particular product transaction, episode or service encounter. Cumulative satisfaction is defined as the consumer's overall satisfaction or dissatisfaction with the organisation based on all encounters and experiences with that particular organisation.." Hayes and Matthes, (2009) has developed a macro in SPSS to perform the moderating analysis. This program was used to test the moderating effect of switching cost in the relationship between satisfaction and loyalty.

Switching cost is operationalised by five dimensions adapted from Burnham *et al*. (2003), Guiltinan (1989) and Jones *et al*. (2002) i.e. perceived monetary costs; perceived uncertainty costs; perceived evaluation costs; perceived learning costs; and perceived set-up costs. Perceived monetary costs are the one time financial outlays that are incurred in switching service provider. Perceived uncertainty costs are associated with failure to continue an existing relationship and it is the psychological uncertainty or perceptions of risk surrounding the performance of an unknown or untested service provider. Perceived evaluation costs are the time and efforts associated with the search and analysis needed to make a switch decision. Perceived learning costs are the time and effort costs of acquiring the know-how or skills in order to use a new service effectively. Perceived set-up costs are the time and efforts associated with the process of initiating a relationship with a new service provider. Switching cost consist of seven items and each item is accompanied by a five-point response format ranging from '1' "strongly disagree" to '5' "strongly agree.".

Sampling Process

The study population consisted of prepaid mobile phone service subscribers in Malaysia. The study sample was the students studying in Malaysian universities. University students belong to a specific population that usually has more mobile phone experience, better skills and higher education levels than "ordinary" people (Li & Zhang, 2005). Furthermore, DeBaillon, and Rockwell (2005) stated that university students were the heaviest users of mobile phone followed by high school students and non-student adults. Based on report by Malaysian Telecommunication Market Statistics (2000-2009), there were 24,114,000 Prepaid mobile phone subscribers. Sample size determination table by Krejcie and Morgan (1970) was used to determine the sample size and for a population of 100,000 and above, the recommended study's sample size is 384. This study utilised stratified sampling method. Seven universities in Klang Valley were selected from twenty public universities in Malaysia as sampling unit for this study. Data were collected from the student of 7 Malaysian public universities in Klang Valley area using self-reported questionnaires. The questionnaires were administered based on the list of final year students provided by the registrar office in each selected faculty for their final year students. Final year students were chosen because they would have more experience in term of number of years using the mobile phone services during their student life at the university similar to Yan, Md-Nor, Abu-Shanab, and Sutanonpaiboon (2009).

Findings

For data collection purposes, 840 questionnaires were distributed and mailed to the selected students of seven public universities in Klang Valley area. Out of 840 questionnaires sent, 398 responses were received resulting in a response rate of 47.4%. In addition to that, for the test of Non-Response Bias, there were 119 respondents classified as early responses and 279 were late responses. The p values of the analysis revealed no statistically significant difference between the two groups (significant $p > .05$). Thus, it can conclude that non-response bias will not significantly affect the generalizability of the findings of this study. Therefore, the analysis was carried out on the full 398 responses.

Factor analysis conducted on customer satisfaction and switching cost show the Kaiser-Meyer-Ollkin (KMO) value of 0.913 and 0.823 exceeding the recommended value of .5 (Hair *et al*., 1998), and .878 for customer loyalty exceeding the recommended value of .6 (Pallant, 2001). The Bartlett's test of sphericity for all factors are highly significant ($p = .00$), supporting the factorability of the correlation matrix. Examination of the measure of sampling adequacy for each item noted that the values fall within the acceptable range, which is between .87 and .96 for customer satisfaction, .75 and .94 for switching cost and .80 and .90 for customer loyalty. indicate that the assumptions of factor analysis were met. Reliability statistics (Cronbach's alpha) for both factors as mentioned in the table are .941, .93 and .934 which indicate high reliability.

For the customer loyalty determinants, factor analysis was conducted based on the 38 questions of which 22 items on service quality, 8 items on perceived value and 8 items on trust. The overall value of Kaiser-Meyer-Olkin was found to be .891. Furthermore, the result of the Bartlett test was highly significant ($p = .00$), which indicates the assumptions of factor analysis were met. A close inspection of the individual MSA noted the value for all 38 items values fell within the acceptable range, which is between .92 and .97. From the output, measures of the loyalty determinants produced 8 factor components with eigenvalues more than 1. These 8 factor components captured 69.26 percent of the total variance of the items. In this study, the "cut-off" point chosen for significant loading is 0.30 and above as suggested by Hair *et al*. (2006) for a sample of 300 and above. Five (5) factors components remained after 16 items were deleted from the initial eight (8) number of factor components. The factor loadings of the remaining five (5) factor components were between .50 and .89. The reliability analysis conducted shows that all 5 factors alpha values are above .50 that is, factor 1 ($\alpha = .914$), factor 2 ($\alpha = .886$), factor 3 ($\alpha = .805$), factor 4 ($\alpha = .798$) and factor 5 ($\alpha = .667$). None of these factors were dropped from subsequent analysis.

In answering research question that is "what is the level of customer loyalty in the Malaysian mobile phone services", the mean value for loyalty is 3.65. This shows that the level of loyalty is moderate i.e. customers generally have moderate perception on loyalty behaviour. Therefore, the Malaysian mobile phone customers moderately recommend the service providers to others when asked for advice; moderately tolerate price increase and moderately spread positive word of mouth.

Mean values for Trust and Convenience Value exhibit a high score (above 3.67) and this indicates that most respondents share slightly similar opinions on convenience value and trust. The respondents perceived the level of convenience value in using the mobile services and trust on the service provider as high. Variables Customer Support Service, Emotional Value and Service Reliability exhibit moderate scores i.e. between 2.33 to 3.67. Therefore, the respondents perceived the level of customer service support, reliability of the service

provider, social and emotional value in using the mobile services as moderate. All the standard deviations were near to 1.00, indicating that the variation between the respondents' opinions is high. Standard deviation for customer loyalty is almost 1.00 (0.94) indicating that the data points for customer loyalty is widely spread from the mean. The computation of the Pearson correlation coefficients was performed to obtain an understanding of the relationship between all the variables in the study. The values of the correlation coefficients (r) given in Table 6.6 indicate the strength of the relationship between variables. Cohen (1988) suggests that if r score is above .50 the correlation between the two variables are considered largely correlated. With regard to the relationship between service reliability and customer loyalty, emotional values and customer loyalty, the correlation is significant at .606 and .654. It gives indication that the two variables are among the variables influencing customer loyalty. According to Pallant (2001), and Tabachnick and Fidell (1996), the correlation between predictor and dependent variables must be below .7. If the score is more than .7, the variables must be deleted from the study. On the other hand, the majority of the loyalty determinants are statistically correlated with customer loyalty with correlation values ranging from .20 to .65. In answering research question, that is "does switching cost moderates the relationship between satisfaction and customer loyalty", moderation analysis is carried out using SPSS macro that was developed by Hayes & Matthes, (2009) which was used in this study to test the moderating effect of switching cost in the relationship between satisfaction and loyalty.
Under hypothesis 5, switching cost moderates the relationship between satisfaction and customer loyalty. Customer loyalty was defined as the outcome variable, satisfaction as focal predictor variable and switching cost as moderator variable. Results showed that satisfaction significantly predict customer loyalty in a positive manner (b value of .8707 and $p<.05$). Switching cost negatively affect customer loyalty but the effect is not statistically significant (b value of -.0429 and $p>.05$) Finally, the interaction between switching cost and satisfaction is not also statistically significant since the value of p for "interact" is 0.6636 and b value is only .0141. So the relationship between satisfaction and customer loyalty is not moderated by switching cost. Therefore, based on the results, hypothesis 5 is rejected.

Conclusion

The purpose of the study is to investigate the factors affecting customer loyalty in Malaysian mobile phone service industry. Findings of the study suggest that the level of customer loyalty is still at moderate level. This means that the customers moderately delivered positive word of mouth about the service providers, moderately recommends the service provider to others and have moderate commitment to purchase additional services from the telecommunication company. Findings of the study also suggest that perceived value and trust have positive influence on customer loyalty. The finding gives managers and academicians a much stronger basis than intuition and anecdotes for recommending strategies to ensure high level of customer loyalty. Indeed, mobile phone service providers should strive to improve service quality, perceived value and trust level in their efforts to attain higher level of customer loyalty. The first positive relationship exists between service quality and customer loyalty means that when customers have positive perception on service quality, they will be using more of the services provided by the telecommunication company. The moderating effect of switching cost on the relationship between customer satisfaction and customer loyalty. Switching cost is essentially the negative components that could motivate or influence dissatisfied customer to churn or switch to other service providers when the cost is low. However, it was interesting to find that the relationship is not moderated by switching cost in this study. In other words, it does not matter whether the switching cost is high or low; satisfied or dissatisfied customers' decision to churn or to remain loyal is not influenced by the cost. Their action on whether to behave loyally is not moderated by the level of the switching cost. The moderating effect of switching costs on the relationship between satisfaction and customer loyalty has been empirically tested in prior studies found mixed and inconcrete results (Aydin & Ozer, 2005; Lee *et al*., 2001; Yang & Peterson, 2004). Researchers argue that the differences in the findings could be due to variables such as types of business, products and consumers (Nielson, 1996). Possible explanation for this is that mobile phone services are relatively easy to use with only little learning effort required, and therefore the learning cost has less influence on switching to other service providers. Nowadays, mobile phone customers can also minimise evaluation cost as they can easily compare the services, coverage and billing between the service providers and competitors. Furthermore, there is minimal setup or little configuration required in order to switch to new service providers and the customers can still use their same numbers with the Mobile Number Portability (MNP) implementation.

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