

The Effectiveness of Switching Barrier on Customer Loyalty Mediated with Customer Satisfaction: Telecommunication Industry, Batticaloa

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Authors' contributions:

This work was carried out in collaboration between two authors. Author SH designed the study, performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript. Author VRR guided and supervised the whole study. Both authors read and approved the final manuscript.

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ABSTRACT

The mobile telecommunications service providers face technical hitches to meet customer loyalty, to increase the market share. Therefore, service providers should be conscious of the factors affecting customer loyalty in building strong relationships. This study aims to investigate the effectiveness of switching barrier on customer loyalty with regards to customer satisfaction in mobile telecommunication service providers. The objective of this study is to identify the level, relationship and impact of switching barrier on customer satisfaction and loyalty. Finally, the study examines the mediating role of satisfaction. This study was based on the customer's perspectives and their experiences with mobile telecommunications service in Batticaloa. Data were obtained from the sample 200 customers, and stratified random sampling was used. The descriptive statistics, correlation and regression analysis were used to analyse the data.

The results revealed that the switching barrier has a significant impact on loyalty and satisfaction. Same as satisfaction has significant impact on loyalty. And also, switching barrier impact on customer loyalty significantly through customer satisfaction. The study contributes to existing

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theoretical and practical knowledge by providing evidence regarding the relationships between switching barrier on customer loyalty, and customer satisfaction. The telecommunication service providers, in Sri Lanka; it is growing rapidly with high competition between the service providers. Hence, this research has the potential to contribute to the overall telecommunication service providers in terms of how to maintain long-term relationships between the service providers and their customers through the strategies of switching barrier.

Keywords: Switching barrier; satisfaction; loyalty; telecommunication industry.

1. INTRODUCTION

To be a prominent company, it is a massive task to build loyalty. Therefore, the dominated companies spend a lot on the different strategies to make it unique in order to develop customer loyalty. At the same time retaining current customers is imperative for saturated service industries such as telecommunication services. Thus customer loyalty is an extremely important issue for telecommunication service providers. Serkan Aydin and Gokhan Ozer [1] suggested in their study that, *companies in telecommunications are losing 2-4 percent of their customers monthly; disloyal customers can amount to millions of lost revenue and profit.* Thus, it is fundamental to the telecommunication industry to consider the concept and strategies that create customer loyalty.

The telecommunication industry in Batticaloa has been liberalised, with five service providers including Dialog, Airtel, Mobitel, Hutch and Etisalat. The existing service providers are trying to capture the other competitors' customers. Meanwhile, Customer switching behaviour is consequently a serious threat to the achievement of long-term relationships [2]. Hence, to enhance the relationship among customers, it is essential to the firms to study the factors of customer switching barrier.

It is accept as true that high levels of satisfaction lead to customer retention [3][4]. The impact of customer satisfaction on customer loyalty is complex and might vary under different conditions. Further, while affected by market structure, customer type and customers' ways of solving problems, the connection between customer satisfaction and customer loyalty is not always a linear relation, although it constitutes a positive relationship [5]. And when customers switch the service provider, they tend to perceive the burden of risks which becomes the switching barrier that influences customer loyalty. Thus, the objective of this study is to investigate the direct effect of the switching barrier on customer

loyalty and the mediating effect of switching barrier on customer loyalty with respect to customer satisfaction.

2. PROBLEM STATEMENT

Sri Lankan mobile telecommunication services are clearly exhibiting signs of a rapid industry paradigm change and symptoms of a market in transition. Strengthened by the rapid development of information and communication technologies (ICT) and high demand from customers. As such, customer loyalty is an extremely important factor to Telecommunication industry at present, as high competition exists. Service providers are competing themselves for every single percentage of market share. Therefore, service providers implement many strategies to create loyal customers in a competitive marketing environment. However, in mobile telecommunication industry, consumer behaviour research has not been paid excessive attention [6].

So far, there are only a few researches have been conducted in the effectiveness of switching barrier on customer loyalty mediated with customer satisfaction. However, it is not identical whether switching barrier has addressed in the telecommunication industry in Sri Lankan context, particularly in Batticaloa Manmunai North Divisional Secretariat. Thus, there exists a clear empirical gap with respect to switching barrier on customer loyalty and satisfaction in mobile telecommunication. This empirical gap becomes a problem to marketers in addressing customer loyalty.

Further, Kim, Moon-Koo and et al. [7] who cites Jones, Mothersbaugh, & Betty [8] and mentioned in his study, "Customers experiencing a high level of satisfaction are likely to remain with their existing providers and maintain their subscription". However, customer satisfaction, while positively influencing customer loyalty, is not always a sufficient condition, and, in some cases, fails to produce the expected effect.

Hence, it is necessary to analyse other potentially influential factors. Concept of the switching barrier was proposed in his context. This means that the literature regarding switching barrier to customer satisfaction and loyalty has not fully explored yet. This study addresses this matter as literature gap and attempts to fill through this study. Therefore, the findings provide further understanding regarding the switching barrier and customer loyalty mediated with customer satisfaction by providing answers to the research questions raised in the study.

2.1 Research Questions

1. What is the level of switching barrier, satisfaction, and loyalty among customers of telecommunication service providers?
2. What is the relationship between switching barrier and customer satisfaction along customer loyalty?
3. Whether switching barrier have impact on customer satisfaction along customer loyalty?
4. Whether the effect of switching barrier on customer loyalty is mediated by customer satisfaction?

3. LITERATURE REVIEW

3.1 Customer Loyalty

Customer loyalty has been usually referred to as the consequence for all the experiences which customer has with a service/product provider [9]. Further, "loyalty as repeated patronage, where loyal customers produce huge amounts of revenue and demand with less time and attention". And also Oliver's [10] work provided a comprehensive view of the loyalty construct when he proposed four sequential brand-loyalty phases. First, *cognitive loyalty* refers to the existence of the belief that a brand is preferable to others. Second, *effective loyalty* represents a favourable attitude that refers to customer liking or positive attitude towards a brand. Third, *conative loyalty* includes a deeply held commitment to the development of behavioural intention. Finally, *action loyalty* is where customers translate intentions into actions.

3.2 Customer Satisfaction

According to Oliver [11] satisfaction is an emotional reaction to a specific product or service experience, which is informed by

consumers' perceived gap between the performance of the product or service and their prior expectations. Considerable attention has been given to the relationship between customer satisfaction and customer loyalty [12] because customer satisfaction is considered a major driver of the long-term relationship between suppliers and buyers. According to Lam et al. [13] increasing customer satisfaction and customer retention leads to improved profits, positive word-of mouth, and lower marketing expenditures.

3.3 Switching Barrier

Switching barriers are defined as "any factor, which makes it more difficult or costly for consumers to change providers" [14]. When considering switching service providers, customers are dealing with a number of barriers that make it difficult to leave the service provider to use and start a relationship with any other provider. Existing studies on customer retention in the service are mainly focusing on customer satisfaction and the switching barrier [15].

Few studies identify that the *switching cost, the attractiveness of the alternatives and the recovery of the service* are establishing the switching barrier and have a large effect on the loyalty [16]. As the switching barrier gets higher and higher, the possibility of sustaining the current service provider gets higher and higher, and the switching barrier acts the adjustment variable between the customer satisfaction and the customer retention. Namely, the customer retention rate can be different in the same level of the customer satisfaction when the switching barriers are different [17,18].

3.4 Relationship between Switching Barrier, Customer Satisfaction and Loyalty

Aaker [19] suggests that the analysis of switching barrier can provide a basis for brand loyalty. Burnham, Thomas A., Judy K. Frels, and V. Mahajan [20] in their study mentioned there is empirical evidence that higher switching barrier positively influence customer loyalty. Jones et al. in [21] did a study on "Switching Barriers and Repurchase Intentions in Services, in which he indicated there may exist an interaction effect between customer satisfaction and switching barrier on customer loyalty. In general, dissatisfaction reduces customers' tendency to recommend a service provider to other

customers. Kim et al. [22] in their research found that customers may turn loyal if faced with high switching barriers. The switching barrier has a direct effect on customer retention and performs to adjustment the relationship between customer satisfaction and customer retention.

4. METHODOLOGY

The descriptive research design was adopted for the study. The type of research is deductive and variables are measured with quantitative analysis. For the study, two hundred questionnaires were issued to the customers in Batticaloa Manmunai North Divisional Secretariat area on a stratified random sampling method. This sample size was considered adequate based on Cooper and Schindler, [23] proposition that statistically, in order for generalisation to take place, a sample of at least 30 must exist and also in their study they took 200 as sample size. Each customers investigated through structured questionnaires with closed statements measured with Likert's scale, was issued which was properly filled and returned. The data analysis was done by using SPSS. As illustrated in the literature the following hypotheses were formulated and assessed through the regression analysis.

- H1:** *The switching barrier has a positive effect on customer loyalty*
- H2:** *The switching barrier has a positive effect on the satisfaction*
- H3:** *Satisfaction has positive effect on customer loyalty*
- H4:** *The effect of switching barrier on customer loyalty is mediated by customer satisfaction*

4.1 Conceptual Model

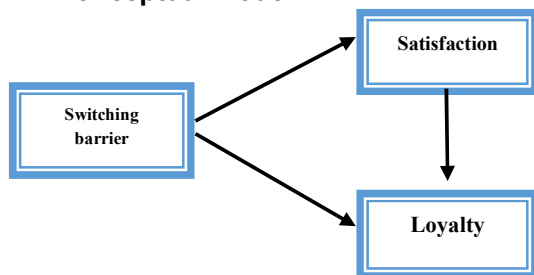


Fig. 1. Conceptual frame work

Husam Mustafa [24] indicated that Switching barrier has an impact on Customer loyalty, this

study attempt to investigate the relationship between them in the Sri Lankan context as devised in the conceptual framework. This relationship model is endorsed with a findings by Husam Mustafa [25] that customer loyalty and satisfaction increases when the interactive level of switching Barrier increases.

5. RESULTS AND DISCUSSION

The data presentation and analysis are presented with frequency distribution, mean, and standard deviation, correlation and regression analysis with research variable.

5.1 Sample Profile

Descriptive statistical analysis was run on respondents' demographic variables. The results are shown in Table 1.

Table 1 exhibits that majority of the respondents were between 18-24 years old which make 31%. Female respondents are accounted as 62.5 percent of the total number of respondents. Majority of the 54.7% of the respondents were users of Dialog service provider. And out of selected five influence factor, majority of the (50%) respondents rated "good coverage" as highly influence factor to recommend their service provider.

5.2 Descriptive Statistics of Study Variables

The descriptive data including, reliability, mean, and standard deviation of the study variables were obtained and shown in the following Table 1.

All attributes of switching barrier were tested for reliability analysis. The Cronbach's Alpha coefficient value for all switching barrier attributes as 0.822, which indicated strong internal consistency among the attributes. Therefore, the variables used in this study were concluded as reliable.

According to the results switching cost found to be high level. However, the overall switching barrier found to be moderate Level. To conclude, service providers in Manmunai North Batticaloa district have moderate level attention in conducting the switching barrier mechanism.

Table 1. Summary of demographic information

Demographic profile		Frequencies	Percentages (%)
Gender	Male	72	37.5
	Female	120	62.5
Age groups	18-24	54	28.1
	25-35	53	27.6
	35-44	52	27.1
	45-54	28	14.6
	54-65	5	2.6
Service Providers	Dialog	105	54.7
	Airtel	40	20.8
	Mobitel	25	13.0
	Etisalat	13	6.8
	Hutch	09	4.7
Influence Factor To recommend	Good coverage	96	50.0
	Good customer service	10	5.2
	Cheap	31	16.1
	More offers	50	26.0
	Brand Image	05	2.6

Table 2. Reliability

Variable	No. of statements	Cronbach's Alpha coefficient
Switching cost	3	0.902
Attractiveness of alternatives	2	0.844
Service recovery	2	0.719
Over all switching barrier	7	0.822
loyalty	9	0.823
satisfaction	4	0.935

Table 3. Level of switching barrier, satisfaction and loyalty

Dimension	Mean	S.D	Decision attribute
Switching cost	3.557	0.715	High Level
Service recovery	3.451	1.002	Moderate Level
Attractiveness of alternatives	3.391	0.865	Moderate Level
Switching barrier	3.466	0.742	Moderate Level
Satisfaction	3.947	0.697	High Level
Loyalty	3.621	0.956	High level

Table 4. Coefficient of correlation between switching barrier, satisfaction and customer Loyalty

Variable	Switching cost	Service recovery	Attractiveness of alternatives	Switching barrier
loyalty				
Pearson Correlation	.660	.620	-.320	.485
Sig.(2-tailed)	<.001	<.001	<.001	<.001
Satisfaction				
Pearson Correlation	.372	.381	-.344	.224
Sig.(2-tailed)	<.001	<.001	<.001	<.001

Further, the variable of customer satisfaction and loyalty have the mean value of 3.947 and 3.621 respectively. It shows that the level of

satisfaction and loyalty are high among the customers in Manmunai North Batticaloa district.

5.3 Relationship between the Variables

Correlation analysis was used to measure the relationship between the variable as shown in Table 4.

As per the Table 4, the relationship between dimension of switching barrier including switching cost and service recovery shows a positive relationship with customer satisfaction and loyalty. On the other hand, the relationship between dimension of attractiveness of alternatives shows a negative relationship between customer satisfaction and loyalty. Anyhow, Correlation regarding switching barrier between satisfaction along loyalty is clearly shown the positive relationship as shown in Table 4.

The correlation of coefficient of switching barrier and satisfaction (r) was .224, and it was indicated weak positive correlation between switching barrier and loyalty. Further, in the correlation between satisfaction and dimension of switching cost and service recovery have medium positive correlation with satisfaction.

But the attractiveness of alternative shows a negative relationship with satisfaction. It is also supported by the study of Yim et al. [26] he mentioned attractiveness of alternatives have both a negative effect on satisfaction and loyalty.

In contrast, Jones et al. [27] found no direct relation between the attractiveness of alternatives and loyalty.

5.4 Analyze the Mediating Effect of Satisfaction on Switching Barrier and Loyalty

The following hypothesis formulated in order to analyse whether the effect of switching barrier on customer loyalty is mediated by customer satisfaction.

H4: *The effect of switching barrier on customer loyalty is mediated by customer satisfaction*

A measure of the mediation effect is the difference between c and c'. This difference is equal to the product of the paths to and from the mediator. Thus, $c - c' = ab$. The total effect of X on Y (c) can be decomposed into a direct component (c') and an indirect component (ab), $c = c' + ab$.

Regression analysis was conducted to find the beta value of a, b, c and c'.

For complete mediation, need to ensure that the effect of switching barrier on loyalty is zero when control for satisfaction (path c' in the causal model in Fig. 2), to show that is zero.

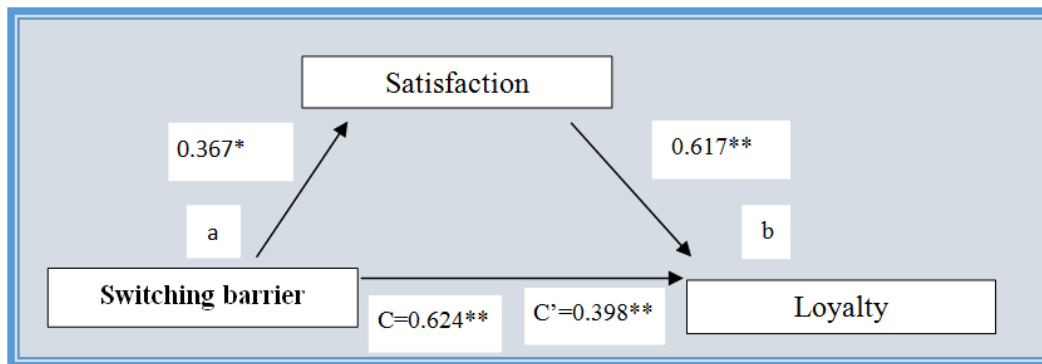


Fig. 2. Coefficient path of variables

Table 5. Regression predicting switching barrier with satisfaction

Model		Coefficients ^a		t	Sig.
		Unstandardized coefficients			
	B	Std. Error			
1	(Constant)	2.226	.411	5.421	.000
	switching	.367	.116	3.167	.002

a. Dependent Variable: Satisfaction

Table 6. Regression predicting loyalty with satisfaction and switching barrier

Model		Coefficients ^a			
		Unstandardized coefficients		t	Sig.
		B	Std. error		
A	(Constant)	1.458	.290	5.032	.000
	switching	.624	.082	7.639	.000
B	(Constant)	.085	.152	.559	.577
	switching	.398	.041	9.748	.000
	Satisfaction	.617	.025	24.743	.000

a. Dependent Variable: loyalty

The model B in Table 6 shows the unstandardized regression weight of 0.398 for switching barrier in predicting loyalty when controlling for satisfaction. Thus, $c' = 0.398$. However, now need to show that the coefficient is equal to zero.

The mediation effect can be measured as the reduction in the regression weight for switching barrier on loyalty when satisfaction is included: $c - c' = 0.624 - 0.398 = 0.226$ alternatively and equivalently (within rounding error), the mediation effect can be calculated as the product of the indirect paths from switching barrier to loyalty through satisfaction: $0.367 * 0.617 = 0.226$

$$a * b = c - c'$$

$$0.367 * 0.617 = 0.624 - 0.398$$

As the difference is equal to zero as per the decision criteria it could be concluded that satisfaction play mediating role. And this study accepted the formulated hypothesis. *The effect of switching barrier on customer loyalty is mediated by customer satisfaction.*

Further, the result showed in Model B indicated satisfaction has a significant factor to affect the customer loyalty as $P < .01$, $\beta = .617$. Therefore this study accepted **H3**, and concluded as satisfaction has a significant positive impact on customer loyalty.

By accepting H3 the study confirmed that, when customers feel they have high levels of satisfaction with their service provider, they will be more likely to be loyal. Further, current findings are congruent with the study of Crosby and Stephens [28] who postulated that customer satisfaction was the best predictor of a customer's likelihood to loyal with a service provider.

6. CONCLUSIONS AND RECOMMENDATION

The research concluded that all the hypotheses are valid and show a significant relationship between switching barrier. On which Attractiveness of alternative negatively correlated with loyalty. It emphasises when Attractiveness of alternative increase loyalty going to decrease. Switching cost and service recovery positively correlated with loyalty. It is also supported by the study of Patterson [29] who indicated that the direct effects of switching costs upon customer loyalty are positive as these costs increase customers are trying to stay with the same service provider.

And also, it suggested that switching barrier affects customer satisfaction and customer loyalty, same as customer satisfaction affects customer loyalty. The findings align with the statement of Lee and Cunningham [30] who stated satisfaction has a direct effect on customer loyalty and performs to adjustment the relationship between the switching barrier and customer loyalty.

It is a big challenge to the service providers to implement switching barrier mechanism. As creating too high switching barriers may result in negative word of mouth and dissatisfaction, and creating too low barriers may make it too easy for customers to defect. Hence service providers are recommended to carry out deeper market analysis prior to implementing switching barrier strategies (service recovery and switching cost). As it retains customers, even when competitors try to win them over with lower prices or offers of other conveniences.

The results of this study provide important insights into the role of switching barrier, satisfaction and loyalty for the service providers

and this outcome is significance to the service providers dealing in the telecommunication industry. This research only focuses on the telecommunication industry in Batticaloa. Additional studies need to be undertaken to examine the switching barrier and customer loyalty in other regions and with larger samples. However, this can be further expanded into fields such as banks, insurance, leasing and another financial sector.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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