

## **Factors Affecting Customer Loyalty in the Telecommunications Industry in the Klang Valley, Malaysia**

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### **ABSTRACT**

A vital factor in the growth and performance of a company in the current highly competitive telecommunications industry is the development and enhancement of customer loyalty. Although several studies in the past have helped explain the influence of some significant variables for loyalty, not many studies have examined the effects of certain factors such as service quality, customer value and corporate image on the loyalty of subscribers of mobile telecommunication companies or providers. Thus, the aim of this study is to explore the critical factors of service quality, customer value, corporate image and customer satisfaction that generate customer loyalty in the mobile communication service markets in the Klang Valley, Malaysia. Furthermore, this study also attempts to validate the connection between these factors and customer loyalty. This study employed the convenience sampling method to select 100 respondents in the Klang Valley, Malaysia, who are mobile phone users. Their personal information was analysed by means of descriptive analysis, while inferential analysis was used to test the hypotheses. All the hypotheses were found to be supported by the findings of the study, which also showed that the tested variables are significantly related to each other. This illustrates that mobile service providers wanting to build and maintain a competitive edge in the mobile service market should make greater efforts to enhance the quality of their service, provide superior customer value, attain higher customer satisfaction and win customer loyalty.

*Keywords:* Corporate image, customer loyalty, customer value, service quality

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### **INTRODUCTION**

In the global and open market of today, quality, productivity and customer satisfaction have proven to be a

challenge for the continued existence and development of companies. These demands are made heavier by the need to draw and keep customers who are loyal. Loyalty is defined as the customer's strong intention to once again buy the same products or services from the same company (Eshghi *et al.*, 2007). According to Liu *et al.* (2011), strong loyalty manages to maintain the repurchasing activities of customers, who then have a tendency to suggest that others purchase of the same services.

Customer loyalty is the basis of a company's continued competitive advantage. It measures customer retention in terms of the number of returning customers, business referrals and word of mouth. Therefore, development and enhancement of loyalty is a critical factor in the growth and performance of a company (Lee & Cunningham, 2001; Liu *et al.*, 2011; Reichheld, 1996).

The telecommunications industry is a highly competitive industry. Rising competition, as well as changing market dynamics, poses fresh challenges and prospects to mobile service providers in both developed and developing countries. A recent report by the Malaysian Communications and Multimedia Commission, SKMM (2013) indicated that by the second quarter of 2013, there were 42.6 million mobile phone subscriptions, including post-paid and pre-paid subscriptions in Malaysia. The mobile phone penetration rate in Malaysia rose from only 142.5% in 2012 to 143.4% in the second quarter 2013, clearly indicating

that mobile telecommunication services are popular among Malaysians owning multiple subscriptions.

In this competitive market, mobile service providers need to draw new customers in order to obtain a greater share of the market as well as to keep their current customers (Hogan *et al.*, 2003; Lee-Kelly *et al.*, 2003). It is necessary for mobile service providers to discover what influences their customers and potential customers in their choice of a mobile phone service. Once a mobile service provider succeeds in fulfilling the expectations of Malaysian users, it will be easy for it to gain shares in the market and have the advantage over other mobile service providers (Turel & Serenko, 2006).

Although several previous research has helped to shed some light on certain significant variables that affect customer satisfaction such as supporting services and product, while referring to convenience, satisfaction and cost for loyalty, not many studies have examined the influence of such factors as service quality, customer value and corporate image on the loyalty of subscribers of mobile telecommunications firms.

Therefore, this study was done to explore how customers of different mobile service providers assessed three variables of mobile services, namely, service quality, customer value and corporate image that generated customer loyalty in mobile communications service markets. Moreover, this study also measured how strongly each variable is related to

customer loyalty. The results of this study would give some idea of how these factors (determinants) are related to the loyalty of customers to mobile service firms.

## RESEARCH HYPOTHESES

According to Liu *et al.* (2011), service quality, which is a global concept across various fields, is a fundamental requirement by customers. Service quality is regarded as a major factor which determines the financial performance or profitability of a company. Numerous studies have shown that a positive and significant relationship exists between the perception of consumers with regard to service quality and their readiness to buy, their intention to buy again, their positive verbalization of intentions, their promotion of the service to others, and their steadfast loyalty (Bloemer *et al.*, 1998; Parasuraman *et al.*, 1991; Zeithaml *et al.*, 1996). In other words, service quality not only attracts new customers away from rival firms, but also strengthens the customers' tendency to purchase again, to buy more and to tell others of their pleasant experiences (Venetis & Ghauri, 2000). Liu *et al.* (2011) agreed with this and mentioned that loyalty is a pledge to repurchase a fancied product or service on a regular basis in future.

Bloemer *et al.* (1998), Aydin and Ozer (2005) and Kuo *et al.* (2009) pointed out that a positive relationship exists between service quality and customer loyalty. They investigated the connection between service quality and post-purchase intention in the value-added services provided by

mobile companies, and their findings revealed that a positive post-purchase intention could be generated in customers by means of good product service quality. Behavioural intentions such as the intention to repurchase, suggesting a provider's reluctance to switch depends on service quality (Cronin *et al.*, 1997; Cronin *et al.*, 2000; Levesque & McDougall, 1996). This agrees with the findings of Liang *et al.* (2013) that the most usual reason given for changing service providers is the failure to provide core service. This proves that failure to provide services as promised is the main reason for the switching of services in China. Therefore, it is hypothesised that:

*Hypothesis 1: Service quality of mobile services provided has positive relationship with customer loyalty.*

A study by Wang *et al.* (2013) proved that perceived value has a positive impact on purchase intention and the relationship can be further enhanced when consumers possess a high level of ethical self-efficacy. This is supported by the findings of Dodds *et al.* (1991) that the perceived value of customers greatly influences their decision to purchase. Eggert and Ulaga (2002) also demonstrated that perceived value has a powerful, positive effect on the repurchase intentions and word of mouth intentions of customers. It has been shown that customers' value perceptions serve to increase their readiness to repurchase (Pura, 2005). Furthermore, according to Wang *et al.* (2004), value can be defined as "utility derived from the perceived

quality and expected performance of the service”, which directly influences loyalty and also indirectly affects loyalty through satisfaction.

The intention to repurchase is a manifestation of customer loyalty (Kuo & Wu, 2012), whereby customers are inclined to return to what they experienced when dealing with the company. Wang and Chang (2013) asserted that purchase intentions provide useful information with regard to the effectiveness of marketing. The relationship between perceived value and customer loyalty has aroused the interest of service practitioners. Marketing professionals view perceived value as one of the main drivers of customer loyalty. Several researchers have suggested that customer perceived value has a positive impact on customer loyalty (Cronin *et al.*, 2000; Kuo *et al.*, 2009; Lai *et al.*, 2009; Lin & Wang, 2006; Wang *et al.*, 2004). Therefore, it is hypothesised that:

*Hypothesis 2: Customer value of mobile services has a positive relationship on customer loyalty.*

Image plays a significant role in the formation of perception of satisfaction since it mirrors how an individual views the reputation and corporate identity of the firm (Cleopatra *et al.*, 2004). Nguyen and Leblanc (2001) asserted that corporate image is linked to the physical and behavioural

characteristics of the company such as business name, architecture, range of products/services, and the notion of quality conveyed by each person through interactions with the company’s customers. They came to the conclusion that corporate image is positively related to customer loyalty in three areas, namely, telecommunications, education and retailing. In addition, Rowley and Dawes (1999) hypothesised that the image (brand/corporate image) and customers’ expectations with regard to the nature and quality of services influence their loyalty.

Therefore, a positive corporate image can have an effect on continued support (Dick & Basu, 1994), and that being an attitude, it will definitely influence behavioral intentions such as customer loyalty (Johnson *et al.*, 2001). According to Lee (2011), strong customer loyalty can successfully maintain the repurchasing activities of customers, who will be inclined to promote the services to others. Customers may remain loyal to a company or a brand because it is perceived as having a positive image among other customers, especially when it is with regard to credence goods, and this alone may instil a degree of unwillingness to switch (Wang, 2010). Therefore, it is hypothesised that:

*Hypothesis 3: The corporate image of a mobile service provider has a positive relationship on customer loyalty.*

## METHODS

Data were collected for this study by means of a questionnaire, which was modified and adopted from Chreang (2007) and Simon and Foresight (2009). The questionnaire was made up of five sections: A, B, C, D and E. Section A was aimed at obtaining information on the demographic and socio-economic status of the respondents. Section B comprised 24 items concerning the perception of the service quality of the service provider. Section C was made up of 14 items on customer value with regard to the mobile service company. Section D contained 8 items on the perception of the corporate image of the mobile service provider. Finally, Section E was made up of 4 items on customer loyalty towards the mobile service company. The questionnaire was pre-tested before it was circulated to 100 respondents in the Klang Valley, Malaysia. The Klang Valley area was selected for this study because it is the commercial centre of Malaysia, and it is equipped with the most up-to-date information technology and a high percentage of its population are Internet users (Euromonitor, 2014; Ministry of Federal Territories, 2014). The target population was the subscribers of the different mobile communication companies in Malaysia. Due to time and financial limitations, the convenience sampling method was employed for this study so as to gather a large amount of data from the target respondents.

The basic characteristics were defined by means of a descriptive analysis. The data from the samples were summed up in a direct and comprehensible manner, and were then analysed according to the demographic profile of the respondents such as gender, age, race, marital status, education level, occupation, personal monthly income, mobile service company subscribed to and types of services subscribed to. The Pearson's Correlation coefficient was used to determine the relationships between the variables so as to test the hypotheses. In the case of this study, it was used to test three independent variables (service quality, customer value and corporate image) that affect the dependent variable (customer loyalty). The variable that best predicted the overall findings obtained from the target respondents was also identified by means of multiple regression analysis.

## RESULTS AND DISCUSSION

### *Demographic Profiles of Respondents*

The demographic profiles of the respondents are shown in Table 1. In this study, the statistical data of the respondents were with regard to gender, age, race, marital status, education level, occupation, personal monthly income, as well as the mobile service company subscribed to and types of services subscribed.

TABLE 1  
Demographic Profiles of the Respondents

Variables	Values	No. of Respondents	Percentage (%)
<b>Gender</b>	Male	54	54
	Female	46	46
<b>Age</b>	Below 20	9	9
	21 - 30	46	46
	31 - 40	25	25
	Above 40	20	20
<b>Ethnicity</b>	Malay	30	30
	Chinese	47	47
	Indian	23	23
<b>Marital status</b>	Single	71	71
	Married	29	29
<b>Educational level</b>	Primary	4	4
	Secondary	17	17
	Tertiary	39	39
<b>Occupation</b>	Public Sector	14	14
	Private Sector	20	20
	Self-employed	12	12
	Unemployed	2	2
	Retirees	5	5
	Students	47	47
<b>Personal monthly income</b>	Below RM1000	49	49
	RM1001-RM2500	14	14
	RM2501-RM4000	24	24
	Above RM4000	13	13
<b>Mobile service company subscribed</b>	Maxis	63	63
	Digi	35	35
	Celcom	2	2
<b>Types of service subscribed</b>	Post-paid	51	51
	Pre-paid	49	49

### *Reliability Test*

A reliability test was carried out to measure the reliability and the internal consistency of the results by considering the value of Cronbach's Alpha. According to Nunnally and Bernstein (1994), a Cronbach's Alpha coefficient value of 0.70 is an acceptable reliability score. If the value of the Cronbach's Alpha ( $\alpha$ ) coefficient is closer

to 1, the higher value will be an indication of internal consistency, thus denoting that the items in that particular variable are highly inter-correlated. As can be seen from the results of the reliability test for this study shown in Table 2, the Cronbach's Alpha values varied from between 0.760 to 0.842, indicating that the scales used in this study are reliable and consistent.

TABLE 2  
Results of the Reliability Test

Variables	No. of Items	Cronbach's Alpha ( $\alpha$ )
Service Quality	24	0.842
Customer Value	14	0.832
Corporate Image	8	0.760
Customer Loyalty	4	0.826

### *Pearson's Correlation Analysis*

The relationships between the independent variables (service quality, customer value and corporate image) and the dependent variable (customer loyalty) are illustrated in Table 3. The use of the Pearson's

Correlation test in this study indicated that there are significant and positive relationships between all the independent variables and dependent variable with regard to the telecommunications industry in Malaysia.

TABLE 3  
Results of the Pearson's Correlation test

Variable	Customer Loyalty	Service Quality	Customer Value	Corporate Image
Customer Loyalty	1	0.923 (**)	0.853 (**)	0.861 (**)
Service Quality	0.923 (**)	1		
Customer Value	0.853 (**)		1	
Corporate Image	0.861 (**)			1

*Hypothesis 1: Service quality of mobile services provided has positive relationship on customer loyalty.*

The p value of 0.0001 obtained indicates that service quality is significantly related to the loyalty of subscribers of telecommunication services in the Klang Valley, since any p value below 0.05 ( $p < 0.05$ ) is an indication of a significant relationship between an independent variable and a dependent variable. A positive Pearson Correlation r value of 0.923 shows that service quality is positively related to customer loyalty. This

suggests that hypothesis 1 is successfully supported since according to Guilford's Rule of Thumb, an r value of 0.923 is an indication of a very high correlation between service quality and customer loyalty.

This finding is backed by the research carried out by Kim and Lee (2010), in which they asserted that the quality of the service provided by mobile telecommunication companies plays a vital role in generating customer loyalty towards service providers. The findings add weight to the results of previous

research which suggested that service quality has a positive effect on customer loyalty in mobile telecommunications markets in China (Lai *et al.*, 2009) and in Turkey (Aydin & Ozer, 2005). Moreover, Lee (2010) also suggested that if customers perceived a mobile phone service to be of superior quality, they would be more inclined to remain with their existing service provider and would promote the service provider to others.

*Hypothesis 2: Customer value of mobile services has a positive relationship on customer loyalty.*

The p value of 0.0001 obtained indicates that customer value is significantly related to the loyalty of subscribers of the telecommunications industry in the Klang Valley, since any p value that is below 0.05 ( $p < 0.05$ ) is an indication of a significant relationship between an independent variable and a dependent variable. It was noted that a positive relationship existed between customer value and customer loyalty because the positive Pearson Correlation r value obtained was 0.853. This suggests that hypothesis 2 is successfully supported since according to Guilford's Rule of Thumb, an r value of 0.853 is an indication of a high correlation between customer value and customer loyalty.

This finding is supported by and is consistent with the findings of other researchers such as Chreang (2007), Wang *et al.* (2004), Dabholkar *et al.* (2000), and Hong & Goo (2004).

*Hypothesis 3: The corporate image of a mobile service provider has a positive relationship on customer loyalty.*

The p value of 0.0001 indicates that corporate image is significantly related to the loyalty of subscribers of the telecommunications industry in the Klang Valley, since any p value that is below 0.05 ( $p < 0.05$ ) is an indication of a significant relationship between an independent variable and a dependent variable. A positive Pearson Correlation r value of 0.861 shows that corporate image is positively related to customer loyalty. This suggests that hypothesis 3 is successfully supported since according to Guilford's Rule of Thumb, an r value of 0.861 is an indication of a high correlation between corporate image and customer loyalty.

This is supported by the findings of Kim and Lee (2010), who claimed that the corporate image of mobile service providers play a crucial role in presenting their reputation and stature as a whole. This finding, which is supported by Andreassen and Lindestad (1998), and Kwon and Lennon (2009), shows that corporate image has a positive influence on customer loyalty.

#### *Regression Analysis*

In this study, hypotheses 1, 2 and 3 were tested by means of a multiple regression analysis, i.e. the effects of three independent variables (service quality, customer value and corporate image) on a dependent variable (customer loyalty) were examined. In addition, the multiple regression analysis was also employed to



measure and predict the most important and the least important independent variable to the dependent variable. Given below is the multiple regression equation for customer loyalty:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + \dots + b_nX_n + e$$

Where: Y = dependent variable (customer loyalty)  
 A = Y intercept of the regression model  
 b = slope of the regression model

X = independent variables (service quality, service value and corporate image)  
 e = error

The model summary of the analysis presented in Table 4 shows that this is an adequately good model as the coefficient of determination (R square) = 0.870, thus indicating that 87.0% of the variation in customer loyalty was due to the independent variables (service quality, customer value and corporate image).

TABLE 4  
 Model Summary of Multiple Regression Analysis for Independent Variables (Service quality, Customer value and Corporate image) versus Dependent Variable (Customer loyalty)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.933 <sup>a</sup>	.870	.866	.26623

a. Predictors: (Constant), Corporate image, Customer value, Service quality

It can be observed from Table 5 that a significant F, which is less than 0.05, shows that there is a significant relationship between the independent variables and the dependent variable. An F value of 213.427, with the significant F of 0.0001, is an

indication that a significant relationship exists between the independent variables (service quality, customer value and corporate image) and the dependent variable (customer loyalty), and also that the regression model matches the data.

TABLE 5  
 ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	45.382	3	15.127	213.427	.000 <sup>a</sup>
Residual	6.804	96	.071		
Total	52.187	99			

a. Predictors: (Constant), Corporate image, Customer value, Service quality

b. Dependent Variable: Customer loyalty

Table 6 shows that service quality, customer value and corporate image significantly affect customer loyalty as their *p* values of 0.000, 0.016 and 0.030, respectively, are all below 0.05.

The predicted value of the dependent variable was measured by means of the  $\beta$  coefficient for the regression equation (George & Mallery, 2003), thus indicating the actual impact of these independent

variables (service quality, customer value and corporate image) on customer loyalty. The value of the  $\beta$  coefficient ranged between -1 to +1. The independent variables (service quality, customer value and corporate image) were measured by their Beta weight, which indicates their impact on the dependent variable (customer loyalty). The Beta column under the Standardized Coefficients in Table 6 shows that service quality (0.607) is the independent variable that is the best predictor of customer loyalty, followed by customer value (0.185), and corporate image (0.176).

The matched equation for this model is:

$$\text{Customer Loyalty} = - 0.283 + 0.700 \text{ Service Quality} + 0.207 \text{ Customer Value} + 0.201 \text{ Corporate Image}$$

The equation infers that if service quality were to be increased by 1%, it would result in a 70.0% increase in customer loyalty, with all other variables being constant. If customer value were to be increased by 1%, it would result in a 20.7% increase in customer loyalty, and all other variables being constant. In addition, a 1% increase in corporate image would result in a 20.1% increase in customer loyalty, with all other variables being constant.

TABLE 6  
Coefficient Results of Multiple Regressions

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.283	.156		-1.811	.073
Service Quality	.700	.110	.607	6.362	.000
Customer Value	.207	.084	.185	2.463	.016
Corporate Image	.201	.091	.176	2.207	.030

a. Dependent Variable: Customer Loyalty

**CONCLUSION**

The rapid advancement of innovative technologies and enhanced customer services, changing customer values and popular corporate images are revolutionising the way people work, learn and interact. These developments are not only transforming the people, but also the way mobile service companies are carrying out their business and relating with their customers. The main objective

of this study was to investigate the effects of service quality, customer value and corporate image on customer loyalty in the telecommunications industry in the Klang Valley, Malaysia. The relationship between service quality, customer value and corporate image with customer loyalty was examined and the findings revealed that all the independent variables had significant positive relationships with customer loyalty. The results showed that

among the three independent variables, service quality turned out to be the most important predictor of customer loyalty, followed by customer value and corporate image.

Hence, the research findings have shed light on why consumers choose a particular mobile service provider and provided information that will help those in the telecommunications industry to enhance the quality of their services, deliver better customer value and reflect a better corporate image to their subscribers. The telecommunication providers can make the best use of the information to find ways to draw new subscribers and keep their existing and loyal subscribers.

#### **LIMITATIONS AND SUGGESTIONS FOR FUTURE STUDIES**

Only 100 respondents from the Klang Valley were selected for this study done through the non-probability sampling method. As such, the sample might not be typical of the target population. Although the respondents in this study came from all walks of life including those working in the public and private sectors, the self-employed, unemployed, retirees and students, 47% of them were students. Therefore, there was a limited possibility of generalising the present findings. Nevertheless, the findings of this study may lay the groundwork for future studies involving the use of the probability sampling method for a larger population representing the various types of occupations in Malaysia. In addition,

this study did not conduct a normality test and multicollinearity test. Future studies should include a normality test to ascertain whether the data are well-modelled by a normal distribution, and a multicollinearity test to determine whether two or more predictor variables in a multiple regression model are highly correlated.

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