

# [Service quality and customer loyalty in telecommunication sector](https://assignbuster.com/service-quality-and-customer-loyalty-in-telecommunication-sector/)

Today telecommunication sector is the fastest growing sectors in Malaysia and at the same time the competition is enhancing day after day among wireless network providers. The primary purpose of our study was to examine the levels of service quality, switching cost, switching barrier, customer satisfaction and customer loyalty and casual links between them. Furthermore we also looked at the strategies of wireless service provider Maxis in Malaysia. Maxis is one of the dominant wireless network providers in Malaysian mobile telecommunication services industry.

For our research we used a sample of 70 master students of Universiti Utara Malaysia (UUM) just who are the subscribers of the telecommunication company of Maxis in Malaysia. In this study we use the adapted question items as the instrument to measure the respective constructs, using a 7-point Likert scale. The main findings of our research are as follows: 1. There is no a significant relationship between call quality and customer satisfaction; 2. Pricing structure does not positively influence customer satisfaction. 3. Switching barrier does not positively affect switching barrier, move-in cost and lost-cost; 4. There is a significant relationship between customer satisfaction and customer loyalty.

## CHAPTER ONE

## Introduction

The telecommunications sector is growing rapidly with the introduction of the latest services and equipment. After the First World War in order to help run the government’s administrative system the telephone and telegraphic services were introduced. Later it expanded its role to the business and industrial sectors and later for public use. This sector has developed to become a sophisticated telecommunications network, to link rural and urban areas throughout the nation and with the whole world.

The mobile sector is one of the fastest growing sectors within the telecommunications industry in Malaysia. In comparison to other ASEAN countries, Malaysia has a relatively high level of service penetration but below those of most developed markets such as Singapore and Hong Kong. After the liberalization of Malaysian’s telecommunications industry, the growth in demand for telecommunications services is increased.

Currently, there are seven licensed domestic network operators in Malaysia including Maxis Broadband, namely Telekom Malaysia Berhad, TT dotCom, Celcom Transmission (M) Sdn. Bhd., DiGi, Fiberail Sdn. Bhd. and Prismanet (M) Sdn. Bhd. This research will examine one of Malaysian’s dominant telecommunication operators Maxis Mobile Sdn Bhd, which started operations in 1995, is the leading telecommunications service provider in Malaysia. Being the leader within the telecommunication industry, the corporation is the fifth largest Public Company in Malaysia with total subscribers of 6. 4 million, providing a wide range of innovative mobile, fixed and international network services to their customers.

Torsten J. Gerpott, Wolfgang Rams, and Andreas Schindler (2001), reveal that concepts of satisfaction and loyalty have emerged as strong predictors of customer retention. Torsten et al. defined loyalty as a customer continues to do business with a service provider or purchases the same brand repetitively. One of the critical success factors of the cellular industry are customer service quality, customer satisfaction, customer retention, customer loyalty in the cellular service. Torsten et al. fined that CS has a significant impact on CL which in turn influences a customer’s intention to terminate/extend the contractual relationship with his mobile cellular network operator (CR).

Focusing on retention of existing customers creates the reduced cost advantage, because recruiting new customers is more difficult and expensive than retaining existing customers. As wireless service is a continuous service, service providers can offer additional services over the length of a customer’s tenure to generate more revenue. For example, customers who use a cellular phone for voice phone calls can start to use it for checking e-mail and browsing Internet. Furthermore, Boney (1997) indicated that good customer service can have a key impact on how a customer views your services and company. Therefore, a poor customer service leads the subscriber to churn from one cellular operator to another.

This research analysis effects on consumer loyalty of consumer satisfaction, and the structural correlation between these factors in the Malaysian mobile telecommunication services industry in the evidence of Maxis. Further, this paper will discuss and identify the factors that influence the customer loyalty. Moreover, the paper will suggest the ways to improve the customer satisfaction and customer loyalty.

1. 1. Problem statement

Customer satisfaction has been the issue to cellular operators in Malaysia. Every one of them is aware that customer is their lifeblood. Customer dissatisfaction can lead customers’ churn and recruiting a new customer is difficult and costly in terms of marketing. Therefore J. Dye, T van der Schaaf (2002), argued that today there are two trends that lead increasing risk to customer satisfaction in telecommunications industry. The first trends are cutting costs by reducing staff and abandon value-added services. The second is the trend to increase risk of reliance upon complex system of hardware, software, and networking equipment. The downside of productivity and efficiency cause the system failure of advancing technology.

## 1. 2. Research questions and objectives

The main goal of this study to determine the basic factors influence the customer satisfaction and customer loyalty. The specific objectives are as follow:

To recognize variables that comprise customer satisfaction and how they affect customer loyalty;

To examine analysis of the relative influences on customer loyalty of customer satisfaction, and the causal relationships between them;

To identify the adjustment effect between customer satisfaction and customer loyalty;

To analyze the strategic implication for mobile service providers attempting to increase the level of customer loyalty.

## 1. 3. Significance of the study

Earlier studies suggest that customer loyalty is a very important factor in companies’ growth and performance proving with competitive advantages (Lee & Cunningham, 2001; Reichheld, 1996). However, there are not enough studies have been done on the topic of the mobile telecommunication services industry of Malaysia and mere handful of research papers have been published. The reason may be due to the short history of the industry, because research on factors influencing customer loyalty and carrier churn began only in the late 1990s.

## CHAPTER TWO

## Literature review

Today for telecommunication networks in order to achieve superior economic success, it is crucial to keep, satisfy customers and increase their loyalty.

High level customer satisfaction carries out many benefits to a company. Fornell (1992), suggests that it enhance loyalty of customers and prevents consumer switching, decreases customers’ price sensitivity, reduces the costs of failed marketing and of new customer creation, decreases operating costs due to increased number of customer, improves the efficiency of advertising, and enhances business reputation.

Customer satisfaction can be defined by two perceptions transaction-specific perception or cumulative perception. The transaction-specific perception specifies customer satisfaction as the evaluation based on the recent purchase experiences (Boulding et al., 1993). The cumulative perspective indicates that evaluations of customer satisfaction should be based on all the purchase experiences of the customer than any specific purchase experience (Johnson & Fornell, 1991). Parasuraman et al. (1988), argued that the cumulative perspective is more able of evaluating the service performance of firms and more useful in predicting consumers’ post-purchase behaviors (Wang et al., 2004). In terms of mobile commerce, Lin &Wang (2006), define customer satisfaction as customer’s post-purchase evaluation and affective response or feeling to the overall product or service experience in a mobile commerce environment. Cronin et al. (2000), Wang et al. (2004), Zeithaml et al. (1996), explain the tendency consumers buying the goods or services at the same shop and recommend the purchased product to friends and relatives as post-purchase intention.

When Gerpott, Rams, and Schindler (2001), and Tung (2004), examined the telecom industry in Germany and SMS service in Singapore, they also identified that customer satisfaction was positively related to post-purchase intention. Moreover, the studies of Turel & Serenko (2006), Wang et al. of the mobile services in Canada and China also supported this argument. In other words, in a mobile commerce environment customer satisfaction is consumer’s total response to the purchase experiences (Lin and Wang, 2006).

Customer loyalty and customer satisfaction as a general rule are very closely related. Customer satisfaction functions as an antecedent of customer loyalty. Lin and Wang (2006), in their study of mobile commerce in Taiwan identified a positive relationship between customer satisfaction and customer loyalty. Customer loyalty is the main objective of customer satisfaction measurement (Sivadass and Baker-Prewitt, 2000) and a key determinant of a brand’s long-term viability (Krishnamurthi & Raj, 1991).

It is easy to create loyalty if a service provider can satisfy customer’s needs better than its competitors (Oliver, 1999). Meanwhile, effective satisfaction must be able to create loyalty amongst customers Clarke (2001). As Fornell (1992), suggested that high customer loyalty is mainly caused by high customer satisfaction. In addition customer satisfaction positively affects customer loyalty (Choi, Seol, Lee, Cho, & Park, 2008) or negatively affects switching intention (Walsh, Dinnie, & Wiedmann, 2006). When Donio, Massari, & Passiante (2006), compared loyal with non-loyal customers they identified that non-loyal customers are much more influenced by negative information about the products or services.

Earlier studies usually focused on factors affecting customer loyalty such as customer satisfaction and the switching barrier (e. g., Gerpott, Rams, & Schindler, 2001; Dick & Basu, 1994; Lee & Cunningham, 2001). However, according to some research, it’ is not always enough to influence positively on customer loyalty by satisfying customers and in some cases, it fails to produce the expected effect. For this reason, these researchers recommend that it is essential to examine other potentially influential factors. Jones, Mothersbaugh, & Betty (2002), proposed the concept of the switching barrier in this context. Further, Colgate & Lang (2001), Jones et al. (2002) and Lee & Cunningham (2001), demonstrated that when the level of customer satisfaction was identical, the level of customer loyalty could vary depending on the magnitude of the switching barrier. In addition, Moon-Koo Kim, Myeong-Cheol Park, Dong-Heon Jeong (2004), analyzed that the switching barrier is directly affects customer loyalty, and its affects customer loyalty are produced through an interaction with customer satisfaction. loss cost among factors comprising the switching barrier, can be both a main and a controlling effect of the switching barrier and has an adjustment and a direct effect on customer loyalty, while move-in cost is the only a major effect. Where lost costs remove customer benefit programs or special customer status and move-in costs are changing telephone numbers. Move-in costs do not affect customer satisfaction and interaction, they only add to the switching barrier.

Moon-Koo Kim et. al (2004), suggested that a customer is likely to stay with the existing mobile telecommunication provider even when his or her satisfaction level is low, if he or she identifies loss costs to be high or the overall switching barrier, or forms a high level of interpersonal relationship.

Fornell (1992) and Soderlund (1998) argue that while affected by customer type and customers’ individual ways of solving problems, market structure, the relationship between customer satisfaction and customer loyalty is not always a linear relation, though it constitutes a positive relationship. According to Fornell (1992), and Soderlund (1998), when customers switch the service provider, they are likely to identify the risks which produces the switching barrier that affects customer loyalty.

Oh (1995) divided the study of customer loyalty into three broad categories: the attitudinal approach, the behavioural approach and the integrated approach. Oh (1995), argued that the integrated approach in order to create its own concept of customer loyalty takes into account both attitudinal and behavioural variables.

Gerpott et al. (2001), Kim et al. (2004), Zeithaml et al. (1996), Kim et al. (2004), Zeithaml, Berry, & Parasuraman (1996), suggested that customer satisfaction depends also on how customers perceive service quality. Muhammad Hasmi Abu Hassan Asaari and Noorliza Karia (2000) stated that the network services can be discussed on call quality, coverage, and network.

Any dropped calls, static and broken conversation during cellular phone calls can lead to custom’s’ dissatisfaction and angry (Steward, 1993). Furthermore what a customer really wants is a good connection, a clear call, and coverage so they can take the phone wherever they go (Boney, 1997).

Muhammad Hasmi et. al (2000), argued that network technologies and air interface standards are rapidly advancing and becoming more complex. Therefore, bad quality of cellular operator’s service such as drop calls, rough handoff, static, or generally weak cellular signals can lead easily to subscriber discontent and churn (Steward, 1996). The design and management of the cellular network infrastructure is very crucial for success of Cellular operator (Muhammad Hasmi et. al, 2000). As Burdiek (1993), stated that strategic network management process should revolve around a system that recognizes the corporate mission that finally will allow the company to defend and enhance their market share and productivity. Shah (1996), identified that the echo canceller of today is at the center of very complex digital network that can assist network operators to deliver a better quality of service to their customer

Service quality is the difference between customers’ expectation and their perceived performance of a service (Parasuraman, Zeithaml, and Berry 1985, 1988). As Cronin et al., (2000), Johnson & Fornell (1991) and Kristensen, Martensen, & Gronholdt (1999), have pointed out in their studies, service quality positively influences customer satisfaction while customers’ satisfaction or dissatisfaction about service quality is formed by their employ of the service and experience of purchase. Studies by Wang et al. (2004) of the telecom industry in China, and studies of the mobile services in South Korea, Singapore, and Canada by Kim et al. (2004), Tung (2004) and Turel and Serenko (2006), also supported that service quality positively influences customer satisfaction.

Kim (2000), Gerpott et al. (2001) and Lee, Lee, & Freick (2001), in their studies on mobile telecommunication services measured service quality by call quality, pricing structure and customer support (e. g.,).

Therefore, for mobile service providers retaining existing customers and strengthening customer loyalty are very essential for gaining competitive advantage, however, there is little research (e. g. Kim et al., 2004) focusing on the retention behavior of customers, which becomes more significant in the post-adoption stage in highly competitive markets like the wireless telecommunications market.

According to Chen & Hitt (2002), Keaveney (1995), Kim et al. (2004), switching costs play a significant role in customer retention or switching behavior. Besides, review of the literatures by Burnham, Frels, & Mahajan (2003), Ganesh, Arnold, & Reynolds (2000), Keaveney (1995), Keaveney & Parthasarathy (2001) on customer switching behavior in service marketing and literature in the field of Information Systems and Information Technology (e. g. Chen & Hitt, 2002; Kim et al., 2004) showed that researchers had identified two major groups of factors related to switching costs and customer satisfaction affecting customer retention or switching behavior which was also identified by Kim et al. (2004).

Klemperer (1987) and Nilssen (1992) found out that theories about switching costs of a product or service were adopted and developed by marketing and IS/IT researchers are generally rooted in the economics literature. Switching costs refer to the various kinds of costs involved when a customer decides to switch to another provider. There is a significant relationship between switching costs and customer satisfaction. Chen & Hitt (2002) suggest that the switching cost includes all costs incurred when a customer switches between different brands of products or services. According to them, if switching costs are very high, customers will be reluctant to switch even if they are not fully satisfied with services.

## CHAPTER THREE

## 3. 0. Research methodology

A questionnaire survey will be used to collect data on subscribers of telecommunication operator Maxis. All the items are measured on seven-point Likert scales, with anchors ranging from “ strongly disagree” to “ strongly agree”. A pilot survey is chosen to revise and complement survey questions. The questionnaire will be developed in English. We will try to make the questionnaire readable and ensure its accuracy and appropriateness.

## 3. 1. Hypothesis/Propositions development

Based on theoretical models developed previous literature reviewed in chapter 2, the following hypotheses are formulated:

H1: Higher levels of call quality are related with higher levels of customer satisfaction

H1-1: Higher levels of pricing structure are linked with higher levels of customer satisfaction

H2: Higher levels of each switching cost are connected with higher levels of the switching barrier

H2-1: Higher levels of move-in costs are related with higher levels of the switching barrier

H2-2: Higher levels of loss cost are linked with higher levels of the switching barrier

H3: Higher levels of customer satisfaction are connected with higher levels of customer loyalty

## 3. 2. Operational definition and measurement of variables

In this study, adapted question items will be used as the instrument to measure the variables below, using a 7-point Likert scale for each item (with 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = agree, and 7 = strongly agree). The variables are defined and measured in table 1.

Table 1

Variable

Operational definition

Measurement items

Service quality

Call quality

Pricing structure

Switching cost

Loss cost

Move-in cost

Switching barrier

Customer satisfaction

Customer loyalty

Call quality according to customer perception

Pricing and price schedule

Perception of loss in social status and performance associated with the switching of service from an existing carrier

Perception of economic cost involved in switching to a new carrier

Economic and psychological difficulty perceived by customer, when switching carriers

Customer’s response to the state of satisfaction, and customer’s judgment of satisfaction level

Combination of customer’s positive attitude toward the service and intention to re-purchase the service

Call clarity coverage

Reasonability of price

Variety of price schedule

Possibility of freely choosing price schedules

Ease of subscribing and changing service;

Friendliness of staff, when subscribing and changing

Difficulty of changing number

Loss of benefits such as mileage program

Carrier’s care for customer;

Trust toward carrier;

Intimacy felt toward carrier;

Level of communication with carrier

Economic loss associated with switching carriers Psychological burden associated with switching carriers

Overall satisfaction with the carrier;

Overall satisfaction with the service

Willingness to stay with the carrier;

Willingness to recommend the carrier to others

## 3. 3. Sample

I choose pilot survey for my research to revise and complement survey questions. The sample of the study will consist of 100 respondents among master students of Universiti Utara Malaysia who use Maxis as their mobile communication provider. A hundred questioner forms will be distributed and collected during the period of from August 20 to September 10, 2010.

## 3. 4. Data collection Procedures

Data for the present study will be collected by using 7-point Likert scale questioners among UUM’s master students. The questioner forms will be distributed before class and will be collected after the class. And also this procedure will be made in the library. In this research there are involved only the subscribers of telecommunication operator Maxis, as research is suggested to investigate the degree of satisfaction and loyalty of customers of this network operator.

## CHAPTER FOUR

## Results and discussions

Table 2

The results of hypothesis tests

## Path

## Hypothesis

## Results

Call quality – Customer satisfaction

H1

Reject

Pricing structure – Customer satisfaction

H1-1

Reject

Switching cost – Switching barrier

H2

Reject

Move-in cost – Switching barrier

H2-1

Reject

Lost-cost -Switching barrier

H2-2

Reject

Customer satisfaction – Customer loyalty

H3

Accept

The results of hypothesis tests and their relationship between constructs customer loyalty, customer satisfaction and switching barrier are shown in the Table 2. We examined every variables deeply in tables 2-1, 2-2, 2-3 and 2-4 in order to find the areas that Maxis should pay attention in order to satisfy its customers that than would lead customers loyalty.

Table 2-1

## Path

## Hypothesis

## Significance

## Results

H1

Call quality- customer satisfaction

CQ1-CS1

. 044

Reject

CQ1-CS2

. 347

Reject

CQ1-CS3

. 039

Reject

CQ2-CS1

. 088

Reject

CQ2-CS2

. 350

Reject

CQ2-CS3

. 134

Reject

CQ3-CS1

. 390

Reject

CQ3-CS2

. 031

Reject

CQ3-CS3

. 297

Reject

From the results of test of hypothesis 1 we can say that there is no significant relationship between call quality and customer satisfaction.

We can see the results from the Table 2-1that indicates that call quality has not significantly positive effect on customer satisfaction with the results p > . 044, p > . 347, p > . 039, p > . 088, p > . 350, p > . 134, p > . 390, p > . 031, p > . 297. Therefore we reject H1.

Table 2-2

## Path

## Hypothesis

## Significance

## Results

H1-1

Pricing structure-customer satisfaction

PS1-CS1

. 000

Accept

PS1-CS2

. 166

Reject

PS1-CS3

. 326

Reject

PS2-CS1

. 149

Reject

PS2-CS2

. 097

Reject

PS2-CS3

. 015

Reject

The results of test of hypothesis 1-1: show that there is no overall significant relationship between pricing structure and customer satisfaction, although there is significant relationship between PS1 and CS1. This means that customers are satisfied with the pricing plan of Maxis compare with other providers’ pricing plan but they do not think the price charge by the service provider is reasonable. As there is no significant relationship between PS1-CS2, PS2-CS1, PS2-CS2, PS2-CS3 for this reason we reject H1-1.

Table 2-3

## Path

## Hypothesis

## Significance

## Results

## H2: Switching cost -switching barrier

H2-1

Move-in — cost-Switching barrier

MC1-SB1

. 175

Reject

MC1-SB2

. 081

Reject

MC1-SB3

. 002

Accept

MC1-SB4

. 002

Accept

H2-2

Lost cost — Switching barrier

LC1-SB1

. 256

Reject

LC1-SB2

. 994

Reject

LC1-SB3

. 104

Reject

LC1-SB4

. 252

Reject

LC2-SB1

. 001

Accept

LC2-SB2

. 444

Reject

LC2-SB3

. 002

Accept

LC2-SB4

. 029

Reject

LC3-SB1

. 413

Reject

LC3-SB2

. 000

Accept

LC3-SB3

. 044

Reject

LC3-SB4

. 027

Reject

The results of test of hypothesis 2-1 show that MC1 has significant relationship between SB3 AND SB4. This means that some subscribers are planning to switch to another network because of difficulties in changing their number but cannot for the reason of high subscription fee for new membership. However there are no significant relationships among MC1-SB1 and MC1-SB2. This means that there is no significant relationship between changing number, safety and massage.

From the table 2-3 we can see that there is no overall significant relationship between lost cost and switching barrier even though there are significant relationships among LC2-SB1, LC2-SB3 and LC3-SB2. These mean that customers feel safe in transactions, in their problems to be solved. Therefore as there is no overall significant relationship between switching cost and switching barrier, we reject H2.

Table 2-4

## Path

## Hypothesis

## Significance

## Results

H3

Customer satisfaction -Customer loyalty

CS1-CL1

. 001

Accept

CS1-CL2

. 001

Accept

CS1-CL3

. 000

Accept

CS1-CL4

. 000

Accept

CS2-CL1

. 019

Reject

CS2-CL2

. 004

Accept

CS2-CL3

. 000

Accept

CS2-CL4

. 002

Accept

CS3-CL1

. 017

Reject

CS3-CL2

. 017

Reject

CS3-CL3

. 296

Reject

CS3-CL4

. 056

Reject

Table 2-4 indicates that there is overall significant relationship between customer satisfaction and customer loyalty however there are not significant relationships among CS2-CL1, CS3-CL1, CS3-CL2, CS3-CL3 and CS3-CL4. The results of tests of other variables show that there are significant relationships among them. This is good response for the network provider to pay more attention to the areas or services that will make subscribers more satisfied and then it will lead to the customer loyalty. This indicates that customer satisfaction is important for the company for the retention their subscribers. Therefore customer satisfaction is positively related to the customer loyalty we accept H3.

## CHAPTER FIVE

## Conclusion and recommendations

The primary purpose of our study was to examine the levels of service quality, switching cost, switching barrier, customer satisfaction and customer loyalty and casual links between them. Furthermore we also looked at the strategies of wireless service provider Maxis in Malaysia. We used a sample of 70 master students of Universiti Utara Malaysia (UUM) just who are the subscribers of the telecommunication network company of Maxis in Malaysia. We examined six hypotheses by using Pilot test and results of our examination demonstrated that just one, hypothesis 3 had a significant relationship while others had not a significant relationship between each other. This could be due to the limitations of the research.

## Limitations of the study

This research has several limitations. The first limitation is place. The research was done only at the UUM. For this reason we cannot generalize the findings of the study for the whole population of mobile phone users of Maxis in Malaysia. The Second limitation is size of sample and respondents themselves. It is consisted only 70 respondents which is considered to be small and all respondents were master students. Future research should be done by using lager sample size and diverse locations. The Third limitation is restriction of time which led to get narrow results.

## Recommendations

Today telecommunication sector is the fastest growing sectors in Malaysia and at the same time the competition is enhancing day after day among wireless network providers. Therefore wireless network providers are aggressively moving to attract customers by offering promotion and new services. In order to survive and to get competitive advantages among competitors Maxis should be innovative and proactive.

It should maximize customer satisfaction in order to obtain customer loyalty. Maxis should investigate what customers expect and require from the company. They can create new services considering the customers’ demands that fulfill that demands.

As we know in Malaysia there are many foreign people work, live and study. For this reason it is important to consider demands and expectations of foreign customers. They should examine which language, tariffs and other services can meet their demands.

They also should do market segmentation research that benefit the subscribers’ seek (price, quality), usage level (heavy, medium, light user or non-user), lifestyle, their demographic background (teenagers, young adult, senior citizen or professional) and others.

According to Muhammad Hasmi et. al (2000) argued that network technologies and air interface standards are rapidly advancing and becoming more complex. So however the results of our research showed that there is no a significant relationship between call quality and customer, pricing structure and customer satisfaction we suggest that these factors are still important in satisfying customers.

So Maxis should be always aware about satiation in the mobile service market, whether it is offering the best price among its competitors whether it is implementing newest technology that can affect on service quality. As Steward (1996) suggested bad quality of cellular operator’s service such as drop calls, rough handoff, static, or generally weak cellular signals can lead easily to subscriber discontent and churn.

For mobile service providers retaining existing customers and strengthening customer loyalty are very essential for gaining competitiv