

DETERMINANTS OF CUSTOMER SATISFACTION
AND CUSTOMER LOYALTY: EXPLORING THE
MODERATING ROLE OF SWITCHING COST AND
CUSTOMER EXPERIENCE AMONG MALAYSIAN
POSTPAID MOBILE PHONE USERS

BY

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ABSTRACT

The mobile network service within the telecommunications industry has a good potential to increase in growth. However, market saturation has caused the growth rate of mobile network subscribers in developing countries to slow down. Hence, it is a challenge for service providers to retain and gain loyalty, as the competition among them is severed. Even though customers are satisfied with their service providers, they may still turn away to other competitors. Therefore, it is important to highlight on the issue on customer loyalty as it is still challenging to understand the context of customer loyalty in the service industry due to the higher expectation of the subscribers. Thus, there is a need to integrate and consolidate the possible variables in order to understand better on customer loyalty. Therefore, this study further clarifies on customer loyalty by investigating the influence of service expectation, service confirmation and perceived service performance towards satisfaction. This study further examined the relationship between satisfaction and loyalty. The moderating roles of switching cost and customer experience were also assessed in this study. A positivist exploratory approach was used to explore the relationship between variables. Convenience sampling technique was employed and based on 338 usable data gathered from Maxis, Digi and Celcom post-paid subscribers in Kuala Lumpur, the data was analyzed using Partial Least Square – Structural Modelling (PLS-SEM) approach. The findings revealed that all relationship between constructs were significant including the moderating role of switching cost and customer experience. However, insignificant result was found on the relationship between service expectation and satisfaction. This research provides insight into determinants of customer loyalty among post-paid subscribers in Malaysia. The major theoretical contributions of this study include extending the previous literature on customer loyalty from the perspective of expectation and perceived service performance. The findings further extend the current stock of knowledge by examining the influence of switching cost and customer experience in the existing expectations confirmation theory. From practical viewpoint, the findings provided information for the telecommunication industry to develop certain strategies to improve and enhance customer satisfaction and loyalty among the subscribers. However, this study is subjected to several limitations. The approach of this study was deductive in nature, which limits the researcher's understanding of what is really happening in telecommunication industry. Therefore, further efforts should be placed on examining the determinants of customer loyalty from qualitative perspectives.

مُلخَصُ البَحْث

لخدمة الهاتف الجوال في صناعة الاتصالات إمكانية جيدة لزيادة النمو، ولكن؛ يؤدي تشبُّع السوق إلى تباطؤ معدل ازدياد المشتركين في تلك الخدمة في البلدان النامية، فمن الصعب على مزودي الخدمة اكتساب العميل والحفاظ على ولائه، ما دامت المنافسة مقسمة بينهم، ورغم أن العملاء راضون عن مزوِّديهم بالخدمة، إلا أنهم قد يتحولون إلى مزودين آخرين منافسين؛ لذا من المهم بيان مسألة ولاء العملاء؛ لصعوبة فهمها في الصناعة الخدمية بسبب ارتفاع توقعات المشتركين، ومن ثم؛ تبرز الحاجة إلى دمج المتغيرات المحتملة وتوحيدها لفهم ولاء العملاء فهماً أفضل، وعليه؛ يوضح هذا البحث ولاء العملاء من خلال التحقيق في تأثير توقُّع الخدمة وتأكيدها وأدائها المتصور؛ في رضا العملاء؛ أي يتناول البحث العلاقة بين الرضا والولاء، وقد جرى فيه تقييم دور التهدئة لتكلفة التحويل وتجربة العميل، واستُخدمت مقارنة وضعية لاستكشاف العلاقة بين المتغيرات، مع تقنية العينات الملائمة، واستناداً إلى 338 مادة من البيانات جُمعت من مشتركى خدمة الهاتف الجوال لاحق الدفع لدى المزودين: Maxis، وDigi، وCelcom، في كوالالمبور؛ جرى تحليل البيانات باستخدام تطبيق (PLS-SEM)، وكشفت النتائج أهمية العلاقات كلها بين المتغيرات، بما فيها دور التهدئة لتكلفة التحويل وتجربة العميل، مع تأثير خفيف لتوقُّع الخدمة في الرضا، وهكذا؛ يُقدِّم البحث نظرة ثاقبة في محددات ولاء العملاء بين مشتركى خدمة الهاتف الجوال لاحق الدفع في ماليزيا، وتتضمن الإسهامات النظرية الرئيسة توسيع نطاق الدراسات السابقة في ولاء العملاء من منظور توقُّع الخدمة وأدائها المتصور، وتعمل النتائج على توسيع المعرفة من خلال دراسة تأثير تكلفة التحويل وتجربة العميل في نظرية تأكيد الخدمة المتوقعة، وإجرائياً؛ قدمت النتائج معلومات لصناعة الاتصالات؛ لتطوير إستراتيجيات تحسين الرضا وتعزيز الولاء بين المشتركين، ولكن؛ لم يخلُ البحث من قيود؛ أبرزها أن نهجه استنتاجي، مما يحدُّ من فهم ما يحدث حقاً في صناعة الاتصالات؛ لذا يلزم بذل مزيد من الجهود في دراسة محددات ولاء العملاء وفق المنهج النوعي.

APPROVAL PAGE

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DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

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LIST OF ABBREBRIATION

4G	: Fourth Generation
5G	: Fifth Generation
CL	: Customer Loyalty
CSI	: Consumer Satisfaction Index
ECT	: Expectation and confirmation theory
EDT	: Expectancy Disconfirmation Theory
EFA	: Exploratory Factor Analysis
EFDP	: Enhanced Franchise Development Program
ETSI	: European Telecommunications Standards Institute
GPRS	: General Packet Radio Services
GSMA	: Groupe Speciale Mobile Association
GST	: Goods and Service Tax
JTM	: Jabatan Telekom Malaysia
KLSE	: Kuala Lumpur Stock Exchange
LTE	: Long Term Evolution
MCMC	: Malaysian Communication and Multimedia Commission
MIM	: Mobile Instant Messaging
MMS	: Multimedia Messaging Services
MNP	: Mobile Number Portability
RISE	: Research Incentive Scheme for the Enterprise
SEF	: Service Export Fund
SC	: Switching Cost
SCT	: Social Cognitive Theory
SE	: Service expectation
SERQUAL	: Service Quality
SIRIM	: Standard and Industrial Research Institute of Malaysia
SME	: Small Medium Enterprise
SP	: Service Performance
SSGS	: Service Sector Guarantee Scheme
TAM	: Technology Acceptance Model

CHAPTER ONE

INTRODUCTION

This chapter consists of several parts. It begins by canvassing the background of the study from which the research problem is stated, and the ensuing research objectives and questions are articulated. To ensure the readers follow the thesis's argument, the terms used in this study are defined to avoid confusion. The chapter also discusses the research significance and its contribution to the body of knowledge. The chapter concludes by outlining the structure of the thesis.

1.0 BACKGROUND OF THE STUDY

Today's competitive business environment demonstrates the significance for organisations to create and maintain customer loyalty. Many researchers agree that customer loyalty benefits the organisation (Khan, 2015; Adjei & Denanyoh, 2014; Kursunluoglu, 2014). For instance, customer loyalty decreases the cost of marketing and increases profit. Furthermore, loyal customers will engage in word-of-mouth, advertising and promoting the products and services to others. They will subscribe to or use new services or products and perhaps make suggestions for organisations to improve on specific services or products (Chinomona & Sandada, 2013).

In the telecommunications industry, the mobile network service has a good potential for growth. According to the Groupe Speciale Mobile Association (GSMA) report, 2015 was a year of continued growth in the mobile service industry. This is evident by the 4.7 billion subscribers and operator revenues reaching more than \$1 trillion. The expansion of 4G network coverage in 151 countries contributes to the

increasing number of service providers and subscribers in the telecommunications industry (GSMA, 2016). However, in developing countries, mobile network subscribers' growth rate is slowing due to market saturation. It is estimated that by 2020, 70% of the world's population will already have subscribed to mobile services (GSMA, 2016).

In this saturated market and mobile penetration of more than 100%, acquiring new customers is a challenge. This is what the Netherlands is currently experiencing (Radosavljevik, Putten & Larsen, 2011). Thus, mobile service providers need to make adjustments in their marketing strategy. Instead of concentrating on gaining new customers, they need to retain existing customers (Chuah, Marimuthu & Thurasamy, 2015). At the same time, it is very challenging to retain customers for extended periods (Chen & Cheng, 2012). As such, it is vital to raise customer loyalty in mobile service providers due to the highly aggressive market competition.

Referring to Figure 1.1, the subscriber penetration rate for Malaysia, Japan, America, Thailand, and Singapore reached 100% in 2011. Singapore and Malaysia have higher penetration rates compared to America, Thailand, and Japan. In relation to the penetration of mobile subscribers, the usage trend of mobile network services in Malaysia had witnessed slow growth after 2012 when the penetration rate reached 140%. According to Velu, Jayaraman, Yahya and Kiumarsi (2014), the Malaysian market at this point can be considered mature, as the level of penetration per 100 customers is more than 100%. Therefore, there is a strong need for mobile service providers to maintain its existing customers.

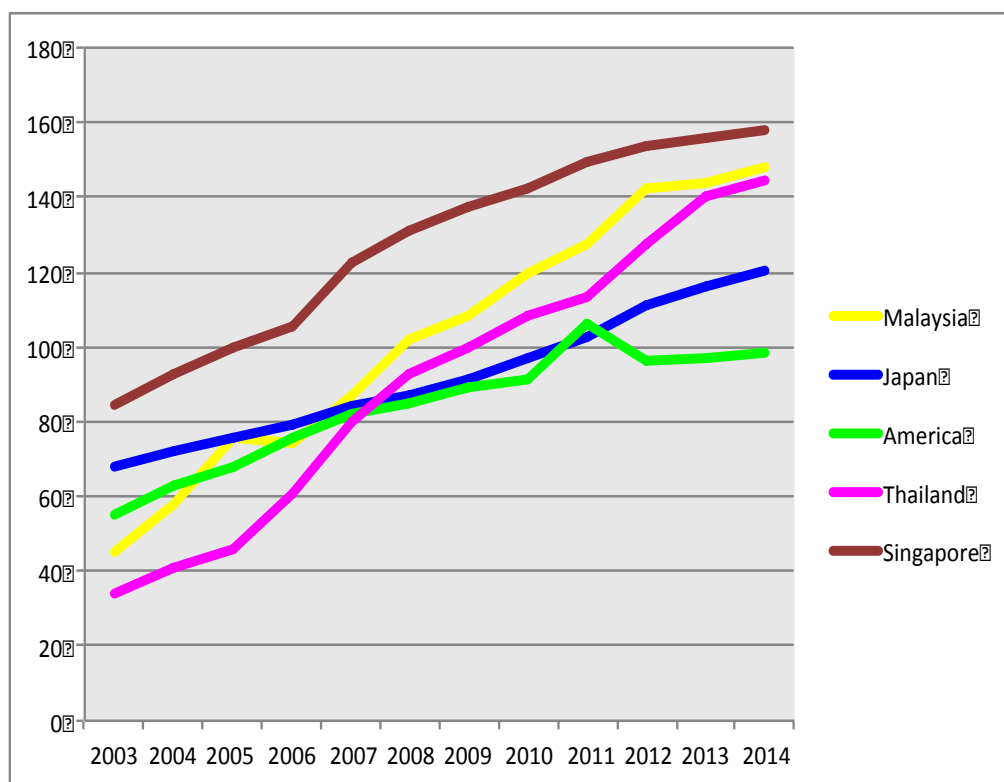


Figure 1.1: Subscriber Penetration Rate in Five Countries
 (Sources: *The World Bank Group (2015)* and *MCMC (2015)*)

It is more challenging to retain and gain loyalty from the customers for long periods with the current market saturation landscape facing the Malaysian telecommunications industry. For that reason, local mobile network service providers are competing to provide the best plans and packages for their existing or potential customers. At the same time, they have to consider other aspects such as enhancing customer experience that can help augment customer loyalty. In the end, it is up to the customers to choose whether to stay loyal to a service provider or migrate to another service provider that offers suitable services according to their level of expectations.

Most telecommunication customers nowadays are loyal to multiple brands as opposed to being loyal to a single brand (Farzana, Yasin & Dardak, 2014). This is because one particular service provider cannot fulfil all customer expectations. This is also the reason customer satisfaction alone does not guarantee loyalty. Furthermore,

switching intent is unpredictable (Jung & Yoon, 2012; Ranaweera & Neely, 2003). This poses more challenges for mobile network service companies, as customers demand more of the products and services that they consume.

According to Maikel Wilms who is the director of the Boston Consulting Group, Netherlands, (panel in the telcom world 2017, in Busan, Korea) “Telecommunications is the only industry where volumes are growing 40–60% a year, but revenues are shrinking”. He added that in the Western Europe, there will be 500 billion euros investment in this industry in the future but if service providers do nothing about it, nothing will change (ITU, 2018).

Customer loyalty within the mobile industry is a very important issue (Babu & Ananthanarayanan, (2014) because service providers lose about 27% to 30% of their subscribers annually (Amulya, 2013; Peighambari, 2007; Ranaweera & Prabhu, 2003; Vandenbosch & Dawar, 2002). It is estimated that these service providers lose around 2.2% of their subscribers every month (Wahab, Zahari, Al Momani & Nor, 2011). The matter is made more urgent with the cost of acquiring new customers is estimated to be around \$600 and \$800 per month, which includes advertising, marketing sales, and commissions (Vandenbosch & Dawar, 2002).

1.1 HISTORY OF TELECOMMUNICATION IN MALAYSIA

For the past twenty years, the telecommunications sector in Malaysia has undergone significant transformations. Telecommunication is defined as “the transmission of information such as voice, images and data over long distances” (Ministry of Human Resources Malaysia, 2012). However, the discussion of this study focuses on mobile networks and does not include satellite radio, copper and optical fibre optic, radio and television.

From 1985 until 2000, the penetration level of telephone line subscriptions rose by 540%, and the number of users increased annually. Malaysia launched the Nordic Mobile Telephone (NMT 450) or Atur 450 in 1985. This effort to introduce the product was initiated by the Malaysian Telecommunications Department, known as Jabatan Telekom Malaysia (JTM). JTM used to monopolise fixed lines and mobile network services in Malaysia. It was also in charge of setting phone rates based on historical costs. JTM further functions as a regulator in the industry. Due to the absence of other competitors in the industry, no budget was allocated to introduce new technology or increase efficiency (Sivalingam, 2007).

In 1987, JTM changed its name to Syarikat Telekom Malaysia Berhad (STMB), due to the privatisation of the department to improve its services. STMB managed to establish the first mobile network services a year later, which provides for the Global System for Mobile Communications (GSM) known as STM Cellular Communications. GSM is a standard network which was developed by the European Telecommunications Standards Institute (ETSI) in order to define and design the protocol for second-generation (2G) Digital mobile network used for mobile phones.

In 1995, STMB for the first time in its history managed to be listed in the Kuala Lumpur Stock Exchange (KLSE). STMB was later changed to Telekom Malaysia Berhad (TMB). TMB expanded their business to Sri Lanka in 1994 using GSM licence, then followed by licences in India and Ghana although it relinquished its businesses in this country due to political issues. By the year 2000, TMB extended their services in South Africa, Guinea, Malawi, Cambodia, Thailand and Bangladesh. Lastly, the company decided to strengthen their investments overseas and Malaysia market.

Due to the large number of subscribers, in 2007 TM began to split their fixed line and mobile services. In 2008, TM managed their domestic line and broadband services, while TM International Berhad (TMI), a newly formed company managed the cellular services. In 2009, TMI rebrand themselves as Axiata.

Hence, in 2004 to 2019, the mobile international presence was concentrated using different name in few countries for example Malaysia (Celcom), Singapore (M1), Indonesia (XL), Cambodia (Smart), Bangladesh (Robi), Sri Lanka (Dialog), Nepal (Ncell) and India (Ideal). In 2005, the company rebranding themselves as TM (Techsansar, 2016).

1.2 MALAYSIA’S CURRENT TELECOMMUNICATIONS INDUSTRY

The subscribers of mobile network services in Malaysia can be considered as one of the highest in the Asia Pacific region based on the statistics issued by the Malaysian Communication and Multimedia Commission (MCMC) in 2017. As stated in Table 1.1, Singapore, Thailand and Indonesia show positive growth in penetration rate from 2014 to 2017. In 2017, Thailand scored the highest penetration level at 176.0%, followed by Indonesia at 173.3%, Singapore 150.8%, Malaysia 131.8% and Cambodia 116.04%, (MCMC, 2017). Thailand’s telecommunications industry rose to 3.8% in 2017 due to the expansion of the country’s cellular had driven increase spending on the telecommunication infrastructure.

Table 1.1: Mobile Phone Subscription Per 100 Citizens

No	Country	2014	2015	2016	2017
1	Singapore	146.9%	148.7%	150.5%	150.8%
2	Malaysia	148.3%	143.8%	139.9%	131.8%
3	Thailand	141.9%	149.9%	173.8%	176.0%
4	Indonesia	136.9%	149.2%	161.5%	173.3%
5	Cambodia	132.7%	134.4%	126.3%	116.04%

(Source: MCMC (2017); Data.gov.sg (2018); The Statistics Portal (2019))

In Malaysia, 2014 witnessed a positive increase in mobile subscriptions by 4.5% compared to the previous year (MCMC, 2015). This trend was possible due to the introduction of new mobile devices that could support data services at more affordable prices. This was also credited to customers subscribing to second mobile services and the government's introduction of *Pakej Komunikasi Belia* (youth communication package). This package offered a RM200 rebate for youths with a monthly income of RM3,000 and below to purchase selected smartphones with the 3G facility. An estimated 1.5 million youths signed up for the package under this scheme.

From the previous discussion, it can be seen that customers have a tendency to subscribe with a service provider and then migrate to another, or they choose to maintain an account with their initial service provider as well as subscribe to another service provider. It is estimated that out of the 10% of users who migrate to another service provider, almost half maintain their existing phone number by using the Mobile Number Portability (MNP) service (MCMC, 2017).

Shamsudin (2012) states that the implementation of MNP is a considerable challenge for service providers as customers can easily shift to other service providers because the MNP allows customers to maintain their existing phone number when switching to other service providers.

In 2017, the penetration rate of mobile subscribers is 131.1% at 42.34 million subscribers. As a result of inactive SIM card termination and migration from prepaid to postpaid, the number of postpaid subscribers increase by 11.2% to 10.23 million while as for prepaid subscribers continued to fall by 6.3% to 32.11 million.

Based on Figure 1.2, the major players in mobile services have nearly equal market shares in terms subscriptions. Digi, Maxi and Celcom have lost some market share to U Mobile and other service providers due to severe competition. U Mobile

has managed to increase its market share to 14% in 2017 from 12% in 2016 due to substantial promotional and marketing activities. The remainder is from other service providers (Tune Talk, Yes, Yoodo, MCalls) with market share increased by 1% to 11% or 4.79 million subscriptions in 2017 compared with 10% in 2016.

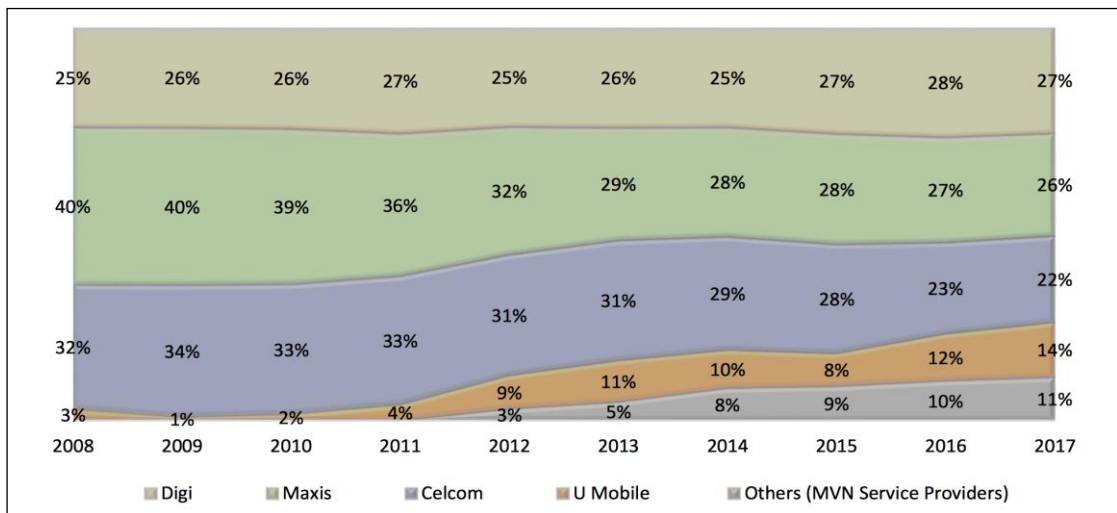


Figure 1.2: Mobile Cellular Subscriptions Market Share by Service Providers 2008-2017
(Source: MCMC, 2017)

Table 1.2 show the number of subscribers for Maxis, Celcom and Digi from the year of 2014 to 2015. Based on Table 1.2, in 2014, Maxis had almost 12.91 million subscribers, which decreased to 12.69 million in 2015. Celcom also experienced a decrease in the number of subscribers from 12.97 million in 2014 to 12.25 million in 2015.

However, Digi presented a positive growth in subscribers from 11.42 million in 2014 to 12.13 million in 2015. This shows that the percentage of subscribers for each service provider is relatively close and the ratio among Maxis, Digi, and Celcom subscribers is small. Malaysia has 37.07 million mobile subscribers, representing 148% penetration rate as of June 30, 2015. Of that, 7.77 million were postpaid subscribers and 29.31 million were prepaid users (Eu, 2016).

Table 1.2: Number of Subscribers for Maxis, Digi and Celcom in Market Share 2014-2015

Service Providers	2015			2014		
	Prepaid	Postpaid	Overall	Prepaid	Postpaid	Overall
Maxis	9.57mil	3.13 mil	12.69mil (34.3%)	9.62mil	3.29mil	12.91mil (34.6%)
Celcom	9.45mil	2.80mil	12.25mil (33.0%)	10.17mil	2.80mil	12.97mil (34.8%)
Digi	10.29mil	1.84mil	12.13mil (32.7%)	9.70mil	1.72mil	11.42mil (30.6%)
Total	29.31mil	7.77mil	37.07mil	29.49mil	7.81mil	37.30mil

(Source: Eu (2016))

1.2.1 Mobile Network Company in Malaysia

The year 1995 marked seven critical players in Malaysia's mobile network industry, namely TM Cellular, Celcom, Mobikom, Digi, Maxis, Time, and Sapura. However, due to industry consolidation that took place during that time, the number was subsequently reduced to three companies operating today, which are Maxis, Digi, and Celcom (ITU, 2004; Spire Research Consulting, 2010)

Digi was the first company to launch its prepaid services in 1998, followed by Celcom. Later, other companies such as TMB introduced the TM Touch, and Maxis began to offer similar services to its users. Digi, being a pioneer in prepaid services, gained the advantage of controlling more than 40% market share in the year 2000. Similarly, Maxis and Digi showed positive growth of 26.5% and 17.3% in the mobile telecommunication market in the same year due to their sales in prepaid mobile telephone services.

1.2.1.1 Maxis

Maxis began its operations in 1993. Currently, it is one of the leading telecommunication service providers in Malaysia. The corporation is the fifth largest