THE IMPACT OF SERVICE QUALITY ON LOYALTY INTENTION AND CUSTOMER SATISFACTION: THE MODERATING EFFECT OF PRICE FAIRNESS AND SWITCHING COST OF PREPAID MOBILE PHONE USERS IN THAI LAND

SAOWANEE SRIKANJANARAK

UNIVERSITI SAINS MALAYSIA

2010

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by

SAOWANEE SRIKANJANARAK

Thesis submitted in fulfillment of the requirements
for the degree of
Doctor of Philosophy

April 2010

ACKNOWLEDGEMENT

First of all, I would like to pay my deepest respect and gratitude to the Buddha whose teachings, Dharma, has been the bedrock of my beliefs; the invaluable compass with which I have been charting my life.

I wish to express my deep and sincere gratitude to my principal supervisor, Dr. Azizah Omar, who has proved to be a great mentor and source of inspiration by providing invaluable support throughout the exhaustive years of my Ph.D. journey. She has imparted not only a great deal of knowledge but also enormous guidance to help me gained wisdom, confidence and necessary survival skills in order to achieve my goal. Her accompany and assurance at my time of distress and crisis will be forever remembered. Associate Professor T Ramayah, my co-supervisor, has always provided me with statistical knowledge, support and constructive feedback. I am indebted to him for his professional knowledge and expertise.

I would like to express my sincere appreciation to the Dean, School of Management, Associate Professor Dato' Dr. Ishak Ismail as well as to Deputy Dean Research and Postgraduate Studies, Associate Professor Dr. Zamri Ahmad for their concerns and assistance. My sincere thanks are also due to my internal examiners, Associate Professor Dato' Dr. Ishak Ismail and Dr. Mahmod Sabri Haron, for their valuable comments which resulted in shaping and revising of the study. The cooperation and sharing of professional knowledge and skills I received from many, if not all, other academic members of the School of Management is gratefully acknowledged with special thanks to Associate Professor Dr. Zainal Ariffin Ahmad and Associate Professor Dr.Yuserrie Zainuddin.

I am also greatly indebted to Dr. Kitima Tamalee, who has been so supportive throughout of my Ph.D. journey. I am also equally indebted to Dr. Jakkravudhi, or Jacky, for his dynamic and intensive encouragement. Both are truly friends.

I wish to offer my appreciation to all my fellow-school mates who have shared their time and knowledge with me during our study and work at the Ph.D room. Special thanks to my Thai compatriots. Notwithstanding, there are many other people who have assisted me in one way or another but have not been mentioned here and I also wish to record my appreciation for their contributions.

I am most grateful to Thepsatri Rajabhat University for granting me this precious opportunity to enhance my career and professionalism. I honestly look forward to reciprocate by offering my utmost contribution to the university and the community at large.

Of course, I am forever in debt to my beloved parents who has taught me the value of hard work by their own example. Without their nurturing and upbringing, this present episode of searching for excellence would not have been a success. Last, but not least, the most special thank you to my lovely son, James or Phanuwit Srikanjanarak, who has been so understanding and strong to face the loneliness and uneasy journey of our long separation. With a deep sense of gratitude, I have realized that I am very blessed to be given a such caring, responsible and smart boy. There is no words can describe how much I value your love and sacrifice to make this dream come true. May our future full of love and success.

TABLE OF CONTENTS

CHAPTER 4 - DATA ANALYSIS AND RESULTS

CHAPTER 5 - DISCUSSION AND CONCLUSION

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

CS	Customer Satisfaction
PFP	Price Fairness Perception
PosSw	Positive Switching Cost
NegSw	Negative Switching Cost
TOT	Telephone Organization of Thailand
CAT	Communication Authority of Thailand
BTO	Build-Transfer-Operate system
PCT	Personal Communication Telephone service
AIS	Advance Infor Service Public Company Limited
DTAC	Total Access Telecommunication Public Company Limited
DPC	Digital Phone Company Limited
True	True Corporation Public
Hutch	Hutchison CAT Wireless Multimedia
WTO	World Trade Organization
ARPU	Average Revenue per Unit
SMS	Short Message Service
MMS	Multimedia Message Service
GPRS	Generic Packet Radio Service of Mobile Internet
SERVQUAL	An instrument for measuring of service quality by Parasuraman et al. (1988)
SERVPERF	An instrument for measuring of service quality by Cronin & Taylor (1992)

LIST OF PUBLICATIONS

1. Srikanjanarak, S., Omar, A., & Ramayah, T. (2009). The conceptualization and operational measurement of price fairness perception in mass service context. *Proceedings of the 14th Asia Pacific Management Conference – "Managing Complexities in the Asia Pacific Region"*, Conference E-Book, ISSN 2086-0188, 1148-1161, 18-20 November, Sheraton Surabaya Hotel & Towers, Surabaya, Indonesia.

2. Srikanjanarak, S., Omar, A., & Ramayah, T. (2009). Value Added Service and Service Quality from the Customer's Perspective: An Empirical Investigation in Thai Telecommunication Industry. *Proceedings of the 4th International Conference on Business and Management Research – "The New World Order after the Crisis",* 22-24 November, Sanur Paradise Plaza Hotel and Suites, Bali, Indonesia.

3. Srikanjanarak, S., Omar, A., & Ramayah, T. (2009). The conceptualisation and operational measurement of price fairness perception in mass service context. *Asian Academy of Management Journal, 14*(2).

IMPAK KUALITI PERKHIDMATAN KE ATAS NIAT KESETIAAN DAN KEPUASAN PELANGGAN: KESAN KESERDEHANAAN HARGA KESAKSAMAAN DAN HARGA PERALIHAN DIKALANGAN PENGGUNA PRABAYAR TELEFON BIMBIT DI THAILAND

ABSTRAK

Persaingan global yang kian meningkat telah menimbulkan persaingan pasaran yang intensif di kalangan penyedia perkhidmatan. Banyak organisasi telah mencipta dan membangunkan beraneka jenis keluaran atau perkhidmatan; terutamanya dalam industri telekomunikasi yang telah membangunkan perkhidmatan telefon bimbit. Pelbagai perkhidmatan nilai tambah telah dikaitkan dengan perkhidmatan telefon bimbit, kekompleksan strategi harga dalam konteks perkhidmatan secara besaran semakin menjadi kompetitif, dengan menawarkan beraneka jenis perkhidmatan pilihan dalam kalangan penyedia perkhidmatan. Di samping itu, pelbagai promosi telah digunakan dengan semakin bertambah sebagai alat utama untuk mengekalkan pelanggan-pelanggan sedia ada. Bagaimanapun, model-model kualiti perkhidmatan tidak banyak memberi fokus kepada perkhidmatan nilai tambah. Sehingga kini, masih belum ada penyelidikan yang mengoperasionalisasikan konsep perkhidmatan nilai tambah dalam satu model pun tentang kualiti perkhidmatan yang dibina menurut perspektif pelanggan industri perkhidmatan. Tambahan lagi, pengukur operasional bagi menggambarkan persepsi kesaksamaan harga dan impak pelbagai strategi dalam pandangan pelanggan dari segi harga peralihan, tidak banyak mendapat perhatian dalam karya-karya perkhidmatan pemasaran. Malahan, tidak banyak kajian yang menyiasat kesannya ke atas kelakuan pelanggan. Justeru, kajian ini bertujuan untuk mengkonsepsikan dengan lebih lanjut model kualiti perkhidmatan, mengembangkan lagi pengkonsepsian dan membina satu pengukur multisekala untuk kesaksamaan harga dan meneliti kesan-kesan pelbagai dimensi kualiti perkhidmatan ke atas niat kesetiaan melalui kepuasan pelanggan. Kesan menyederhana kesaksamaan harga dan harga peralihan (yang positif dan negatif) ke atas kepuasan pelanggan dan niat kesetiaan juga akan dikaji. Data dikumpul daripada pengguna-pengguna perseorangan menggunakan soal selidik urus sendiri. Sejumlah 998 peserta yang boleh diguna pakai telah dianalisis. Empat dimensi kualiti perkhidmatan telah dicipta: perkhidmatan teras, perkhidmatan bukan suara, perkhidmatan hiburan dan perkhidmatan keprihatinan pelanggan. Kesemua ini mempengaruhi niat untuk menetap dan niat secara lisan; kecuali perkhidmatan hiburan yang hanya mempengaruhi niat secara lisan. Keputusan kajian ini menyokong kesan pengantaraan kepuasan pelanggan terhadap tiga dimensi kualiti perkhidmatan dan niat kesetiaan, kecuali perkhidmatan hiburan. Kesan menyederhana persepsi kesaksamaan harga dan harga peralihan positif telah dapat disahkan. Dapatan ini menunjukkan bahawa untuk mengekalkan niat kesetiaan di antara pelanggan kepada penyedia perkhidmatan, penciptaan dan pembangunan kualiti perkhidmatan teras, perkhidmatan-perkhidmatan lain yang berkait dengan perkhidmatan teras nampaknya semakin menjadi senjata yang penting. Bagaimanapun, perkhidmatan hiburan juga mengenakan impak yang semakin bertambah kepada niat secara lisan. Lebih-lebih lagi, strategi harga seharusnya memfokuskan kepada urus niaga saksama. Harga peralihan positif pula seharusnya dikaji dari sudut pandangan pelanggan. Perbincangan am, batasan kajian, implikasi teori dan praktik serta cadangan-cadangan dari dapatan-dapatan ini juga disediakan.

THE IMPACT OF SERVICE QUALITY ON LOYALTY INTENTION AND CUSTOMER SATISFACTION: THE MODERATING EFFECT OF PRICE FAIRNESS AND SWITCHING COST OF PREPAID MOBILE PHONE USERS IN THAILAND

ABSTRACT

Increasing global competition has led to an intensively competitive market among service providers. Several organizations have created and developed a variety of products or services; in particular the telecommunications industry has developed mobile phone services. Various value-added services linked to mobile phone services, the complexity of price strategies in mass service context is increasingly competitive, offering variety of service options among service providers and various promotions have been increasingly used as major tools to retain their existing customers. However, service quality models have placed little focus on value-added services and no research has yet operationalized the concept of value-added services in a service quality model from the customer's perspective of the service industry. In addition, the lack of operational measurement to capture the price fairness perception and the impact of various strategies in customer's view in terms of switching cost has received little attention in the service marketing literature. Moreover, there have been limited studies investigating their impact on customer behaviour. Hence, this study aims to further conceptualize a service quality model, develop an extension of conceptualization and a multiscale measurement of price fairness perception and examine the effects of various dimensions of service quality on loyalty intention through customer satisfaction. Moderating effects of price fairness and switching costs (positive and negative) on customer satisfaction and loyalty intention are also investigated. Data is collected from individual users by using self-administrated questionnaires and 998 usable responses were analyzed. Four dimensions of service quality are created; core service, non-voice service, entertainment service and customer care service. They affect both staying intention and word of mouth intention, except entertainment services which have impact only on word of mouth intention. The results support the mediation effect of customer satisfaction on three dimensions of service quality and loyalty intention, except entertainment service. The moderating effect of price fairness perception and positive switching cost has been demonstrated. These findings indicated that to maintain the loyalty intention between customer and service provider, the creating and developing the quality of core service, other services related to the core service seems to be an increasingly important weapon. However, entertainment service is also effecting an increasing impact on word of mouth intention. Moreover, price strategy should be focused on the fair deal and positive switching cost should be pursued from the point of view of the customer. The general discussion, limitations, theoretical and practical implications and recommendations from the current findings are provided.

CHAPTER 1

INTRODUCTION

1.0 Introduction

This chapter provides an overview of the present study including the background of the study, problem statement, research objectives and research questions. The significance, scope of the study, and definition of key terms explored in this study are also presented. The organization of research approach is introduced at the end of this chapter.

1.1 Background of the Study

Customer loyalty has long been highlighted in academic and many service industries, such as manufacturing, health care, education and telecommunications, as vital for continuous customer relationship management that focuses on customer satisfaction and long-term business profitability. Numerous studies (Reichheld, 1996; Reichheld & Sassar, 1990; Sheth & Parvitiyar, 1995) indicate that maintaining a loyal customer base is more economically advantageous than constantly seeking new customers as this requires further investment in new advertisement, campaigns, or promotions. In addition, Donio', Massari and Passiante (2006) reported that customers who show loyal behaviour tend to lead to high profitability for a firm. However, customer loyalty is widely reported to be declining due to such factors as lowering levels of quality of product or service differentiation, lower risk of switching cost, intense competition, consumers becoming more demanding and showing increasing levels of dissatisfaction with pricing, core service failure and general inconvenience (Bennett & Rundle-Thiele, 2005; Dick & Basu, 1994; Keaveney, 1995). These factors can influence a customer's loyalty towards an organization which in turn will determine the profitability of the company.

A global competitive environment that focuses on integration of information, communication and technology (ICT) is one of the main factors that cause organizations to become more innovative and creative in developing their business strategies and products (or services). This leads to the creation of a strongly competitive market among suppliers or producers. Therefore, many service industries such as tourism, healthcare, academic institutions and telecommunication place emphasis on sustaining loyal customers as long as they can. This has become the most important part of their company's mission in order to enhance profitability (Donio' et al., 2006; Ennew & Binks, 1996; Gerpott, Rams & Schindler, 2001; Hallowell, 1996; Reichheld, 1996).

A substantial body of literature has addressed the importance of customer satisfaction towards customer loyalty. A positive significance has been demonstrated in the relationship between customer satisfaction and customer loyalty, which in turn affects profitability (Anderson, Fornell & Lehmann, 1994; Anderson, Fornell & Rust, 1997; Anderson & Sullivan, 1993; Danio' et al., 2006, Massari & Passiante, 2006; Hallowell, 1996; Reichheld, 1996; Rust & Zahorik, 1993). For example, customers who are satisfied with certain products or services lead to increased business sales through their demonstration of customer loyalty, namely such behaviours such as repurchase, word of mouth (WOM), resistance to stay, price tolerance and increasing the volume of usage (Bolton, Lemon & Verhoef, 2004; Danio' et al., 2006; Heskett, 2002; Reichheld, 1996; Storbacka, Strandiv & Gronroos, 1994; Szymanski & Henard, 2001). However, Anderson and Sullivan (1993) indicated the large variation between customer satisfaction and loyal behaviour. Bloemer and Kasper (1995) also found that the relationship between customer satisfaction and brand loyalty is quite complex. They suggested that there are some factors that will influence that relationship. As a result, several factors have been investigated with respect to the moderating effect on the relationship between customer satisfaction and customer loyalty in service contexts such as switching cost, customer characteristics, corporate image, customer experiences, customer life style, customer spending, customer's skill (Andreassen & Lindestad, 1998; Aydin & Ozer, 2006; Aydin, Ozer & Arasil, 2005; Cooil, Keiningham, Aksoy & Hsu, 2007; Kim, Park & Jeong, 2004; Lee, Lee & Feick, 2001; Mittal & Kamakura, 2001).

According to Keaveney (1995), the effect of poor service and price perception are the reasons why customers generally switch to other service providers even when they stated that they were satisfied with a particular service provider. The author suggests that price perceptions as a comparison with competitive price may have a direct effect on customers to remain or switch to other service providers. Likewise, several studies have suggested that price perception has an important role on loyal behaviour in service industries (Bolton et al., 2004; Bolton, 1999; Varki & Colgate, 2001; Vose, Parasuraman & Grewal, 1998). The other possible reason for the variability of satisfaction and retention is switching cost (Anderson & Sullivan, 1993; Fornell, Johnson, Anderson, Cha & Bryant, 1996; Keaveney, 1995). This has been supported by Fornell (1992) who states that the relationship between customer satisfaction and customer loyalty is affected by several factors, including the industry type, switching cost and the differentiation level of products in a category.

Empirical studies in several sectors (e.g., Jones, Motherbaugh & Beatty, 2000; Lee et al., 2001) found that there is a weaker relationship between customer satisfaction and customer loyalty in market segments with high perceived switching cost than in those with low perceived switching cost. As a result of these findings, over the past several decades of service industries, the switching cost variable has been widely accepted as one of the most important factor for firms to maintain existing customers. However, the results of previous studies of switching cost effect on satisfaction-loyalty link are still inconclusive.

Service quality models; namely SERVQUAL (Parasuraman et al., 1988) and SERVPERF (Cronin & Taylor, 1992) are the two most widely accepted models used to measure service quality. However, many scholars have argued that SERVQUAL and SERVPERF conceptualizations are still inadequate to measure the specific characteristics of service quality in other industries (Brady & Cronin, 2001; Carr, 2007; Dabholkar, Thorpe & Rentz, 1996; Gounaris, 2005; Kang, 2006; Kang & James, 2004; Philip & Hazlett, 1997). Therefore, new measurements have been developed to capture service quality in specific industries. For instance, Dabholkar et al. (1996) developed the Retail Service quality Scale for the retail industry; Gounaris (2005) developed INDSERV scale for b2b services by using SERVQUAL and adding some items which were suitable for the specific nature of its industry; Caro and Garcia (2008) developed a multidimensional and hierarchical service quality model for the travel agency industry which comprised of personal interaction, physical environment, and outcome. More recently, Kang (2006) and Kang and James (2004) developed service quality dimensions based on Gronroos' service quality model and SERVQUAL to measure service quality amongst mobile phone service providers. They argued that the SERVQUAL measurement is more focused on the processing of delivery service and does not reflect on service output (Seth, Deshmukh & Vrat, 2005; Lim et al., 2006; Kang, 2006; Kang & James, 2004). In addition, Selth et al. (2005) revealed that several service quality models are different, based on the nature of the service industry, currently existing competition, time, needs, and so forth.

Currently, the nature of service industries is rapidly being developed by increasing the quality of service and customer care service. Moreover, several value-added services have been increasingly created and developed to satisfy customers' needs in order to keep the favour of existing customers. This is true in such things as after-sales service in the electronics industry and particularly true in various value-added services in the mobile phone service industry such as communication services, entertainment services, information services and money transfer services. Therefore, the service quality model for mobile phone services needs to be further developed.

In fact, marketers in service industries are shifting their microscopic view of understanding of the nature of determining factors for establishing, maintaining, and enhancing the relationship with the customer to a holistic view, especially with regard to the aggressive competition in the mobile phone service industry. Therefore, this study is trying to identify dimensions of the mobile phone service quality which will be the main factors that affect customer satisfaction and in turn lead to customer loyalty. The role of price fairness perception and switching costs as moderating effects on the relationship between customer satisfaction and customer loyalty are also investigated.

1.2 Problem Statement

Numerous studies have shown positive association between customer satisfaction and customer loyalty, which in turn affects profitability (Anderson et al., 1994; Anderson et al., 1997; Anderson & Sullivan, 1993; Hallowell, 1996; Rust & Zahorik, 1993; Storbacka et al., 1994). For example, customers who are satisfied with certain products or services will lead to increased business sales through their repurchase behaviour, word of mouth, and increased volume of usage. These customers are considered as loyal customers (Storbacka et al., 1994). However, according to Bennett and Rundle (2004), the study of relationships between customer satisfaction and customer loyalty is complex, dynamic, and change depending on the choice offering by each firm (Bennett & Rundle-Thiele, 2004; Bolton, 1998; Bolton & Lemon, 1999; Oliver, 1997). Nevertheless, several researchers have suggested that many factors act as moderators on the customer satisfaction-customer loyalty link, such as price fairness perception, switching cost, consistent pricing policy, customer characteristics and a competitive intensity (Bennett & Rundle, 2004; Bolton et al., 2004).

Currently, the advancement of information and technology communication (ICT) facilitates the nature of service industries which develop rapidly by increasing the quality of their services and customer care. Moreover, several value-added services have been increasingly created and developed to satisfy customers' needs and to satisfy the existing customers' desire for the best possible product. Therefore, the impact of value-added services and quality needs to be tested.

Previous studies have addressed the important factors of price perception and price fairness perception towards customer satisfaction and customer loyalty (Bolton et al., 2004; Homburg, Koschate & Hoyer, 2005; Varki & Colgate, 2001). Recently, price fairness perception has been raised as newsworthy in customer's minds and affects subsequent behaviour such as repurchase, word of mouth, increased usage and resistance to switching towards similar products. However, the effect of price fairness perception on pricing packages offered by providers upon customer loyalty has received less attention (Bolton et al., 2004; Xia, Monroe & Cox, 2004; Ranaweera & Neely, 2003). There are no strong empirical studies that can be used to support arguments regarding this aspect of loyalty intention. Hence, by looking into the nature of the telecommunication industry, which is volatile and rapidly evolving, it is worth exploring the influence of customer perception of price fairness based on pricing strategies and test if it acts as a moderator on customer satisfaction and loyalty intention (Bolton et al., 2004; Ranaweera & Neely, 2003).

Moreover, switching cost in the service context is the most powerful factor in enhancing customer-service provider relationships, regardless of their satisfaction with the service provider (Bansal, Irving & Taylor, 2004; Burnham, Frels & Mahajan, 2003; Fornell, 1992; Jones et al., 2000). However, as the results from previous studies show, the effect of switching cost as a moderator on the satisfaction–loyalty link in the service context has not been thoroughly analyzed at this point in time (Aydin et al., 2005; Lee et al., 2001; Jones et al., 2007). Therefore, it is necessary to look more acutely at the consumer's view, and test if it acts as a moderator on customer satisfaction and loyalty intention (Aydin et al., 2005; Lee et al., 2001; Jones et al., 2007).

Recent changes in the business environment in Thailand have led to a transition of business structure, especially in the mobile phone service industry. The new rule of the Thai government that emphasizes liberalization of structure has extensively expanded the telecommunication market's competition and market share among the domestic and foreign companies. Hence, service quality has developed rapidly and a great variety of value-added services in mobile phone service applications has sprung up. Moreover, various price plans, which are related to service options, have been incorporated to serve and sustain the customer's need. They have been perceived as switching cost in the customer's mind. Thus, protecting the existing customers through the development of long-term relationships between service providers and their customers with an emphasis on enhancement of service quality and satisfaction is critical (Reichheld, 1996; Woodruff, 1997). Nevertheless, very limited researches pertaining to prepaid mobile phone service industry have been studied.

Therefore, it is worth exploring the impact of various dimensions of service quality which have developed based on Gronroos' Model (Gronroos, 1984). Specifically, it is worth examining such features as technical quality (core service and value-added services), and functional quality (customer care service), and their effect upon customer loyalty through customer satisfaction in prepaid mobile phone service industry in thailand. The influence of the customer's perception of price fairness and switching cost towards the service provider in the mobile phone service industry as moderator will also be included in the integrated framework of this study.

1.3 Research Objectives

Based on the background and research problem, thus, the objectives are as follows:

1. To investigate the influence of various dimensions of service quality (core service, value-added services and customer care service) on loyalty intention through customer satisfaction in prepaid mobile phone service in Thailand.
2. To investigate the moderating effect of price fairness perception and switching costs on customer satisfaction and loyalty intention.

1.4 Research Questions

This study attempts to answer the following research questions:

1. Do various dimensions of service quality (core service, value-added services and customer care service) have a positive relationship with loyalty intention?
2. Do various dimensions of service quality (core service, value-added services and customer care service) have a positive relationship with customer satisfaction?

3. Does customer satisfaction mediate the relationship between various dimensions of service quality (core service, value-added services and customer care service) and loyalty intention?
4. Does price fairness perception moderate the relationship between customer satisfaction and loyalty intention?
5. Do switching costs (positive and negative) moderate the relationship between customer satisfaction and loyalty intention?

1.5 Significance of Study

This study is specifically significant for theoretical and practical contribution for researchers and managers for the following reasons:

1.5.1 Theoretical Contributions

1. This study provides enrichment to the existing literature regarding the service quality model by conceptualizing core service and value-added services as technical quality and customer care service as functional quality based on Gronroos' Model (Gronroos, 1984) since the specific measurement to measure service quality in new industries there has increasingly been developed.
2. This study adds to the existing literature on the moderating effect on the relationship between customer satisfaction and loyalty intention. The two variables have been investigated regarding their effects, price fairness perception and switching cost, in one framework. This represents an advancement on the previous studies that focused on perceived equity (price fairness and switching cost) only from the specific-transaction point of view.

3. This study adds to the existing literature on switching cost by conceptualizing switching cost based on the customers' view into positive and negative switching cost and investigating its effect as moderator on the relationship between customer satisfaction and loyalty intention.
4. This study provides enrichment to the existing literature on price fairness perception by developing the measurement of price fairness perception at an operational level. This represents advancement on the previous studies as no such research has currently been conducted.
5. This study can add advancement to the social exchange theory that perceived equity in equity theory in terms of price fairness perception and switching cost has impact beyond customer satisfaction to perform long-term relationships in the mobile phone service sector.

1.5.2 Practical Contribution

The results from this study can generated as the Asian perspective particular prepaid mobile phone service industry in Thailand. Moreover, the finding can enhance the understanding of managers of companies in telecommunication and other companies in service industries. In addition, the findings can be used to formulate strategies based on the studied variables, such as increasing the service quality in various areas (core service, value-added services and customer care service), customer satisfaction, price fairness perception, and switching cost in order to sustain loyal customers which in turn improve company profitability.

1.6 Scope of the Study

This study focuses on the mobile phone service industry in Thailand. Respondents in this study are the prepaid mobile phone service users who make their own decisions to continue/discontinue the usage of a particular service provider. The multi stage sampling method is applied in the study design. The self-administered survey is conducted to gather data in the area of Bangkok and eight provinces throughout Thailand.

1.7 Operational Definition of Key terms

The definition of each variable used in the study is described below (Table 1.1).

Table 1.1
The definition of variables used in the study

Variables	Definitions
Loyalty Intention	A long-term relationship where customers have a deep commitment towards a service provider despite situational influences and marketing efforts having the potential to cause switching behaviour (Oliver, 1999). This includes intention to repurchase, positive use of word of mouth (WOM), encouraging others to use the same provider/product and resistance to switching suppliers or products.
Customer Satisfaction	The consumer's overall or cumulative satisfaction using whatever evaluation they choose (including emotion-based evaluations) with all services (including performance and quality) which are made available by the service provider (Johnson & Fornell, 1991; Oliver, 1997).
Service Quality	The customer's perceived judgment resulting from the evaluation process of comparisons between their expectations and service performance to date in two dimensions, technical quality and functional quality, which they received from their current service provider (Gronroos, 1984).
Technical Quality	The quality of the service output (what is delivered) (Gronroos, 1984), comprising of core service and value-added services (Lim et al., 2006).
Core Service	The quality of the main needed output from the service provider (Gronroos, 1984) in terms of core quality (Gerpott et al., 2001; Lim et al., 2006; Kim et al., 2004).
Value-Added Services	Output services (Gronroos, 1984) that focus on additional services in order to fulfill core services or another purpose for customers' needs, typically comprising of several ancillary services (Lim et al., 2006).

Table 1.1 Continued

Variables	Definitions
Functional Quality	The quality of customer care service which is viewed as a supplementary service linked to the overall value of the output service (Gronroos, 1984; Lim et al., 2006).
Price Fairness Perception	The customer's emotional assessment associated with the difference (lack of difference) between the current service provider and competitors regarding price structure based on service plan by comparing the product/service in terms of flexibility, reasonableness and acceptability (Bolton et al., 2004; Roth et al., 2006; Xia et al., 2004).
Switching Cost	The consumer's perceived difficulty in switching to another service provider. There are two types of switching cost, positive switching cost and negative switching cost (Jones et al., 2007).
Positive Switching Cost	The switching cost that provides positive benefits and value (increases positive emotions and repurchase intentions) beyond the core service (Jones et al., 2007).
Negative Switching Cost	The switching cost that includes the negative aspects (e.g., search time, inflexible contract, etc.) a customer would have to endure or incur to switch (Jones et al., 2007).
Subscriber	A mobile phone service user who subscribes to a service provider (network operator) to utilize a mobile phone service (True Corporations Public Company).
Individual user	The users at the individual level who control their decision making for using mobile phone services. They can be the users who subscribe or do not subscribe to the current service provider.
Currently used most	The identification of the network operator or mobile phone service provider that the customer currently uses most commonly.
Prepaid User	The users at the individual level who are using only prepaid mobile phone service.

1.8 Organization of the Study

This thesis consists of five chapters. The first chapter presents the background of the study, problem statement, research objectives and research questions, significance and scope of the study, and definition of key terms.

Chapter 2 will review previous research literature on customer loyalty, variables related to theoretical framework of the present study and relevant theories pertaining to it. The development of hypotheses to be tested in this study will also be presented.

Chapter 3 explains research methodology used in this study to answer the research questions. It includes the research conceptual framework, research hypotheses, research design, unit of analysis, population, sample size, sampling technique, questionnaire, data collection procedures, research instruments and statistical analysis.

Chapter 4 presents the data analysis and findings. It begins with descriptive statistics and a profile of respondents. This is followed by an assessment of goodness of measure, correlation analysis, multiple regression analysis, and hierarchical regression analysis in order to test the research hypotheses.

Chapter 5 presents a discussion and conclusion. The general discussion is modeled on the objectives of the study. It begins with the recapitulation of the study and is followed by a discussion of the findings and both theoretical and practical implications of the study. The limitations of the research and recommendations for future research are presented in this chapter. Finally, the conclusion is provided.

CHAPTER 2

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.0 Introduction

The purpose of this study is to investigate the impact of various dimensions of service quality, customer satisfaction, price fairness perception, switching cost and loyalty intention by using different measurements from previous studies. This chapter reviews relevant literature with respect to the nature of the present study and conceptual background of dependent and independent variables chosen in this present study. The underlying theories used in previous empirical studies, pertaining to the development of the theoretical framework used in this study, will also be discussed. Finally, the process of developing the hypotheses which show the relationships between the studied variables in this study is discussed.

2.1 Telecommunication Industry in Thailand

The telecommunications sector in Thailand has evolved from a monopolistic sector in the past to an open share ownership sector. The two main state-owned enterprises responsible for providing telecommunications services comprised of Telephone Organization of Thailand (TOT) and Communication Authority of Thailand (CAT). They operate the country's telegraph, telex, and international telephone service. The Thailand government has introduced a Build-Transfer-Operate system (BTO) in the early 1990s to entice foreign investments. All private enterprises under this system arrangement have a main responsibility to provide telecommunication services for fixed line, mobile lines, and a range of value-added services for its fixed line subscribers such as a public phone service, Personal Communication Telephone service (PCT), data network services, and internet and multimedia services.

However, they are not allowed to own physical network assets. Instead, they are granted the rights to use these network systems to provide services and share revenue returns from their operation to the state-owned telecommunication companies.

As a result of the BTO in the Thai telecommunication industry, after the liberalization process, the fixed telephone line users in Thailand rose rapidly from 2.4 million lines to 4.1 million lines. In addition, initially two mobile cellular operators were licensed in the early 1990s under the BTO structured lease arrangements: Advance Infor Service Public Company Limited (AIS with Singapore Telecom) formed a cooperative alliance with TOT in 1990. Total Access Telecommunication Public Company Limited (DTAC renamed from TAC with Telenor) linked with CAT in 1991. In 1997, Digital Phone Company Limited (DPC), a digital GSM 1800 network provider came under an arrangement with CAT. This contract was for 16 years and will end in 2013. Originally, the company only paid 20% in excise tax, but this increased to 25 % in 2005. TA Orange (now True Move) is a GSM 1800 cellular operator under a concession granted by CAT since October 2001. Hutchison CAT Wireless Multimedia Company Limited established a joint-venture with CAT Telecom and Hutchison Hong Kong to operate CDMA mobile phones in Thailand with CAT. Thai Mobile is a joint venture between The Telephone Organization of Thailand; it became functional on July 30, 2002, and is currently known as the TOT. The Communications Authority of Thailand, which was corporatized on August 14, 2003, is currently known as the CAT.

Table 2.1
Fixed Telephone Line and Mobile Telephone Line Uses: 1990/1995/2001-2002

	1990	**1995**	**2000**	**2001**	**2002**
Fixed Telephone Line	1,325,000	3,482,000	5,591,000	6,042,000	6,500,000
Mobile Phone Line	63,000	1,298,000	3,056,000	7,563,000	17,454,000

Source: TMCnet, C. (2005)

As mentioned previously, in the early 1990s, the communication sector was one of the fastest growing industries in Thailand. Table 2.1 indicates that from 1990 to 1995, Thailand was half-way through a robust growth era of telecommunication services. For instance, fixed telephone line users increased by 150% from 1,325,000 to 3,482,000, while mobile phone line users increased by 20 times, or 2,000%, during the five year period. The number of mobile phone users increased from 63,000 users in 1990 to more than 17 million users in 2002.

The advancement of the mobile phone services has shaped the lifestyles and trends of communication for Thai people of all age groups. Similarly, the advancements in various technologies have also shaped the way for people to run their businesses, thereby assisting the strong economic development of Thailand. The growth of mobile phone users has reached a level where most people are expected to own a mobile phone. The size of mobile phones has become more convenient, while their prices have become more affordable to the ordinary people, making them more accessible to almost everyone. For example, people from all social groups, from daily-earning labourers upwards can afford a mobile phone.

As a result, the mobile phone industry has become the fastest growing and most competitive industry in the country. Currently, the mobile phone service market consists of six operators, with three of them constituting the major private operators: Advance Info Service (AIS) is the leading company in the mobile phone arena; Total

Access Communication Public Company Limited (DTAC), as the second mobile operator; True Corporation Public (True), being the third largest mobile phone operator. Following these are Digital Phone Company Limited (DPC); Hutchison CAT Wireless Multimedia (Hutch), and the last operator being Thai Mobile Company Limited.

What was the major reason that caused the mobile phone market in Thailand to develop so rapidly in recent years? In fact, it was the introduction of prepaid services by the two largest service providers, AIS and DTAC. Both had introduced pay-as-you-go packages in mid 1999 - AIS under the name One-2-call; and DTAC using the brand Dpromt. True, which was at that time called Orange, launched prepaid service in 2001, under the name Orange.

Thailand as a member of the World Trade Organization (WTO) was committed to liberalize the telecommunications business by 2006. Thailand joined WTO since the WTO’s Negotiating Group on Basic Telecommunications in February 1996 introduced the concept of the WTO Basic Telecommunications Agreement of 1997, which committed 72 countries to open their basic telecommunications service sectors to competitive entry and increased foreign investments in the sector by 2006. The requirement was, the country had to open up their four basic telecommunications services: fixed line telex, telegraph and facsimile, mobile phone, international telephone, leased line, and Internet services.

The principle behind the Liberalization of the industry was to create a level playing field and a fairer environment for telecommunications operators, thus, increasing the capabilities of most businesses as well as the benefits for all customers. The overall economy becomes more efficient as it can produce more products from the same amount of telecommunication services, which are considered as intermediate input. Thai economy is currently operating below its potential with significant over-capacity in many manufacturing and service sectors along with a relatively high rate of employment. Major beneficiaries from the reformed telecommunications services are banking and financial services, hotels, education, printing, retail and wholesale trades, and entertainment sectors. All of these organizations are now relying heavily on telecommunication services. Therefore, the Thai government expects that the liberalization of the Thai Telecommunication business will promote effective competition that brings high levels of benefit and efficiency to the national economy.

The government has indicated its determination to improve and develop the telecommunications business in Thailand and to prepare the way for the liberalization of the Thai telecommunications market. Schemes/options have been introduced and set in motion, including a privatization plan of the state-owned telecommunications operators. The process of liberalization has required some activities to be changed, under the WTO requirement. The replacement of BTO with independent licensed operators is required, as well as privatization of the state owned operators. This leads to the regulatory reform that supports the revision of the telecommunications market structure from that of a monopolistic or oligopolistic structure to a perfectly competitive structure.

The government realizes that the market structure of the telecommunication sector needs to be adjusted. TOT and CAT cannot continue to hold their regulatory functions (as concession issuers). They will have to become private operators in the market soon after the process of corporatization and privatization has been accomplished. The TOT was transformed into TOT Corporation Public Company Limited on July 30, 2002, and CAT was split into two companies named CAT Telecommunication Company Limited and Thailand Post Company Limited on

August 14, 2003. Furthermore, both companies were granted licenses from the National Telecommunication Commission (NTC) on August 4, 2005.

According to Thailand's constitution, a specific independent authority, is required as part of liberalization process of the telecommunications industry to be an effective member of WTO; and this is the NTC. NTC was successfully selected in August 2004 with the purpose of creating fair and free competition in the telecommunications market. The organization's main responsibility is to establish rules and regulations to govern and regulate an increasingly competitive market. This includes rules on qualifications of the operators, licensing requirement standards, technical specifications, operating conditions, interconnection principles and processes, tariff structures and service fees, price regulation, competition policy and universal service, operating conditions, and consumer rights. The NTC is currently investigating the recent pricing strategies of the biggest market player. It was publicised that it would announce the introduction of an interconnection regime in early 2007 which was to encourage more rational market competition.

2.2 Market Situation of Mobile Phone Service Industry in Thailand

The telecommunication industry in Thailand, in particular, the mobile phone service sector is facing competitive switching behaviour among consumers, due to the variability of communication channels themselves such as postpaid and prepaid services. Presently, the mobile phone service industry in Thailand has been one of the fastest growing businesses compared with other industries such as the manufacturing and the automotive industries. For example, Figure 2.1 shows that the number of subscribers of mobile phone service had increased over the past six years from 2001 (7.6 millions) to 2006 (39 millions).

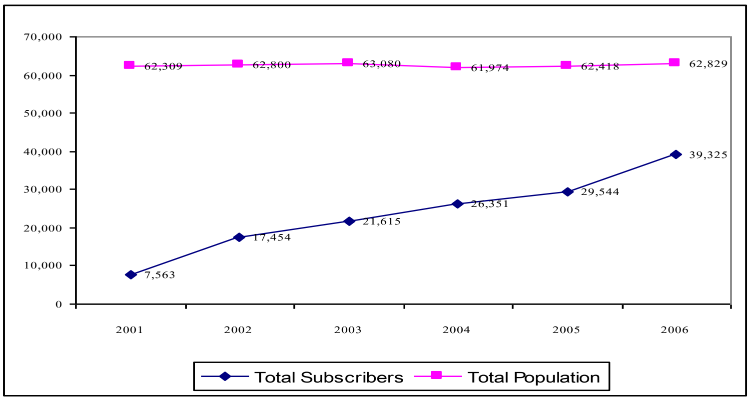


Figure 2.1 Total Number of Mobile Phone Subscribers and Total Population in Thailand 2001-2006

Note:

1. The total number of mobile phone users who subscribe to their current network operator.
2. The total number of the people who live and have a register at the house listing with government office.

Source*:* Adapted from

1. Business Research Department Krung Thai Bank (2007)
2. National Statistical office of Thailand (2006a)

The ratio between the total mobile phone subscribers and the total population in Thailand in terms of the Country Mobile-Phone Penetration Rate in 2001-2006 rapidly increased as shown in Figure 2.2.

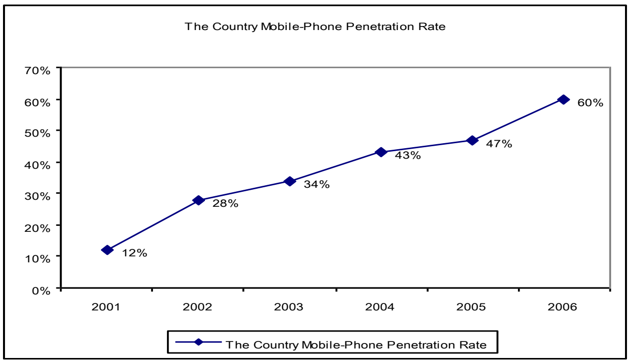


Figure 2.2 The Country Mobile-Phone Penetration Rate from 2001-2006

Note: The Country Mobile-Phone Penetration Rate is the ratio between the total of the total of populations and the Mobile phone subscriber in Thailand at the end of the year in 2001-2006

Source: Adapted from AIS, DTAC, TRUE Company Website

According to a report by the TMCnet (2007), the country's mobile-phone penetration rate was estimated to reach 75% by the end of 2007, with an additional 10 million new users (TMCnet, 2007). This indicates the real increased demand among consumers.

By 2006, the Thai government had instituted a policy that all mobile phone users must register their phone numbers. As a result of the policy, the actual mobile phone users were recorded at only 39.33 million, while the total number of mobile phones sold was 52.61 million at the end of 2006 (TMCnet, 2007). This shows that the average of mobile phone numbers of those current customers is 1.33 numbers per user. The percentage of users who possess 2 mobile numbers was estimated to be 13.3% at the end of 2006 and was expected to reach 30-40% by the end of 2007 (Thana, 2007). Moreover, Hutchison Telecommunication International Limited (2007) reported that the churn rate in Thailand had decreased from 8.2% to 6.9% at the end of the third quarter 2007 (Table 2.2).

Table 2.2
Churn Rate of Mobile Phone Services in Hong Kong and Thailand

Churn Rate	**Q3 2007**			**Q2 2007**			**Q1 2007**		
	30 September 2007			**30 June 2007**			**31 March 2007**		
Country	**Blended**	**Postpaid**	**Prepaid**	**Blended**	**Postpaid**	**Prepaid**	**Blended**	**Postpaid**	**Prepaid**
Hong Kong	3.9 %	1.8 %	8.2 %	3.7 %	1.7 %	7.7 %	4.3 %	1.7 %	9.2 %
Thailand	5.5 %	3.4 %	6.9 %	6.5 %	3.9 %	8.2 %	6.6 %	4.2 %	8.2 %

Source: Hutchison (2007)

These observations are shown in Figure 2.3 and Figure 2.4. The Average Revenue per Unit (ARPU) gained by the three biggest companies of Thai Mobile phone operators, namely AIS, Dtac, and True fluctuated slightly for both "postpaid" and "prepaid" from 2004 - 2006. The total subscribers to the prepaid system was growing more strongly than postpaid in the three biggest companies as indicated in Figure 2.5.

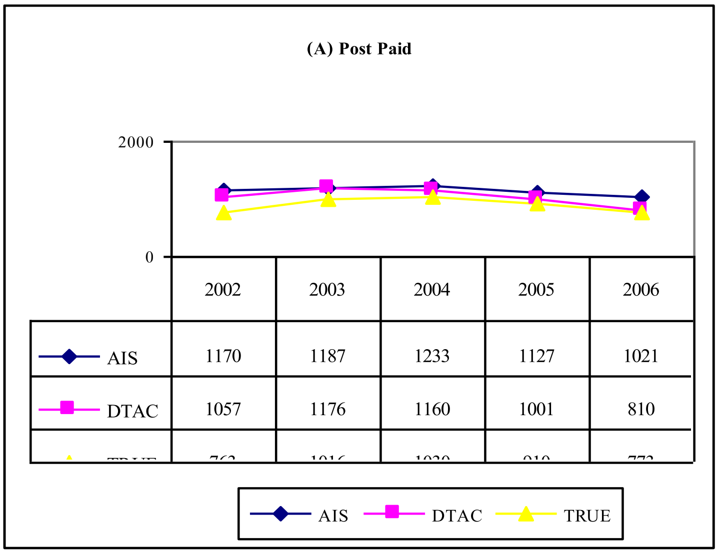


Figure 2.3 ARPU of the Three Biggest Companies of Thai Mobile Phone Operators by the Postpaid from 2002-2006 (Thousand: Baht)

Note: ARPU is calculated using net revenues in the period/average sub-base.

Source: Adapted from AIS, DTAC, TRUE Company Website

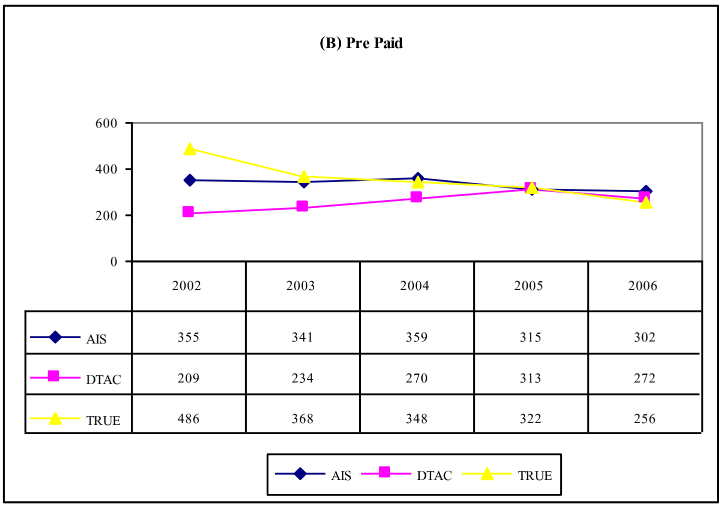
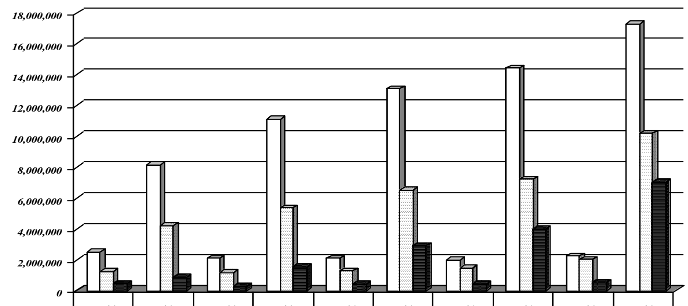


Figure 2.4 ARPU of the Three Biggest Companies of Thai Mobile Phone by the Prepaid from 2002-2006 (Thousand: Baht).

Note: ARPU is calculated using net revenues in the period/average sub-base.

Source: Adapted from AIS, DTAC, TRUE Company Website.



	2002		2003		2004		2005		2006	
	Post paid	Pre paid	Post paid	Pre paid	Post paid	Pre paid	Post paid	Pre paid	Post paid	Pre paid
AIS	2,526,300	8,136,200	2,115,400	11,123,800	2,100,300	13,063,700	1,999,660	14,409,165	2,242,400	17,279,100
DTAC	1,250,226	4,204,336	1,167,543	5,382,953	1,276,538	6,509,627	1,465,083	7,211,857	2,036,102	10,189,396
TRUE	459,171	877,057	285,255	1,539,735	452,565	2,927,818	449,173	4,009,470	546,453	7,031,289

Figure 2.5 Total Subscribers of the Three Biggest Companies of Thai Mobile Phone Operators by the Postpaid and Prepaid from 2001-2006.
Source: Adapted from AIS, DTAC, TRUE Company Website.

Another interesting observation is that the biggest company (Advances Infor Service, AIS) was experiencing a decrease in its market share for both prepaid and postpaid users even though it has the highest network coverage, best sound quality, and other favoured services (Figure 2.6 and Figure 2.7).

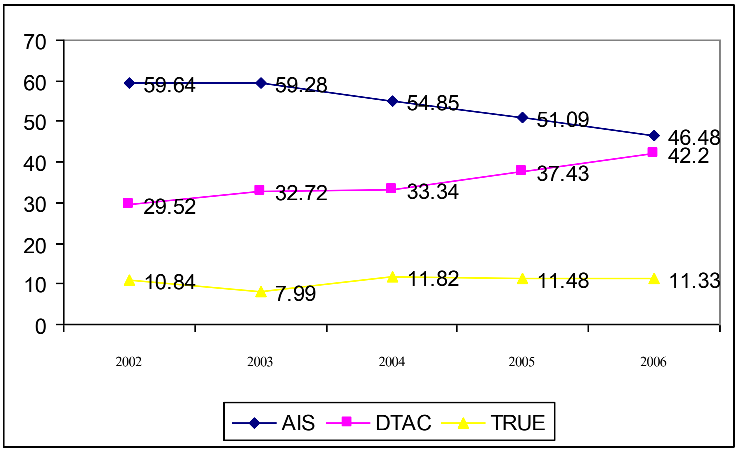


Figure 2.6 Market Share of the Three Biggest Companies of Thai Mobile Phone Operators by the Postpaid from 2001-2006
Source: Adapted from AIS, DTAC, TRUE Company Website.

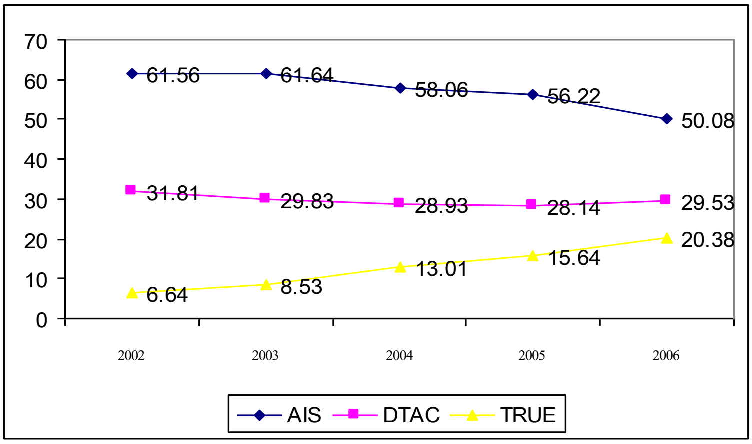


Figure 2.7 Market Share of the Three Biggest Companies of Thai Mobile Phone Operators by the Prepaid from 2001-2006.
Source: Adapted from AIS, DTAC, TRUE Company Website.

Beside the competition among the local companies, there is also an increasing number of competitors from foreign telecommunication network companies in Thailand. For instance, in 2006 the liberalization practices policy of the Thai government allowed many foreign telecommunication companies to venture into Thai network companies. These companies with extensive capital investment funding and high technology have teamed up with smaller local companies to further create the "pricing-war" among the network companies in Thailand. As a result of this situation, customers have more choices to select from the mobile phone subscriptions which give greater price flexibility, better services, more network packages, more features, and wider coverage.

These factors have become the driving forces in telecommunication service industry, in particular the mobile phone network companies which have gone through maturity stage and really require restructuring of their market orientation by improving their service quality. Moreover, these factors have also forced competing firms to increase their creation new services (value-added service) such as SMS (Short Message Service), MMS (Multimedia Message Service), GPRS (Generic Packet Radio Service of Mobile Internet), Blue tooth and Infrared, Entertainment services such as, playing online games, listening to music from the Internet and downloading ring tones, Information services such as Sport Information, Business Information and General Information, and so forth. In addition, firms also have to provide customer care service. A variety of pricing plans based on calling time and rate in every 15 days are also provided for customers as an alternative for firms to maintain the existing customers as long as possible. All these strategies have been developed in order to enhance customer satisfaction and switching cost that can create loyalty intention towards the service provider, which in turn cause an increase in their market share to the fullest.

In 2008, Thai telecommunication companies had a 15% growth in the telecommunication subscribers over the year 2007 and boasted a healthy 94% market penetration. This is considered high market penetration though varies from region to region within Thailand. For example, in Bangkok and other major cities, the market penetration was as high as 100-120% whereas in rural areas there was still an area of growth. This rise in market penetration and widening of subscriber base was achieved through target marketing approaches such as customer’s need oriented pricing plans that suit their calling patterns. Such marketing strategies allowed subscribers to have cheaper subscription rates during fixed hours of the day as defined by the individual companies. However this kind of incentives provided by the telecommunication companies compelled the subscribers to utilize the benefits of such plans to the maximum according to their needs and requirements. Thus, customers started subscribing to prepaid plans from more than one telecommunication companies. This enabled them to have the freedom and choice to utilise the benefits provided by different companies according to the customers’ own needs. This customer behaviours has been identified as multi SIM phenomenon and