

**A Three-Dimensional Customer Commitment Model: Its
Impact on Relational Outcomes**

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Abstract

Customer's ever increasing bargaining power makes it particularly important that practitioners and researchers more thoroughly understand the complex nature of customer commitment. Not surprisingly, however, although the construct of commitment has emerged as one of the key constructs in relationship marketing and has been widely studied in literature, there has been very little agreement on the conceptualisation of the construct.

Building upon relationship marketing and organisational behaviour literature, the aim of this research is to extend our understanding of the nature of customer commitment by developing a three-dimensional customer commitment model relaying on commitment theory from the organisational behaviour literature; affective desire-based (AC), calculative cost-based (CC), and normative obligation-based (NC). Relationships among the commitment dimensions and relationships with a number of loyalty relational outcomes, namely, intention to stay (ITS), word of mouth (WOM), and willingness to pay (WTP) were investigated in this study. Using survey questionnaire distributed among customers of cell phone services (N=525), the data was analysed by structural equation modeling (SEM) and then additional analysis was employed to further demystify the complexity of the commitment concept.

The results suggest that AC is the dominant source that generates customer loyalty, in line with the state of literature. Both cost-based and surprisingly obligation-based have shown detrimental effects on maintaining and developing the customer-service provider relationship. Additional analysis with various scenarios was implemented using mean split as cut score for high/low commitment dimensions. The findings suggest NC turns to have important positive role on relational outcomes when both AC and CC are below the mean split. When both AC and CC are high NC negatively affect at least ITS but at the same time make a clear positive effect on WTP. The findings can be instructional for identifying how firms can bend various marketing sources to secure more loyal customers to the service provider.

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Dedication

I would like to dedicate this piece of work to a number of people who contributed to it either in a direct or indirect way.

This work is dedicated to the University of Manchester professional body, namely members of staff and research students, their hard work and practical approach in many instances impressed me. Also, I dedicate this work to my family and to my father in particular. His support and direction persist that I make every attempts to finish my studies to the last limit.

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ABBREVIATIONS

Affective Commitment (AC)

Calculative Commitment (CC)

Normative Commitment (NC)

Positive Word of Mouth (PWOM)

Intention to Stay (ITS)

Willingness to Pay (WTP)

1. Research Introduction

1.1. Introduction

In a dynamic and competitive business environment, the trend towards more diverse societies and the shift from mass-production into differentiation and/or customisation increased the need for greater understanding of customers' idiosyncratic characteristics, their differential attitudes and patronage behaviours. Technology has brought in new marketing opportunities, and companies become more able to acquire new capabilities to track customer information, using it to understand customer needs and wants with more effective and efficient abilities. Databases, the Internet, decision support systems, and eventually integrated customer-centric solutions (CRM) have all made dramatic contributions to developing business models and offering marketing applications, towards achieving sustainable competitive advantage that is difficult to duplicate by other competitors (Porter 1998; Turban, McLean and Wetherbe 2002).

The emerging role of technology and in particular the Internet, and the facilities provided to access information have made customer bargaining power stronger than ever before. The information era has given customers the opportunity to become more increasingly knowledgeable about products/services and aware of other competitive offers from alternative companies in the marketplace. Technology has become a source of pressure to companies, which gives the customer access to a wide range of alternatives, and forces companies to intensify their customer retention efforts. The wide range of promotions based on technologically-advanced solutions facilitates increasing the customer knowledge-base toward what can be offered to them by companies in the marketplace. Customers become

more knowledgeable and experienced with time and more sensitive to price, eventually becoming better negotiators (Butscher 2002; Reinartz and Kumar 2002).

On the side of the company, with the facilities offered by technology and in particular the constant development and recruitment of databases and information systems, companies have become able to store information on customers allowing them to tailor more effective and efficient offers, relying on better customisations that take into consideration customers' idiosyncratic characteristics, allowing companies to continue to strengthen the relationship with the customer, and to strengthen their position in comparison to other competitors in the marketplace. According to Grant (1998) in the analysis of buyer-supplier relationship bargaining power, the influence of the bargaining power of buyers relative to that of sellers relies on how well the informed buyers are about the suppliers' products/services and their prices and costs, and that the emerging social networks in terms of momentum and complexity and the role of technology and in particular the Internet in informing and connecting parties have made customers' bargaining power stronger than ever before.

The purpose of this chapter is to introduce the reader to the research background and why it is important to be studied for theory development and marketplace. The importance of the study is presented by explaining why the research is studied in this form and not another. The formulation of the research problem, questions, objectives, and an overview of the thesis including a summary of main sections are presented. The overview explains the basis of developing the conceptual framework based on prior research in the area of relationship marketing and organisational behaviour. Next, a brief summary of the research method and

data collection are made followed by a description of the research design, data analysis process, potential contributions and directions for further research.

1.2. Research Background

One of the most important business issues is how to build, maintain, and develop profitable relationships with customers in a dynamic, competitive, and diverse business environment. Customers considered to be heavy users may not be influenced with intensive marketing efforts such as loyalty programmes, while other low or moderate users may respond better and become more loyal to the firm. This might be due to the dynamic and changing nature of the relationships and the fact that the diverse responses from customers suggest a need to consider idiosyncratic customer characteristics (Liu 2007).

Recent research in marketing has narrowed the focus on nurturing the relationship with customers, as managing relationships with customers will not only reduce costs by allowing, say, a better allocation of resources, but also affecting the important issue of customers' predisposition to stay and extend their investment, improving the overall marketing performance and increasing the value the firms' earn. Firms have significantly developed customer relationship management (CRM) systems that attempt to enhance the effectiveness of managing customers' information, and use information to understand customer behaviours, utilising this to gain maximum value (Peppers and Rogers 1999; Xu, Yen, and Chou 2002).

Many studies have tried to shed light on customer relationship management practices and their implementations (e.g., Rigby, Ledingham 2004; Rigby, Reichheld, and Schefter 2002; Winter 2001), attempting to investigate cases and giving best practices to the marketplace, measuring economic feasibility and usefulness to firms from a long-term strategic perspective (e.g., Cao and Gruca 2005; Ryals 2005; Reinartz, Krafft, and Hoyer 2004; Thomas and Sullivan 2005).

Customers are critical to the survival of a firm, as they are the main source of the revenue and profit. Many companies have invested millions in building customer-based strategies in marketing, implementing a customer approach that focuses on customer value or customer profitability, and emphasising that customers are assets that provide long-term return on investment. Moreover, some companies have quantified the value of the customers whereby many attempts have been made to calculate the financial visibility for acquiring and retaining customers, giving more details on the investment a firm makes in looking after its customers and the consequences regarding their financial return.

Many attempts have been made to calculate long-term customer profitability, specifying the value of the customer to the firm. This was made by calculating financial metrics that were designed to measure the long-term value of the customers, assessing the long-term value of all current and future profits generated from a customer over the life of his/her business with a firm (Doyle 2000; Gupta and Lehmann 2005). However, although there have been many customer-focused marketing strategies quantifying individual customer values in an attempt

to improve their marketing efforts, companies overlook the value needed from the customer's perspective (Pepper and Roger 2005).

Since not all customers want the same working relationship, and since they increasingly receive various offers, the resulting rapport, nonetheless, is neither linear nor simple. Firms need to pursue advanced multiple relationship marketing tactics (e.g., transactional and relational marketing simultaneously) to achieve their aims, taking into account views of fulfilling customer needs and wants from the customer perspective.

Given the fact that customers have become more knowledgeable, more powerful and less content, gaining customer loyalty becomes more complex to achieve and takes more time to grow and nurture than most management teams have to give. The tool to enhance customer loyalty is expected to continue to evolve as a customer's expectation of what the company should offer to deserve their loyalty will continue to change (Keiningham et al. 2005). Having loyal customers becomes increasingly demanding in the dynamic and competitive business environment. Loyal customers can result in many direct and indirect benefits such as spending more; spreading positive word-of mouth which attracts other customers, and being more willing to pay a higher price, generating a higher value on investment than any other customer.

It is believed that customer loyalty is more than just a programme or a certain activity. It is a business strategy that seeks to build stronger and more durable relationships with customers which can be promoted through enhancing and consolidating a number of variables such as

customer satisfaction and/or increasing switching costs to make customers stay (Duffy 1998; Lam et al. 2004). The concept of customer loyalty can be defined and conceptualised from different perspectives and with a wide variety of classifications. Dick and Basu (1994, p.100) also argued that loyalty is a complex concept, which has multiple facets, and defined as the relationship between “the relative attitude toward an entity (brand/service/store/vendor) and patronage behaviour”. This study considered customer loyalty as the relative attitude toward an entity which disseminates three relational outcomes; willingness to pay more (WTP), positive word-of-mouth (PWOM), and intention to stay (ITS).

In relationship marketing literature, loyalty has often been expressed in two distinct forms, the attitudinal loyalty and the behavioural. Behavioural loyalty reflects the performed customers’ actual behaviour/action. Attitudinal loyalty, on the other hand, is the consumer’s intentions to take action measuring attitudinal predispositions in a form of self-report. Both approaches were used extensively in the literature and have shown substance understanding to the customer loyalty relationship marketing concept. According to Seiders and his colleagues the behavioural loyalty, however, is more accurate and robust measure in evaluating the effectiveness of firm’s marketing strategy. Consequently, we acknowledge that the literature largely failed to link between attitudinal and behavioural loyalty and that more research is needed to examine this particular link. This is due to a weaker or rather less significant explanatory power of attitudinal loyalty compared to more robust measures of behavioural loyalty (e.g., Reinartz and Kumar 2003, Vogel, Evanschitzky, and Ramaseshan 2008; Verhoef 2004).

As offers become more customised, it is argued that creating bonds should strive to a more thorough understanding of customer predisposition by combining structure, emotion, and norms which makes it far more difficult for customers to switch when other opportunities arise. This research considers the concept of commitment as a major concept to be studied here, which shed lights on customer predisposition towards the relational outcomes. The concept of customer commitment has been addressed here as a multidimensional concept that sheds light on various managerial and theoretical contributions. Many studies in relationship marketing have addressed commitment as a unidimensional concept, others as two-dimensional, and there has been very limited research addressing commitment as three-dimensional concept. In this research we extend the examination of customer commitment to three types of customers' commitment; desire-based (*affective*), cost-based (*calculative*), or obligation-based (*normative*), which are presumed to have differential impacts on customer loyalty to the firm.

In sum, the emergence of high-technology, including virtual business models and the increased sophistication of contemporary life have both transferred businesses into wider marketplaces whereby a customer-centric approach has become a corner stone on which to build innovative ways of business thinking and marketing activities. From this point on, the main discussion was narrowed on addressing customer-firm relationship phenomena and how it should be better understood and employed, investigating customer commitment-loyalty relationships.

1.3. Research Problem

The dynamic and competitive business environment has urged companies to pay considerable emphasis on building close ties with their customers and nurturing long-term relationships. With high competitions, customers become more able to switch to other competitors. Although many companies implemented marketing programmes to retain customers and extend the relationships with them, some of these marketing programmes are cost-based, which basically rely on financial incentives and/or financial constrains. These activities have in some instances shown effectiveness in attracting and keeping customers, however, they also caused detrimental effects on the resulting rapport.

It has been argued that the vast majority of loyalty programmes do not contribute to increasing sales. For instance, in a retail setting, consumers who have a loyalty card do not seem to end up spending much more than those who do not. Many frequent shoppers decide to sign up for the programme because they are rewarded for doing something they would do anyway; it is likely a large percentage of loyalty card customers, perhaps the vast majority, are accumulating points or discounts without having to change their purchasing behaviour from before they were members (Keiningham et al. 2005).

Loyalty programmes are expensive to create and maintain and in many instances can result in disastrous effects on investment. The cost to produce loyalty programmes is high and the probability to cover this cost looks bleak in many circumstances. According to Keiningham et al. (2005), a study by McKinsey & Company found in the telecoms industry that companies realised that they hold many customers in their profiles, only as hostages and not

equal to customer loyalty. Many of the loyalty programmes are indiscriminate in their targeting of customers, creating bonds with the wrong customers which results in the majority of customers not providing an acceptable return on investment.

Despite substantial academic research dedicated to studying customer commitment and its impact on performance measurements such as retention and customer share (Fullerton 2003; Gustafsson, Johnson and Roos 2005; Verhoef 2003), there has been a relative lack of research on the role of commitment dimensions- affective commitment captures the emotional factors, normative commitment captures the sense of obligation, and calculative commitment captures economic consequences- to address the issue of customer loyalty. This study, in reference to undertaken methods and resources, narrowed the focus on the intentions form of loyalty using a broad view of loyalty i.e, word of mouth, intention to stay, and willingness to pay.

Few studies investigated three commitment dimensions in the area of relationship marketing, and that the relational outcomes (as used in this research), to the author's best knowledge, have not been investigated with the three-dimensional customer commitment in a single study. This research attempted to void this gab to contribute to the literature in the relationship marketing area.

1.4. Research Questions

This study poses a number of enquiries in order to shed light on the phenomena under investigation whereby the following research question is proposed:

What makes customers adhere to a relationship with the firm, and how their attitudes and intentional behaviour vary toward the firm's businesses?

1.5. Research Objectives

As the main theme under investigation in this research is the impact of customer commitment on loyalty relational outcomes, the aim is to shed light on a mechanism of customers' commitment toward their company as determinant to customer loyalty. As the processes underlying the antecedents of customer loyalty - the direct and mediated processes by which loyalty translates into its consequences - are not clear enough, this research attempts to fill this void by addressing three dimensions of commitment to influence relational loyalty outcomes, and proposed the following detailed research objectives:

- Validate customer commitment as a major concept in customer-firm relationship that impacts relational outcomes.
- Examine the relationships between affective commitment, calculative commitment, and normative commitment.
- Examine the effects of commitment dimensions on relational outcome (affective, calculative, and normative commitment).

- Compare possible differential impacts of commitment dimensions on relational outcomes (i.e., intention to stay, positive word-of-mouth, and willingness to pay more).

1.6. Thesis Overview

To answer the research questions, this thesis will cover a number of research issues by addressing the following sections. First, literature will be reviewed according to proposed theoretical framework. Second, an overview of the methods used for this research to empirically validate the proposed theoretical framework will be presented and justified. Third, analysis of the collected data will be made. Fourth, discussion of results will be presented. Finally, the conclusion will be drawn by presenting the contribution of this research (i.e. theoretical contribution and managerial implications), potential limitations, and recommendation for further research.

1.6.1. Developing the Conceptual Framework

In the logic of the deductive process, it is essential to explain what is meant to be studied behind each concept, showing how concepts consist of categories where strong relationships should exist between both the concepts and their categories, ultimately describing the phenomena under investigation, and creating its boundaries. Each concept was defined and relationships were depicted between concepts, creating the theoretical foundation of this study based on extensive review of literature in order to contribute to the relevant research area.

The conceptual framework (refer to figure 2.1 next chapter) represents the structure of the causal relationships between the proposed constructs under investigation as the basis of hypotheses development in the literature review section. The proposed model attempted to explain what leads to loyalty in order to uncover relational efforts that eventually lead to profitability. The proposed model aimed to shed light on customer attitudes, explaining customers' predispositions toward the firm through investigating the possible differential impacts of commitment dimensions. The commitment dimensions defined as psychological attachments lead to customer loyalty represented by a number of relational outcomes.

The emphasis was on showing the concepts that were used, how they were developed based on previous relevant empirical and theoretical research to shed light on the boundaries of the phenomena, explaining why it is in this form and not another. For instance, only one negative relationship between calculative commitment and loyalty intentions was expected, as customers who commit to the companies because of economic factors will be less inclined to pay more for such offers in the future, to refer the companies to other people, or to stay when there are other alternatives.

1.6.2. Proposed Research Method

Empirical research was employed to help answer the research questions and consequently test the hypothesis. While providing the rationale for the research techniques gives an indication of research feasibility, elaboration on dealing with challenges was also presented in the research method chapter. The justifications were made based on a number of issues

such as the nature of the study, the allocated time and resources, and the epistemological stance.

1.6.3. Research Philosophical Stance

The ontological stance of the research was based on the argument that the reality is out there, independent from the observer's perception. Accordingly, the epistemological stance followed the positivism approach in which scientific theories are used to support the series of the proposed premises. The focus is to empirically support causal relationships between determined concepts supported by theories and tackled through logical, consistent, and specific arguments (Gill and Johnson 2002). Causal relationships will be tested in a form of falsifying the proposed null hypotheses (Popper 1980).

In line with the literature in the same research area, the deductive research approach (theory driven) was followed. This was clarified here in order to help in justifying the research strategy for which quantitative research method of confirmatory nature suits the case of this research.

1.6.4. Research Strategy

Following quantitative research design, an online survey distributed to customers of cell phone services was employed by asking the participants directly through a self-reported questionnaire. The operationalisation process for the constructs in the proposed model was generated from previous literature in the area of relationship marketing where the measurement definitions were identified and the research instrument was developed.

1.6.5. Data Analysis Plan

Analysis of the collected data was conducted on the basis of quantitative research design. With the availability of a number of techniques, the researcher selected the statistical approach that deemed to be most appropriate to answer the research questions. In line with the stream of literature in the research area, a structural equation modelling approach was employed, and the unit of analysis was the customer. A measurement model was first employed to validate the measurements, followed by a structural model whereby paths were tested simultaneously in order to test the hypotheses, presenting the findings eventually.

1.6.6. Proposed Contribution to Knowledge

This research considers both the theoretical contribution to the area under investigation and the managerial implications. The theoretical contribution was generated from gaps in the literature and concentrated on the following aspects: the effect of commitment dimensions on such relationships with broad intentional measurement (i.e., willingness to pay more, positive word of mouth, and intention to stay), which was addressed all together in a single study. Also, the relationship between commitment dimensions was rarely studied, examining a relatively intact research area in the literature of relationship marketing.

Regarding managerial implications, the research enables practitioners to deal with customers more successfully, resulting in many benefits related to allocation of resources more effectively and efficiently and ultimately developing the most appropriate marketing strategies. This should have the potential to provide marketing managers with insights into

developing loyalty schemes that contribute to effective marketing applications and potentially giving directions for developing decision support models of CRM strategies.

1.7. Summary

In this chapter a number of issues have been overviewed, offering explanation of the paths that will be followed in this thesis. The formulation of a research problem and its importance was presented to both practitioners and academic audiences. The focus of the research was narrowed on finding explanations to customer attitudinal components in which commitment-loyalty links have been the basis of explaining the causal mechanism that contribute to building a successful customer-firm relationship. Then, research questions and objectives were presented.

The conceptual framework was elaborated briefly, as defining constructs and relationships were necessary to create the research boundaries. Furthermore, the research method followed quantitative research strategy within the deductive type of research and positivist epistemological stance were elaborated. Structural equation modelling was selected to analyse data collected through survey questionnaire. Finally, a brief description of the potential theoretical contribution of this research and managerial implications were presented, offering insights into a contribution to the relevant audience and eventually counting as part of a constructive process which contributes to a better knowledge production.

2. Literature Review

2.1. Introduction

In this chapter, literature is critically reviewed in both the areas of relationship marketing and organisational behaviour by examining the latest state of knowledge, attempting to make an original contribution. Gaps in the literature were searched in the area in order to synthesise a research topic that offers a contribution to both theory development and the marketplace. The review focused on conducting evaluation by discussing concepts, comparing relationships and results among many conceptual and empirical studies in various research settings (Saunders, Lewis and Thornhill 2003).

Relevant theories, concepts and arguments were reviewed in selective and critical manners structured in a way corresponding to the research objectives that have been set for this study. The review explained how the research model was developed whereby main concepts in the proposed theoretical model were introduced and then discussed according to empirical and conceptual previous works in the relevant research areas, presenting the hypotheses eventually. The review benefited from studies addressing the broad concept of relationship marketing and the development process of customer-firm relationship that based on an exchange mechanism. The review also benefited from works on commitment theory from the organisational behaviour literature.

2.2. Relationship Marketing Concept

Relationship marketing has been a major concept in marketing trends for many years now, and yet many companies have been trying to comprehend and implement its fundamental ideas. The subject of relationship marketing has been studied constantly and developed widely in the literature of marketing science, demonstrating its importance on directing successful customer-centric marketing strategies (e.g., Gruen, Summers, and Acito 2000; Gummesson 2002; Morgan and Hunt 1994; Peterson 1995; Sheth and Parvatiyar 1995). Relationship marketing was defined by Lovelock and Wright (1999) as activities which aim at developing long-term, cost-effective links between an organisation and its customers based on the principle of mutual benefits for the parties associated in the relationship. From a wider view, Watkins (1999) argued that relationship marketing as a concept in marketing science is about creating and keeping customers, those customers who are profitable for the organisation.

In addition, relationship marketing was defined from a different perspective, Gummesson (2002) put forward that the concept of relationship marketing is marketing activities that are based on interactions within networks of relationships. The definition emphasised relationship marketing as a network of relationships which at least have two parties contacting each other, say, as a supplier and a customer. The relationship is created and maintained through a network of relationships which can grow into enormously complex patterns with the aid of combining state-of-the-art technology and well-developed network relationships.

Gummesson portrayed the dynamic marketplace as networks of relationships within which we interact. Relationships are operated within the spirit of the value of network societies whereby individuals voluntarily enter relationships through associations. Marketing and business become subsets or properties of society from groups of like-minded people, affinity groups. The group members share common interests, and thus the relationships within the marketplace can be developed through networks of relationships within which like-minded individuals share similar ideas and interests. Such activities facilitate improving customer segmentation efforts, however, as society trends move toward individualism, companies still need to project ideas to better understand how to approach customers in more customised ways achieving the one-to-one customisation offer from the customer's perspective.

Oposing the long-term relationship marketing concept is transaction marketing which is a single deal accompanied with customer promiscuity (Berry 1995; Gummesson 2002). A customer may repeatedly use the same supplier because of high switching costs, but without feeling committed to the supplier or wanting to enter a closer relationship. Customers' preference to transactional marketing rather than the long-term might be affected by the degree of competition in the market and availability of other alternatives. Some opinions consider transaction marketing a practical and functional option. However, transactional marketing has no ambition to post customer loyalty and lacks history and, of course, does not yield the sentiments that contribute to the success of the relationship, which accompanies the real work of building a relationship (Gummesson 2002).

On the other hand, the concept of relationship marketing although has been developed from many perspectives, relationship quality is considered to be vital in the formulation process of the customer-firm relationship. For example, Crosby, Evan, and Cowles (1990) and Palmatier, Dant, Grewal, and Evans (2006) argue that the quality of the relationship transactions is a pre-requisite to a successful long-term relationship. Relationship quality is viewed as an assessment of the strength of a relationship capturing different but related aspects of the customer-firm relationship such as trust, confidence, integrity, satisfaction, and high performance (Crosby, Evans, and Cowles 1990; De Wulf, Odekerken-Schroder, and Iacobucci 2001; Palmatier et al 2006). The relationship quality is a broad concept that can be viewed as a higher-order construct (Kumar, Scheer, and Steenkamp 1995), which has been studied extensively in the literature and by large formulates a basis of streams of literature in relationship marketing area.

Relationship marketing is an essential concept in marketing science which is formulated as network of involved parties in the relationship processes based on mutual exchange. It focuses on the quality of the relationship, capturing different but related aspects of a relationship such as trust, confidence, integrity, satisfaction, and high performance that are best developed based on long-term customised integrated processes, following a customer-centric strategy, and by virtue developing better quality relationships between customers and companies.

2.2.1. Relationship Marketing as an Exchange Process

Understanding the mechanisms that drive the customer-firm relationship and how these relationships operate can be considered the platform for marketing activities and in particular for implementing the customer relationship marketing approach. Although within the current marketing and management mode of thinking, much of marketing activity is actually reduced to impersonal relationships through mass promotion and mass distribution. The prime focus of relationship marketing, however, is on the individual, offering them customised offers in a long-term exchange relationship whereby developing an exchange mechanism that generates benefits for both parties is of the utmost importance to the success of the relationship but such implementation of the exchange mechanism is neither linear nor simple (Johnson and Selnes 2004).

Exchange relationship mechanisms illustrate fundamental differences in how value is created; a relationship may be continuous but may be weak or strong and involve intermittent transactions. Within the relationship between the associated parties, conflicts might occur and the relationship may weaken at certain stages and within certain circumstances, however, this does not mean that relationships are broken or ended. They can often be restored or may be maintained because of feelings of the importance of maintaining the relationships and the value it brings. Nevertheless, the fundamental idea to be explained here in the dynamics of the marketplace is the exchange relationship based on the exchange theory. Because relationship marketing focuses on mutual gains and cooperation (Anderson and Narus 1990; Ganesan and Hess 1997), the purpose of an exchange relationship is to connect a customer's needs with a supplier's resources, and offerings through collaboration

are the fundamental property of relationships between suppliers and customers whereby the relationship is increasingly seen as an interaction and a joint value creation (Hakansson, Harrison, and Waluszewski 2004; Johnson and Selnes 2004).

It can be concluded that the relationship marketing concept relies basically on mutual benefits for both parties over a long-term and cost-effective relationship. Although the relationships can be portrayed as operating within networks of relationships in a dynamic and fast-growing marketplace, relationships need to be developed on individual basis taking into consideration the value and the mechanism of the exchange between the associated parties.

2.2.2. Relationship Marketing as Development Process

In relationship marketing literature, Reichheld and Sasser (1990) focused on the temporal factor of the customer-firm relationship and found that companies can boost profits by almost 100% when they retain only 5% more of their customers. The argument of Reichheld and Sasser (1990) in their famous paper 'Zero Defect' focused on the importance of retaining customers in the long-term. The longer the customer stays, the more potential for profitability they become as their purchases increase over time and the variable cost associated with acquiring new customers reduced, regardless to any business pattern customers might be involved with (Reichheld, 1996; Pine, Peppers and Rogers, 1995).

It can be argued, however, that not necessarily all customers who stay long-term are engaged in a profitable relationship. This might be due to a number of factors that are based on the

changing nature of customer-firm relationships, accompanied with high bargaining power and increasing knowledge of the products/services and the availability of a wide range of alternatives that should make customers become better negotiators. Customers might have a sense of resentment because companies charge premium prices after retaining them, which tends to reduce the volumes of transactions and their purchases and weaken the value of the relationship.

It is important here to stress that relationship marketing is a long-term concept that is developed through a number of stages. Dwyer, Schurr, and Oh (1987) envisaged the concept of relationship marketing as a development process that evolves through a number of phases: awareness, exploration, expansion, commitment, and dissolution. The relationship begins with the awareness and then exploration whereby attraction is the main process. Both parties, in the face of resistance of the other parties, may rearrange their mutual distributions of obligations, benefits, and burdens.

In the exploration phase of the relationship, the associated parties may engage in bargaining though there is often some reluctance to do so. However, a perceived willingness to negotiate may be a significant aspect of attraction which is considered as a first step in establishing the relationship. Both parties develop norms of how they deal with each other once they come together and exchange benefits/rewards and build expectations of what the relationship should be. Both parties explore the bargaining power of the other and eventual possibility of building a long-term profitable relationship (Dwyer, Schurr, and Oh 1987).

The continuation and the expansion of a relationship depend on its importance and the sustainability of the value that the relationship brings for the involved parties. Although conflicts might occur throughout different phases of the relationship, the development of the relationship over time is built on collaboration between the customers and suppliers and the satisfaction with the other's role performance and its associated rewards. Both parties become dependant on making the relationship successful and then begin to commit themselves to make it work (Gummesson 2002; Kalaignanam and Varadarajan 2006).

Commitment of both parties in the relationship is the most advanced phase in the exchange relationship, before any possibility of withdrawal or dissolution. In the commitment phase, the associated parties value the relationship and carry on in consistent and durable performance with a common belief in the effectiveness of future exchange. Customers might preclude other primary exchange partners who could provide similar benefits (Dwyer, Schurr, and Oh 1987). This phase of the relationship can be the closest phase to achieving customer loyalty, distinguishing and assessing its relative degrees (Pritchard, Havitz, and Howard 1999).

The goal in relationship marketing is to establish a relationship between the company and customer that is not only built on factors such as good prices, but also on an emotional connection that manifests itself. The benefits for both parties need to be on an emotional level that is complemented by benefits on the financial level and administered by norms, thus the relationship in the general circumstances should consider both emotions and financial return (Butscher 2005). It can be argued that the development process of a business

relationship includes many different phases, and that the most advanced one is the commitment of the parties in the relationship. Many different aspects will be taking shape throughout relationship phases, like sentiments and norms that developed by mutual exchange and should lead to more loyal customers, eventually to successful customer-firm relationship.

2.3. Developing Research Model

Business relationships have been categorised among a number of different business parties. The relationships among business to customer (B2C) (Bendapudi and Berry 1997; Mattila 2001; Verhoef 2004), business to business (B2B) (Dwyer, Schurr, and Oh 1987; Gillilando and Bello 2002; Weitz and Jap 1995) and consumer to consumer (C2C) (Harris and Baron 2004; McGrath and Otnes 1995) have been all investigated widely in the literature through conceptual and empirical studies and in various research settings. This research narrows the focus on B2C types of relationship, as increasing interests have been dedicated to studying relationships between customers and firms in response to a great demand for better business growth, believing that maximising the return on customers will maximise the value the firm's earn (Pepper and Roger 2005).

In this study, the customer-firm relationship has been tackled from the customer's view, addressing the nature of the issue from a psychological perspective. The scope has been narrowed on understanding the psychological nature of customers' response to the firm through the concept of customer commitment. The attempt is to investigate what makes customers adhere to the relationship with the firm and how their attitudes and intentional

behaviour vary toward the firm's businesses, allowing companies to more fully understand how to get a greater share of their patronage and the associated support.

Over the past decades, reviewing research investigating the nature of customer commitment to the firm, attempts have been made to examine and develop the concept of commitment because of its important value it brings to the firm's businesses, enhancing dramatically the relationship bond and eventually posting customer loyalty (Gilliland and Bello 2002). The following section of the literature is organised according to developed conceptual framework relying on prior research in the aforementioned research areas. Literature on commitment theory was reviewed from the area of organisational behaviour in which the conceptualisation of commitment concept was overviewed in critical and comparative approach.

The commitment concept was studied whereby three dimensions of customer commitment (affective, calculative, and normative) were introduced. Each commitment dimension was addressed and relationships among them were studied. Yet, the commitment related impacts on relational outcomes (word-of-mouth, willingness to pay more, and intention to stay) were examined whereby hypotheses were concluded.

2.3.1. Customer Commitment

Customers' ever-increasing bargaining power makes it particularly important that practitioners and researchers consider investigating the nature of customer commitment. Although commitment has been a central concept in the literature of relationship marketing

(Morgan and Hunt 1994; Pritchard, Havitz, and Howard 1999; Peterson 1995; Sheth and Parvatiyar 1995), and recent research has identified commitment as a powerful determinant of loyalty-related outcomes, such as retention, willingness to pay more, and referrals (Brown et al. 2005; Fulerton 2003; Hennig-Thurau, Gwinner, and Gremler 2002; Palmatier et al. 2006; Venetis and Ghauri 2004), there has been little agreement on either the conceptualisation or the measurements of the construct.

Some researchers define commitment as a pledge of continuity between exchange partners based on beliefs in the effectiveness of long-term mutual benefits, and portray it as an advanced phase of the relationship (Dwyer, Schurr, and Oh 1987). Within this context, commitment has often been defined simply as the desire to maintain a relationship (Moorman, Zaltman, and Deshpande 1992; Morgan and Hunt 1994) and viewed as a unidimensional concept (e.g. Garbarino and Johnson 1999; Lacy, Suh, and Morgan 2007; Morgan and Hunt 1994).

In distribution channels, associated parties exert efforts to make significant idiosyncratic investments to adapt to the relationship (Anderson and Weitz 1992; Jap and Ganesan 2000). In their investigation of the trust-commitment link, Morgan and Hunt (1994) found positive effects of commitment on acquiescence and cooperation but a negative effect on propensity to leave. Furthermore, commitment viewed as a mediator in B2C relationships seems to show a strong influence on customer loyalty such as continuity expectancy and word-of-mouth (e.g., Brown et al. 2005; De Wulf and Odekerhen-Schroder 2003; Palmatier et al. 2006).

Other researchers, however, based their works on commitment theory in organisational behaviour literature, regarding commitment as a multidimensional construct and exploring the construct as the customer's psychological attachment (e.g., Bansal, Irving, and Taylor 2004; Jones et al. 2007). Commitment within this school is often defined as "a force that binds individuals to course of actions of relevance to the target of interest" (Meyer and Herscovitch 2001, p.301).

In organisational behaviour literature, attempts have been made to distinguish the theoretical basis of commitment and have taken two distinct directions: *behavioural* and *attitudinal* commitment (e.g., Meyer and Herscovitch 2001; Meyer and Allen 1997). The behavioural approach focuses on the impact of behaviour on changing attitudes, searching for patterns of attitude changes in dealing to remain committed to a decision that has been taken. The attitudinal approach, however, focuses on commitment within a process of conditions, psychological states, and their impact on behaviour relying on the theory of reasoning action (Meyer and Allen 1991; Meyer and Allen 1997). Because the primary aim of this research is to shed light on commitment as the current state of customers' psychological attachment to the firm, the attitudinal approach is deemed more appropriate (Brown et al. 1995; O'Reilly and Chatman 1986).

Although the significance of distinguishing to whom and/or what the customer is committed to has been made (Jones and Taylor 2004), conceptual and theoretical works in relationship marketing suggested that commitment to the overall firm has a wider effect on loyalty than commitment to employees as salespersons (Hansen, Sandvik, and Selnes 2003; Macintosh

and Lockshin 1997). Other studies studied commitment of customers to the brand (Johnson, Herrmann, and Huber 2006) and yet to the service (Bansal, Irving, and Taylor 2004; Jones et al. 2007). In this study we define commitment as the force that binds customers to the services offered by the company. The object domain in this research is narrowed on the service that is offered by the firm to its customers. It is believed here that this should provide more specific and accurate investigation to the nature of the commitment construct.

2.3.2. Three-Dimensional Model of Customer Commitment

Although a significant body of literature on organisational behaviour supports all commitment forms to be related negatively to withdrawal cognitions and turnover behaviour (e.g. Meyer et al. 2002; Meyer and Herscovitch 2001; Powell and Meyer 2004), most studies in relationship marketing address only affective and calculative commitment on relational outcomes (e.g. Fullerton 2003; Gustafsson, Johnson, and Roos 2005; Verhoef, Franses, and Hoekstra 2002). To our knowledge, the only exception of explicitly testing three-dimensional commitment on relational outcomes were that of Gruen, Summers, and Acito (2000) in a B2B insurance context and Bansal, Irving, and Taylor (2004) in a B2C services setting. Table 2.1 provides an overview of academic studies that investigated the effects of multidimensional commitment on relational outcomes in B2C relationships. The rationale for the selection was centred based on the commitment concept being investigated as a major concept in the studies of consumer-firm relationship (i.e., considered commitment to be the most dominant concept in the study). The other reason is that these studies were published in highly recognised academic journals in the field by various sources.

Drawing from theoretical and empirical works on organisational behaviour (e.g., Allen and Meyer 1990; Meyer and Allen 1991; Meyer and Herscovitch 2001), a three-dimensional customer commitment model was proposed, including *affective commitment* (desire-based), *calculative or continuance* (cost-based), and *normative commitment* (obligation-based), as depicted in figure 2.1. In this model, we investigate relations among commitment dimensions and impacts on *customer intentions to stay* (ITS), *Positive word of mouth* (PWOM), and *willingness to pay more* (WTP).

Although each of these dimensions is developed differently and has different antecedents such as trust, subjective norms, and switching costs (Bansal, Irving, and Taylor 2004), given our focus on studying the nature of commitment and impacts on a number of relational outcomes, the antecedents of customer commitment fall outside the boundaries of this research.

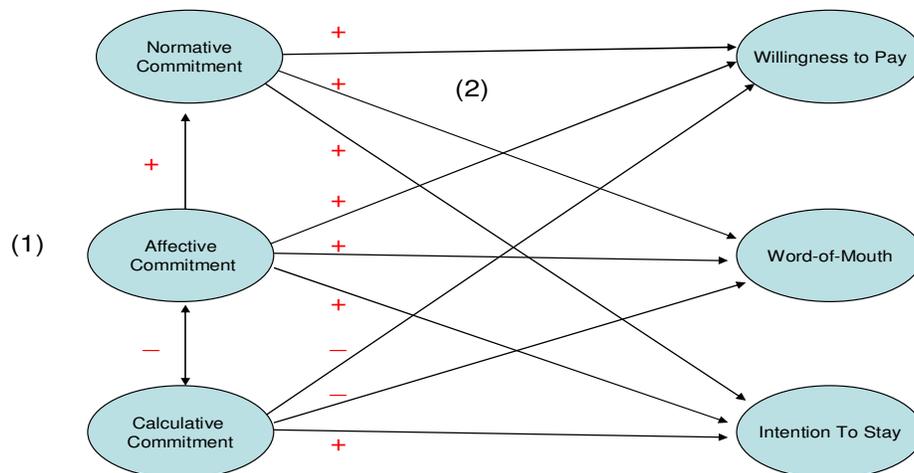


Figure 2.1: Research Model (1) relationship among commitment dimensions (2) individual impacts of each commitment dimension on intention to stay, word of mouth, and willingness to pay

Table 2.1: Overview of Major Studies on Consumer Commitment on Relational Outcomes

Jones, Reynolds, Mothersbaugh, and Beatty (2007)	AC and CC Dimensions Studied	repurchase intentions, negative WOM	banks, cable television, physicians, hairstylists, retail stores	AC positively affects repurchase intentions and decreases negative WOM. Findings increases repurchase intentions and partially increases negative WOM
Bansal, Irving, and Fullerton (2005) (2004)	AC, CC, and AC and CC	switching intentions, advocacy intentions	auto repair banking, retail grocery, and telecommunication	negative effects of AC on switching intentions are partially mediated by AC. Non-habit positive related to AC-CC interaction is not supported. AC in different settings and worse interaction between AC and CC on both dependent variables
Hansen, Sandvik and Selnes (2003)	AC and CC	intention to stay	Banking	AC positively affects intention to stay, while CC-intention to stay link has no significant positive relationship with WOM activity and praise
Walker (2001)	AC and high-sacrifice	WOM Activity, WOM Praise	hair salon, veterinarian	AC has no effect on retention but overlaps with customer satisfaction which has consistent positive effect on retention, CC has consistent positive effect on retention
Gustafsson, Johnson and Roos (2005)	AC and CC	retention Loyalty intentions (include repurchase intentions, WOM, advocacy intention, WTP)	telecommunications cell phone manufacturer	AC is positively related to loyalty intentions, CC has consistent positive effect on retention
Hubber (2006)	AC	intention to stay and referrals, WOM		
Fullerton (2003)	AC and CC	switching intentions, WOM, advocacy intention, WTP	cellular phone service	AC and CC have negative effects on switching intention, AC affects advocacy intention and WTP, CC positively affects AC on loyalty intention, but has no effect on WTP, CC has a positive AC effect. CC is only found
Johnson, Gustafsson, Andreassen, Lervik and Cha Verhoef, Franses and Hoekstra (2001) (2002)	AC and CC	loyalty (include intention to stay and referrals, WOM)	airlines, banks, bus and train, transportation service station insurance company	airlines, gas stations and trains AC positively affects referrals, AC-number of services link is positively related and moderated by relationship
Mattila (2006)	AC, CC (points and value-added benefits)	number of behavioral services loyalty (WOM, purchases, preferred hotel)	hotel company	AC, and CC are positively related to behavioral loyalty but AC has scored
Verhoef (2004)	AC	brand, share of customer retention, customer share	insurance company	a wider role, adding AC to CC AC positively affects both customer retention and customer share Improves behavioral loyalty

2.3.3. Affective Commitment

Affective commitment reflects the emotional attachment to the commitment object (Allen and Meyer 1990). It is the force that binds customers out of desire, customers' liking and positive feelings toward the company (Fullerton 2003; Guren, Summers, and Acito 2000; Hansen, Sandvik, and Selnes 2003). The affective commitment is developed through a number of factors such as increase of customer satisfaction and trust (Bansal, Irving, and Taylor 2004). However, satisfaction was defined and conceptualised in the literature as transactional or cumulative transaction (e.g., Anderson, Fornell, and Lehman 1994; Fornell et al. 1996), the satisfaction which contains only emotional components is the antecedent that contribute to developing affective commitment in this study.

A number of studies addressed the effect of affective commitment on performance measurements (e.g., Johnson et al. 2001; Verhoef 2003; Fullerton 2005). Evidence of positive effects of switching intention (Bansal, Irving and Taylor 2004; Mattila 2006), retention, customer share (Verhoef 2003), acceptance of price increases, and advocacy intention has been found in different industries (e.g., Fullerton 2003; Fullerton 2005). Yet,

Johnson et al. (2001) found positive effects of affective commitment on retention and referrals in different research setting such as airlines, banks, service stations, and train transportation.

It is important here to note that the affective commitment has been measured differently, and this is likely to be the cause of different and/or conflicting findings across several studies. For instance, while Verhoef (2003) studied the effect of affective commitment based on belonging and affiliation, Gustafsson, Johnson, and Roos (2005) studied affective commitment as care, reciprocity, and feelings of trust toward the company. However, even though there has been variance in how affective commitment has been measured in the marketing literature, most empirical works regard affective commitment as psychological attachment from a sense of desire.

Consistent with the literature, thus, this research examines affective commitment as a sense of desire (e.g., Allen and Meyer 1990, Meyer and Allen 1991, Verhoef 2003; Bansal, Irving, and Taylor 2004). Furthermore, Dick and Basu (1994) argued that consumers tend to engage more in loyalty behaviour such as PWOM when they experience notable emotional experiences. In addition, a relatively few other studies also found positive effects of affective commitment on PWOM (e.g. Fullerton 2003; Fullerton 2005; Harrison-Walker 2001) and affective commitment on WTP (Fullerton 2003; Fullerton 2005). It is, therefore, predicted that affective commitment is positively related to relational outcomes (i.e. ITS, PWOM, and WTP). Thus the following hypotheses are proposed:

H1: Affective commitment is positively related to the customer intentions to stay.

H2: Affective commitment is positively related to the customer positive word of mouth.

H3: Affective commitment is positively related to the customer willingness to pay more.

2.3.4. Calculative Commitment

Calculative or continuance commitment is defined as the “perceived cost associated with leaving the organisation” (Meyer et al. 1993, p.539). The customer recognition of the cost is evaluated based on both switching costs and the availability of other alternatives (e.g., Allen and Meyer 1990; Gustafsson, Johnson and Roos 2005; Garbarino and Johnson 1999; Gruen, Summers, and Acito 2000).

The calculative commitment here is studied as attitudinal components which comprise switching cost concepts. Roos (1999) proposed three different kinds of switching determinants: the pushing determinant, the swayer, and the pulling determinant. For instance, the pushing determinants included were price, product mix, range of goods, failure of the system, and location. Moreover, Burnham, Frels, and Mahajan (2003) in their empirical and theoretical work developed a switching cost typology that identifies three types of switching costs: first, procedural switching costs, which primarily involved the loss of time and effort, second, financial switching costs involved the loss of financially quantifiable resources, and third, relational switching costs that involved psychological or emotional discomfort due to the loss of identity and the breaking of bonds.

Relationship marketing literature consistently found that calculative commitment had a negative impact on customer switching intentions (Bansal et al. 2004; Fullerton 2003; Fullerton 2005). For instance, Gustafsson, Johnson, and Roos (2005) found supportive results regarding the positive effects of calculative commitment on retention in the telecommunication sector, providing mobile phone, modem-based and broadband internet services. Furthermore, recent research in relationship marketing called for a further research on the construct of calculative commitment, in particular in industries that include significant switching barriers (e.g., Johnson, Herrmann, and Huber 2006).

Unlike affective commitment, calculative commitment has shown to have a negative effect on customers' willingness to spread PWOM (e.g., Fullerton 2003; Fullerton 2005; Jones et al. 2007). Furthermore, there has been some indication that calculative commitment undermines WTP (Gundlach, Achrol, and Mentzer 1995), and empirical support can be seen for a negative relationship between calculative commitment and WTP (Fullerton 2003; Fullerton 2005). Customers who feel locked in a relationship with the company based on the cost associated with leaving may react against these feelings by referring the company negatively and not be willing to pay more for a higher price. Calculative (cost-based) commitment is the customer attachment on the basis of the degree of perceived costs associated with leaving (Gruen et al. 2000). Previous studies suggest that customers who are attached to a company due to considerations regarding the cost associated with leaving tend to refer to the company negatively and are less willing to pay a higher price for the service provided to them (e.g., Fullerton 2003; Fullerton 2005).

Calculative commitment in this study in particular taps into the psychological state of feelings of being locked in or trapped in a relationship, such as those experienced by customers who signed contracts with a service provider and want to leave but cannot leave because of the imposed financial penalties and/or loss of benefits when moving to another service provider.

Calculative commitment is partially rooted in the side-bets theory, where the customer is bound to a relational partner because of the possibility that extra-relational benefits would be lost in the event of switching (Becker 1960). In addition, the availability of other alternatives in the marketplace and switching cost are also known as determinants of calculative commitment (Bansal et al. 2004; Fullerton 2003; Gundlach et al. 1995). Customers who feel locked in a relationship with a company tend to refer to the company negatively and are less willing to pay a higher price than customers who do not hold the psychological state of feeling locked in a relationship. In sum, the hypotheses were developed based on related theory, previous research, and rational argument. Thus the following hypotheses are proposed:

H4: Calculative commitment is positively related to customer intentions to stay.

H5: Calculative commitment is negatively related to customer positive word of mouth.

H6: Calculative commitment is negatively related to customer willingness to pay more.

2.3.5. Normative Commitment

Normative commitment represents a force that binds customers to the company from a sense of moral obligation (Allen and Meyer 1990; Gruen, Summers, and Acito 2000; Meyer and Herscovitch 2001). The construct of normative commitment, considering the theory of reasoned action, can be as a result of two basic determinants, one as a function of inner belief and personal nature and the other reflecting the influence of external social pressure from colleagues, friends or family (Ajzen and Fishbein 1980).

Subjective norms originating from the influence of the social environment were studied as the driver to normative commitment; individuals feel pressured that they ought to conform to the surrounding social environment, and they act compares their behaviour to that of the social group that they feel belong to (Foxall, Goldsmith, and Brown 1998). It has been recognised as an influential concept to customer loyalty (Dick and Basu 1994), and empirical evidence show it to be negatively related to switching intentions (Bansal and Taylor 1999; Nysveen, Pederson, and Thorbjornsen 2005). This supports the notion that normative attitudinal components are important in explaining a side of the psychological attachment that differs from a sense of desire and perceived cost.

Normative commitment has been well established in organisational behaviour domains (e.g., Meyer and Allen 1991; Wiener 1982) and is believed to be linked to turnover intentions (e.g., Chang, Chi, Miao 2007; Herscovitch and Meyer 2002; Meyer and Allen 1991) and desirable work behaviour (e.g., performance, attendance, citizenship) (Allen and Meyer, 1996; Herscovitch and Meyer 2002). To date, there has been limited research conducted in marketing explicitly investigating normative commitment. A notable exception is Gruen,

Summers, and Acito (2000) who studied professional association members in the insurance industry and found a positive effect of normative commitment on influence coproduction. The individuals with a high sense of obligation also engaged in the work of the association on the basis of a pledge to payment for the value received. Moreover, Bansal, Irving, and Taylor (2004) in an auto-repair setting found normative commitment, among the three dimensions of commitment, to score the highest negative impact on switching intention. These findings provide some insights on impacts of normative commitment on customer intention to stay, refer the company, and possibly tolerate a higher price. Customers stay attached to the company because they feel they are obliged to do so, which is congruent with their internal values and/or the influence of the surrounding social environment. Therefore, the following hypotheses are proposed:

H7: Normative commitment is positively related to customer intentions to stay.

H8: Normative commitment is positively related to customer positive word of mouth.

H9: Normative commitment is positively related to customer willingness to pay more.

2.3.6. Relations Among Commitment Dimensions

Meta-analysis studies in organisational Behavior demonstrated that the three components of commitment are distinctly unique but also related to each other (Allen and Meyer 1996; Meyer et al. 2002). Further research has been recommended to investigate the interactive effects of commitment components to help in reaching a better state of understanding of the nature of commitment and as a result generate fruitful managerial implications (e.g., Meyer and Allen 1991; Chang et al. 2007; Meyer et al. 2002).

2.3.6.1. Affective Commitment – Calculative Commitment Relationship

Literature on the relationship between affective-calculative commitment do not provide consistent findings. While theoretical and empirical research provides support for adverse interactivity in various settings such as banking, retailing, and telecommunication (Fullerton 2003; Fullerton 2005; Jones et al. 2007), in the hotel industry, Mettala (2006) found that adding affective commitment to calculative commitment has an incremental influence on guest behaviour toward rewards that include both hard benefits (e.g. free stay) and soft benefits (e.g. priority check-in). However, such results might be because of the nature of the dependent variable measured in the study that includes both emotional and cost-based components.

Bansal, Irving, and Taylor (2004), however, found no support for interaction in auto repair services, although it was argued to be due to the nature of the field study setting and the associated difficulties to detect interaction in the particular empirical context (automobile services). The cost-based commitment was reported with a low-level effect by the participants.

Despite inconsistent findings in the literature which might be due to the context and/or measurement differences, it is argued in principle that a high sense of calculative commitment based on the high cost associated with leaving weakens the commitment that is based on the affective desired-based commitment, whilst a high sense of affective attachment might diminish the customer calculative commitment.

Research in organisational behaviour, such as the work of Meyer et al. (2007), Meyer and Herscovitch (2001), and Herscovitch and Meyer (2002), offers support for the argument that each construct simultaneously hinders the efforts of the other. Some relationship marketing researchers, such as Bansal et al. (2004) and Fullerton (2005), developed a new construct by taking a product of affective commitment and calculative commitment in order to uncover the interaction between the affective and calculative commitment. However, the new construct was investigated only on a dependent variable, and the results were either varied or insignificant. For this study, therefore, since we have no theoretical or empirical basis to presume causality, we assume a negative correlation to address this relationship. Therefore, the following hypothesis is proposed:

H10: Customer affective commitment correlates negatively with customer calculative commitment

2.3.6.2. Affective Commitment – Normative Commitment Relationship

Organisational behaviour literature shows that affective and normative commitment constructs are correlated yet distinct constructs. Conceptually, whilst normative commitment relates to the sense of moral obligation to fulfil an individual's psychological contract, affective commitment stems from the sense of desire to remain with the organisation (Allen and Meyer 1996; Meyer and Smith 2000).

Both theoretical and empirical works provide support for a positive effect of affective commitment on normative commitment (e.g. Meyer and Herscovitch 2001; Meyer and Smith 2000). In B2C relationship marketing, however, to the best of our knowledge, the only study that addressed such relation was Bansal, Irving, and Taylor (2004), who found positive impacts of affective commitment on normative commitment, and that normative commitment partially mediates the relationship between affective commitment and switching intentions. It is argued here that strong emotional feelings toward the company bolster a customer's sense of obligation to be committed in the relationship that can be interpreted as a way of indebted obligation.

Despite relatively little research conducted in relationship marketing investigating the construct of normative commitment, Bansal et al. (2004) addressed the customer-firm relationship and found that affective commitment has a positive impact on normative commitment. In organisational behaviour literature, Meyer et al. (2002) in meta-analysis study extensively studied the link within the employee-organisation relationship and also found that affective commitment affects normative commitment.

The sense of desire is a strong driving force that affects the sense of obligation customers feel toward the company (Bansal et al. 2004; Meyer et al. 2002). Normative commitment is developed based on internal beliefs and/or social pressure from family, friends, or colleagues. In order to justify behaving in accordance with their desires, individuals may also want to ensure that their actions are morally right and will be accepted by their family, friends, or colleagues (Bergman 2006). Therefore the following hypothesis is proposed:

H11: Affective commitment positively affects normative commitment.

2.4. Summary

In this chapter we reviewed empirical and theoretical research drawing from the area of relationship marketing and works on commitment theory from organisational behaviour. The purpose was to better understand the concept of commitment as multidimensional psychological attachments and their impact on relational outcomes (i.e., ITS, PWOM, and WTP).

Commitment was defined as the force that binds customers to the company where three forms of commitment have been addressed: (1) affective commitment reflects the sense of desire and demonstrated positive impacts on ITS, PWOM, WTP, and normative commitment; (2) calculative commitment reflects the perceived costs associated with leaving the company, and has been shown to have only positive impacts on ITS, negative impacts on PWOM and WTP, and negatively correlated with affective commitment; (3) normative commitment reflects the perceived obligation to remain with the company, and although to date, little work in relationship marketing investigated normative commitment, this study hypothesised normative commitment to be positively related to relational outcomes (ITS, POWM, WTP).

3. Research Design & Data Collection

3.1. Introduction

As there is an availability of different research methods, the selection of the actual research method used was justified. For this study the selection was mainly based on a number of issues such as the nature of the study and the epistemological stance. This section provides an overview of the research method used, states the reasons behind the selection of the research design process, and makes comparison with other potential research techniques. In addition to the rationale for the use of research techniques to give an indication of research feasibility, elaboration on how challenges were dealt with was also presented.

The philosophical stance of the research was elaborated, justifying the use of quantitative research design. The positivism stance was discussed in order to justify the testing approach for the hypotheses. Then, the targeted industry, target population, sampling procedures, and the process of designing the research instrument, including pretest and sources of the item

scales, were expanded upon and discussed. The data collection phase was presented, providing details on how the online survey questionnaire was conducted. This included the practicalities in designing the online survey and the pilot test and its overall execution. The covering letter, confidentiality policy, and procedures that alleviate the response bias were all be presented and discussed. Finally, there was a brief presentation of the data analysis plan implemented in this research, which was reported in the next chapter.

3.2. The Positivism Philosophy of Science

Once it is realised that the various epistemological standards stem from views of ontology or the perception of the truth, elaborating upon the philosophical stance of the research should provide a guide to the employment of available research methods, justifying these methods compared to other potential research methods, while taking into consideration the suitability in tackling the research problem, theoretical goals, and feasibility.

The ontological stance of this research is based on the argument that reality is independent from the observer's perception and all that is needed is to uncover it. Accordingly, the epistemological warrant is embodied in the positivism school of thought that places the natural sciences research method on social phenomena. The justification is mainly based on beliefs that the positivism approach, generally speaking, should provide a way forward to build scientific knowledge which attempts to contribute to the state of knowledge in the domain under investigation (Rosenberg 1998).

To produce knowledge within the positivism school of thought is to bring in logical reconstruction to guarantee its truth. Causal arguments are built by developed premises that ultimately hold up the essence of the research argument. All meaningful statements should be supported or contradicted by experiences, and statements must be subjected to empirical verification and must also have logical form and substance (Hollis 1994). The theoretical terms must be reducible to observational terms. The type of knowledge produced should be supported by empirical evidence, which only supports to some degree the meaningful statements or rather the hypotheses being tested. Although the logical verification principles can be incoherent because of imperfect measurement of social phenomenon, hypotheses are used as a way of supporting a meaningful statement and not to prove it (Robson 2003).

Though both inductive and deductive approaches to research can be congruent with the philosophical stance, this research is described as deductive research (i.e. theory driven), which generated the subject under investigation through extensive review of literature. Scientific theories are used here to support the series of the proposed premises, where the focus is narrowed on attempts to empirically validate the prediction of causal relationships between determined concepts supported by theories and tackled through logical, consistent, and specific arguments (Gill and Johnson 2002).

3.3. The Mobile Telecommunication Service Setting

In this section, justification was given as to why the cell phone service sector has been selected as the context of the current study, from both practical and theoretical points of views. The first argument will be based on the benefits the study should bring to the cell phone service sector. As the role of the study is to enhance customer services from the customer's viewpoint, it can hopefully provide a more complete understanding of the complex nature of customer commitment-loyalty, filling a void by critically examining the customer-firm relationship from a psychological perspective. This is in line with the increasing demand to establish and nurture profitable customer-focused strategies in the marketplace.

With constant product development trends, various competitive offers for different user segments, and the entrance of new virtual players, the mobile telecommunication service sector is a rich environment for implementing various forms of dynamic marketing activities. Huge investments in the mobile network infrastructure have already been made, and with threats from new emerging virtual players striving to provide competitive services, and new technology pushing into the market, there have been rising demands for new product developments such as integrated solutions to information technology and in particular telecom services, resulting in a high potential for creating new services that are able to change the basis of market demand.

Such dynamic changes in a competitive environment make it critical for current mobile telecommunication companies to seek to strengthen their position in the marketplace, by following an ambitious and long-term customer-focused strategy creating a competitive asset

unlike any other in the market. By focusing on the development of customers' individual needs and their idiosyncratic characteristics, through a learning relationship process, the opportunity to gain more profitable customer-firm relationships should be possible, thus providing a key advantage for a competitive approach that is difficult to duplicate. This research aims to fulfill this demand, by attempting to provide additional leverage for a customer-focused strategy by providing analysis to uncover the complex nature of customer loyalty in a changing and fast-growing marketplace.

From a conceptual standpoint, the mobile telecommunication service sector was selected to conduct the empirical research based on the following reasons: first, the type of the customer-firm relationship is largely based on cost-based contracts offers to the same customer from many companies existent in the market. Customers may stay with their provider because of cost-based constraints such as financial penalties as constraints related to violations to contract terms or losing offers they receive. Non-contractual customers, on the other hand, have low switching cost and interact with firms at their own volition (Reinartz and Kumar 2003). In terms of volume of exchanged transactions, contractual customers normally make greater transactions in general than the non-contractual customers. Furthermore, contractual customers tend to have a broader and more depth relationship and understanding than the non-contractual customers to services provided to them, making it possible to develop further the business to a higher level. Ultimately, they tend to be more

experienced in dealing with cost-based constraints and at the same time receive more benefits in return.

It is worth mentioning here that the contractual and non-contractual settings may impact the research findings. The results could be different if non-contractual setting was selected. Non-contractual customers deal with the firms at their own volition with far less constraints as in contractual setting. Such differences could appear clearly in particular in the calculative cost-based type of commitment as pre-paid customer usually a more price sensitive. An explanation could be given here if the sample was selected from pre-paid type of customers as higher possible effects of calculative commitment than other commitment dimensions to loyalty outcomes. Overall, the selection of contractual setting provides fruitful grounds to broadly examine the effects of commitment dimensions on relational outcomes in the proposed research model.

Second, cell phone service companies constantly strive for dynamic customer service, which can be characterised by individually customised service solutions. Furthermore, the product development trends such as the penetration of video facilities and multimedia messaging services highlight a great potential to build long-term customer-firm relationships as the mobile companies are able to adapt to changing customer needs and wants over time. These types of activities should support the provision of a rich context that expands both the affective and normative dimensions of customer commitment along with the calculative cost-based dimensions, making the industry a suitable context in which to test the overall theoretical model.

3.4. Developing the Research Instrument

The measures employed in this research were adapted from previous studies. The researcher strived to combine measurements that cover the constructs that were included in the theoretical model, taking into consideration demonstrable reliability and validity. Careful attention to question wording and ordering has been made in order to increase the validity and to minimise the likelihood that responses were affected by factors other than those which were intended to be measured (Sapsford 1999).

3.4.1. The Pretest

As the first step, a pretest was conducted with an initial selection of measurement scales. A pretest is intended to uncover faults and to ensure that the questionnaire meets the researcher's expectation in terms of the data obtained before the final distribution (Webb 2002; Aaker, Kumar, and Day 1998). A pretest can be conducted for different purposes and in different ways. The number of participants in the pretest is open to debate and depends on the main purpose for which the pre-test is conducted. For instance, if it is to check for specific wording problems, then only 10 respondents are needed in the pretest (Hair, Bush, and Ortinau 2003). The pretest can help by improving the research instruments in many ways, such as estimating how much time is needed to complete the survey, whether to add other instructions, and by helping to establish what to say in the covering letter. If any

problems or concerns arise in the pretest, modifications must be made prior to moving to the next step (Hair et al. 2003).

Bourque and Fielder (1995), and Czaja and Blair (2005), suggested that when extensive changes are identified during a pretest, revisions should be made and pretesting continued, both formally and informally, until the surveyor is confident that the data collection instrument is obtaining the data needed, and feels satisfied with the questionnaire and the survey procedures.

3.4.2. Conducting Formal & Informal Pretests

Since the measurement scales for commitment dimensions were adapted originally from organisational behaviour literature, it was necessary to conduct formal and informal pretests to find out whether the measurement scales could fit the customer-firm relationship in the cell phone service context (see the questionnaire in appendix 1). An initial pretest was executed with a convenient sample of 99 respondents. The sample was drawn from postgraduate students and staff at the University of Manchester. Respondents had either monthly tariff or pay as you go users.

The questionnaire was delivered in person where the researcher asked the respondents to fill in the questionnaires and to give opinions after completion as to whether there were any questions or responses that were not clear. Respondents were also asked to indicate any questions that they found especially interesting. At the end of the questionnaire, an open ended question was added, if respondents were willing to write down any further

information on issues regarding the questionnaire such as the flow of the questionnaire, the length, and any other issues of interest related to their cell phone service provider.

The researcher made attempts to discuss the questionnaire with respondents regarding the meaning of the questions and their fit with the current context. The respondents were asked to pay attention to such elements as words, phrases, instructions, and question flow patterns, and to point out anything they felt to be confusing, difficult to understand, or otherwise a problem (Aaker, Kumar, and Day 1998). Discussion was made and comments gathered and compared in order to generate the most appropriate research instrument for the study.

Moreover, an informal pretest was made following a consultative approach based on discussion with eight senior and junior researchers at Manchester Business School, which have a wide expertise in designing questionnaires and survey research. A number of issues were discussed concerning the research instrument, such as the structure and the adaptability of the questions to be used in the questionnaire for the current study; opinions and suggestions were recorded and thought of in order to improve the overall research instrument. First, the ease of the language used and the length of questions employed in the questionnaire were discussed. Second, the issue of mixing the questions in the questionnaire was discussed and comparisons were made, to which some opinions were in favour of asking the questions for each construct in the same block, and others were in favour of mixing the order of the questions.

Some modifications were made after reviewing the comments given on the paper-based questionnaire, and going through a constant consultative approach with senior and junior researchers, reviewing the mobile telecommunication market reports and the literature, and conducting preliminary statistical analysis. A number of item-scales were changed as follows: Allen and Meyer (1997) item-scales from the organisational behaviour literature were used in the pretest to measure affective, normative, and calculative commitment, respectively. However, only some items measuring normative commitment were kept, while affective and calculative commitments were replaced by the Jones et al. (2007) scales, as they appeared to be more appropriate to the customer-firm relationship and had been used before in service contexts.

Moreover, the positive word of mouth (PWOM) item scale from the work of Brown et al. (2005) was considered because it was thought to be suitable to the context of the study, measuring PWOM with different levels in terms of the extent customers refer the company to acquaintances and friends and family members. However, respondents commented that these questions appeared repetitive and that measuring POWM could be made with more condensed item scale.

An additional formal pretest was conducted with 10 respondents who hold postgraduate degrees and are English native in order to further scrutinise the wordings used. The participants recommended no major changes in the questionnaire and only minor modifications in wording were suggested. Overall, almost all the respondents commented that the flow and the language used are both clear and understandable.

Reflecting on the process by itself, it was seen to be very useful to foster opinions about the types of question used and whether they were the most appropriate choice for the current study (among many others available in the research area). The pretest also suggested further refinements that could add, for example, better clarity and help in estimating the timing of the questionnaire, and eventually determine how the questionnaire could be executed when launching the main survey.

3.5. Measurements

Measurement scales were adapted using primarily existing scales from studies in relationship marketing and also organisational behaviour. Minor modifications in wording were made in order to better suit the flow of questionnaire, and the cell phone services setting. The selection of scales was made through comparison with existing scales available in the literature, considering the suitability with the context under investigation (cell phone services and suitability to the selected sample) and the nature of the item scales: if they actually measure what is intended to be measured in the study. The last section addressed descriptive information, length of the relationship, age, gender, annual household income, and level of education. Definitions of each construct were presented, and literature was reviewed for the purpose of generating the most appropriate measurement scales.

Responses to the questionnaire were self-reported. Respondents answered the questions directly in the questionnaire where they were asked about their attitudes and intentional

behaviour. All items were measured in an online 5 points Likert-scale format (e.g. Jones et al. 2007). Participants were asked to indicate their agreement/disagreement with each of the statements, ranging from 1=strongly disagree, to 5=strongly agree.

The response choices were intended to be clearly identified for the respondents so that they could answer the questions in a most reliable and valid way. However, with the internet survey which appears on the respondent's computer screen, putting labels for each point of the 7-point scale was rather impractical. Results from a pre-test and a re-test indicated that our respondents favoured a 5-point scale, as each point on the scale appeared on their screen accompanied by a label which indicated the extent of their agreement with each statement. More specifically, the respondents stated that the 5-point scale was easier and less time consuming in terms of how they read each statement and reflected upon their responses. Considerations were given with regard to the level of information desired, the timeframe and the capabilities of respondents of using the scale. Thus, when all of the factors were considered, it was deemed appropriate that the measurement scales would use a 5-point scale rather than a 7-point scale. Furthermore, by examining the distributions of the data, there do not seem to be any issues or compromises that were introduced by this choice.

3.5.1. Measuring Affective Commitment

Affective commitment is defined here as the psychological force that binds customers to a course of actions with the target of interest, experienced as a sense of desire toward the object of interest (Allen and Meyer 1990; Fullerton 2003; Hansen, Sandvik, and Selnes 2003). Affective commitment measures the affective status, which drives individuals to be

committed to the target of interest. In this study, commitment as a function of emphasis is directed to the service that is offered to the customer by the cell phone companies.

Studies in the area of relationship marketing measured affective commitment in B2B and B2C relationships based on works from organisational behaviour literature, adapting mainly item scales by Meyer and Allen (1997) (e.g. Bansal, Irving, and Taylor 2004; Fullerton 2003; Gruen, Summers, and Acito 2000). Other research in relationship marketing followed a more independent approach and developed further the measurement of affective commitment in B2B and B2C groupings (e.g. Kumar, Scheer, and Steenkamp 1995a; Verhoef, Franses and Hoekstra 2002). It should be noted here that both streams of measurements have been shown to have high reliability. However, it can be argued that the employee-organisation type of relationship differs in nature from that of the customer-firm relationship. Employee's daily activities with their organisation do differ from that of the customers-firm relationship in mobile telecommunication companies. These differences between the two forms of relationship should be reflected on the operationalisation of the commitment constructs, and thus such differences may support considering a shift in measurements that suit not only the context of the study but the type of the relationship.

The items scale from the study of Jones et al. (2007) was adapted, as the content of the questions appeared to be compatible with what was actually going to be measured in the current study, in respect to the type of relationship and the research setting. In addition, the study of Jones et al. (2007) benefited from item-scales developed in both relationship marketing literature and organisational behaviour (e.g. Allen and Meyer 1990; Kumar,

Scheer, and Steenkamp 1995a; Kumar, Scheer, and Steenkamp 1995b; Verhoef, Franses, and Hoekstra 2002). The scale was used in six types of service providers: banks, cable television providers, cell phone providers, physicians, hairstylists, and retail stores.

These item scales measure the likeability and attachment of the customer to the services. Although the concepts of identification and belonging were considered to be part of the affective commitment measurement scale in a number of studies in organisational behaviour, such as in Allen and Meyer (1990) and Meyer and Allen (1997), this study addresses the issue of likeability to measure affective commitment as was originally developed by Kumar, Scheer, and Steenkamp (1995a) in relationship marketing literature. Namely, the main perspective taken for the current study is that customers committed to stay with a company because they like it.

The results of Jones et al. (2007) supported the internal consistency of the scale since composite reliabilities ranged from 0.92 to 0.93, over two samples for the six types of service. For this research, four items were borrowed, and only minor modifications in wording were made regarding the name of the industry under investigation. The items of affective commitment are displayed in Table 3.1.

Table 3.1: Scale Items of Affective Commitment

I like my cell phone service company
I use my cell phone service company because I really like it
I am a customer of my cell phone service company because I feel a strong sense of attachment to it

I do business with my cell phone service company because I like it

3.5.2 Measuring Calculative Commitment

Calculative or continuance commitment is based on recognition of the cost. The relationship is evaluated and sustained based on the cost associated with leaving a company (Allen and Meyer 1990). Customers feel that they are locked into a relationship because of the economic factors associated with leaving, for example, as the cost is too high to switch they will remain with a provider. To measure the calculative commitment, four items from the study of Jones et al. (2007) was adapted. As previously discussed, this scale was drawn from studies in both relationship marketing and organisational behaviour literature (i.e., Allen and Meyer 1990; Verhoef, Franses, and Hoekstra 2002), and is used here, as it is easy to understand and is compatible with the aim of the study with relation to the construct of calculative commitment.

This measurement scale was used for six types of service providers; banks, cable television providers, cell phone providers, physicians, hairstylists, and retail stores. The results of the Jones et al. (2007) model supported the internal consistency of the scale as it displayed composite reliabilities ranging from 0.96 to 0.93 over two samples. Only minor modifications in wording were made with respect to the name of the service sector under investigation. The calculative commitment items are displayed in Table 3.2.

Table 3.2: Scale Items of Calculative Commitment

I feel somewhat locked into using my cell phone service company

I feel like I don't have a choice as to which cell phone service company I use
I feel like I use my cell phone service company because I have to
I feel sort of stuck with my cell phone service company

3.5.3. Measuring Normative Commitment

Normative commitment is the psychological attachment of the customers to the company based on a sense of obligation. Customers feel that they are obliged to stay with a company because of the belief that they ought to return the favour for the benefits they have received (Gellately et al. 2006; Meyer and Allen 1997). Items of normative commitment were developed by works in organisational behaviour literature, such as the works of Allen and Meyer (1990), Meyer, Allen and Smith (1993), and Meyer and Allen (1997).

Academic studies in relationship marketing adapted items from the organisational behaviour literature with modifications in wordings to better fit the context of the studies. Bansal, Irving, and Taylor (2004) adapted Meyer and Allen (1997) scale items in customer-firm relationship in the context of auto-repair services. Gruen, Summers, and Acito (2000) developed items relying on views in works in organisational behaviour targeting professional agents for insurance companies. This study adapted three items from Bansal, Irving, and Taylor (2004), and one item from the study of Gruen, Summers, and Acito (2000) with minor modification in wordings. Bansal, Irving, and Taylor (2004) reported a scale reliability of .85, in Gruen, Summers, and Acito (2000) reported it to be .84. Only a

minor wording modification was made with respect to the name of the company under investigation. The normative commitment items that were used displayed in Table 3.3.

Table 3.3: Scale Items of Normative Commitment

My cell phone service company deserves my loyalty
Customers of my cell phone service company ought to be loyal to it
Even if it were to my advantage, I do not feel it would be right to leave my cell phone service company now
I would not leave my cell phone service company right now because I have a sense of obligation to it

3.5.4. Measuring Positive Word-of-Mouth

Three-item scale measuring positive word-of mouth was adapted from the study of Zeithaml, Berry, and Parasuraman (1996). The scale was implemented for four different industries: computer manufacturer in relation to business customer, retail chain, automobile insurer, and life insurer in relation to end customer. Reliability scores ranged from .93 to .94 in these four industries. This particular scale was used by many prior academic studies in relationship marketing such as Fullerton (2003), Fullerton (2005) Verhoef, Franses, Hoekstra (2002), and the items-scale was widely used and shown to be reliable in various contexts. The positive word-of-mouth items that were used displayed in Table 3.4.

Table 3.4: Scale Items of Positive Word of Mouth

I say positive things about my cell phone service company to other people

I would recommend my cell phone service company to someone who seeks my advice
I encourage my friends and relatives to consider choosing my cell phone service company

3.5.5. Measuring Willingness to Pay More

Various measurements of willingness to pay more were developed within the literature of relationship marketing (e.g. Homburg, Koschate, and Hoyer 2005; Fullerton 2003; Jones and Taylor 2007; Zeithaml, Berry, and Parasuraman 1996). This study used three items to measure this particular construct, which were adapted from previous studies by Zeithaml, Berry, and Parasuraman (1996), Fullerton (2005), and Fullerton (2003). Minor modifications in wording were made to better fit the style of the questions in the questionnaire, and the cell phone service setting. The willingness to pay more scale was established using in a number of settings, such as clothing, grocery, and cellular telephone service provides. Reliability scores in most of the samples within these studies exceeded the .70 threshold. The willingness to pay more items that were used displayed in Table 3.5.

Table 3.5: Scale Items of Willingness to Pay More

I would stay with my cell phone service company even if it slightly raises its price
I am likely to pay a higher price that what competitors charge for the benefits I currently receive from my cell phone service company
I would accept higher prices, if my cell phone service company raises its prices

3.5.6. Measuring Intention to Stay

The intention to stay measurement scale items have been adopted from Hansen, Sandvik, and Selnes (2003), where it was assessed with a two-item scale. The first is stated in a reverse question and indicates the intention to leave the current relationship in the foreseeable future, whereas the second measures the intention to maintain the current relationship. The rationale for combining scale items with negative and positive connotations was mainly to better control response bias. These items, which were originally developed by Kumar, Hibbard, and Stern (1994) in the area of the suppliers-firms relationship, are amongst many other items, of which two were adopted by Hansen, Sandvik, and Selnes (2003) and used in this study to measure the intention to stay construct. Only minor modifications in wording were made to obtain a better fit within the context of the study. The construct reliability was reported .70.

It is worthwhile here to mention that although multi-item scales are preferred to be used over 2-item scale, there is considerable work that supports the use of single-item scales in customer retention research and argues that the use of multi-item scales may actually decrease the quality of measurement in studies concerning customer retention and satisfaction (Jones et al. 2007; Rossiter 2002). The intention to stay items that were used displayed in Table 3.6.

Table 3.6: Scale Items of Intention to Stay

I definitely intend to maintain my relationship with my current cell phone service company
I will most probably switch to an alternative cell phone service company in the foreseeable future

3.5.7. Descriptive Information

Demographic information was sought in the survey in order to give a description of the sample characteristics in the study. Questions regarding age, gender, education, and household income were together information about the respondents’ characteristics and the sample diversity. The demographic characteristics can also be used to realise to what extent the characteristics of the customer represent the population of the study.

In addition, relationship duration was asked by the question: “How long have you been a customer with your cell phone service company”. This question was adapted from the study of Seiders et al. (2005), using 6-point Likert scale. The household income, age, and education were reported in consultation with the relevant census data category of the U.S. population cited from the U.S. Census Bureau Report, Census (2000).

3.6. Data Collection

To test the proposed hypotheses, empirical research was conducted. Following quantitative research design, the data was collected through a self-administered Internet survey using cell phone service customers in the U.S. Individual contractual customers (i.e., pay monthly) were targeted and asked about their attitudes and intentional behaviours towards their current

cell phone service providers. The commitment stage in customer-firm relationship, according to a key research in relationship marketing area i.e., Dwyer, Schurr, and Oh (1987), is portrayed as an advanced phase of the relationship. A customer is in a contract is an important issue as the assumption was made that customers are in advanced stage of the relationship (i.e., commitment stage), if they have been staying with their service provider for several years and have made several transactions and therefore by virtue more experienced. This is a valuable asset that is already available to the company. Contractual customers in advanced stage could be described as stable, consistent and good to do business with for future transactions. Their transactions will be predictable and more efficient for customisation efforts than the newly signed contractual customers, with of course a higher volume of purchases.

The majority of the members of the sample are from customers that have been staying with their providers for over than three years. This is in order to ensure that customers are in advanced phase in the customer-firm relationship (i.e., the commitment phase). From a methodical perspective, this helps to avoid possible differences in behaviour from other customers of newly signed contracts, an issue discussed in more detail in the discussion section of this thesis.

In this section, first the reasoning behind the selection of online survey data collection method was provided. Then, procedures for conducting the online survey were also explained. Lastly, procedures which were followed regarding factors such as the covering letter, the anonymity policy, inform consent, pilot test, and response bias were expanded.

3.6.1. Selection of Questionnaire

A questionnaire is a structured technique for collecting data that consists of a written series of questions (Malhotra and Birks 2003). A number of reasons made the use of the structured questionnaire the most appropriate for this research. First, it is relatively inexpensive and easy to administer in comparison with other research methods. Second, it can be used over a large geographical area with a likelihood of reaching sample members easily. Third, in terms of response bias, it will ensure that each question will be asked to all respondents in similar manner (Faria and Dickinson, 1996). Finally, the nature of the study makes the structured questionnaire one of the most feasible techniques to implement. In addition, the limited budget available suggested a self-reported structured questionnaire as the most appropriate option for collecting the required data.

3.6.2. Online Survey

There exist a number of means for collecting data through a structured questionnaire: postal self-completion questionnaire, face-to-face or telephone interviews, and online surveys. Each method has certain advantages and disadvantages. However, the Internet in certain contexts provides an extraordinary possibility of accessing far more diverse samples than has ever been possible before (Czaja and Blair 2005; Hewson, Yule, and Vogel 2003; Thomas 2004).

Because the use of online surveys in some situations cannot be seen to be superior to more traditional means as their use is restricted by the number of people that can be reached by web access only; sometimes e-mail directories do not exist, and random sampling is problematic (Thomas 2004), a market research company was selected from a list of a number of professional companies specialised in collecting primary data for academic research in the marketing discipline provided by the *American Marketing Association* (AMA). The selection of the market research company was based on the type and size of the panel available for consumer research in the cell phone service sector. A quota sample was designed from contractual customers of cell phone service companies such as AT&T, Nextel, T-Mobile, and Verizon.

3.6.3. Sampling

Choosing the sample and drawing its plan was based on the data collection research strategy (Aaker et al. 1995). A quota sample was drawn from a large panel whereby the sampling selection was drawn based on criteria relating to the nature of the research that addressed customer commitment-loyalty links. As this research is confined to customer-firm relationships, individual customers were the target of choice for this study. The study was implemented towards cell phone users whose contract was on a contractual basis in the U.S. Only contractual customers were included to avoid any potential differences in response which might occur due to various common subscriptions in the targeted service sector.

The U.S. market can be described as a well-developed and mature market that can offer a rich context for this study. The U.S. panel was the largest and most diverse panel than any

other available panel regarding telecommunication services. The aim was to achieve the desired sample balance in terms of demographics, and based on ethnicity and geographical location of the U.S. population as depicted in table 3.2. This was made by offsetting the outbound invitations based on the estimated responsiveness from a pilot study of each demographic group according to standardised data categories.

Table 3.7: U.S. General Population Balanced Outbound Invitations

Ethnicity	%
African American	12.5%
Asian American	4.0%
Caucasian	69.0%
Hispanic Origin	12.5%
Native American, American Indian, Alaska Native	1.5%
Other	0.5%

Census Region	%
Midwest	22.9%
Northeast	19.0%
South	35.6%
West	22.5%

Note: Standardised panel data categories for Ethnicity and Region

A pre-screener question was asked at the beginning of the survey to obtain the contractual type of customers “What is your cell phone current contract?” The results are depicted below in table 3.8.

Table 3.8: Results of the Pre-Screener Question

Answer	Total Answers	% Answering	%Unique
Pay as you go	116	15.72%	14.55%
Monthly (Fixed contract)	646	87.53%	81.05%
Pre-paid 1 year in advance	35	4.74%	4.39%
Total Responses:	797		

Pre-screener question: “What is your cell phone current contract?”

The survey was distributed by e-mail invitation to 4145 individual customers for various cell phone companies in the U.S. market. The individuals who received the survey invitation were part of a large panel (over a million members) that included pay as you go, monthly contract, and pre-paid customers. The pre-paid question was clicked by 797 individuals to the pre-screener question included in the e-mail, and 151 of the participants (i.e. 116 pay as you go customers, 35 pre-paid) customers in the survey transferred directly to the market research company’s end page, as they were not qualified to be part of the sample. Of the 646 qualified, 96 cases were not included in the sample as they reached the pre-screener questions but then did not want to participate in the survey. This resulted in a sample size of 550 contractual customers.

3.6.4. Designing the Internet Survey: Procedures & Execution

A number of survey host software packages such as *SurveyMonkey* and *SurveyPro* were explored in order to select the most appropriate survey host, which would meet the requirement of the designed questionnaire. After weighting the advantages and disadvantages of potential survey hosts, the selection was made to use *SelectSurvey.Net* software, which was available at Manchester Business School. This software was selected to collect the required data because it provided functions that suited the research instrument of this study, and was also offered at no cost.

The survey was tested and re-tested in coordination with a team from the market research company and in consultation with senior and junior researchers at Manchester Business School. Appropriate modifications were made to ensure that the survey was organised in a way that would be accessible and compatible with the usual format used by the market research company before running the main survey. In addition, to enhance the validity of the collected data, a number of procedures were employed in designing the questionnaire. Most importantly, the online questionnaire was made to be short and concise, and designed to take only few minutes to complete. Financial incentives were offered, which aimed at encouraging the participant to take part in the survey.

The e-mail invitation mentioned that the online survey was conducted as part of an academic study. In addition, because Bourque and Fielder (1995) suggested that additional of incentives might elicit a higher response and more accuracy in answering the questions, in the brief introductory message it was mentioned that the practical purpose of the study was to improve the level of customer service in the telecommunication sector.

The anonymity of the participants was guaranteed by the market research company: An agreement stated that it is prohibited to request any personally identifiable information in the survey. Only general profiling information was provided, and no personally identifiable information such as names, addresses, or e-mail addresses were disclosed or provided to the researcher. Participants were assured that their responses would be treated in the strictest confidence, and the details were provided in the confidentiality policy section, which was made accessible to the participants in the covering letter.

The participants received the invitation in their email box with the necessary link needed in order to partake in the questionnaire, and were told that they had a survey in their account (from the site). First, a standardised covering letter was presented. The covering letter included an invitation to complete a customer loyalty survey and the link to the questionnaire page; the incentives, type of the research, time frame, and confidentiality and anonymity policy. A second covering letter was presented, briefly, when the participants came to the questionnaire page: it provided the instructions on how participants will be answering the self-reported questions, again the time frame, a clear statement of the study's purpose and importance, and eventually reinforcing the importance of the respondent's participation (i.e. this study attempts to improve the customer services in the cell phone services).

Questions were set out on separate pages to alleviate any potential carry over effect at the time when the participants were answering the questions. The direction that the questions

will be displayed on separate page was provided in the introductory message as well. A function which made answering the questions obligatory was placed on all questions in the questionnaire. This also was mentioned beforehand in the covering letter and a red asterisk (*) sign was marked at the end of each question. Without answering a question, participants were not able to proceed to the next one. This procedure was made in order to minimise the possible missing data, and simultaneously preserve the validity of the collected data.

Brief instructions about how to answer the questions, with the scales employed, were provided in advance in the covering letter. Responses were offered in a form of agreement statements, using a 5- point scale, which were displayed clearly next to the bottom of each question.

It is important here to mention that 12 researchers (who were part of the previous pre-test) were asked to take part in the selection process when incorporating the survey procedures in an online format. The survey was tested and re-tested many times until the researcher felt comfortable with the final. Moreover, two researchers experienced in the U.S. market, checked the language and terminologies used in order to ensure that it fitted well with that of U.S. cell phone customers. Also, this was carried out in consultation with the project team of the market research company.

Before the main execution of the survey, a pilot test was conducted with 56 participants (roughly 10% of the main sample). The pilot was distributed to the same participants, who were all seen as qualified to be included in the main survey. The purpose of conducting the

pilot was to better understand respondent's reactions to the questionnaire, and check the pattern of answers, to obtain an initial estimation of the response rate, and to check the smooth running of the survey in order to avoid any potential problem that might occur before the execution of the main survey. The collection of the data for the pilot test, and the review of the smooth running of the process were accomplished successfully in a weeks' time. The process was reviewed and demonstrated how the data collection process would look when the survey was eventually executed. Overall, the pilot test ensured that the survey was ready for execution in order to collect the requested sample for this research.

The survey was launched giving consideration when it was best to send out invitations to acquire a high response rate. Therefore the weekends and holidays were avoided. The invitations were sent in waves based on an estimated response rate acquired from the pilot test. After the initial project launch, the actual response rate of demographic groups was measured and incorporated into the subsequent sample. A follow-up reminder was conducted according to the response rate that was achieved in the first instance. This was conducted in order to reach the requested sample size that was specified in the first place. Data collection was completed in a period of five weeks.

In sum, it can be argued that the procedures that were followed in designing the survey appeared to benefit from the broad assessment of useful and reliable research techniques that were recommended and implemented in previous studies in marketing research. In the pretests, questions in the survey were thoroughly reviewed and modifications were made to ensure that the questions were understandable and measured what the research aimed to measure. In addition, a pilot test of roughly 10% from the actual sample was conducted to

ensure the smooth running of the data collection process before proceeding to the main data collection stage. Patterns of data were checked; initial statistical analysis was conducted, and the process of delivering the survey to the respondents was examined to ensure an effective and efficient technical perspective (see the questionnaire in appendix 2).

3.7. An Overview of Data Analysis

The unit of analysis in this research was the customer. Structural equation modeling (SEM) technique was employed to analyse the data in order to test causal relationships between dependent and independent variables simultaneously, and also to test the validity of the measurements (Ullman 2001). At the outset of the data analysis, outlier examinations were made, and descriptive statistics were run to understand the characteristics of the data. Next, confirmatory factor analysis was used to test the factor structure based on the specific hypotheses that were developed. SPSS and *AMOS* software were used to run the analysis.

3.8. Summary of the Chapter

In this chapter a number of issues have been presented and discussed to elaborate upon the research design and the data collection process that were followed in this study. The positivism philosophy of research has been introduced in order to justify the use of quantitative research design. The cell phone service sector was selected because of its suitability to the nature of the research from a theoretical standpoint and the contribution that the research offers to such context. The context is dynamic and rich with marketing programmes that foster commitment dimensions, making them feasible for the study of customer loyalty.

A quota sample was drawn from cell phone users in the U.S. market, and the sample was established as both diverse and proportional to the U.S. general population. The research instrument was developed by combining existing scales available in the area of relationship marketing and organisational behaviour. A pretest was conducted formally by using a convenient sample of 99 respondents from postgraduate students and staff at the University of Manchester, and informally throughout various discussions with senior and junior academics in business and management studies.

Procedures such as providing anonymity, confidentiality, a covering letter, and a financial incentive, instructions, and asking each question on separate page were all addressed and incorporated into the survey to ensure that the data collection process was established as appropriate and robust. Moreover, a pilot-test was conducted with roughly 10% of the main sample from the same participants as in the actual survey, to check the patterns of the answers, and ensure the smooth running of the data collection process. Data was collected in a period of five weeks.

4. Data Analysis

4.1. Introduction

In this chapter a number of issues regarding the data analysis stage of this thesis will be discussed. The analysis of the collected data has been made according to steps that have been set in advance in order to test the developed hypotheses, and present the findings of this

research. Discussion of the results will be presented, and alternatives will be outlined in order to justify the selection of the data analysis process.

The data was first examined for data entry errors, dealt with missing data deletion, and the examination of outliers to refine the data in order to determine the final sample size to be used in the analysis. Following this, sample descriptions were determined by showing the age, gender, level of education, and length of the customer-firm relationship. The assumption of normality and description of fit indices that assess the measurement model validity were examined. Next, the testing of hypotheses was conducted using the two-step approach as set out by Anderson and Gerbing (1988). The measurement model was run, whilst examining the fit indices as well as constructs validity, discriminant validity, and face validity. Lastly, the structural modelling was run to examine the path coefficients, to test causal relationships between dependent and independent variables simultaneously (Ullman 2001). Confirmatory factor analysis was used to test the factor structure based on the specific hypotheses that were developed. SPSS and *AMOS* software were used to run the analysis. The unit of analysis in this research was the customer.

4.2. Data Examination

In this section, data was examined in three main steps. First, the data was scrutinised for any entry errors: this was done by checking if any values fall outside the specified range. The next step was involved handling the missing data, removing incomplete cases with missing values. Finally, outliers were dealt with by using Multivariate, Bivariate, and Univariate tests in order to detect potential outliers in the data set.

4.2.1. Checking the Data

The number of participants who responded to the questionnaire was 550 based on a quota sample that only included contractual customers. Proceeding with the analysis, items were coded on an excel sheet and transformed to an SPSS file. Amongst the variables used in the data set there was one reversed item, which is one of the two items that indicate the “intention to stay” (ITS) latent variable. The value of this item was reversed at this stage and incorporated accordingly into the data in the SPSS file.

Both continuous and categorical variables were checked for entry errors by searching for values that fall outside the range of the score of all variables. The continuous variables were screened to ensure the value for all variables were within the specified range: from 1 to 5. The categorical variables such as age, gender, and level of education were also checked for any entry error. Both the maximum and minimum range of the values was run in the SPSS for all variables, in order to ensure that the values for each variable in the analysis were within its specified range (Pallant 2005). None of the variables were shown to have values that were outside the specified range; therefore, the analysis could proceed to the next stage.

4.2.2. Handling Missing Data

The number of incomplete cases that were identified in the data set was 16; respondents who began answering the questions did not in fact complete answering the questionnaires. Although these cases vary in the number of missing values (as in some cases respondents answered less or more questions than in other cases), most of the cases had over 50% of

missing values. Overall, the cases that were identified to have missing values were treated as missing data within this study.

The missing data can be dealt with in different ways which are based on the need to understand the causes of nonresponses or missing values among the collected data, understanding the underlying processes and their possible impact especially when the missing data occurs in a specific non random fashion. This is a necessary procedure that the researcher should take into consideration in order to make the most appropriate decision about how to handle the missing data. In addition to the pattern of the missing values, the actual number of missing data is important in order to determine the best way in which to deal with this area. For instance, when the number of missing data is very small compared to the actual sample size, the missing data can be ignored: missing data that accounts for under 10% for an individual case or observation can generally be classed in this way. However, when the number of missing data is higher than 10% compared to the overall collected sample, this can be considered substantial enough to warrant action (Hair et al. 2006).

A number of applications to deal with the missing data can be used, based on the number of missing data and the underlying reasons for having the missing data in the dataset. Both theoretical and empirical considerations when attempting to take action regarding the missing data should be taken into consideration. For instance, Listwise or Casewise data deletion, Pairwise data deletion and Means Substitutions are some of the data application methods that deal with missing data in different ways. Missing data can be ignored, deleted,

or substituted, based on what can be inferred from the nature of the missing data, number of missing data, and the eventual judgment of the researcher (Hair et al. 2006)

In this research, the judgment to exclude the missing data (incomplete individual cases) prior to the analysis was considered to be the most appropriate choice. The data set in the analysis did not include any missing values and only the complete cases were used in the analysis. A number of reasons were considered in order to take this judgment. First, the number of missing values in most of the incomplete cases was high, and no specific patterns were inferred from the missing values as respondents of these cases did not complete the questionnaire. The only interpretation can be that these participants could be considered as careless respondents who did not want to complete the questionnaire within a specific time.

Second, the missing data are apparent in a small subset of cases; the numbers of cases that entail missing values are very small compared with the obtained sample size. Missing data accounts for 2.9% of the overall collected individual cases: thus deletion can be appropriate as long as the proportion of missing values is not too large. Third, from an empirical perspective, when the relationships among variables are strong, this can be supportive in deleting a few cases with incomplete values. Running initial analysis, the relationships among the variables in this research was strong, and this lends support to the judgment to delete the missing data prior to the analysis (Hair et al. 2006).

4.2.3. Dealing with Outliers

According to Hair et al. (2006) outliers are unique combinations of values. It is the values that make the observation stand out from the rest. Outliers can occur due to several reasons. In one case, values can be diagnosed as outliers when they fall outside the population we intend to sample. Moreover, the outliers can be from the intended population, yet have more extreme values than the values that comprise a normal distribution. The researcher must assess whether the outlying value is retained or eliminated due to its undue influence on the results. The evaluation considers the impact of the outliers on the results based on their nature and number, taking into consideration the context of the analysis and the type of information that might be inferred from the pattern of the outliers (Tabachink and Fidell 2001).

Three main methods were considered in this research in order to diagnose any potential outliers in the collected data. The examination of potential outliers included the following methods: Multivariate, Bivariate, and Univariate diagnoses. When a candidate for an outlier was designated, it was examined, and a decision on retention or deletion was made by searching for the observations across other tests to provide the basis of the decision for deletion/retention (Hair et al. 2006). The potential deletion, retention, or transformation of outliers was based on the method undertaken, visual examinations of the cases, and the search for patterns in the data amongst what was to be identified as potential outliers.

The first stage involved examining all the variables individually from the Univariate perspective. The data values were converted to standardised z scores, which have a mean of 0 and a standard deviation of 1. To detect outliers among continuous variables using the Univariate test, all variables should be converted to standardised z scores. The search for

cases that can be diagnosed as outliers is based on finding scores that exceed the standardised z score cut-point 3.29 ($p < .01$, two-tailed test). Any values that exceed the cutscore should be considered as a potential candidate for an outlier value. The observation should be large enough, with a notable difference from the threshold z value to ensure that the value is extreme and out of the normal pattern in the dataset. After screening all the values included in the dataset only few cases exceeded the cut-point standardised z score. However, although there were few cases exceeded the standardized z score, the difference from the standardised threshold 3.29 ($p < .01$, two-tailed test), was not large enough to make the observation stand out from the others, and thus be classified as potential outliers (Tabachnick and Fidell 2001).

It is worthwhile here to mention that although the comparison of z scores can help in detecting potential outliers, the extremity of a standardised score depends on the size of the sample. With a very large sample size, only a few standardised scores in excess to the cutpoint 3.29 are expected (Tabachnick and Fidell 2001). This provides justification, in this case, why at this stage no potential outliers were detected, and therefore other tests to explore potential outliers in the data were carried out.

Univariate graphical examinations, using Box & Whiskers plots for all variables were carried out in order to help diagnose any potential outliers. Although a number of cases were shown here to be candidates for outliers, four cases in particular were diagnosed repeatedly as potential outliers in the Univariate graphical examinations. These four cases were found to have extremely high scores, which were repeated in the following variables: the

participants' positive recommendation to the company; acceptance of a higher price; intention to switch in the foreseeable future, and staying with the company because I have to (refer to the graph 4.1 below). These cases displayed the most potential to be diagnosed as outliers, and have the following ID numbers in the dataset: 316, 459, 380, 377.

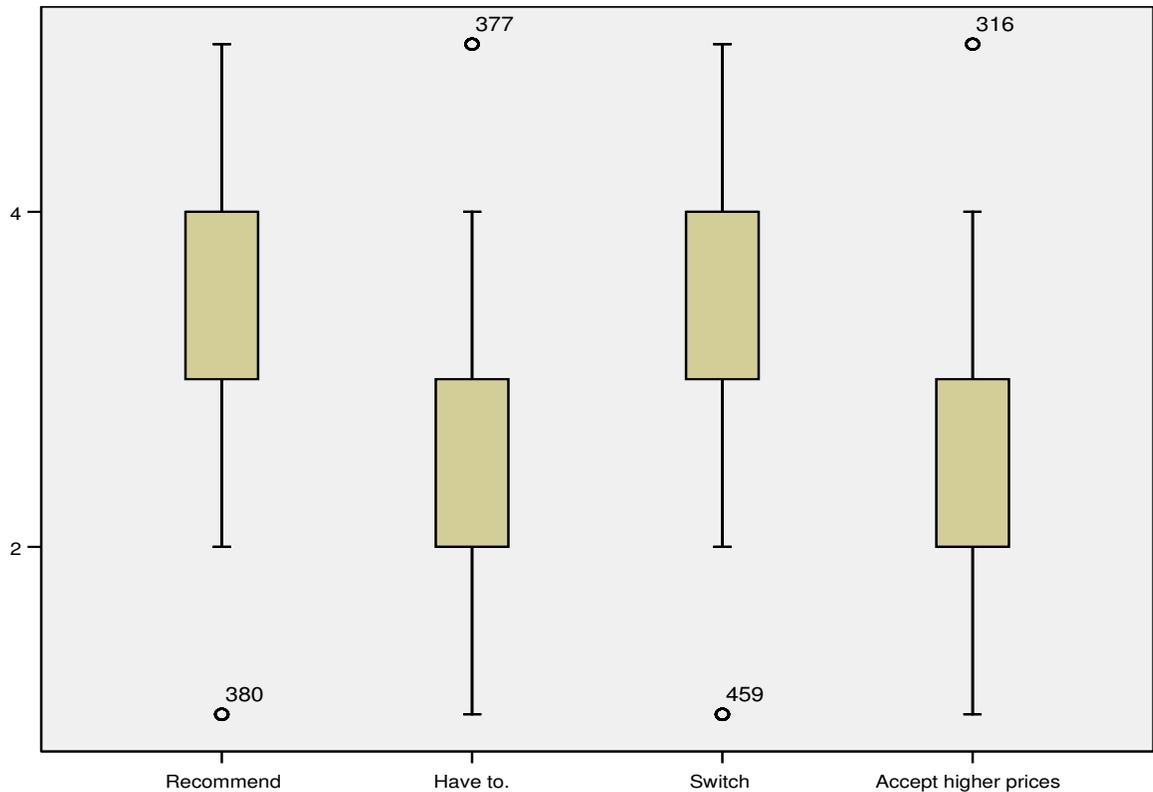


Figure 4.1. Potential Outliers from Univariate Graphical Examinations Using Box & Whiskers Plots

In the second stage, a Bivariate examination was made using scatterplot graphs, in order to show the relationships between variables, according to the proposed theoretical framework in this research. Summated scales were used to make the constructs according to the aforementioned conceptual assumptions of item-scales. Thus, relationships were examined based on the theoretical support that was made in this research. For instance, the relationship between affective commitment (AC) and intention to stay (ITS), calculative commitment

(CC) and positive word of mouth (PWOM) were examined in the scatterplots with the purpose of exploring potential outliers. After testing and re-testing a number of potential relationships, the assessment resulted in identifying four cases that seemed to demonstrate extreme values away from the diagonal lines (ID 42, 58, 331, and 383). However, the cases were retained and no further action was taken at this stage in order to double check if these cases would also be found in further examination of potential outliers.

In the third stage of diagnosing potential outliers, the Multivariate diagnostic method using the Mahalanobis Distance test was employed. Assessments for each observation across a set of variables were made. The cases that were shown to have the highest scores were reported as potential outliers. The Mahalanobis test was conducted several times with alternative regression models. Cut-off points for Mahalanobis tests were considered based on the sample size and the number of the variables included in the regression models ($p < .01$). This was done in order to detect potential outliers, which satisfy the condition that exceed the established cut-off points, and to ensure the detection of the highest values that are frequent among the regression models. It was not possible, in some situations, to rely only on a cut-off point among a number of regression models, therefore the researcher considered the highest values resulting from running Mahalanobis tests that were found among most of the conducted regression models. This resulted in diagnosing 7 cases as potential outliers (ID 42, 58, 260, 316, 331, 377, and 383).

Bivariate graphical examinations using scatterplots detected four cases as potential outliers

(ID 42, 58, 331 and 383). These same four cases were also found as outliers in the seven cases that were diagnosed in the Mahalanobis distance test. Therefore the four cases were detected as outliers in both tests, and the judgement was to exclude them from the analysis. Moreover, three cases that were only found to be potential outliers in the Mahalanobis test were also diagnosed as outliers. The judgment resulted in diagnosing a total of seven cases as outliers in all, these being: 42, 58, 260, 316, 331, 377, and 383. In addition, two out of the four cases that were diagnosed in the Univariate graphical examination, were found to be the same as those found in the Mahalanobis Distance test. The two remaining cases from the Univariate test were found to have extreme values repeated in more than one variable of the analysis and therefore the decision was taken to consider them outliers as well. As a result, the number of cases that were identified as outliers was nine.

From a theoretical standpoint, these cases were interpreted as invalid responses in which answers were provided without sufficient consideration to the questions being asked and/or the response options (i.e. agreement statements). They also had different patterns from the remaining cases. For example, some of these cases (respondents) had scored an extremely high desire to maintain the current relationship with the company, and at the same time an equally extremely high intention to switch to other competitors. As these two questions consist of only one construct in the theoretical argument (the intention to stay construct), the normal assumption is to find a consistent pattern of answers to both questions. Also, among these cases it was noticed that similar answers were provided to questions which measured different concepts, and that the answers in normal cases displayed differences between the answers to questions that indicated different constructs within the theoretical framework.

Ultimately, the outliers were interpreted as extreme values resulting from careless respondents that did not pay enough attention when answering the questions. In the case of this research, as little is lost by deleting the nine outliers from the sample (ID 42, 58, 260, 316, 331, 383, 459, 380, 377), the decision was taken to exclude them from the analysis. This resulted in a final sample size of 525.

4.2.4. Examining the Normality Assumption

The normality of the observed variables was assessed through visual examination using histograms with a normality curve drawn on the frequency distribution. This was determined by using the frequency of function available in the SPSS software. Shown below are three examples of frequency graphs (Figure 4.2, 4.3, and 4.4 respectively) that depict the distributions that by visual examination appear to be very close to what can be considered as normal distribution.

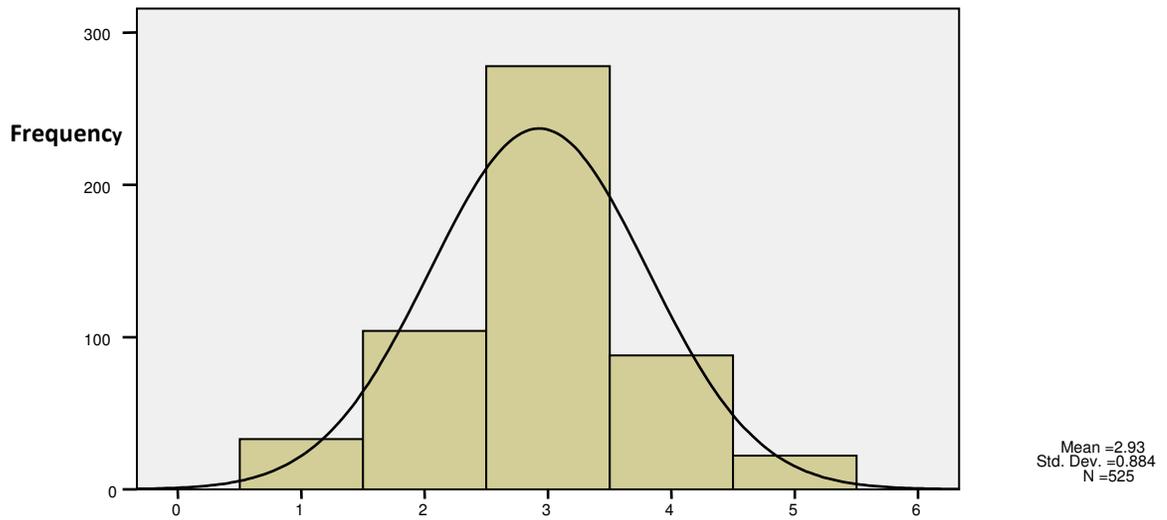


Figure 4.2. My cell phone service company deserves my loyalty.

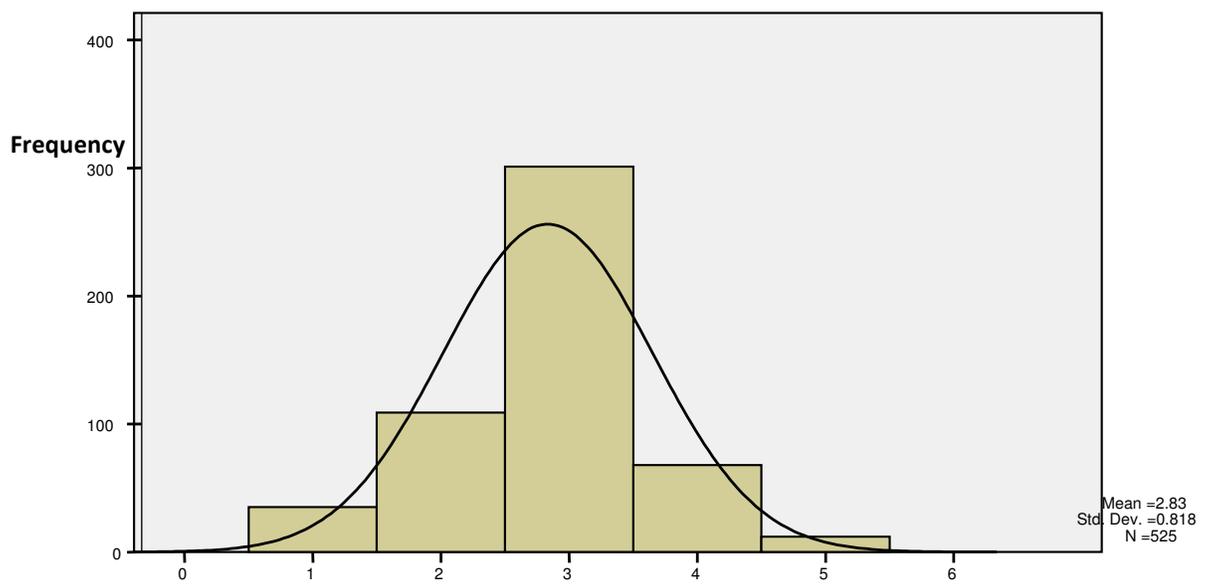


Figure 4.3.: customer of my cell phone service company ought to be loyal to it.

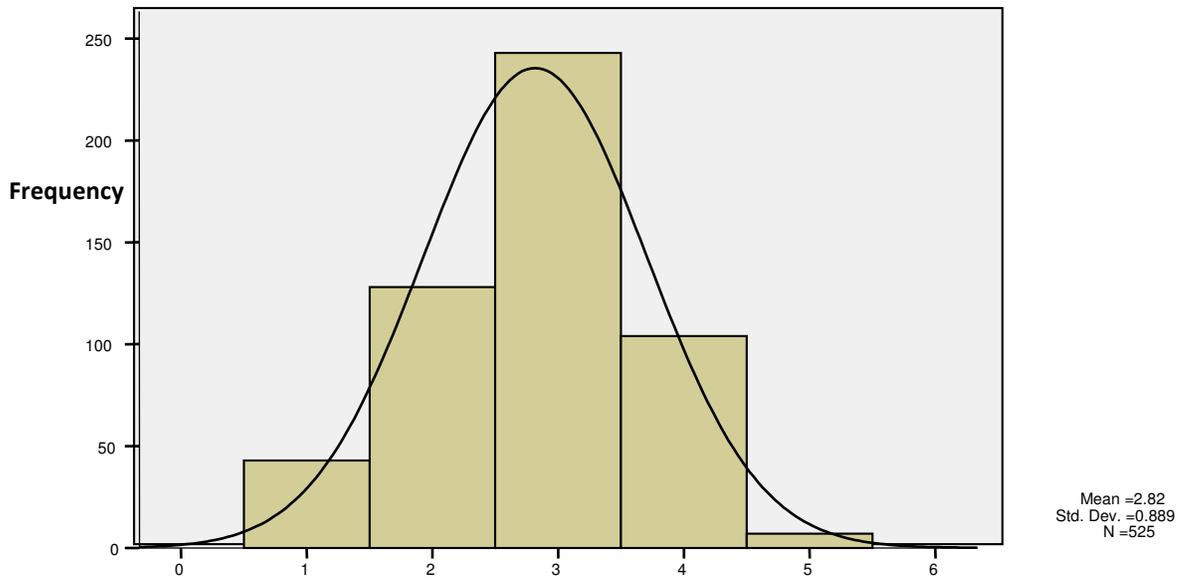


Figure 4.4. I would stay with my cell phone service company even if it slightly raises its price.

After examining all the variables included in the analysis, none of the variables was shown to be significantly skewed or highly kurtotic. No variables had a Skewness measure greater than +1 or -1: a threshold put by Hair et al. (2006). Furthermore, variables displayed a Kurtosis value greater than +1.5, which indicates a distribution is too peaked, and below -1.5, which indicates the distribution is too flat (Hair et al. 2006). In the data set available for this study, only two variables had slightly higher values than +1.5, indicating acceptable normality.

The values of the means and medians for most, if not all the variables, included in the analysis were very close, indicating the responses are close to normal distribution. Standard Deviation values for almost all the cases were relatively small and below 1.

4.3. Sample Description

In this section, descriptive statistical analysis and frequency analysis will be presented and explained with simple graphs and tables. The demographic information concerning the participants that was obtained, along with the collected data will be presented in order to give a description of the sample that was made available for analysis. In specific, participants' gender, age, level of education, and annual household income will be presented. The participants' length of the relationship with their cell phone service companies will also be displayed. The observations will be displayed with emphasis on annotating the most notable demographic characteristics of the sample.

4.3.1. Gender

Table 4.1. Descriptive Statistics: Gender

	Frequency	Percent
Male	223	42.5
Female	302	57.5
Total	525	100.0

Participants in the survey are 57.5 % female while 42.5% are male.

4.3.2. Age

Age groups were determined in order to define the age of the participants in the final sample. It can be noted from the table below that the most frequent age group is 35-44 years, which consists 22.3% of the participants in the survey. This is followed by the age group 45-54 years, with 17.9% participation, and then age group 25-29 years with 15.2%. The lowest participation was from the youngest age group (under 19 years old), as depicted in the figure below. The total sample size was 525.

Table 4. 2. Descriptive Statistics: Age of the Participants

	Frequency	Percent
Under 19 years old	5	1.0
20 to 24 years	53	10.1
25 to 29 years	80	15.2
30 to 34 years	50	9.5
35 to 44 years	117	22.3
45 to 54 years	94	17.9
55 to 59 years	35	6.7
60 to 64 years	25	4.8
65 years and over	66	12.6
Total	525	100.0

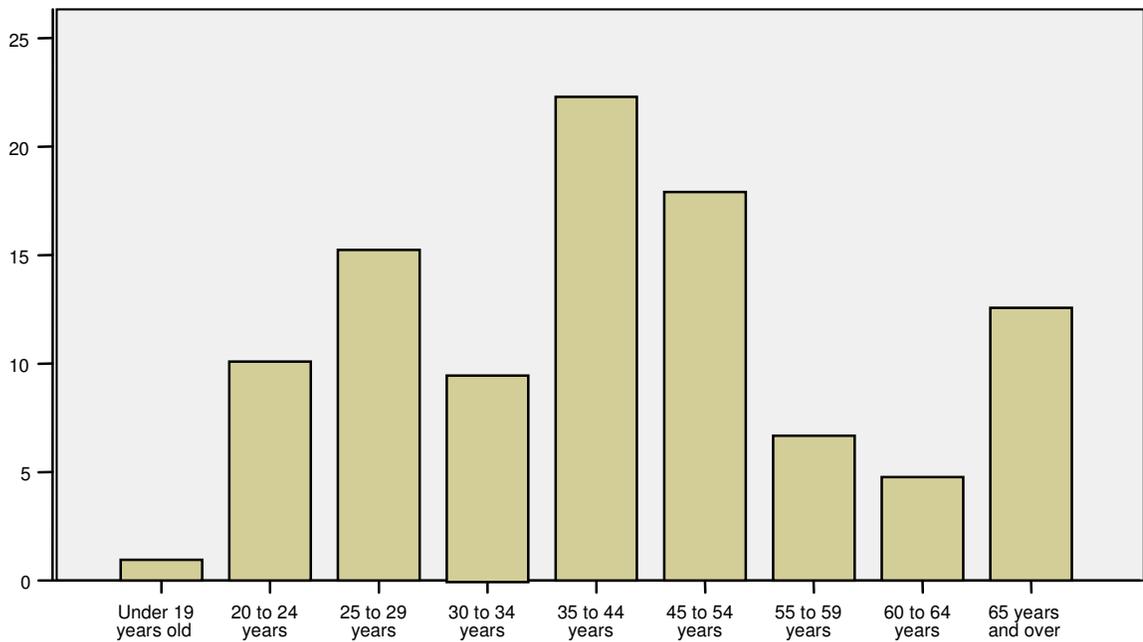


Figure 4.6: The Distribution of Participants' Age Groups in the Sample

4.3.3. Level of Education

The level of education of the respondents was established to be classified in seven intervals. It can be noticed from the table 4.3 below that the highest participation was 29.3% from participants in the survey who had acquired some college education but had not got a degree. This is followed by 28.2% of the participants who have acquired a Bachelor's degree, and then 18.9%, who acquired a graduate or professional degree. The lowest participation was from the participants that acquired the lowest level of education (Less than 9th grade), which consist of 0.4% of the sample.

Table 4.3. Descriptive Statistics: Level of Education

	Frequency	Percent
Less than 9 th grade	2	.4
9 th to 12 th grade, no diploma	4	.8
High school graduate (includes equivalency)	48	9.1
Some college, no degree	154	29.3
Associate degree	70	13.3
Bachelor's degree	148	28.2
Graduate or professional degree	99	18.9
Total	525	100.0

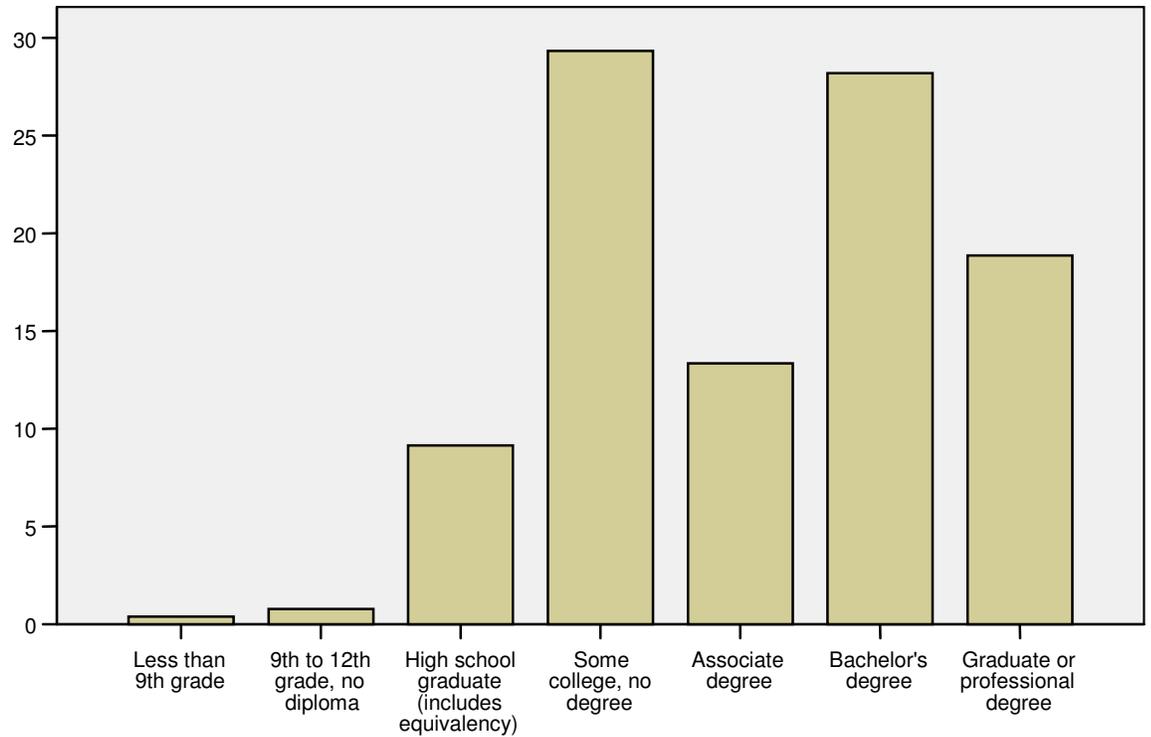


Figure 4.7: Frequency distribution of the level of education for all participants in the sample.

4.3.4. Annual Household Income

To classify the annual household income for the participants, 10 intervals have been used.

It can be noted from table 4.4, above, that the most frequent interval of customer annual household income was \$50,000 to \$74,999 (22.9%). This was followed by the \$35,000 to \$49,999 interval (18.9%), and then the \$75,000 to \$99,999 interval (14.5%). The lowest participation (6%) was from the highest income group of \$200,000 or more.

Table 4.4. Descriptive Statistics: Annual Household Income

	Frequency	Percent
Less than \$10,000	10	1.9
\$10,000 to \$14,999	11	2.1
\$15,000 to \$24,999	59	11.2
\$25,000 to \$34,999	61	11.6
\$35,000 to \$49,999	99	18.9
\$50,000 to \$74,999	120	22.9
\$75,000 to \$99,999	76	14.5
\$100,000 to \$149,999	63	12.0
\$150,000 to \$199,999	20	3.8
\$200,000 or more	6	1.1
Total	525	100.0

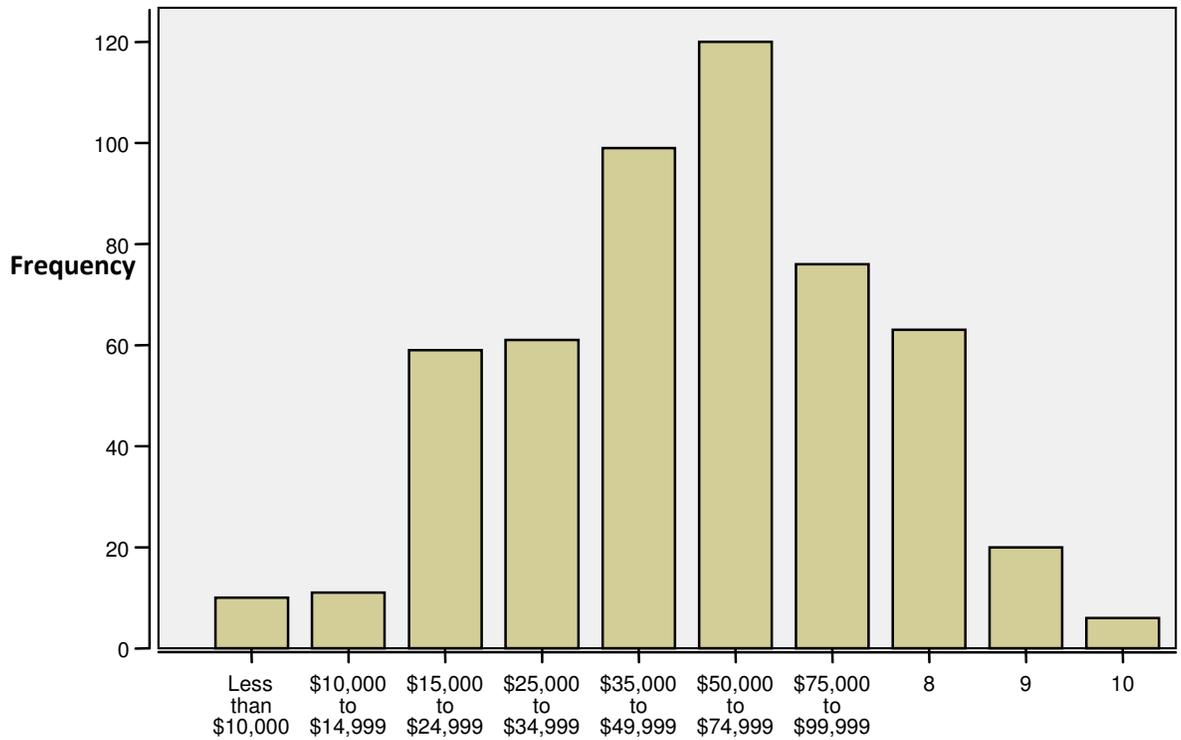


Figure 4.8: The Distribution of Annual Household Income for the Participants in the Sample

4.4.5. Length of the relationship

To classify the respondents' length of the relationship, six intervals have been made. It can be noticed from the table 4.5, below, that 45.5% of participants in the survey have been with their cell phone service company for 5 years or longer. The majority (69.3%) of the participants in the survey have been with the company for 3 years or longer.

Table 4.5: Descriptive Statistics: Length of the Relationship

	Frequency	Percent
Less than 1 year	33	6.3
1 year or longer; but less than 2 years	69	13.1
2 years or longer; but less than 3 years	58	11.0
3 years or longer; but less than 4 years	66	12.6
4 years or longer; but less than 5 years	60	11.4
5 years or longer	239	45.5
Total	525	100.0

4.4. Structural Equation Modeling Analysis

Structural equation modeling (SEM) is a comprehensive and powerful tool for assessing a theoretical model. It offers the researcher a great potential for further theory development.

Like any statistical method, it features a number of assumptions. These assumptions should be met or at least approximated to ensure trustworthy results. In the general sense, the SEM technique includes two statistical techniques together: factor analysis and multiple regression analysis. It examines the structure of interrelationships expressed in a series of equations similar to multiple regressions, all the relationships between the observed and latent variables, and all the relationships between the latent variables. The feature that is offered by using the SEM that is different from other statistical techniques is an ability to run all the relationships simultaneously, presenting the whole phenomenon under investigation at one time (Hair et al. 2006).

The following sections of this chapter will present the analysis using the SEM technique. First, the procedures that have been followed in an attempt to meet the normality assumption will be discussed. Second, model evaluation strategies will be overviewed for the purpose of justifying the implementing strategy for testing the SEM model. Third, the criteria for assessing the proposed model, such as the fit indices and a number of validity measures will be elaborated upon, as they will be used in the next stages of the analysis. Fourth, the measurement model will be presented and discussed to test the validity of the measurements that have been specified in advance in the proposed theoretical model. Finally, the structural model will be conducted, whereby the path coefficients are estimated, and results from testing the hypotheses will be presented and discussed.

4.4.1. SEM Normality Assumption

To ensure the assumption of normality and that none of the observed distribution of variables depart from normality for the obtained data, a robust maximum likelihood estimation, which adjusts the standards errors and provides the Satorra-Bentler scaled chi-square was employed. Implementing such strict criteria in order to achieve normality was made possible as the default method of estimating free parameters when using the structural equation modeling (SEM) technique with the AMOS Version 6 was used.

4.4.2. Model Evaluation Strategies

A number of model evaluation strategies based on different schools of thought were suggested for the purpose of testing the structural equation models, assessing the causal

relationship in the theoretical model. For this purpose, three main distinct strategies in the application of SEM have been proposed: the confirmatory modeling strategy, the competing or alternative models' strategy and model development strategy (Hair et al. 2006; Joreskog and Sorbom 1981).

The most direct application of SEM is confirmatory modeling strategy. Here, the researcher first presents a single model based on the theory, whereby the SEM application is employed to evaluate how well the theoretical model fits the data. The researcher collects appropriate data, and then tests the fit of the hypothesised model with the sample data whereby results should inform to either reject or fail to reject the model (Hair et al. 2006; Joreskog and Sorbom 1981).

The second strategy is the competing or alternative models strategy. The research identifies and tests several alternative models, which represent truly different hypothetical structural relationships relying on alternative theories. Such tests of competing models are supported by theories and are considered to be a much stronger test than using a single model with potential slight refinement in measurements. However, it is important to mention here that the implementation of the competing models strategy relies on the complexity of the model, as the more complex the model, the more equivalent models exist (Hair et al. 2006).

The third strategy is the model development strategy. It suggests that the model can be developed or rather amendable, aiming to improve the model through modifications of the measurement or structural models. The primary focus is to locate the source of poor fit in the

model and to develop a new model that can provide better description and fit to the sample data. It should be mentioned here that the proposed model is presented to be an initial model only where possibly poor model fit to the collected data can be handled through model respecification, in that, the researcher uses SEM application not only for testing the model empirically, but also to provide insights into model respecification. However, the model respecification must be established based on both theoretical support and statistical considerations (Hair et al. 2006).

This study implements the confirmatory modeling strategy as the proposed model in this research. It is a simple model and it would be difficult, or rather impossible to employ other competing models. Also, the theoretical framework has been designed based on reviewed literature and supported by theories and the approach of this study is to test the theoretical model. Within this strategy only slight modifications in refinement of measurements can be possible in order to suggest more valid and reliable measures, allowing a true test of the path models, either to reject or fail to reject the null hypotheses. In this respect, this study has followed Anderson and Gerbing's (1988) two-step approach, whereby the measurement model, which aims at validating the employed measurements and assessing their psychometric properties has been estimated first, followed by the use of a structural model to test the hypotheses.

4.4.2.1. Assessing Model Validity

Having a valid measurement model is an important issue in order to present reliable and trustworthy results. In the application of SEM, assessing the model validity requires taking

into consideration a number of validity criteria, such as discriminant, convergent and face validity, and also fit indices which indicate the extent to which the proposed theoretical model fits the collected sample data. The validity measures and fit indices should both provide details regarding the assessment of the measurements. They provide indications of the model validity that should be implemented before the hypotheses are tested. This approach is in line with the stream of literature in the area of relationship marketing that employs SEM application. Previous studies implemented such an approach, and this study has benefited from utilising procedures that were followed in the relevant areas of research.

In this section a number of validity measures will be overviewed and explained in order to give a background for the use of the employed validity measures in the measurement model section. Following this, the fit indices will be overviewed and discussed in order to justify the use of these particular indices in the hypothesised model in subsequent sections, specifically, the measurement model and the structural model.

4.4.2.1.1. Validity Measures

A number of validity measures should be used to assess the statistical and content validities of the proposed model. In particular, these validity measures need to be taken into consideration at the stage of examination of the validity of the measurement model. Having said that, one of the most important and comprehensive validity measures is that of construct validity, which contains a number of components such as convergent validity, discriminant validity, and face validity (Hair et al. 2006). In this research, convergent, discriminant, and face validity all will be reviewed, and implemented in the measurement model section.

To assess convergent validity, the factor loadings, variance extracted and internal consistency of the scales (construct reliability) need to be examined. In addition, according to Fornell and Larcker's (1981) approach, convergent validity is also assessed by the significance of the *t* statistics that represents the relationships between indicators and their latent constructs. These procedures assess the extent to which indicators of a specific construct converge or share a high proportion of variance in common, indicating the convergent validity measurement. High correlations between items measuring the same or closely related constructs are needed. This can be established by having acceptable factor loadings and internal consistency among items that identify a latent variable according to guidelines that have been set by a number of academic studies (e.g. Anderson and Gerbing 1988; Bagozzi and Yi 1988; Bollen and Lennox 1991; Fornell and Larcker 1981). These guidelines will be elaborated upon and followed subsequently in the measurement model section.

On the other hand, discriminant validity is one of the most important validity measures that need to be assessed when examining the extent to which the measures differ from each other. According to Fowler, (1995) discriminant validity can be the extent to which groups of respondents, who are thought to differ in what is being measured, differ in their answers. From another, and more theoretical standpoint, the discriminant validity measure is the extent to which a construct is truly distinct from other constructs (Hair et al. 2006). For this research, discriminant validity will be assessed following the approach of Fornell and Larcker (1981). This approach is regarded as a rigorous method for examining the discriminant validity of a measurement model, and was used extensively in the area of

relationship marketing (e.g. DeWitt, Nguyen, and Marshall 2008; Fullerton 2005; Gustafsson, Johnson and Roos 2005). To ensure the discriminant validity of the constructs, Fornell and Larker (1981), argued that the average variance extracted (AVE) of any two constructs should be greater than their squared correlation.

In addition, an important issue that needs to be considered in the validity of the constructs is the face validity, or what is known as the content of the questions. This is related to the extent to which the content of the items is consistent with the construct definition: items represented by what is intended to be measured according to the aforementioned definitions. This validity procedure relies basically on the judgment of the research, and requires the researcher to examine carefully the content of the questions before taking any action such as retaining or deleting any items from the analysis (Hair et al. 2006).

It is worthwhile here to mention that face validity is an important and complementary validity procedure that accompanies the other statistical validity measures (i.e. convergent validity, and discriminant validity) to assess the constructs' validity and eventually the measurement model. When a judgment needs to be taken regarding any potential action to modify the measurement model, such as deleting an item from its respective item-scale, the assessment should be made taking into consideration both statistical procedures and also theoretical considerations.

4.4.2.1.2. Fit Indices

Presenting the confirmatory factor analysis results requires considering the use of the appropriate fit indices and specific construct validity in order to assess how well the specified model is consistent with the sample data, supporting both the measurement model validity and the results of the structural model. In this section, fit indices will be reviewed and details on which indices to use and guidelines for acceptable fit will be provided prior to proceeding with the analysis. Justifications for the selections will be made based on the value and appropriateness of each index that indicates acceptable fit.

The basics of Goodness-of-fit (GOF), relies on comparing the theory with the reality represented by the data. Fit indices in the CFA/SEM model can be classified into three general groups of GOF measure: absolute measures, incremental measures, and parsimony measures. Absolute fit is measured by using the Chi-Square (χ^2) goodness of fit statistic, which is considered to be the key value in assessing the GOF of the CFA/SEM model. It indicates the extent to which the observed covariance matrix does not match the estimated covariance matrix within sampling variance (Hair et al. 2006).

In general, χ^2 value is sensitive to sample size. As sample size increases the χ^2 value increases and the chance of rejecting a model also increases. This can be interpreted as the increase in sample size, which makes it more likely to detect discrepancies between the estimated and observed covariance matrix. The sample size, thus, might influence the non-significant probability level and the rejection or non rejection of the model fit. Similarly, the number of estimated free parameters also influence the SEM estimated covariance matrix. It

can be argued that the power of the χ^2 test is a function of sample size and parameter size and level of significance. In this study, in addition to reporting the χ^2 value, the degree of freedom, sample size, and p-value will be reported (Bagozzi and Yi 1988).

Researchers seldom have CFA/SEM models that are not significantly different and routinely overlook the Chi-square and rely on other measures to assess SEM/CFA models. The Goodness-of-Fit Index (GFI) is moderately sensitive to sample size due to the effect of the overall sample size on sampling distribution; a GFI value range from 0 to 1 with higher values indicating better fit. Overall a GFI value of greater than .90 typically is considered good. However, these values are not cut off values, they are only guidelines to assess the fit of the model. Moreover, the adjusted goodness-of-fit index (AGFI) tries to take into account differing degrees of model complexity. AGFI favours models with a minimum number of free paths. AGFI values are typically lower than the GFI value and this is relatively based on model complexity. Additionally, there is also the Root Mean Square Error of Approximation (RMSEA) fit index, which tends to correct for the tendency of the Chi-square GOF. It simply tries to correct for both model complexity and sample size, and the lower the RMSEA the better the fit of the model. It is also known as a badness-of-fit index, as lower values produce a higher fit in contrast to other fit indices where higher values produce better fit. A guideline states that values below 0.10 equal acceptable models (Hair et al. 2006). In this study, the GFI and RMSEA fit indices will be reported to indicate the acceptability of the model fit.

Second, there are incremental fit indices, which are also called goodness-of-fit indices. These are concerned with the degree to which the proposed model is superior to other alternative models and assumes that all observed variables are uncorrelated, as the larger its value the greater the improvement of the proposed model over the alternative model. There are a number of incremental fit indices provided by SEM programmes, such as the Normed Fit Index (NFI), Comparative Fit Index (CFI), and Tucker Lewis Index (TLI). The CFI is one of the main incremental fit indices and the most widely used as it is relative insensitivity to model complexity, and its values fall within the familiar normed ranges from 0 to 1. The CFI values should exceed .90 to be associated with a good model fit; the higher the value, the better fit of the model, and so it is with the NFI and TLI values. However, the TLI is not normed and its ranged values can fall below 0 or above 1. For this study the NFI and CFI values will be used because they the most widely used indices for normed data and relatively insensitive to model complexity (Hair et al. 2006).

Third, there are parsimony fit indices, which relate model fit to model complexity, whereby the more complex the model the better the fit. The indices here are only useful in comparing the fit to other models, one more complex than the other. The Parsimony Goodness-of-fit index (PGFI) and the parsimony normed fit index (PNFI) are examples of parsimony fit indices. However, such fit indices will not be used in this study since the attempt here is only to confirm the proposed model, following a confirmatory modeling strategy.

Although there are no cut off values that can distinguish good models from bad models for any of the aforementioned GOF indices (i.e. absolute measures, incremental measures, and

parsimony measures), the study will benefit from the recommended values (guidelines) to determine the fit of the proposed conceptual model to the data set. Furthermore, multiple fit indices representing different types of measures from badness-of-fit indices and goodness-of-fit indices are advisable for use. It is recommended that the researcher should not only rely on the χ^2 statistic, but also assessing model fit based on multiple fit indices, which take into account the theoretical, statistical, and practical considerations. Ultimately, reporting multiple fit indices representing different measures satisfy the general guidelines for evaluating a model fit (Baumgartner and Homburg 1996; Browne and Cudeck 1992; Hair et al. 2006).

4.4.2.2. Evaluating the Measurement Model

As discussed in the previous chapter, the conceptual model in this research proposed six latent variables, each of which have been assigned with observed variables specified in advance based on developed item-scales from previous studies in the relevant area of research. Confirmatory factor analysis was performed on these measurements using AMOS Version 6 with maximum-likelihood (ML) estimation. The results were presented taking into consideration a number of validity measurements and reliability of scales along with different fit indices for the measurement model, based on both statistical considerations and the theoretical support. This is in order to demonstrate that the measurement model fits the sample data well, has a satisfactory level of validity and is ready for hypotheses testing. Standardised estimates were used for all subsequent analysis. The measurement model was carried out on all the scales run together at the same time on a group basis.

In this section, a number of validity measurements, which are used to validate the measurement model were addressed and implemented. Construct validity were examined whereby convergent validity, discriminant validity, and face validity were addressed and results presented. The measurement model was modified by removing a number of items from the analysis in order to achieve the most possible, reliable and valid measurements. Also reliability and internal consistency of all scales will be presented. Finally, the overall final model fit will be presented whereby the Chi-square and a number of different fit indices such as Goodness-Of-Fit and Badness-Of-Fit will be reported indicating the acceptability of the measurement model.

Regarding the convergent validity: factor loadings as well as the squared multiple correlations between the items and the constructs were reviewed carefully (Bollen 1989). A number of guidelines have been laid down to determine acceptable measurements. According to Fornell and Lacker (1981), convergent validity exists when item factor loadings are greater than .70 and item squared multiple correlations are greater than .50. Other researchers suggested that a minimal level of factor loading of .60 is considered acceptable to infer convergent validity (Bagozzi and Yi 1988), and with the squared multiple correlations, item values above .40 are reflective of a substantial shared variance with their respective scales (Taylor and Todd 1995). Moreover, according to Hair et al. (2006), factor loading guidelines state that all loadings should be at least .50, and preferably .70 or higher, and should be significant as required for convergent validity.

In this study, according to the aforementioned guidelines, satisfactory factor loadings were achieved for all items except an item belongs to WTP construct that scored very low on its respective construct. The value was less than the standards set by Fornell and Lacker (1981), and thus the item was excluded from the analysis. Furthermore, another item from the normative commitment (NC) scale was removed as it achieved the lowest values on its respective construct, and by removing it this supported higher level of discriminant validity (refer to discriminant validity in subsequent pages). Moreover, one item from the calculative commitment (CC) was also excluded from the analysis. This item had the lowest value compared with the other items that loaded on the same construct. The consequences of removing these items were evaluated, which affected the discriminant validity and resulted in improving the model fit and, substantially lowers the X^2 value. It also resulted in better face validity for the construct and more consistent measurement scales within the proposed model (table 4.7 indicates the excluded items).

The results of this study indicated a high degree of shared variance between the indicators of each construct, as all variance-extracted estimates were greater than .50, suggesting an overall acceptable convergent validity. In summary, after removing the aforementioned items from the analysis, all items loaded highly on their respective construct, indicating evidence of convergent validity. All loadings were significant as required for convergent validity. The lowest value achieved was .59 for one of the items that indicates the normative commitment construct. Regarding the internal consistency, the results support the internal consistency of each scale, as all composite reliabilities were greater than the .70 standards set by Nunnally (1978).

Table 4.6. Items Excluded From Final Measurements

Construct	Items
AC	I like my cell phone service company (a) I use my cell phone service company because I really like it. I am a customer of my cell phone service company because I feel a strong sense of attachment to it. I do business with my cell phone service company because I like it.
NC	My cell phone service company deserves my loyalty. Customers of my cell phone service company ought to be loyal to it. I would not leave my cell phone service company right now because I have a sense of obligation to it. Even if it were to my advantage, I do not feel it would be right to leave my cell phone service company now (a)
CC	I feel like I don't have a choice as to which cell phone service company I use. I feel like I use my cell phone service company because I have to. I feel sort of stuck with my cell phone service company. I feel somewhat locked into using my cell phone service company (a)
PWOM	I say positive things about my cell phone service company to other people. I would recommend my cell phone service company to someone who seeks my advice. I encourage my friends and relatives to consider choosing my cell phone service company
ITS	I definitely intend to maintain my relationship with my current cell phone service company. I will most probably switch to an alternative cell phone service company in the foreseeable future.
WTP	I would stay with my cell phone service company even if it slightly raise its price. I would accept higher prices, if my cell phone service company raises its prices. I am likely to pay a higher price than what competitors charge for the benefits I currently receive from my cell phone service company (a)

(a) Items excluded after pretest based on confirmatory factor analysis

Using the most stringent test to examine the discriminant validity, according to Fornell and Larcker (1981), the squared correlation between constructs must be less than the average variance extracted (AVE) for each underlying construct in order to achieve the acceptable discriminant validity. AVE was calculated for each construct, as it is not provided by AMOS 6 software. The formula according to Hair et al. (2006) was calculated by computing the sum

of the squared standardised factor loadings, divided by the number of items for each latent construct. Also, the squared correlation for each pair of constructs was calculated. Comparisons were made between the calculated values of the AVE and squared correlations in order to assess the discriminant validity of each construct.

Giving the high squared correlations among affective commitment (AC) and positive word of mouth (PWOM), one item from the affective commitment scale was excluded from the analysis, resulting in a higher variance extracted (VE) than the squared correlation between AC and PWOM constructs. This supported fulfilling the requirement of the discriminant validity test for this pair of constructs. It is important to mention here that removing any item from the analysis relied on a number of statistical and content procedures: factor loadings, a discriminate validity test, face validity, and the fit of the model with the sample data. The decision to exclude items was based on the judgment of the researcher, as this was believed to be a critical part of the process when determining the measurement model, which will be used subsequently in testing the structural model. Removing the item from the affective commitment scale appears not to have made a difference to the content of the item scale. The face validity of the item “I like my cell phone service company” with the availability of the other items in the scale that also measure the liking concept, makes it possible in this respect to remove this item from the analysis. Table 4.8 presents the final item scales, factor loadings, and their reliabilities. In addition, table 4.9 presents the correlation matrix for latent variables and the average variance extracted.

Table 4.7: Confirmatory Factor Analysis, Scale Reliabilities, and Item Means

Construct	Scale Reliability	Factor Loading	Item Means	Items
AC	.84	.84 .70 .81	3.63 2.85 3.52	I use my cell phone service company because I really like it. I am a customer of my cell phone service company because I feel a strong sense of attachment to it. I do business with my cell phone service company because I like it.
NC	.81	.91 .83 .59	2.93 2.83 2.30	My cell phone service company deserves my loyalty. Customers of my cell phone service company ought to be loyal to it. I would not leave my cell phone service company right now because I have a sense of obligation to it.
CC	.88	.82 .90 .83	2.30 2.35 2.52	I feel like I don't have a choice as to which cell phone service company I use. I feel like I use my cell phone service company because I have to. I feel sort of stuck with my cell phone service company.
PWOM	.87	.86 .91 .79	3.63 3.77 3.38	I say positive things about my cell phone service company to other people. I would recommend my cell phone service company to someone who seeks my advice. I encourage my friends and relatives to consider choosing my cell phone service company.
ITS	.78	.87 .74	3.59 3.46	I definitely intend to maintain my relationship with my current cell phone service company. I will most probably switch to an alternative cell phone service company in the foreseeable future (r).
WTP	.79	.92 .72	2.82 2.43	I would stay with my cell phone service company even if it slightly raise its price. I would accept higher prices, if my cell phone service company raises its prices.

Notes: standardised factor loadings reported from AMOS 6 Confirmatory Factor Analysis results (r) reversed item

Table 4.8. Correlation Matrix and Average Variance Extracted

	1	2	3	4	5	6
1. Affective commitment	1					
2. Normative commitment	.669 (.000)	1				
3. Calculative commitment	-.388 (.000)	-.180 (.000)	1			
4. Positive word of mouth	.702 (.000)	.504 (.000)	-.430 (.000)	1		
5. Intention to stay	.644 (.000)	.456 (.000)	-.478 (.000)	.697 (.000)	1	
6. Willingness to pay	.461 (.000)	.373 (.000)	-.313 (.000)	.481 (.000)	.538 (.000)	1
Average variance extracted	.657	.621	.723	.730	.651	.684

Notes: N=525; significance levels are in parentheses (two-tailed test).

As a result, all variance extracted estimates exceeded the threshold 0.5, and were greater than the squared correlation estimates for all constructs, except in the case of a very slightly higher value of squared correlation displayed between the PWOM and the intention to stay (ITS) constructs than the AVE score for ITS construct. However, the correlation between this pair of constructs is less than the .90 threshold suggested by Hair et al. (2006, p.227), and therefore indicates no substantial collinearity problem for the path coefficient. Based on these results, the final measurement model was generated and made ready to process with the analysis to test the structural model.

It is important here to mention that for two latent factors (WTP, ITS) in the measurement

model, only two indicators were used. According to Anderson and Gerbing (1988), defining the factors in the measurement model with only two indicators per factor can be a problematic issue unless a large sample size is obtained. The sample size is considered to be, in some situations, used as a remedy to provide proper solutions with few item scales that define latent factors, arguing that solutions have proven to be true only for large samples. Although such guidelines on minimum sample sizes have not been determined, Anderson and Gerbing (1988) cited studies by Tanaka (1984), and Harlow (1985), which suggested that a sample size of at least 400 or 500 is needed. In this research, it can be argued that an acceptable sample size (N=525) was made available that allowed using two indicators to represent a latent factor.

Moreover, to comply with efficient measurement, the three dimensions of customer commitment were assessed using relatively condensed forms of scale, taking into consideration assessments of validity and reliability of the measurements. Each dimension of commitment was measured using three items with the highest possible loadings on their respective commitment factor. Measuring the three dimensions of commitment with three items for each dimension is in line with previous studies, such as the work of Gellately, Meyer, and Luckhak (2006).

To assess the overall measurement model fit, multiple fit indices were reported. Since Chi-Square may be an inadequate measure to assess model fit with large sample sizes (Brown and Cudeck 1993), four additional commonly used fit indices were selected for reporting: The Goodness-of-Fit Index (GFI), the root mean square error of approximation (RMSEA),

the Normed Fit Index (NFI), and the Comparative Fit Index (CFI). These fit indices were reported in similar studies in the area of research under investigation, and have shown to be acceptable among a wide range of studies (e.g. Bansal, Taylor, and James 2005; Jones, Mothersbaugh, and Beatty 2000; Oliver and Swan 1989).

Overall, the fit statistics indicated an acceptable fit of the measurement to the sample data, with all fit indices equal to, or better than the recommended values. Although the Chi-square statistic was significant ($\chi^2 = 352$, $df = 89$, $p < .01$), fit indices not as heavily influenced by sample size indicate an acceptable measurement of model fit ([NFI] = .94; [CFI] = .95; [RMSEA] = .075; [GFI] = .92).

4.4.2.3. Structural Model

A confirmatory factor analysis, based on the data from contractual cell phone users (N=525) was performed through AMOS Version 6. The hypothesised model was presented in circles that represent latent variables and rectangles that represent measured variables (refer to figure 4.10). Lines connecting variables indicate the hypothesised relationships. An absence of a line connecting variables implies no hypothesised direct effect. Arrows display the hypothesised directions between dependent (WTP, PWOM, ITS, NC) and independent variables (AC and CC) in the specified model.

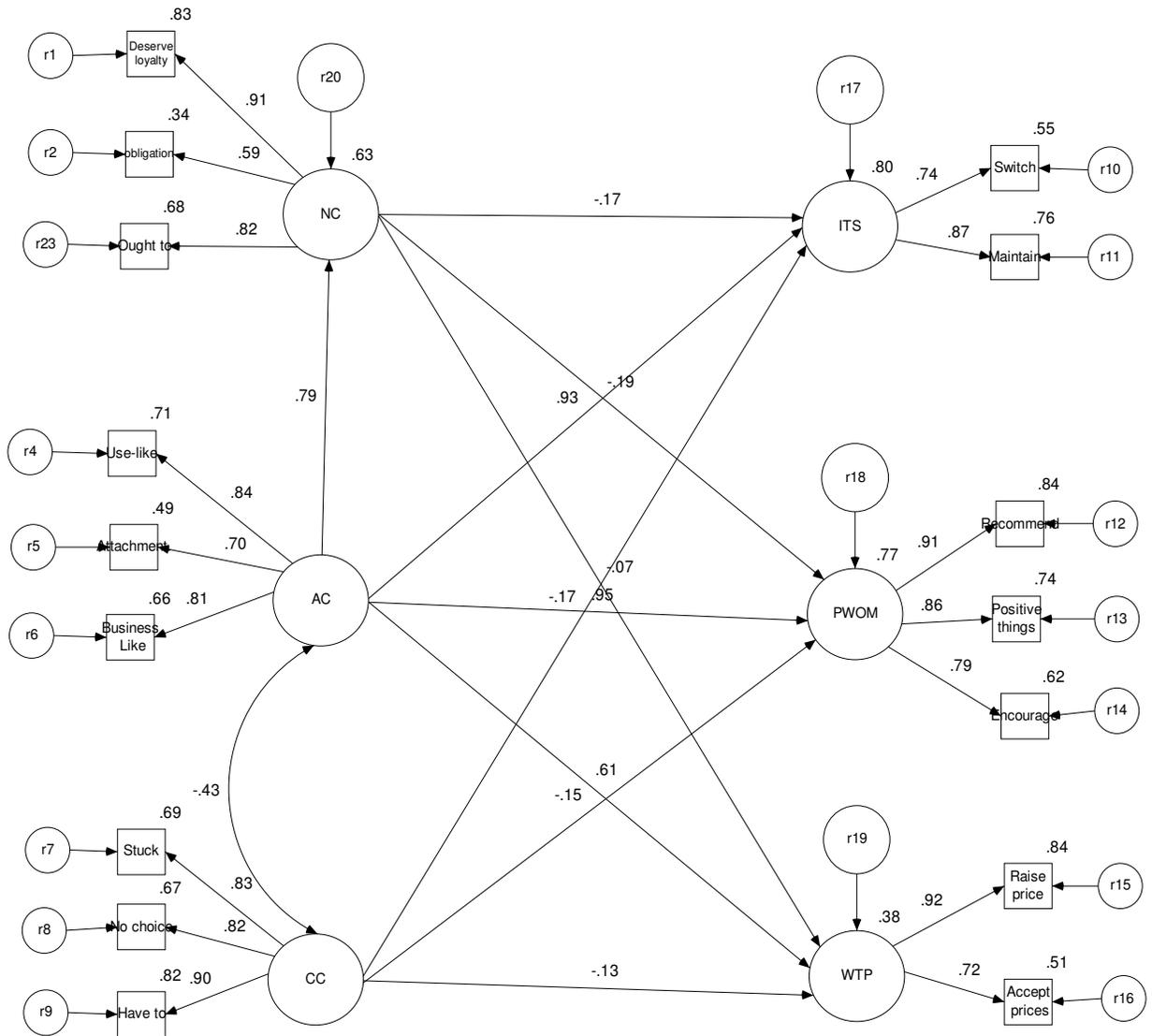


Figure 4.10: The structural model results

Overall, the fit indices indicated an acceptable model fit with the sample data ($X^2 = 432$, $df = 79$, $p < .01$, [NFI] = .92; [CFI] = .94; [RMSEA] = .083; [GFI] = .90). Affective commitment was expected to have positive impacts on intention to stay (ITS), positive word of mouth (PWOM), and willingness to pay more (WTP) [Hypotheses 1, 2, 3 respectively].

The results support these hypotheses [Hypothesis 1, $B = .93$, $t\text{-value} = 10.92$, $p < .01$; Hypothesis 2, $B = .95$, $t\text{-value} = 12.76$, $p < .01$; Hypothesis 3, $B = .61$, $t\text{-value} = 7.10$, $p < .01$].

Although there have been relatively high path coefficients between affective commitment and intention to stay in one hand, and affective commitment and positive word of mouth in the other, it is plausible to argue that the constructs are conceptualised differently whereby they mean different things and therefore have different implications on relationship marketing. It can be argued that they are not identical. The ITS construct explains that customers intend to maintain the relationship with their service provider in the current time and the future, and this contributes to the company's customer retention strategy. On the other hand, PWOM construct measures the positive referrals of customers toward the company. It measures the intention of customer to refer positively to other people such as friends, relatives etc. Customers recommend their company to other people and invite them to subscribe. The PWOM implications lay on acquisition efforts and not retention. Thus, although there seems to be proximity in impacts of affective commitment on types of loyalty outcomes, affective commitment impacts deal with distinct concepts that have different implications on the company's relationship marketing strategies.

It can be argued that ITS and PWOM considered to be different loyalty relational outcomes that have different implications on relationship marketing strategies in which the latter is a higher level of advanced loyalty to firms than the former, i.e., ITS is a pre-requisite to POWM. Customers who have the intention to stay with the company they refer positively to it.

Affective commitment was expected to positively affect normative commitment (Hypothesis 11), and to be negatively related with calculative commitment (Hypothesis 10). Both relationships were found significant in the hypothesized direction and were supported: [Hypothesis 11, $B = .79$, $t\text{-value} = 12.19$, $p < .01$; Hypothesis 10, $B = -.43$, $t\text{-value} = -7.97$, $p < .01$].

On the other hand, calculative commitment was predicted to have a positive impact on ITS [Hypothesis 4], and a negative impact on PWOM and WTP [Hypothesis 5, 6 respectively]. The results support the negative impacts of calculative commitment on PWOM and WTP only [Hypothesis 5, $B = -.15$, $t\text{-value} = -4.10$, $p < .01$; Hypothesis 6, $B = -.13$, $t\text{-value} = -2.69$, $p < .01$], whereas the impact of calculative commitment on ITS was significant but found to be negative and not positive [Hypothesis 4, $B = -.17$, $t\text{-value} = -4.31$, $p < .01$]. Therefore, only hypotheses 5 and 6 were supported while hypothesis 4 was not supported. This may infer that CC has hindering role on customer retention in an advance phase of customer-firm relationship.

Although, normative commitment was hypothesised to have positive impact on ITS, PWOM, and WTP [Hypothesis 7, 8, 9 respectively], only the impacts of normative commitment on ITS, and normative commitment on PWOM were significant, but the relationships were instead negative [Hypothesis 7, $B = -.17$, $t\text{-value} = -2.40$, $p < .05$; Hypothesis 8, $B = -.19$, $t\text{-value} = -2.84$, $p < .01$]. Hypothesis 9, which states that normative commitment has a positive impact on WTP, was not found to be significant and thus the

hypothesis was not supported. Therefore, hypotheses 7, 8, 9 were all not supported. This may be due to the complex nature of NC that is influenced by the other types of commitment, an issue discussed further in the discussion section of this thesis. Table 4.10 presents the results for the structural model.

Table 4.9. AMOS Results for the Proposed Model

Hypothesis	Relationship	Estimate	t-value
1	Affective commitment → Intention to stay	.93	10.92**
2	Affective commitment → PWOM	.95	12.76**
3	Affective commitment → WTP	.61	7.10 **
4	Calculative commitment → Intention to stay	-.17	- 4.31**
5	Calculative commitment → PWOM	-.15	- 4.10**
6	Calculative commitment → WTP	-.13	- 2.69**
7	Normative commitment → Intention to stay	-.17	- 2.40*
8	Normative commitment → PWOM	-.19	- 2.84**
9	Normative commitment → WTP	-.07	-.898
10	Affective commitment ↔ Calculative commitment	-.43	- 7.97**
11	Affective commitment → Normative commitment	.79	12.19**

Notes: PWOM = positive word of mouth, WTP = willingness to pay more

Estimate results are reported from standardized regression weights

* $p < .05$ ** $p < .01$

$\chi^2 = 432$, $df = 79$, $p < .01$, [NFI] = .92; [CFI] = .94; [RMSEA] = .083; [GFI] = .90

4.4.2.3.1. Test of Rival Models

The study tests two alternative models in order to test the robustness of the results. The first alternative model constrained the path from affective commitment to normative commitment, presuming that there is no relationship between these two dimensions. Little

research in consumer studies has gone into normative commitment, addressing such a link in consumer-firm relationship (e.g., Bansal et al. 2004). The assumption was made considering that these two constructs are unrelated. However, the fit of the model was worse than the original model (refer to table 4.10). The second alternative model unconstrained the affective commitment impact on normative commitment and drew lines from the intention to stay to positive word of mouth as well as willingness to pay more. The assumption was made as intention of customer to stay leads to positive word of mouth and willingness to pay more. However, this assumption was not supported and again the original model has shown to have a better fit than the second alternative model. It is important here to point out the links were between intentional loyalty outcomes and not behavioural and this may actually justify the different results from other research (Evanschitzky, Iyer, Plassmann, Niessing, and Meffert 2006) that studied links between attitudinal loyalty (measured as referrals) and behavioural loyalty (measured as number of usage). This research narrowed the scope on attitudinal loyalty, broaden the concept to ITS and WTP as well.

The models were evaluated by comparing all fit indices results in table 4.9 and 4.10 and indicate that the various model fit indices for the original model are superior to the two alternative models.

Table 4.10. AMOS Results for Rival Models

Path	Rival Model 1	Rival Model 2
	Effect Estimate	Effect Estimate
AC →ITS	.723**	.620**
AC →PWOM	.749**	.365**
AC →WTP	.444**	-.041
CC →ITS	-.203*	-.239**
CC →PWOM	-.165*	-.067
CC →WTP	-.156*	-.038
NC →ITS	.145*	.204**
NC →PWOM	.093*	.031
NC →WTP	.150*	.080
AC↔CC	-.302**	-.308
ITS →PWOM	---	.509**
ITS→WTP	---	.610
	$\chi^2 = 745, df = 94, p < .01$	$\chi^2 = 654, df = 92, p < .01$
	NFI = .867	NFI = .883
Model fit	CFI = .881	CFI = .897
	RMSEA = .115	RMSEA = .108
	GFI = .857	GFI = .875

Notes: Estimate results are reported from standardized regression weights. * $p < .05$ ** $p < .01$

Alternative model 1: excludes direct effect of affective commitment on normative commitment.

Alternative model 2: includes direct effects of intention to stay on positive word of mouth and willingness to pay, and excludes direct effect of affective commitment on normative commitment.

4. 5. Summary of Chapter

The data analysis stage began by transforming the data into an SPSS file, which was then scrutinised for data entry errors and no values were detected to be out of the specified range. Identified incomplete individual cases were considered missing values and the judgment to exclude them prior to the analysis was taken as considered to be the most appropriate choice. The examination of potential outliers was made through multiple tests: Multivariate, Bivariate, and Univariate analysis, such as the z-score, whiskerplots graphics and Mahalanobis test. This resulted in identifying nine outliers that were excluded from the analysis. The data obtained displayed, to a great extent, a close approximation to normal distribution. Descriptive statistics were presented before the SEM analysis was performed. The age, gender, education, and length of the customer-firm relationship have all been presented, giving an explanation to the sample data under taken. The final sample that was made available for the analysis was 525.

SEM was used as the statistical technique implemented in this research, as it offered the possibility to run both factor analysis and multiple regression analysis; and also provided a feature that examines all the relationships included in the analysis at one time. Following the two-step approach set by Anderson and Gerbing (1988), first, measurement model was performed to assess the overall measurement model considering discriminant, convergent, and face validity of the items used in the analysis, and yet the reliability of the scales. Before measurement model analysis, validity measurements were reviewed. Also, fit indices were overviewed whereby a number of badness of fit and goodness of fit indices were selected for use in this study along with the Chi-Square index.

In the measurement model analysis, an acceptable measurement model fit was achieved. Although the Chi-Square statistic was significant ($\chi^2 = 426, df = 75, p < .01$), other fit indices also indicated an acceptable measurement model fit (Normed Fit Index [NFI] = .94; Comparative Fit Index [CFI] = .95; Root Mean Square Error of Approximation [RMSEA] = .075; Goodness of Fit Index [GFI] = .92). Four items were removed from the analysis to achieve acceptable factor loadings, discriminant validity among the constructs, and eventually valid and unidimensional constructs. This resulted in an acceptable measurement model that fitted the sample data obtained for this study.

Second, the structural model was conducted to test the hypotheses, whereby results were presented in a fairly factual style. Affective commitment has been shown to have the strongest positive impacts on loyalty outcomes and normative commitment, and correlate negatively with calculative commitment. These hypotheses were supported, and also the findings were in line with the literature established in this area of research: calculative commitment has been shown to have negative effects on loyalty outcomes; the effects on PWOM and WTP were negative and these effects supported the related hypotheses. However, the calculative commitment-intention to stay (ITS) path, which was hypothesised to have a positive effect, has shown to be contradictory to the large bulk of literature by scoring a significant negative effect.

Normative commitment, on the other hand, has been shown to have two significant, but relatively weak, paths toward loyalty outcomes out of a possible three. However, normative commitment-ITS, and normative commitment-PWOM paths, although demonstrating

significant relationships, had a negative, not positive effect. These findings are in contrast to the hypotheses that were determined in the first place. Thus, according to the hypotheses, the normative commitment effects on ITS, PWOM and WTP were not supported. This shows that the normative view, especially in the current context, (cell phone services) surprisingly leads to detrimental effects on customer loyalty. Such results can be interpreted by determining that customers might feel that they have fulfilled their part of the psychological contract, while the other part (service company) did not: this, in affect, might create a sense of resentment instead, and result in the higher the sense of obligation toward the company, the less the customer's willingness to stay and refer positively. In the following chapter, these results will be interpreted carefully and discussed extensively in more detail. As a result, 7 hypotheses out of 11 were supported. As additional validation procedures to the research model, two rival models were suggested to investigate the robustness of the original model. The first one excludes direct effect of affective commitment on normative commitment, and the second includes direct effects of intention to stay on positive word of mouth and willingness to pay, and excludes direct effect of affective commitment on normative commitment. However, the various fit measures for the original model were in support to the original model, showing it to be superior to the two rival models.

5. Discussion

Overall, the results of the structural model indicated that affective commitment had the strongest and most favourable positive impact on relational outcomes. This finding is in line with the streams of literature in both relationship marketing (e.g. Evanschitzky et al. 2006; Fullerton 2005a; Fullerton 2005b; Harrison-Walker 2001; Jones et al. 2007), and organisational behaviour (e.g. Blau and Holladay 2006; Chang et al. 2007; Meyer et al. 2002; Wasti 2005). Affective commitment was found to increase customer intention to stay, positive word of mouth, and willingness to pay more. In addition, affective commitment results support the negative correlation with calculative commitment, and the positive impact on normative commitment. Customer commitment to the service company, based on the affective attachment, have very strong influences toward relational outcomes. These findings support all affective commitment hypotheses, and are in line with several studies in the area of relationship marketing and organisational behaviour literature (e.g. Bansal et al. 2004; Fullerton 2003; Herscovitch and Meyer 2002).

The effect of affective commitment toward the service company is very strong with high standardised regression coefficients. Relationships between customers and cell phone companies are often important in services due to the fact that service products are intangible in nature, which makes, for instance, the service quality and the impressions associated with the brand identity with the customer, and other factor that fosters the desire-based attachment of customers toward the service company, an important part of the service experience.

Calculative commitment results were partially consistent with the literature. Calculative commitment has a negative effect on positive word of mouth, supporting the relevant hypothesis and in line with the stream of literature in the area (e.g. Fullerton 2003; Jones et al. 2007). Although little research directly addressed the impact of calculative commitment on willingness to pay more (e.g. Fullerton 2003; Fullerton 2005), the related hypothesis in this study was in fact supported. The negative impact of calculative commitment toward willingness to pay more was significant; the higher the sense of feeling locked into the relationship, the less the willingness to refer positively to the service company; and of course, the less the willingness to pay a higher price. With regard to the impact of calculative commitment on customer intention to stay, the hypothesis which assumes the existence of a positive relationship was not supported. The relationship was negative and not positive toward customer intention to stay, opposing the related hypothesis.

It is interesting to note that calculative commitment scored a significantly negative impact on intention to stay and not a positive one. This notable finding should inform one that customers who stay with the company because of the cost associated with leaving will, in fact, simply leave when they have the opportunity. The issue here is relevant to the binding force based on the cost associated with leaving the company imposed on the customer, and the many other options that are available, aside from their current service company. Cell phone users could accumulate feelings of resentment when the cell phone service company attempts to bind customers based on the cost associated with leaving.

The tradition in this industry is to gain and keep customers through financial loyalty schemes, in order to keep and develop the business. Such practices are also accompanied by imposing cost-associated penalties imposed on customers intending to violate the contractual relationship with the company. Companies want the customer to commit to a relationship for a specific period of time, such as a year or so. If the contract is in any way violated, customers will be liable to financial loss. This dimension in the customer-firm relationship seems to be increasing the likelihood of creating a feeling of resentment.

The feeling of resentment may be caused by current practises. In many instances companies do not clearly reveal to customers important information such as imposing penalties to enforce them to commit to conditions they would not willingly partake in. This can create a drastic psychological violation of the relationship between the two parties, which may become difficult to restore. In addition, the availability of other competitive deals, from alternative competing companies, makes it easier and more tempting for customers to consider leaving their cell phone provider; customers may feel that they are locked into the relationship and will be ready to leave when they have a chance to do so, especially when customers have other opportunities to leave to other competitors in the marketplace.

The results have shown that the potential costs of staying because of the cost associated with leaving a cell phone service provider have adverse effects on the general intention to continue the relationship, and there may of course be several explanations for this. Binding customers using cost associated tactics will not work especially with those who have been with their service provider for many years. Cell phone users could accumulate feelings of

resentment when the cell phone service company attempts to impose cost-associated penalties to enforce customers to commit to conditions they would not willingly partake in. This may also result from the features of a dynamic and competitive market, in which many customers know that tomorrow's offers might be different than today's. However, such perceptions are likely to vary across industries and customer groups, and thus the results should be interpreted with care regarding their general inferences towards other markets.

Although very few studies in relationship marketing have studied normative commitment (e.g., Bansal et al 2004; Gruen et al. 2000), and there is lack of empirical evidence concerning normative commitment-loyalty links, there has been a great deal of attention to normative commitment in the employee-organisation type of relationship, highlighting its importance (Allen and Meyer 1996; Meyer and Allen 1991; Meyer and Herscovitch 2002; Meyer and Smith 2000; Powell and Meyer 2004; Wiener 1982). In organisational behaviour literature, it was argued that normative commitment, with its distinct emphasis on the concept of obligation, may well be the missing link in our understanding of the influence of psychological contracts on employee commitment (Meyer and Allen 1997).

In this study, although the results did not show normative commitment to be related to customer willingness to pay more, and added very little to our understanding of such relationship, it is interesting to point out that normative commitment related negatively and not positively to customer intention to stay and positive word of mouth. These findings are in opposition to the hypotheses of this study, which had assumed normative commitment to be related positively to positive word of mouth and the intention of the customer to stay. The

empirical test shows that the higher the customer commitment based on a sense of obligation toward the company, the less the intention to stay and the less the willingness, on the part of the customer, to refer to the company positively.

Normative commitment is developed on the basis of psychological contracts consisting of the beliefs of the parties involved in an exchange relationship regarding their reciprocal obligations. Normative commitment was interpreted as part of integrated commitment dimensions in the current research adopting a three-dimensional approach as an extension of existing studies that mostly address commitment as either unidimensional or twodimensional concept (e.g., De Wulf and Odekerhen-Schroder 2003; Garbarino and Johnson 1999; Morgan and Hunt 1994).

The interpretation of such findings might be due to the fact that the psychological attachment is subject to change over time, as one or both parties perceive obligations to have been fulfilled or violated (Meyer and Allen 1997). The customers who value feelings of indebtedness, and at the same time perceive that the service provider has violated the agreement put in place, perhaps throughout a number of instances in the relationship, the sense of obligation could possibly turn into a negative and not positive, as a matter of reaction. A potential breach of psychological contract between an individual customer and the service company might have drastic consequences on customer obligation-based type of commitment, turning a positive perception to a negative one.

One possibility suggested by the pattern of our findings is that the notion of a context effect might also help to explain several the unexpected findings involving normative commitment concept, considering the dynamic telecommunication environment whereby today's offer may differ from tomorrow's offer with the availability of many competitors in the marketplace and well-informed customers.

Also, although affective commitment have direct positive effects on customer's intention to stay, positive word of mouth, and willingness to pay, the indirect mediating effects through normative commitment, in fact, turn negative toward both the customer intention to stay and positive word of mouth. These findings although contrast the hypotheses, as normative commitment distract the influence of affective commitment and not empower it, the results inferred that the normative commitment is a distinct concept that influences loyalty outcomes, which differ from the other two forms of commitment.

There has been some evidence from previous literature stating that the concept of normative commitment is contextual in nature, which influenced by the other two forms of commitment whereby the meaning and implications of the normative commitment varies as a function of the other two (Gellately et al. 2006; Meyer et al 2007; Wasti 2005). In this study, the relationships between normative commitment and the intention to stay and positive word of mouth are negative when affective commitment has strong impacts on loyalty relational outcomes and calculative commitment has relatively weak negative effects on loyalty relational outcomes. These findings are in contrast to works in organisational behaviour literature (e.g. Gellately et al. 2006; Meyer et al. 2007) that argued when

employees have a strong sense of affective commitment, obligations might be experienced as the right thing to do, which contributes to an increase in willingness to engage in citizenship behaviour. However, such interpretations to the perception of the obligation-based commitment were particular to employee-organisation type of relationship.

The interpretation of this study basically relies on the nature of the customer-firm relationship in the cell phone service setting. Telecommunications is traditionally considered a low commitment industry ruled by financial constraints (Roos and Gustafsson 2007; Reinartz and Kumar 2003), and that the sense of liking experienced as a mindset has shown to be the predominant to bind customers over both the cost-based and obligation based types of commitment. The negative effects of the sense of obligations, however, could be explained by viewing that the customers may have had feelings of resentment because of past experiences with the service provider, and thus their sense of obligation become usually a matter of negative reaction.

5.1. The Revised Conceptual Model

The conceptual model in this research was developed based on literature from the areas of relationship marketing and organisational behaviour. It is suggested to be developed further taking into consideration factors as relationship duration, demographics, product category, and industry sector. The new revised proposed conceptual model presents the relationship between commitment dimensions and relational outcomes along with the aforementioned factors that may influence such relationships.

Although antecedents of commitment dimensions fall outside the scope of this study, they could be discussed in order to explain what are the drivers of commitment dimensions. In relation to affective commitment, literature suggested that it is developed by increasing customer satisfaction and trust, and there have been already some evidence in relationship marketing literature that trust and satisfaction act as drivers (Garbarino and Johnson 1999; Henning-Thurau et al 2002 Morgan and Hunt 1994), which are developed by increasing the relationship quality (Kumar et al. 1995). The calculative commitment on the other hand is developed by increasing switching costs and the limited availability of alternatives in the marketplace. In addition, we point out that the price perceptions could be antecedents to calculative commitment dimension as well, as high or low perception of the price by customers would not actually influence the calculative commitment especially under condition of high affective commitment; however, it is believed here that demographic such as customer income and gender may influence the perception of the price as antecedent to calculative commitment. Furthermore, as antecedent to normative commitment, subjective norms have been studied in relationship marketing literature (e.g., Bansal et al. 2004; Nysveen et al 2005) and have shown some influences on loyalty. Subjective norms can be developed from a sense of inner beliefs with the values and norms congruent with the society or that imposed by external social pressure, and we believe here that subjective norm is what develops normative commitment. However, because of the focus of the research is to shed light on the complexity of the commitment concept, the antecedents fall outside the scope of the revised research model.

According to Ajzen and Fishbein (1980), the attitudinal process consists of antecedents, mediators, and outcomes. In the revised model we added variables that could play potential moderator roles in the commitment-loyalty links. A number of factors may have played important roles in explaining the impacts of commitment dimensions on loyalty relational outcomes. For example, type of customer contract, demographics, relationship age, product category, and industry sector, all may provide additional explanations to the results that have been drawn from the revised research model.

First, the product category, whether if it is hedonic or utilitarian, is a major issue that possibly contributes to explaining part of the outcomes. The product category that is selected for the current study may provide us with particular results but different interpretation might be needed with regard to different product categories. Homburg, Koschate, and Hoyer (2006) acknowledged the impact of product category on their study of commitment–loyalty whereby only utilitarian products had been investigated (i.e. CD-learning); if hedonic products had also been studied, there might have been additional results reflecting effects of psychological attachments.

Second, the characteristics of the sample undertaken, which addressed only contractual customers, could have possibly influenced the result of this research. Contractual customers have more depth and breadth type of relationship with a firm rather than the non-contractual customers who deal with firms at their own volition. Also, contractual customers tend to extend their services eventually increasing the volume of their transactions rather than the non-contractual setting. Therefore, it is argued here that different results might have been

produced if we addressed the contractual customers as well as non-contractual customers but this may require a larger sample for representation issue of the target audience as well as consideration to meet the requirement of the statistical test that will be used.

Customers who have had contracts larger than three years were the majority of the sample (65%) compared to customers of newly signed contracts. The assumption was related to the relationship stage: the longer the customer stay, the more committed they are in the relationship. As in this research the concept of commitment is investigated, the selection falls on the sample with majority of customers stayed with the firm for more than three years. However, we acknowledge here the need to address such differences in sample from customers of newly signed contract as their responses might be different and such differences might impact the outcomes of the research.

Third, the length of the relationship is a major issue which could affect the commitment-loyalty links, as it was addressed in studies such as Verhoef (2003) and Verhoef et al. (2001). However, the direction of the contribution is not quite clear until this stage. Research on relationship duration argue that the longer the relationship is, the higher the level of confidence and trust (e.g., Dwyer, Schurr, and Oh 1987; Doney and Cannon 1997), and this is likely to be related to fostering affective commitment (Verhoef, Franses, and Hoekstra 2002; Verhoef, Franses, and Hoekstra 2001). However, a recent study by Homburg, Koschate, and Hoyer (2006) found that over time customers become more knowledgeable about companies' offers and thus more sensitive to any cost increase, and this lends additional support for calculative commitment in our model. Even though the particular role

of relationship duration on customer commitment-loyalty links does not appear to be consistent, we argue that relationship duration is an important issue which need to be addressed to elaborate better the development of the commitment model.

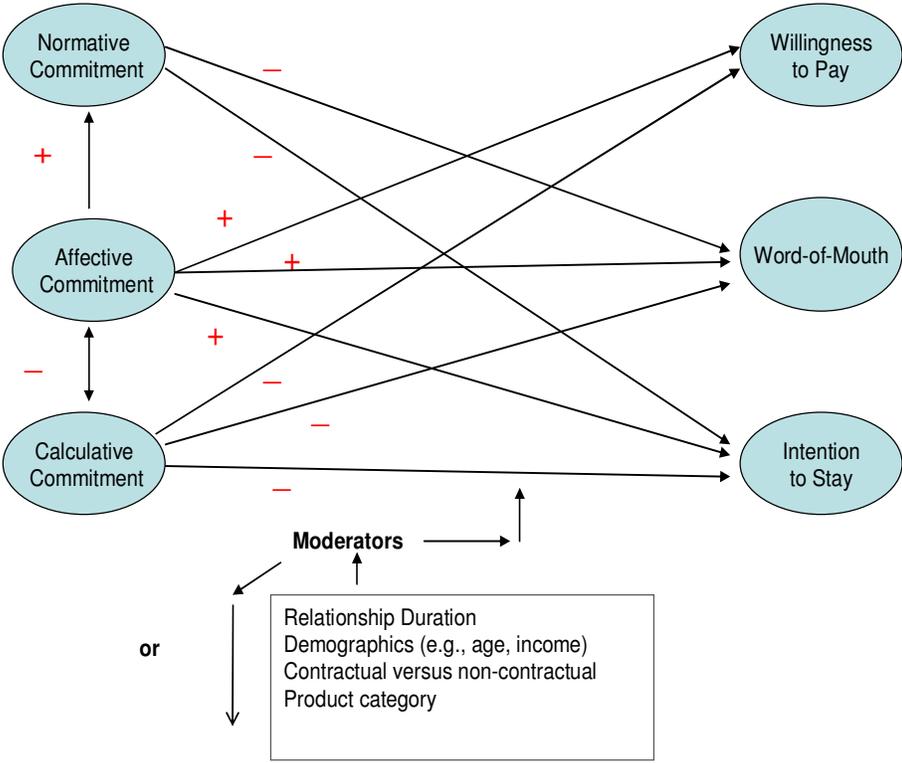


Figure 5.1. Revised conceptual model

5.2. Additional Analysis

The complex nature of the concept of commitment can be investigated by studying commitment as the combined effect of the three dimensions on relational outcomes. The direction of this research is in favour of the argument that individuals can simultaneously experience more than one mindset (e.g., sense of desire, obligation, and cost-based constraint) and that it is best to consider each individual as having a commitment profile reflecting the relative strength of affective, calculative and normative dimensions (Mayer and Allen 1997; Herscovitch and Meyer 2002). Despite the fact that commitment has emerged as a key variable in relationship marketing, none have simultaneously addressed the combined effects of the three-dimensional commitment. Studies have been limited mostly to affective and calculative commitments (e.g., Fullerton 2003; Jones et al. 2007). Obviously, in addition to a potential theoretical contribution, we argue that more meaningful managerial implications can be derived by adopting combined effects' approach.

In organisational behaviour literature, recent works on commitment theory provide a more complete picture about the nature of commitment in an attempt to find the most favourable pathways to relational outcomes. However, even in the organisational behaviour discipline few studies offer any insights providing specific predictions concerning the combined effects of three commitment dimensions on discretionary and focal types of behavioural outcomes, and results were mostly inconsistent (Gellatly, Meyer, and Luchak 2006; Herscovitch and Meyer 2002; Meyer et al. 2007; Wasti 2005).

It is important however to stress the interactions among commitment dimensions, and how this could provide better explanations to the complex nature of customer commitment. We propose the assumption that commitment dimensions worked out as one mindset so that interpretations for any of these dimensions are related to the others. If one dimension is in certain stream, this may have impacts on the other commitment dimensions trends.

To more fully explore the managerial implications of this research, some additional analysis were conducted on the data. The outcomes of positive word of mouth, willingness to pay, and intention to stay were explored relative to particular combinations of commitment (i.e., high or low affective commitment, high or low normative commitment, and high or low calculative commitment). Thus, eight profile groups were created to fulfil such combination using median splits on affective commitment, normative commitment, and calculative commitment to investigate the mean levels of positive word of mouth, willingness to pay, and intention to stay (see table 5.1).

Table 5.1. Mean Level Comparisons

	(1) N=45	(2) N=105	(3) N=19	(4) N=69	(5) N=37	(6) N=31	(7) N=117	(8) N=101
	AC↑	AC↑	AC↑	AC↑	AC↓	AC↓	AC↓	AC↓
	NC↑	NC↑	NC↓	NC↓	NC↑	NC↑	NC↓	NC↓
	CC↑	CC↓	CC↑	CC↓	CC↑	CC↓	CC↑	CC↓
PWOM	4	4.1	4	3.9	3.3	3.6	2.9	3.4
WTP	2.9	3.1	2.6	2.8	2.6	2.7	2.1	2.5
ITS	3.6	4.2	3.7	3.9	3.3	3.6	2.9	3.4

NOTE: AC = Affective Commitment, CC = Calculative commitment, NC = Normative Commitment, WOM = Word-of-mouth, WTP = Willingness to Pay More.

Mean level comparisons were made among the loyalty relational outcomes. In general, the mean levels for positive word of mouth, willingness to pay and intention to stay have shown to be the highest in the profile where both affective commitment and normative commitment are high while calculative commitment is low. The mean levels for positive word of mouth, willingness to pay, and intention to stay, however, scored the lowest values in the profile where both affective commitment and normative commitment are low, while calculative commitment is high. Again, our results show that calculative commitment plays hindering role on loyalty outcomes and therefore should be avoided if firms want to obtain the highest level of customer loyalty. The additional analysis clearly demonstrates positive outcomes

associated with affective commitment under most conditions. Affective commitment clearly plays an important role in increasing loyalty relational outcomes.

Normative commitment on the other hand has positive influence on all relational outcomes when affective commitment and calculative commitment are low. Note in table 5.1 the increase in values of PWOM, WTP and ITS from profile (8) to (6), where normative commitment mean level shifts from low to high while both affective commitment and calculative commitment are low in both profile (6) and (8). This valuable finding must help to recommend normative commitment as effective customer loyalty strategy under the condition where both affective commitment and calculative commitment values are low (i.e., notice the increase in values from profile eight to six). However, when both affective commitment and calculative commitment are high the increase or the shift from low to high normative commitment has an adverse effect on at least ITS. This can be noted from the shift in values of profile (3) to (1). It can be argued that normative commitment is experienced differently based on the strength/weakness of the other dimensions of commitment. Normative commitment influences on loyalty outcomes are changing based on the other commitment dimensions, as it shifts from positive to negative impacts based on the strength/weakness of the other two dimensions of commitment.

Normative commitment has shown to have positive influences on relational outcomes but it turns to negative when both affective commitment and calculative commitment are high. The sense of obligation is a unique psychological state. We found here that if firms wishing to give main role for normative commitment in a customer loyalty strategy that must be in

certain conditions where best when both affective commitment and calculative commitment values are low. On the other hand, normative commitment is better to be avoided in particular with regard to ITS when both affective commitment and calculative commitment are high. However, it has been shown that normative commitment has a constructive role in influencing WTP even under the condition of high affective commitment and high calculative commitment.

6. Conclusion

6. 1. Introduction

The aim of this study was to shed light on the complex nature of customer commitment, its impacts on a number of loyalty relational outcomes in the customer-firm relationship. While the contributions to this area of research are appreciated, it has been recognised that a large bulk of the literature has merely produced fragmented findings. In the extant literature regarding the concept of commitment, many have addressed the commitment as unidimensional or two-dimensional, whilst very few have investigated customer commitment as three-dimensional. Most of the research on commitment has concentrated efforts on affective commitment, investigating its effects on different relational outcomes such as word of mouth, customer churn, and switching costs. In addition, while others extended the investigation on commitment and addressed both affective and calculative commitment and had shown the relative strength of the influences on relational outcomes, very limited research has gone into investigating normative obligation-based commitment in the area of relationship marketing and that the results varied.

For example, the study of Verhoef (2003) focused on the impact of affective commitment on customer share and retention, Fullerton (2003) focused on affective and calculative commitment and their impacts on a number of relational outcomes (switching, advocacy, and willingness to pay more), Bansal, Irving, and Taylor (2004) investigated the normative, calculative, and affective commitment on switching costs. It can be argued that several studies tackled the commitment dimensions, however, a theoretically rigorous model

explaining the impacts of the three commitment dimensions on a number of relational outcomes was not introduced before. Therefore, to contribute to this literature, a model of three-dimensional customer commitment was introduced in this research.

The remainder of this chapter will cover a number of issues as follows: an overview summary of the major findings of each chapter will be presented and discussed in detail, attempting to satisfy the objectives of the research. Following this discussion, the conclusion will be drawn by presenting the contributions of the research to the state of literature, taking into consideration the necessary extension of the commitment concept as three-dimensional concept. Then, this chapter will turn to a discussion of the managerial implications generated from the findings, showing the impact on marketing loyalty schemes in the marketplace. Having looked at the implications of the findings, the study limitations will be revealed, and further research will be presented considering both conceptual and methodological point of views. This chapter will end with some concluding remarks regarding the subject under investigation.

6.2. Research Theoretical Contribution

The study contributes to the literature by proposing a conceptual model of three dimensional customer commitment in the customer-firm type of relationship, which was empirically validated in the cell phone service setting. Existing literature on both relationship marketing and organisational behaviour were reviewed to build this model. The model did not only add new insights to the literature, but also provided a strong theoretical base for future research. To our knowledge, this is the first study to look at a three-dimensional commitment model

on a number of relational outcomes in relationship marketing in the cell phone service context. Many previous studies were limited on other relational concepts such as satisfaction and trust (e.g., Anderson, Fornell, and Lehmann 1994; Bolton 1998; Bolton and Lemon 1999; Dewitt, Nguyen, and Marshall 2008; Fornell et al. 1996; Homburg and Giering 2001; Ping 1993) and did not include, for instance, the important view of normative commitment in customer-firm relationship marketing literature, nor the relational outcome willingness to pay more.

One of the most important reasons for distinguishing among the three forms of commitment was that they can have different implications for behaviour (Meyer and Allen 1997). A major contribution of this research is that our understanding regarding the commitment concept was broadened from commitment as unidimensional or two-dimensional into three dimensional, presenting their differential impacts on a number of loyalty relational outcomes. Importantly, normative commitment in our study has been shown to have negative effects in some instances and in other instances positive relationships on loyalty relational outcomes. These relationships were absent from the stream of literature indicating that study offers theoretical and empirical contributions by adding this dimension to the debate in the area of relationship marketing.

Normative commitment experienced as a sense of obligation has different conceptualisation to the other commitment dimensions and deemed as a necessary component in our research. Normative commitment has shown to have negative effects on loyalty outcomes in the research model, and the additional analysis has shown certain negative and other positive

effects under certain conditions of high/low affective commitment and calculative commitment. The additional analysis shed light on positive role of normative commitment by which it is better to be used for customer loyalty strategy when both affective commitment and calculative commitment are weak, and experiences a constructive influence on WTP under the specific condition when the other commitment dimensions are strong.

Another contribution of this work was addressing customer loyalty from different angles, including a range of loyalty outcomes that explain a great deal of the comprehensive nature of the concept (positive word of mouth, intention to stay, and willingness to pay more). Our study supports the stream of literature that presents the concept of loyalty as multi-faceted. From the results presented in previous sections, it was found that the relationships between any commitment dimension and the relational outcomes score differently. The results supported that the relational outcomes are theoretically distinct concepts in which expanding the study with other relational outcomes would be an interesting area for future research.

6.3. Managerial Implications

In the context where companies usually develop customer loyalty schemes on the basis of financial incentives as the force to bind customers, a gap in the mobile telecom industry was identified. In the service sectors of cell phone users, companies frequently depend on cost-based selling propositions as many current loyalty schemes are developed on the basis of financial incentives to start up and maintain contractual relationships. Such marketing techniques overlook other kinds of customers' psychological attachments that influence customer loyalty toward the service provider. What this research proposed was not only

studying the cost-based attachment to gain customers' loyalty but also on the affective and normative dimensions, which brings in a more comprehensive view in understanding customers' predispositions.

Results have shown customer calculative commitment to have damaging effects on loyalty relational outcomes, even on customer intention to stay. The cost-based marketing tactics are not a contributing force to customer loyalty but instead hinder any efforts to support loyalty relational outcomes, and thus need to be avoided at any cost. This might be due to feelings of resentment and disappointment from the cost-based marketing schemes that drive customers to think of switching, referring negatively, and not willing to pay a higher price in a dynamic environment with the availability of other available competing companies in the marketplace. Our research informed that a number of marketing practices that firms may use to engender cost-based commitment may not actually work, and that marketers must exercise caution when attempting to manipulate calculative commitment. An example might be the penalties that are incurred by customers if they attempt to remove themselves from service contracts prior to the contract's expiration.

The general feelings toward service companies among customers in the cell phone service sector are accompanied with mistrust and regarded as a highly utilitarian relationship. Our findings urge companies to avoid any drastic violations of the contractual relationship of the customer-firm, paying greater attention to the affective emotional attachment and avoiding both marketing tactics that foster the cost-based marketing schemes and the sense of

obligation, suggesting that the way to post loyalty is by nurturing the customer affective psychological attachment.

Overall, the current research questions the previously held belief that managers should develop high levels of affective commitment and calculative commitment to build the strongest relationships with customers (Bansal, Irving, and Taylor 2004; Bendapudi and Berry 1997; Fullerton 2003). The results from the current research indicate that the strongest relationships are those that are based on only high levels of affective commitment, and that additional analysis has shown that normative commitment may have constructive role in the absence of high affective commitment.

6.4. Limitations and recommendations for further research

Despite the contribution of this research, several limitations and important recommendations for further research should be noted. Regarding the development of the research model, it is suggested to expand the relational outcomes into not only intentional behaviour but also add measurements of actual behaviour. It would be an interesting area of research to carry out comparisons between intentional behavioural loyalty and actual behavioural loyalty (e.g., Evanschitzky *et al.* 2006).

Behavioural loyalty can be studied by measuring actual purchases behaviour such as addressing the concept of customer share. A number of studies has investigated the concept of customer share (De Wulf, Odekerken-Schroder and Lacobucci 2001; Magi 2003; Verhoef 2003) and argued that it is essential to study actual behaviour based on reviewing past

customer records using a company's customer databases, which would help in predicting their future behaviour. According to Peppers and Rogers (1993), customer share is the amount of a customer's purchases of particular products or services from a certain supplier compared to the customer's total purchases of that product or service from all other suppliers in the same market.

Further studies are recommended to address customer share following Pepper and Roger's (1993) argument - the shift from market share to customer share, from mass marketing to one-one marketing - arguing that concentrating on studying customer share is profitable, cost efficient, and a solid performance measurement. Nevertheless, this study studied loyalty only as intentional behaviour because it was not feasible to measure customer share in the cell phone service setting as usually customers deal with one company only, unlike other sectors where it is possible to deal with more than one provider concurrently such as retailing, banking, and airlines. These sectors can be potential arenas in which to investigate the impacts of the three-dimensional customer commitment model on customer share.

In addition to customer share, another behavioural loyalty measure to use is customer cross-selling, whereby customers buy more than one product/service from the same supplier. In the literature, measuring cross-selling was by reviewing customer databases over time, before and after measuring customer attitudinal components of commitment so that the researchers can monitor the differences and the increase or decrease of cross-selling activities (e.g. Verhoef, Franses, and Hoekstra 2001).

Further studies are recommended to investigate another potential concept of loyalty outcome which is customer complaint. Customer complaints are considered to be a negative relational outcome which can be addressed in comparative study along with the other positive relational outcomes addressed in this study (e.g. positive word of mouth, willingness to pay). Also, it is recommended to pay greater attention to potential indirect effects of either moderators or mediators within the commitment-loyalty links, and to implement the study in a number of research settings instead of only one which should provide a better explanation to the external validity of the proposed model.

Another interesting recommendation for further research in the area of relationship marketing is to investigate the three-dimensional customer commitment model in cross-cultural research. Comparative cross-cultural study that focuses on differences and similarities among different social groups is recommended here to shed light on the generalisability of the three-dimensional customer commitment model in different cultures. For instance, the study of Meyer et al. (2007) has found evidence for potential cultural differences in studying the relations between commitment dimensions in the role of collectivist vs. individualistic culture and that, for instance, the collectivist culture has accounted more in the correlation between normative commitment and affective commitment.

Hofstede's (2001) cultural dimensions in commitment-loyalty studies in relationship marketing can be used with this respect. The dimensions identified by Hofstede were Power Distance, Uncertainty Orientation, Individualism vs. Collectivism, Masculinity vs.

Femininity, and Long-Term vs. Short-Term Orientation. It should be noted here that studies in organisational behavioural literature have already addressed this void by conducting cross-cultural studies for commitment dimensions (e.g., Jaramillo 2005; Stanly et al. 2005; Stanly et al. 2007), but still this need to be expanded in relationship marketing literature.

Another limitation of the study is its cross sectional nature, which only permits the inference of causal relationships, with all the negative consequences accompanying it. The difficulty here is that adequate explanation derives from an understanding of process, and in this regard the fact of a statistically established relationship might not be enough. At the very least, it may mask a more complex set of direct and indirect relationships. In this study, cross-sectional design may not capture the dynamic and changing nature of the relationship of affective, calculative and normative commitment. A longitudinal research which investigates the phenomena over time could perhaps provide better explanations of potential dynamics in the relationships.

Future research could also be devoted to examining potential nonlinear relations between commitment dimensions and attitudinal loyalty and behaviours. The study of Luchak and Gellatly (2007) in organisational behaviour literature has found nonlinearity in relations between commitment and work outcomes, and that the impacts of affective and calculative commitment of the employees are influenced, for instance, by the increase from low to moderate levels.

Methodological expansion could be made by implementing experimental research instead of survey questionnaire to shed light on the nature of customer commitment. A number of studies in relationship marketing used experimental research in studies of satisfaction and retention (e.g., Homburg, Koschate and Hoyer 2006; Homburg, Koschate, and Hoyer 2005). The experiment can be made with a number of sessions starting with introducing hypothetical situations in which the expectations were set, and the rest/subsequent sections containing a different condition that manipulates the experience. For instance, the study of Fullerton (2003) tackled the complex nature of attitudinal commitment with quasi-experimental research with only affective and calculative commitment. For the three commitment dimensions, this can be done with eight different scenarios based on high/low commitment profiles.

Conceptual expansion on the subject under investigation can be made by investigating how each commitment dimension develops with shifting the scope into the antecedents for each commitment dimension such as trust, satisfaction, switching costs, price perceptions, subjective norms, and preferential treatments. Theoretical development can be made by addressing for instance the affective commitment dimension as an outcome and narrowing the scope of the research on its antecedents. Also, it is recommended to investigate each commitment dimension on loyalty outcomes such as word-of-mouth, customer share, willingness to pay, cross-selling, repurchase intentions, and customer complains. These potential areas of investigation will directly develop a series of further research which will help in establishing a track record in the chosen specialisation. It can be suggested that

theoretical development can be made by recommending one dimension of commitment as mediator/moderator in a chain of antecedents and outcomes.

Research on relationship age argue that the longer the relationship is, the higher the level of confidence and trust, and this is likely to be related to fostering affective commitment. However, recent research has found that over time customers become more knowledgeable about companies' offers and thus more sensitive to any cost increase, and this may lend additional support for the calculative commitment in our model. Nevertheless, such discussion is believed to be contextual in nature and its impact may vary by the product category. Had utilitarian or hedonic products been investigated, there might have been additional results reflecting the effects of commitment dimensions. This might give potential interesting research which investigates the effects of relationship age on the three dimensional customer commitment model.

Customer commitment is a complex concept including multi-dimensional aspects and requires to be measured to a specific target of interest. Further interesting works can be done by studying commitment for instance to employees and the brand and making a comparison to find the strongest pathway toward the objects of interest. Hansen et al. (2003) investigated customer affective and calculative commitment to both sales employees and to the company, however, normative commitment was not investigated.

To broaden our understanding of the nature of commitment construct using the three-dimensional model, it is recommended to involve profile analysis by classifying respondents

into high and low groups of the three commitments by taking the median as the cut score along with customer demographic characteristics. Profiling group analysis can support creating segments on the basis of the proposed dimensions in conjunction with customers' demographic information and possible customer-firm relationship duration, through which the segmentation base can be validated and recommendations for new expansions based on creating profiling groups. This approach, however, requires access to both a company customer database and survey data.

Last but not least, the literature of relationship marketing is in short of attitudinal loyalty measurements that have different implications of relationship marketing strategies. A study that is dedicated to design measurements differentiating for instance word of mouth and intention to stay whereby they have different implications as the former focusing on acquisition strategy and the latter on retention strategy must be a valuable piece of work that offer a valuable contribution to the discipline.

6.5. Conclusion and Remarks

This research aimed to understand the complex nature of customer commitment and their impacts on relational outcomes, offering both theoretical contributions and managerial implications, and presenting limitations and recommendations for future research. The key contribution of this research was the proposing of the research model of three-dimensional customer commitment and subsequently testing it empirically. This study supported the solid theoretical basis of commitment dimensions, and the usefulness of identifying differential impacts of commitment on a range of loyalty outcomes. This model could be applied by

other researchers in other research settings and can be developed to be tested in B2B relationships. Moreover, the fact that the model was tested using data from cell phone service users goes far into elaborating new insights in this research stream. However, profiling group analysis to the three-dimensional commitment gives further insights to shed light on the interesting but rather to say complex nature of the commitment concept.

In order to assess the extent to which current results can be generalised, it is important to conduct similar studies in other cultures, industries, and economic settings, namely for different services and for physical goods. In addition, it should be noted that the literature itself has provided deficient conceptualisation and measurements for the constructs included in the investigation. Finally, the issues raised in this work showed that there is a large scope for future research into the area of customer commitment, adding that such types of research can produce highly rewarding outcomes.

The results supported adopting loyalty schemes based on a range of activities that fosters in principle the affective desired-based and avoiding both the calculative cost-based and in instances obligation-based type of commitment. Practitioners assess whether it is possible for the firm to adopt effective loyalty programmes and better marketing strategies ultimately using marketing tactics that foster the sense of liking and emotional attachment toward the service provider and in other instances the obligation-based type of commitment. Particularly, in condition of low affective and calculative commitment, it is recommended to employ the obligation-based normative commitment to generate better customer loyalty. Finally, the results of this research will be useful and necessary to serve as guidelines in

commitment-loyalty literature, giving suggestions, evidences, and directions in helping researchers to drive other research models to further contribute to the area of research.

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Appendices
Appendix 1: Pre-test Questionnaire

As part of academic survey at Manchester Business School, the following questions ask you about your attitude towards your mobile phone provider. Please take a few minutes to indicate your agreement with the next set of statements and check the appropriate option (1=strongly disagree, 7=strongly agree). Your responses are anonymous and strictly confidential.

18	I do not feel “emotionally attached” to my mobile phone provider.	1	2	3	4	5	6	7
19	Right now, staying with my mobile phone provider is a matter of necessity as much as desire.	1	2	3	4	5	6	7
20	My mobile phone provider deserves my loyalty.	1	2	3	4	5	6	7
21	I recommend my mobile phone provider to family members.	1	2	3	4	5	6	7
22	I am willing to pay more for my mobile phone provider’s service.	1	2	3	4	5	6	7
23	My mobile phone provider has a great deal of personal meaning for me.	1	2	3	4	5	6	7
24	I believe that I have too few options to consider leaving my mobile phone provider.	1	2	3	4	5	6	7
25	I would not leave my mobile phone provider right now because I have a sense of obligation to the people in it.	1	2	3	4	5	6	7
26	I speak positively of my mobile phone provider to others.	1	2	3	4	5	6	7
27	I do not feel a strong sense of “belonging” to my mobile phone provider.	1	2	3	4	5	6	7
28	One of the few negative consequences of leaving my mobile phone provider would be the scarcity of available alternatives.	1	2	3	4	5	6	7
29	I owe a great deal to my mobile phone provider.	1	2	3	4	5	6	7
30	I recommend my mobile phone provider to acquaintances.	1	2	3	4	5	6	7
31	One of the major reasons I continue to stay with my mobile phone provider is that leaving would require considerable personal sacrifice; another company may not match the overall benefits I have here.	1	2	3	4	5	6	7
32	I recommend my mobile phone provider to close personal friends.	1	2	3	4	5	6	7
33	If I had not already invested so much into my relationship with my mobile phone provider, I might consider switching elsewhere.	1	2	3	4	5	6	7
	future.							
15	I would feel guilty if I left my mobile phone provider now.	1	2	3	4	5	6	7
16	I Speak positively about my mobile phone provider employee(s) to others.	1	2	3	4	5	6	7
17	If my mobile phone provider were to rise the price 10%, I would likely remain.	1	2	3	4	5	6	7

Descriptive Information

The following questions are about yourself, the information is of statistical purpose only. Please tick the relevant boxes.

Type of contract:

- Pay as you go 12 months contract 18 months contract
- Others

How long have you been a customer with your mobile phone company?

- < 6 months 6 months – 1 year > 1 – 2 years
- > 2 – 3 years > 3 years

Gender Male Female

Age 18-30 31- 40 41-50 >50

Net Income < £15,000 £16,000 - £21,000 £22,000 - £30,000

£31,000 - £40,000 > £41,000

Thank you for taking part in this survey, your participation is much appreciated.

Appendix 2: Online Survey

Dear Wave One,

Based on your e-Rewards profile, you are invited to earn e-Rewards Currency for completing a Quick Survey. This survey should take just a few minutes of your time. Your account will be credited immediately upon completion.

This survey is hosted by e-Rewards. To complete the survey and earn e-Rewards Currency, simply click the link below, or copy the URL into your browser: <http://www.e-rewards.com/pro.do?FT=DP473LXLKGY8>

We encourage you to respond quickly -- this e-Rewards invitation will be available only until a predetermined number of responses have been received. Please Note: you will only receive e-Rewards credit for taking the survey once.

Continue to check your inbox and your Member home page for future opportunities to earn e-Rewards Currency.

We value your time,

The e-Rewards Team

Which of the following is your current cell phone service provider?

- Alltel
- AT&T
- Cellular One
- Centennial Wireless
- Nextel
- Sprint PCS/Nextel
- T-Mobile
- Verizon
- Other
- I don't use a mobile phone

If you answered "Other" on the previous question, please specify:

Submit

Important note regarding pop-up blockers: In order to ensure you are able to earn e-Rewards Currency, please disable any pop-up blocking software you may use, or add e-Rewards.com to the "Allow" list. Otherwise, you may not be able to fully participate in e-Rewards.

What is your cell phone current contract?

- Pay as you go
- Monthly (Fixed contract)
- pre-paid 1 year in advance

Submit

Important note regarding pop-up blockers: In order to ensure you are able to earn e-Rewards Currency, please disable any pop-up blocking software you may use, or add e-Rewards.com to the "Allow" list. Otherwise, you may not be able to fully participate in e-Rewards.

Congratulations! Based on your responses to this Quick Survey, you may have qualified for an additional research study. If you qualify and complete the survey:

- **Full reward amount:** \$3.50 in e-Rewards Currency
- **Survey Length:** approximately 6 minutes

Would you like to participate in this research study?

- Yes
- Yes, but not right now
- No thank you

Submit

Important note regarding pop-up blockers: In order to ensure you are able to earn e-Rewards Currency, please disable any pop-up blocking software you may use, or add e-Rewards.com to the "Allow" list. Otherwise, you may not be able to fully participate in e-Rewards.

Great! Please click the Begin Survey button below to leave the e-Rewards Web site and access our client's research study. The study will re-ask some of the questions you just answered. As some qualifying groups fill faster than others, not everyone will qualify for the full credit amount.

- **Topic:** Consumer (Academic Study)
- **Research Sponsor:** Manchester Business School
- **Full credit amount*:** receive **\$3.50 in e-Rewards Currency** when you access and fully complete the research survey.
- **Partial credit amount*:** receive **\$0.50 in e-Rewards Currency** as a token of our appreciation if your survey answers do not meet the criteria to fully qualify for the study OR if the predetermined number of participants has been reached.
- The full survey should take approximately **6 minutes** to complete.
- e-Rewards is firmly committed to protecting your privacy. If you have any concerns about your privacy, please read our [Privacy Policy](#) or [contact us](#).

*Please allow up to 7-10 business days for your e-Rewards currency to appear in your e-Rewards account statement.

When you have completed the research study, please click the "Submit" button below to receive credit for completing the Quick Survey.

Submit 

Important note regarding pop-up blockers: In order to ensure you are able to earn e-Rewards Currency, please disable any pop-up blocking software you may use, or add e-Rewards.com to the "Allow" list. Otherwise, you may not be able to fully participate in e-Rewards

Customer Loyalty - Cell Phone Users

Thank you for taking the time to participate in our research. The purpose of this academic study is to enhance the level of customer service in the cell phone telecommunications sector. We would like to learn more about your attitudes toward your cell phone service provider. Please read the statements in the following pages and, based on your overall experiences and opinions, indicate your responses (1= Strongly Disagree to 5= Strongly Agree). Each statement is displayed on a separate page. Statements marked with a red * are compulsory. On average, it will take approximately 6 minutes to complete this survey.

1. I am pleased with the overall service provided by my cell phone service company. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

2. I think I did the right thing when I chose my cell phone service company. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

3. Overall, I am satisfied with my cell phone service company. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

4. I care whether my peers would approve of me staying with my cell phone service company. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

5. People who are important to me would approve of me staying with my current cell phone service company. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

6. My cell phone service company treats me fairly and justly. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

7. I can count on my cell phone service company to provide a good service. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

8. I feel that I can trust my cell phone service company. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

9. I pay a better price for services at my cell phone company than I would at a competitor's.
*

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

10. The cost of services at my cell phone company is lower than the competitors'. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

11. It would be a hassle changing my cell phone service company. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

12. It would take a lot of time and effort switching my cell phone service company. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

13. The costs in time, money, and effort to switch to a new cell phone service company would be high for me. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

14. I like my cell phone service company. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

15. I use my cell phone service company because I really like it. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

16. I am a customer of my cell phone service company because I feel a strong sense of attachment to it. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

17. I do business with my cell phone service company because I like it. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

18. My cell phone service company deserves my loyalty. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

19. Customers of my cell phone service company ought to be loyal to it. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

20. Even if it were to my advantage, I do not feel it would be right to leave my cell phone service company now. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

21. I would not leave my cell phone service company right now because I have a sense of obligation to it. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

22. I feel somewhat locked into using my cell phone service company. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

23. I feel like I don't have a choice as to which cell phone service company I use. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

24. I feel like I use my cell phone service company because I have to. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

25. I feel sort of stuck with my cell phone service company. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

26. I say positive things about my cell phone service company to other people. *

Strongly Disagree

Disagree

Neither Disagree Nor Agree

Agree

27. I would recommend my cell phone service company to someone who seeks my advice. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

28. I encourage my friends and relatives to consider choosing my cell phone service company. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

29. I definitely intend to maintain my relationship with my current cell phone service company. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

30. I will most probably switch to an alternative cell phone service company in the foreseeable future.
*

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

31. I would stay with my cell phone service company even if it slightly raise its price. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

32. I am likely to pay a higher price than what competitors charge for the benefits I currently receive from my cell phone service company. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

33. I would accept higher prices, if my cell phone service company raises its prices. *

- Strongly Disagree
- Disagree
- Neither Disagree Nor Agree
- Agree
- Strongly Agree

Demographics

Finally, we want to ask you a few questions about yourself. The information is of statistical purpose only.

34. How long have you been a customer with your cell phone service company? *

- Less than 1 year
- 1 year or longer; but less than 2 years
- 2 years or longer; but less than 3 years
- 3 years or longer; but less than 4 years
- 4 years or longer; but less than 5 years
- 5 years or longer

35. Gender *

- Male
- Female

36. Age *

- Under 19 years
- 20 to 24 years
- 25 to 29 years
- 30 to 34 years
- 35 to 44 years
- 45 to 54 years
- 55 to 59 years
- 60 to 64 years
- 65 years and over

37. Education *

- Less than 9th grade
- 9th to 12th grade, no diploma
- High school graduate (includes equivalency)
- Some college, no degree
- Associate degree
- Bachelor's degree
- Graduate or professional degree

38. Annual household income *

- Less than \$10,000
- \$10,000 to \$14,999
- \$15,000 to \$24,999
- \$25,000 to \$34,999
- \$35,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 to \$149,999
- \$150,000 to \$199,999
- \$200,000 or more