Customer Service Retention – A Behavioural Perspective of the UK Mobile Market

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Customer Service Retention – A Behavioural Perspective of the UK Mobile Market

Muhammad Turki Alshurideh

Thesis submitted in fulfilment of the Requirements for the degree of Doctor of Philosophy

Durham Business School

Durham University

2010
To my wife, Barween, and
my children, Hevron, Azad, and Tamer,
who sacrificed so much to make it possible for me to complete my
Doctorate studies
Abstract

Customer retention is essential for firms in the service sector and will subsequently receive a great deal of attention in the coming years. A large majority of firms are losing their current customers at a significant rate. UK operators lose over a third of their subscribers every year in spite of incurring large customer acquisition and retention expenditures. A study of customer retention from a variety of angles, including economic, behavioural and psychological perspectives, was rigorously carried out. It has been found that a majority of scholars explain customer retention from a behavioural perspective by using unrelated or indirect factors such as trust and commitment, price terms, and loyalty terms. It has also been noted that previous studies lack a clear theoretical background and a solid empirical proof to support their findings of customer operant retention behaviour.

This study approaches the customer retention problem in the mobile phone sector from a behavioural perspective, applying the Behavioural Perspective Model as the main analytical framework. The model includes a set of pre-behaviour and post-behaviour factors to study consumer choice and explains its relevant drivers in a viable and comprehensive way, grounded in radical behaviourism. Many data collection methods were used to collect data from the study sample, including mobile contracts content analysis techniques, customer focus groups, and, principally, a customer survey supported by interviews with a number of managers. The data were analysed using different regression measurements to test the study model, and the propositions were constructed and tested quantitatively and discussed qualitatively. Analysis revealed that a customer will buy a mobile telecommunication package and engage in a long-term relationship with a supplier whom he or she believes will honour the relationship’s functional and emotional benefits; the consumer will be expecting to obtain such benefits when he/she buys, consumes, and has a positive experience of both the purchased object and the seller.

Key words: Relationship marketing, Customer retention, Consumer behaviour, Mobile communication services, the BPM, and Service contract.
Declaration of rights

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Chapter One: Research gap and objectives
**Introduction**

Relationship marketing (RM) is that part of marketing knowledge concerned with how organizations create, build, and maintain productive relationships with customers for long-term profitability (Ryals and Payne, 2001; Zinkhan, 2004). To manage long-term relationships with customers, it is essential for businesses to identify and nurture a satisfactory, mutually beneficial, continuous relationship with consumers (Metcalf et al., 1992; Buttle, 1996). To achieve this goal, firms should focus their marketing instruments to enhance customer attraction and retention (Prykop and Heitmann, 2006).

Customer retention (CR) is a crucial area of study in the field of relationship marketing that is mainly concerned with keeping customers in the long term (Gronroos, 1997). Customer retention is essential for all firms in the service sector in the present consumer market and it will receive a great deal of attention over the next few years (Appiah-Adu, 1999). This is because customers are considered a real asset to firms, the majority of which are facing consumer base losses to a considerable degree (Swanson and Hsu, 2009). In the mobile phone market, CR becomes an essential phenomenon since this sector has witnessed substantial growth, change, and competition both globally and domestically. A considerable number of firms in the mobile phone sector are losing their current customer bases at rates exceeding 30% despite practising different relationship marketing strategies to retain existing customers (Grönroos, 1995; Ravald and Grönroos, 1996; Ranaweera and Prabhu, 2003). Also, Andic (2006) stated that the major mobile network operators in the UK, including Orange, T-Mobile, O2 and Vodafone, lose over a third of their youth subscribers to rival providers. At the same time, many managers are unable in most situations to address that fact head-on, although they are striving to learn the reason for this loss (Reichheld, 1996). Accordingly, these mobile operators cannot afford to lose current and future customers; such a loss would, in turn, lead to lost sales and profits, and ultimately the failure of businesses (Reichheld and Sasser, 1990; Reichheld and Kenny, 1990). In light of the disparity between customer acquisition and retention in the cellular industry, the issue of customer retention has been approached from different angles such as the economic, behavioural, and psychological perspectives. The majority of previous studies have failed to provide a solid theoretical justification and practical that explain the customer’s repeat purchase from a behavioural perspective. That is because customer retention occurs in a situation where a customer is influenced by a variety of pre-
behaviour and post-behaviour factors which need to be taken into consideration together. Thus, there is a need to apply a theoretical framework that gives a full picture of retention, including both how behaviour retention setting is manipulated or prepared and what potential utility increases the possibility of the customer being involved in long term relationship and repeat purchase. In order to provide a complete understanding of why and how customer retention takes place, the present study will investigate the problem of customer retention in the mobile phone sector via the application of the Behavioural Perspective Model (BPM) (Foxall, 1998). The literature gap has been addressed as “what are the main factors that drive customer retention behaviour”. To find a reasonable solution to this question, three main objectives have been determined for testing. The first is “to what level is the applied theoretical model useful in studying CR phenomenon?” The second is, “based on the BPM, what are the main pre-behaviour and post-behaviour factors that drive customer retention?” The third is “to what level can the BPM be used to explain CR in the mobile phone sector and how its drivers draw their effects?”

The first chapter is organised as follows. The first section will briefly introduce relationship marketing as a preliminary topic and will elucidate the customer retention phenomenon. The second section will provide the conceptual background for customer retention followed by a justifiable explanation of why customer retention is a problem in the mobile phone sector in section three. Since this thesis is limited to the cellular industry, section four illustrates briefly the service contract and its benefits in maintaining a mutual relationship. Section five will explain will describe the research gap and question based on a summary analysis of secondary literature as illustrated deeply in the literature review chapter. Section six will include the research contribution and objectives, followed by the thesis outline in the last section.

1 - 1: Relationship marketing

This section provides an overview of the nature of relationship marketing (RM), which was a highly discussed marketing paradigm during the 1990s when it emerged as a new marketing concept (Gummesson, 1994). Accordingly, the RM approach started to appear as a new business alternative that covered traditional marketing gaps. The shortcoming of traditional marketing activities was that they explained only part of the customer-supplier relationship, focusing primarily on management marketing activities that control the exchange process between the two parties and that were aimed at maximizing suppliers’
returns and acquiring new customers (Gronroos, 1997). As a result of increased competition, RM has been responsible for changing and shifting business concepts and scopes from “Winning new customers” to “Caring for and keeping current customers” (Aijo, 1996).

RM has also changed the traditional marketing perspective from managing relationships with customers to managing five additional markets: supplier, recruitment, referral, influencer, and internal markets (Smyth and Fitch, 2009). However, consumer markets remain the primary focus at the centre of the model, with a clear need for a detailed, long-term marketing strategy. It has been proposed that the primary role of marketing is to connect suppliers and customers with respect to other relationships with other stakeholders, both inside and outside the organization (Gummesson, 1996).

Simply, the relationship between customer and firm is built by both parties in order to exchange objects valuable to both of them. However, there is no repetition for another exchange process if the outcomes of the first episode are not satisfactory for their goals. This view is translated by Gronroos (1997) who described the new marketing role as follows:

“Marketing is to establish, maintain, and enhance relationships with customers, and other partners, at a profit, so that the objectives of the parties are met. This is achieved by mutual exchange and fulfilment of promises” (p.335).

According to this definition, the customer-supplier relationship shifts from transactional marketing to relational marketing, which relies on both mutual interdependence and mutual cooperation in the long term (Sheth and Parvatiyar, 1995; Arias, 1998). Thus, a relationship is formed not just to solve a specific problem between two parties but to take advantage of short-term perspectives to encompass those activities which have a continual concern for the long term (Hausman, 2001). This view is best described by Gordon (1998):

“Relationship marketing is the ongoing process of identifying and creating new values with individual customers and then sharing the benefits from this over a lifetime of association” (p.9).

According to this description, the main goal of RM is to perpetuate the exchange process between relationship parties. Relationship continuity cannot happen without creating an ongoing collaboration between suppliers and customers aimed at an exchange of mutual, valuable objectives in the long term that encourages the involvement of both parties in the
relationship (Gordon et al., 1998; Durkin and Howcroft, 2003). Some scholars, such as Palmer (1996) and Pressey and Mathews (2000), have frequently highlighted the importance of creating and developing different relational bonds that lead to an increase in reliable repeat business between buyers and sellers. Repeat business with existing customers is the core of relationship marketing since it has been found that it costs five to six times more to attract a new customer than it costs to retain an existing one (Lovelock et al., 1999). Thus, customer retention has gained scholars’ and practitioners’ interest as one of the main relationship marketing concepts. However, attracting new customers remains the main focus for many organizations; they tend to treat new customers better, provide them with favourable prices, and offer superior contract conditions (Farquhar and Panther, 2008). Even so, many questions still remain among suppliers, the answers to which provide essential contributions to the subject of customer retention. Firstly, how can organizations find customers who will engage in long-term relationships? Secondly, how can organizations build healthy relationships in order to retain existing customers? Thirdly, beyond routine purchasing habits, what circumstances or reasons might provide a better explanation of customer retention behaviour, such as social, economic, temporal, and contractual factors?

To summarise, relationship marketing has been discussed in this section to introduce the customer retention paradigm. It is through this paradigm that the thesis approaches the study of how customers’ retention behaviour occurs (Palmer, 1995). The next section expands the discussion of customer retention, then examines why it is a critical problem in the mobile telephone sector.

1 - 2: Customer retention-conceptual background

Morgan and Hunt (1994) provide a broad definition of RM as “all marketing activities directed towards establishing, developing, and maintaining successful relational exchanges” (p.22). This highlights the need to change existing attitudes toward marketing from a series of independent transactions to a dynamic process of establishing, maintaining and enhancing relationships in the long term (Selnes, 1998). It indicates that the relationship between consumer and firm is built upon two parties engaged in a continuous process of exchange whereby both will benefit in the long term. While such relationships are sometimes available, they are not necessarily always long-term (Karantinou, 2005). Thus, the primary relational goal is the long-term continuity of
exchange between two parties. Therefore, the “customer retention” trend has emerged in order to increase organizations’ profits and minimize both costs and customer switching in the long run. This view is confirmed by Farquhar (2003) who explained that, in order to be able to build long-term relationships with customers, institutions must first be able to retain existing customers. This is confirmed by Christopher et al. (1991) who assert that the function of RM is “getting and keeping customers” which will be the challenge of survival in volatile markets. Accordingly, customer retention is that part of relationship marketing knowledge concerned mainly with maintaining existing customers by manipulating the relationship in a way that enables parties, the firm and the customer, to benefit through long-term, repeat business (Fanjoy and bureau, 1994; Leong Yow and Qing, 2006; Chang and Chen, 2007).

How is customer retention defined? No single definition of customer retention has gained the majority of marketers’ and scholars’ agreement. However, there is general agreement that customer retention implies a long-term relationship. Customer retention has been defined by Oliver (1997):

“Deeply held commitment to rebuy or repatronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviour” (p. 392)

Another definition has been given by Ranaweera and Prabhu (2003) and repeated by Kassim and Souiden (2007): “the future propensity of the customers to stay with their service provider” (p.219). Buchanan and Gillies (1990) described customer retention rate as “the percentage of customers at the beginning of the year that still remains at the end of the year” (p.523). Another definition is provided by Motiwala (2008): “maintaining the existing customer base by establishing good relations with all who buy the company’s product” (p.46). For the purposes of this study, the researcher defines customer retention in the following way: “all marketing plans and actions that seek to retain both existing and new customers by establishing, maintaining, and maximizing mutual long-term benefits that strengthen and extend the joint relationship between two parties”. This definition coincides with the main flow of researchers’ interests that explains customer retention-related concepts such as relationship strength, which is based on prolonging mutual benefits (Storbacka et al., 1994; Zineldin, 1996; Bove and Johnson, 2001). Basically, customer retention implies a long-term relationship but it has many concepts which may exist between the lines. Some researchers such as Zeithaml et al. (1996) used the term
“future behaviour intention” to describe “customer retention”. This is in line with Cronin et al. (2000) who used “customer retention” and “behavioural intention” as synonymous concepts. Also, customer retention has a strong link with loyalty which supports the idea of retaining customers who exhibit both a high degree of attitudinal and behavioural loyalty (Rauyruen and Miller, 2007).

Is customer retention happening? The majority of organizations have specific management units which tackle the main retention strategies and activities duties (e.g. customer retention department) (Blattberg et al., 2002) and turn their attention and resources towards increasing the retention rate of customers and users (Wirtz and Lihotzky, 2003). However, Pruden (1995, p.15) stated that “we are not entering the era of relationship marketing yet and retention marketing has yet to progress beyond a topic for articles and speeches, with little real action”. This is supported by Clapp (2005) who contends that the majority of institutions value new customers over existing ones in order to develop their enterprise and replace lost business. Weinstein (2002) has provided evidence that shows acquiring new customers and chasing new business still takes up most companies’ time, energy, and resources. He reported that around 80% of marketing budgets are often invested in obtaining new business. For example, despite the interest of UK banks in retention, new customers often receive more favourable business conditions, such as lower prices and/or more flexible contracts and payment terms, than existing customers (Reichheld and Sasser, 1990; Abrams and Kleiner, 2003; Farquhar and Panther, 2007). In contrast, Aspinall et al. (2001) found that 54% of companies reported that customer retention was more important than customer acquisition, while Payne and Frow (1999) found that only 23% of marketing budgets in UK organizations is spent on customer retention. Moreover, it has been illustrated that customer retention is practised by many organizations because it enables them to gain a competitive advantage in the market, which is essential for business and firms’ survival (Flambard-Ruauad, 2005). Therefore, organizations should make more effort to enhance customer retention rates, especially in highly changeable markets such as the mobile phone sector which reached high levels of market penetration within a short period of time (Yang, 2006).

It is appropriate in this context to mention the main reason for highlighting the importance of studying the customer retention phenomenon. Based on high churn rate (customer attrition) in some business sectors, customer retention has attracted significant interest
from scholars and practitioners in the field of relationship marketing over the last two decades (Parvatiyar and Sheth, 2001). For example, in the mobile phone sector, it has been estimated that about 27% of a given cellular supplier’s subscribers are lost each year, which is estimated to be around 2.2% every month (Vandenbosh and Dawar, 2002). The authors claimed that the cost of acquiring each new mobile subscriber was estimated at between $600.00 and $800.00, which encompasses many costs such as advertising, marketing, sales, and commissions. According to the Organization for Corporate and Development study, the average annual revenue from each mobile user is $439.00 (based on 30 leading countries) (Wales, 2009).

Frequently, the main theme of customer retention studies has focused on studying the supplier sides and how they maintain relationships with customers (Khalifa, 2004; Buttle, 2008). Even from the supplier side, the bulk of previous customer retention literature has focused on the economic aspects of retaining customers and how firms develop strategies to improve customer retention and maximize returns through the customers’ life cycles (Clarke et al., 2002). Scholars and practitioners’ interest in the economic aspects of retaining customers has increased since Dawkins and Reichheld (1990) reported that a 5% increase in customer retention generated an increase in customer net present value of between 25% and 95% in a wide range of business sectors. Also, according to Hanks (2007), a mere 5% improvement in customer retention can lead to a 75% increase in profitability. However, establishing and maintaining strong relationships with all customers may not be the primary aim of some organizations because not all customers and their relationships are similar or profitable (Hausman, 2001; Chen and Popovich, 2003). Moreover, it has been explained by Reichheld and Kenny (1990) that the majority of firms focus on customers’ current period revenues and costs and pay no attention to potential cash flows over customers’ lifetimes.

Liu (2006) provides an analysis of monetary and non-monetary costs incorporated in searching for and finding a new service provider. The salient costs incurred by customers involved financial expense as well as time and effort involved in establishing and maintaining a new service relationship (Zeithaml, 1988). This coincides with Gupta et al.’s (2004) results which indicated that a 1% increase in customer retention had almost five times more impact on firm value than a 1% change in discount rate or cost of capital. In addition to, Reichheld (1996) identified six economic benefits, to organizations, of
retaining customers that can be achieved in the long term: First, savings on customers’
acquisition or replacement costs; second, guaranteed base profits as existing customers are
likely to have a minimum spend per period; third, growth in per-customer revenue as, over
a period of time, existing customers are likely to earn more, have more varied needs, and
spend more; fourth, a reduction in relative operating costs as the firms can spread the cost
over many more customers and over a longer period; fifth, free-of-charge referrals of new
customers by existing customers which would otherwise be costly in terms of
commissions or introductory fees; and sixth, price premiums as existing customers do not
usually wait for promotions or price reductions before deciding to purchase, in particular
with new models or versions of existing products. What is more, Gummesson (2004)
studied the ‘return on relationships’ concept (ROR) and highlighted the following critical
points: First, marketing costs go down when customer retention goes up, and firms do not
have to recruit new customers as before; second, competitors have a tougher time when
retention and loyalty increase, (they are not getting new customers served up on a plate);
third, both customers and suppliers can get benefits through cost reductions and joint
development of products, services, and systems when they collaborate with competitors
on one level.

Retaining customers in highly competitive business environments is critical for any
compny’s survival because a lost customer represents more than the loss of the next sale.
The company loses the future profits from that customer’s lifetime of purchases. Also,
keeping customers makes the cost of selling to existing customers lower than the cost of
selling to new customers (Aydin and Ozer, 2005). Therefore, acquisition should be
secondary to retaining customers and enhancing relationships with them (McCarthy,
1997). That is because, according to Levy (2008), new customers are more difficult to find
and reach, they buy 10% less than existing customers, and they are less engaged in the
buying process and relationship with retailers in general. Meanwhile, according to Eiben
et al. (1998), existing customers tend to buy more, which in turn generates more profit
through more cash flow. In addition, repeat customers were tested and shown to be less
price-sensitive, they provide positive word of mouth, and they generate a fall in
transaction costs, all of which increases firms’ sales and profits, which leads to sales
referrals (Stahl et al., 2003). Also, firms can gain a number of additional, indirect,
relational economic benefits. For example, Farquhar (2004) explained the profitability of
cross-selling to existing individual customers. Farquhar recommended that firms offer the
best supply environment to increase the possibility of selling different types of products and services to existing customers, such as downloadable songs, videos, and ring-tones via the mobile handset.

Apart from the economic benefits that a firm can gain from customer retention, there are many indirect benefits which may outweigh direct profits. Hanks (2007) discussed the importance of soliciting customer feedback to improve business operations, customer retention and profits. Also, Eisingerich and Bell (2007) studied the maintenance of customer relationships in high credence services. The main finding highlighted that customers’ willingness to recommend the firm to relatives or friends is the key component of customer commitment to the organization; perceived excellence in quality of service and trust in the organization will lead to repurchase intentions. In addition, word-of-mouth, for example, represents an opportunity for firms because it has a powerful influence on consumers' attitudes and behaviours (Mazzarol et al., 2007). Moreover, Christensen (2006) highlighted the importance of measuring consumer reactions towards organizations based upon emotional and attitudinal responses. Transferring positive information about the organization, its products (Riley, 2006), image (Pope and Voges, 2000), and brand (Grau et al., 2007) are all considered examples of a firm’s goals while customers usually promote them for free.

From the customer’s perspective, many benefits can be gained through involvement in a long-term relationship, such as enhanced confidence, developing social relationships with others, special treatment benefits, reduction of risk, economic advantages, social benefits and adaptability, and the simplicity and efficiency of the decision-making process (Gwinner et al., 1998; Marzo-Navarro et al., 2004; Dubelaar et al., 2005). Some scholars such as Dwyer et al. (1987) categorised customer relational benefits from suppliers into either functional or social benefits. Functional benefits include convenience, time-saving, and making the best purchase decision (Reynolds and Beatty, 1999), while social benefits include how comfortable and pleasant the relationship is, enjoying a relationship with the suppliers’ employees, and having good friends or a good time (Goodwin, 1994). At the same time, relationship benefits have been categorised to include functional, social, and psychological benefits, according to Sweeney and Webb (2007). It has been illustrated that psychological benefits include empathy, understanding between the relationship parties, and customer-perceived value which has many elements (e.g. perception of
reliability, solidarity, trust, responsiveness) (Bitner et al., 1998; Sweeney and Webb, 2007).

A customer may demonstrate his/her retention propensity in many ways: by expressing preference for a company over others, by continuing to buy from it or by increasing its business in the future (Zeithaml et al., 1996). Meanwhile, Ennew and Binks (1996) differentiated between two dimensions of retention: the continuance of a particular relationship (e.g. contract renewal) and the retention of the customer, which gives firms the opportunity to sell a variety of products and services. This thesis has adapted Ennew and Hartly’s view to study the customer retention issue from a behavioural perspective designed to produce repeat business. They contend that the centre of the relationship marketing paradigm is the continuation of the interaction between any two parties. The continuation process is aimed at making the most of existing clients, which is essential for long-term profitability. That is because the customer retention process begins with the first repeat purchase and continues until one of the parties terminates the mutual relationship (Thomas, 2001). This idea is upheld by Dwyer et al. (1987) who viewed relationship marketing as being based on repeat purchase behaviour rather than a discrete transaction. Within the same theme, Gronroos (1990, p.5) declared that “If close and long-term relationships can be achieved, the possibility is high that this will lead to continuing exchanges requiring lower marketing cost per customer”.

Mutual relationship classification has been perceived differently within the relationship literature, ranging from discrete transactions, through repeated purchase transactions, to long-term relationship, and full partners as explained by Goffin (2006), according to other scholars’ illustrations (Mohr and Nevin, 1990; Webster, 1992). Mainly, scholars have classified relationship types based on specific factors such as transactions, closeness, and longevity (Barnes, 1997; Bove and Johnson, 2001). Some scholars have relied heavily on employing different relationship time dimensions and have used different related concepts such as relationship longevity or duration (Bolton, 1998; Reinartz and Kumar, 2003; Fink et al., 2008). However, according to Goffin (2006), it is useful to employ time dimensions in relationship classification but, in most cases, classifying relationships as long- or short-term based on time dimensions is insufficient and useless while a long-term relationship may consist of just a single, small transaction such as the placing of an order and its delivery. The important point is to consider how relationship classification from different
perspectives, especially temporal ones, can be employed and used to classify relationship types among partners in a way that serves the study purposes. Lambert et al. (1996), for example, differentiated between three types of mutual relationship or partnership, seen as ‘short-term’, ‘long-term’, and ‘long-term with no end’. For this study’s purposes, a relationship is classified into contractual ones (mutual contracts which needs to be signed by customers and suppliers) which continued for at least 12 months (e.g. 12-month mobile contract service subscription), and non-contractual ones (no contracts need to be signed by customers and suppliers) which may continue for more or less than 12 months (e.g. Pay-as-you-go service subscription). Both firms and individuals normally use long-term contractual agreements for many purposes, such as reducing uncertainty, supporting investments, and making suitable use of different, sufficient, financial mentoring techniques such as predetermined and cost-targeting (Zirpoli and Caputo, 2002; Goffin et al., 2006).

Is it healthy in all cases for customers to be involved in relationships with suppliers? Being in a relationship with the same service provider is not a healthy situation in some cases; some customers prefer not to be engaged with relationships because not all long-term relationships bring welfare and benefits to them (Bloom and Perry, 2001). Therefore, it is appropriate to conclude by highlighting the disadvantages of being locked into a relationship with a specific supplier, especially through a contract. This area of research is still new and additional research is needed. Hankansson and Snehota (1995) explained five negative factors or disadvantages that result from being in a relationship: First, loss of control - developing a relationship sometimes means giving up or minimizing control of many things such as resources, activities and even intentions; second, indeterminateness - while such a relationship is not constant, its future is uncertain and is determined by its history, current events and the parties’ expectations of future events; third, resource demanding - it takes great effort to build and maintain a relationship, which can be viewed as an investment and maintenance cost; fourth, preclusion from other opportunities - a variety of resources are required to build and maintain a relationship, and many conflicts may arise between the parties when such opportunities are attractive to invest in; fifth, unexpected demand - all parties in a relationship are linked to many other relationships which may passively link into a network of relationships. Pererson et al., (2005) mentioned other disadvantages that are a consequence of being locked into mobile phone service subscriptions: poor value-for-money mobile offers, poor network, a handset using
unique data and software, long-term contract (e.g. 2-year contract), poor customer service operators, joint venture cooperation between mobile service supplier (O2) and a mobile retailer (Tesco Mobile), specific geographical area coverage, limited number of mobile services, offering specific types of mobile handsets, high switching cost, specific mobile tools and accessories, and mobile contract’s conditions.

In summary, the goal of customer retention is aimed at benefiting both relationship parties to facilitate exchanges, make relationship exchanges more possible, reduce transaction costs, and maximize the relationship’s economic and non-economic benefits in order to repeat the exchange processes in the future. To establish this, firms try to affect consumers’ behaviour by providing different types of utilities to retain customers (Foxall, 1998a). Accordingly, many scholars such as Cronin et al.(2000) and as Hanzaee (2008) have claimed that relationship benefits are essential prerequisites for relationship exchange and continuation. Thus, it is important to investigate customers’ view of retention with respect to different behaviour-related issues, such as the effect of post-behaviour utility consequences signalled by pre-behaviour antecedent stimuli on consumers’ retention choice; this has received little attention from scholars, especially in the mobile phone sector (Patterson, 2004; Gan et al., 2006). The following section will explain why the mobile phone sector is a good field to study.

**1 - 3: Scope of customer retention problem in the mobile phone sector**

This study is conducted in one of today’s most rapidly growing and competitive sectors, the cellular phone industry (Gruber, 2005). The cellular phone industry accounts for nearly £1.1 trillion globally and approximately €200 billion in Europe by providing a variety of businesses such as mobile services, handsets, content delivery, and infrastructure manufacture/installations (Eccho, 2009). The importance of the mobile business has increased since it has now entered all aspects of life, including education, health, business, and entertainment. Mobile phones are described as “those telephones that are fully portable and not attached to a base unit operating on dedicated mobile phone networks, where revenue is generated by all voice and data transmissions originating from such mobile phones”(Mintel Report, 1998, cited in Turnbull and Leek, 2000, p.148).

Over the last decade, the mobile industry has passed through a wave of critically rapid changes in its structure, competition, strategies, techniques, and technological
environment. These changes came as a result of globalization, liberalisation, deregulation, and technological developments which are the primary factors affecting economies in general and the mobile phone sector in particular. As a result, these challenges undermine the ability of businesses to retain their customers (Kalakota et al., 1996). The wireless communication sector is not excluded from this phenomenon, being one of the fastest-growing service segments in telecommunications (Kim and Yoon, 2004), and has both “high customer turnover and high customer acquisition cost” (Bolton, 1998, p.52). Recently, the wireless telecommunication sector has experienced an unprecedented increase in competition, highlighting the importance of retaining existing users (Seo et al., 2008). According to Andic (2006), in Great Britain, mobile phone operators are losing more than a third of their young subscribers to other rivals’ networks every year, which costs them over $1.8bn (equal to £949m) in revenue.

There are many critical issues that explain the reasons for choosing to study customer retention in the mobile phone sector. These issues are divided into two parts to represent both customer and supplier perspectives. This thesis will focus more on investigating customer retention from the customers’ perspective rather than from the suppliers’ perspective. This is because the suppliers’ view and the benefits of a mutual relationship and customer retention have been widely discussed by both practitioners and scholars (Thorsten and Alexander, 1997; Wirtz and Lihotzky, 2003) while the customers’ view and the benefits of being in a long-term relationship and repeat purchasing do not receive much attention (Berry, 1995). However, some mobile suppliers’ supporting data and managers’ opinions will be discussed in different sections of this thesis to further clarify what mobile suppliers do to attract and retain their existing customers.

Previous research has suggested many reasons for studying customer retention in the mobile phone sector from a consumer perspective. Recently, mobile penetration or usage rate has become very high in different European countries. For example, the penetration rate has reached almost 100% in Germany (Dewenter et al., 2007), 103% in Western Europe and 124.6% in Italy (Ahonen, 2006). According to the same sources, the penetration rate in the UK was estimated at 114.8%. Roughly 27% of UK mobile users have two mobile handsets while 87% have only one. Thus, it is more difficult and expensive to acquire new customers than to focus on current customers, especially in a mature market such as the UK and US wireless communication market (Buttle and Bok,
1996; Seo et al., 2008). Also, according to Gronroos (1995), the cost of encouraging satisfied customers to buy more products/services is lower than the cost incurred in finding new customers and making them buy firms’ offerings. Therefore, suppliers would be better advised to concentrate on satisfying the needs of existing customers by providing clear contractual and non-contractual relational mobile offers. In addition, customers have become very familiar with mobile telecommunication since it was introduced in 1996. Thus, they have acquired a relatively good knowledge of mobile phone suppliers’ characteristics and the offers that affect their decision-making; making a suitable choice will encourage them to become involved in a long-term relationship. Also, mobile users are familiar with the different services provided by operators, such as roaming and multimedia messaging service (MMS), and suppliers’ product offerings such as Universal Serial Bus (USB), and personal mobile handsets (Jansen and Scarfone, 2008). However, consumers can experience confusion in the mobile marketplace when choosing the best relationship and contractual option offered by operators (Leek and Kun, 2006). Customer confusion occurs as a result of a variety of mobile phone plans introduced and advertised similarly in the marketplace. This can make the process of comparing contract alternatives, benefits and costs a relatively difficult issue for some customers. In addition, choosing to analyse and investigate the mobile contract will produce valuable benefits for both relationship parties, especially for customers in the long term. Also, a choice of mobile contract should be based on the purchasing habits and predictability of usage in the consumer’s previous experience. That is because the contract purchasing behaviour becomes a repetitive choice behaviour taking place as a continuous process, the predictors and determinants of which need to be explained (Sheth and Raju, 1974). Thus, customers are facing different challenges, as indicated by the following questions: How does a customer choose from among various mobile airtime offers? And how will the customer’s choice be influenced by different stimuli and consequence components offered by mobile suppliers?

Choosing to study customer retention from the supplier side has been justified in many aspects. The main challenges that face mobile operators in today’s competitive business are how to acquire new subscribers and retain existing ones, especially young subscribers (Seth et al., 2005). This view is confirmed by Bolton (1998) who illustrated that the cellular industry’s churn rate is currently 2.7% each month (e.g. roughly 30% per year); the typical firm experiences the equivalent of complete customer turnover every three
years. In France, for example, operators lose about 30% or more of their subscribers every year in spite of having large customer acquisition expenditures (Lee et al., 2001). Also, it has been claimed by Barnes (2001) that attracting new customers is significantly more costly than retaining existing ones. Along the same lines, it has been claimed that the cost of attracting and recruiting a new customer is five times more than the cost of keeping a current customer (Rosenberg and Czepiel, 1992; Grönroos, 1995). This view has been confirmed by Halliday (2004) who claimed that, in 1998, automobile executives estimated that it costs about $200 to keep a customer compared with $800 to attract one. By comparison, in the mobile industry, Bolton (1998) contended that the average cost of acquisition for a new subscriber is about $600. Based on the previous explanation, one might ask why, while mobile operators are facing major loss of existing customers every year, do they do good business and generate good cash flow or profits in the UK market.

The rational explanation to this issue is that mobile operators should focus more on satisfying current customers to prevent them from switching or being attracted by other operators for two main reasons. First, it costs operators a huge amount of money, time, and efforts to attract customers. For example, to advertise mobile offerings to target customers and stimulate them to be involved in a relationship with the mobile operator, it has been reported that the aggregate advertising expenditures of the main UK mobile operators including Orange Plc, O2 UK, Hutchison 3G UK Ltd, Virgin Mobile Telecommunications Ltd, T Mobile Network, and Vodafone Ltd. was over £235 million in 2008 while it was around £261 million 2006 (Boyfield, 2009). It has also been claimed that the cost of acquiring each new mobile subscriber was estimated at between $600 and $800, which encompasses many costs such as advertising, marketing, sales, and commissions (Vandenbosch & Dawar, 2002). Thus, caring for current customers will help to minimize both operation and marketing costs attached to acquiring new customers to cover the lost ones. For further explanation, Aydin and Özer (2005) explained that Orange loses around 20% of its customers each year. The average cost to Orange of recruiting each new customer was £256 in 1996. Therefore, based on Palmer’s (1998) claims, reducing the churn rate from 20% to 10% would produce over £25 million of savings every year.

Second, in general, mobile operators do good business and generate relatively high revenue through selling different products and services to both current customers and new ones. It has been estimated that the cellular phone industry accounts for approximately
€200 billion in Europe by providing a variety of businesses such as mobile services, handsets, content delivery, and infrastructure manufacture/installations (Eccho, 2009). In the UK market only, Boyfield (2009) claimed that the total annual revenues of UK mobile telephone operators increased from £200 million to £1600 million as a result of providing a range of product and service choices, ranging from ringtone downloads to travel alerts. Also, it has been estimated by Ofcom that the total mobile telecom revenue that was generated in both data service and mobile voice was £15.1 billion in 2007. Thus, mobile operators try to increase the level of business by attracting new customers, doing more business with existing customers, and focusing on minimizing customers’ attrition. That is because according to the Organization for Corporate and Development study, the average annual revenue from each mobile user is $439.00 (based on 30 leading countries) (Wales, 2009).

Based on the previous explanation, mobile suppliers are in an escalating race to attract new customers and retain their existing ones by providing new wireless utilities through new mobile products, accessories, data, and technology and services continuously. For example, it is claimed by Verheugen (the EC Vice-President in charge of Enterprise and Industry) that “In the European Union market alone, there are about 185 million new mobile phones a year” (Foresman, 2009). Thus, keeping customers is an issue that needs continuous monitoring from operators because keeping customers means more cash flow and less operational and marketing costs. In addition, providing different types of contractual mobile services with suitable levels of mobile technology are considered the greatest challenge for operators. That is because serving customers in the long term means delivering high-quality services, which is seen as an essential approach for success and survival in today’s competitive business environment (Zeithaml et al., 1996).

To summarise, a large number of wireless telecommunication and relationship marketing studies indicate that a majority of companies are still losing customers at a notable rate, especially mobile service providers (Lee et al., 2001; Wirtz and Lihotzky, 2003). Thus, the importance of customer retention as a field of study in this thesis is highlighted by many factors: increase in competition, increased customer-switching rate, unreliability of traditional marketing tools, evolving consumer buying patterns, more demanding and sophisticated customers, changing business themes, rapid scale of innovation, increase in
quality expectations, mobile phone suppliers mergers and acquisitions, and increased partnership (Peppers and Rogers, 1995; Buttle, 1996; Sheth and Sisodia, 2002).

This study of customer retention is conducted in the mobile phone sector and, according to Dalen et al. (2006), about 50% of contracts are renewed; therefore, it is essential to provide a working definition of “contract” and to explain how suppliers can use it to retain customers in the long term.

1 - 4: Service contract and contractual relationship marketing

The majority of service organizations deliver their services through long-term contracts, especially the mobile phone sector.

A contract is defined as “a promise or set of promises for the breach of which the law provides a remedy or for the performance of which the law recognizes a duty” (Muroff et al., 2004, p.459). Based on Muroff’s definition, two main principles remain important in contract constructions: First, a contract is a well-written document that encompasses a promise or mutual promises of intentions which bind the agreed obligations between the contracting parties; second, a contract’s obligations and promises are enforced by the law. The formal construct of a contract defines its actions’ promissory nature that defined the intent and bind of both contracted relationship parties (Roehling, 1997).

In most cases, a contract is used by service firms as a basic tool in the interaction process which defines the shape of the relationship and which contains three main elements: First, it defines types and levels of property right exchanges between the two parties; second, it includes both implicit and explicit content of exchange processes which define the type and level of formality and informality of the interaction process; and third, it sets out the degree of involvement and the communication types and methods involved in the interactions (Janssen and Joha, 2004). Accordingly, there are many issues that should be explained clearly when constructing the mobile contract between the parties involved, such as the legal ramifications of contract duration, automatic termination, and renewal conditions.

This thesis inspects the customer retention issue in the UK mobile market. Wireless telecommunication services are provided by UK mobile phone suppliers using two subscription methods: prepaid and post-paid. For the purposes of this study, the
contractual behaviour situation can be described as one in which a customer signs a contract with one or more of the wireless telecommunication service providers; this is known as post-paid subscription. The non-contractual behaviour situation is described as the prepaid situation, where there is no need for a customer to sign a contract with any of the wireless telecommunication service providers; this is known as “Pay-as-you-Go”.

Wireless communication services are controlled by law which is defined by specific rules that control such interaction. A large part of any contract presents and defines a code of conduct that encompasses many rules and conditions; these define and control the future interactions between customer and suppliers for a specific period of time and can be renewed for additional periods of time. Two elements need to be explained regarding the contract from a behavioural perspective: Firstly, the contractual data which encompasses many elements and circumstances that ensure that interactions between both relationship parties run smoothly without any violations (Wei and Chiu, 2002); and secondly, the contractual relationship requirements, which is described clearly and divided by Panesar (2008, cited in Thompson et al., 1998) into four main elements: (a) the relationship between the involved parties, (b) the responsibilities of each party, (c) the sharing risk of events and actions in a contract, and (d) the reimbursements structure. These elements usually act together to define and shape the contractual relationship between any two parties.

In changeable and uncertain business environments, written contracts offer many benefits for both customers and suppliers; these include help in determining and protecting benefits in the long term, giving adequate protection for both parties, help in minimizing and managing the perceived risk, managing the internal and external contracting process with a variety of business bodies and customers, and help in delivering the multi-functional tools between the relationship parties (Levine, 2003; Gutiérrez et al., 2004; Koford and Miller, 2006). Moreover, a contract is useful in many other business issues, such as determining the future demand for a variety of products and services, organizing business relationships between different partners, especially when a network of relationships is needed to serve customers properly (e.g. inventory and outsourcing systems), and investigating consumer behaviour, reactions, and future trends in many services, especially for new offerings (Taylor, 1980; Tekleab et al., 2005). Also, written contracts make it possible for both parties to initiate, maintain, and eventually terminate their
mutual relationship without dispute. By having the conditions and terms recorded in a written document, it is possible for both parties to respond to any possible changes in business conditions, allowing them to cancel, renew, or upgrade their commitments. In the presence of varying circumstances, a contract can help in controlling both parties’ decisions and facilitating business continuation (Goldberg, 1976).

Some service contracts can be renewed legally and repeatedly based on previous agreements with no changes or additional charges; these would include mobile phone contracts, although they frequently contain written statements that clearly define the contract’s renewal and termination conditions (Goldberg and Erickson, 1987). However, in most cases contracted partners go through a negotiation process before relationship renewal or termination occurs. When contract negotiations take place, factors that affected the negotiation process for the first contract are different from those that affect the decision to renew a contract. In the case of the latter, firms and customers are more likely to be concerned with the value to be gained and penalties incurred whereas, with regard to the former, consumers are concerned with all aspects of the contract, i.e. benefit terms, costs and conditions (Ganesh et al., 2000). This is because the process of contract renewal has many additional elements that need to be taken into consideration, such as reliability, consistency of service, goods provided, variations in service quality during the contracted period, consumer uncertainty and how to reduce it, substitute mobile offers’ availability, and contract duration. Thus, contract renewal is affected by many factors such as contract price (cost), renewal negotiation process, and contract-related issues such as duration, terms and conditions. Price is essential in the contractual relationship because it determines many elements such as future service usage, level of benefits, and the contract period. For example, in the mobile phone sector, organizations that provide technical elements which require broadband-related services will force mobile operators to set different price levels for these services based on future use (Jonason, 2002).

In addition, renewing contracts provides many benefits for both parties. The primary benefits are price (saving on costs), enhanced quality of products and services, increased mutual cooperation, time and effort saved by not having to search for other alternatives, accumulated experiences for both parties, and establishing trust and commitment between contractual partners (Hart et al., 1997; Bolton et al., 2006; Anton et al., 2007). Service delivery and consumption experience are essential factors for the customer to consider
when deciding whether to renew or cancel the contract; these factors are thus crucial for the supplier’s survival (Bolton et al., 2006). The renewal process can also be used as a tool to enhance, by avoiding mistakes, the kind of contracted products and the level and quality of services and aids in developing long-term business exchange activities (Dalen et al., 2006). Some of the indirect benefits of contract renewal were explained by Lascelles and Dale (1989, cited in Meyer et al., 2006) who showed that some customers use their purchasing muscle to force their suppliers to adopt certain quality management techniques and practices as a contractual condition of business.

In regard to customer retention, the contract is the primary tool used to organise simple and complex consumer-supplier relationship exchanges to the degree that both parties are committed to contract obligations, benefits, and penalties over the contract period (Gutiérrez et al., 2004). Contracts commit both parties to the relationship by managing many interactive behavioural and non-behavioural related dimensions such as dependence, power, cooperation, conflict, trust, commitment, switching barriers, switching costs, exchange content, transaction costs, mutual bonds, customization, and uncertainty reduction. According to Sharma et al. (2006) and Kim and Frazier (1997), five commitment dimensions relating to mutual contracts have been determined: locked-in, behavioural commitment, obligation, affective, and value-based. The main contract issues that need more explanation with respect to commitment in the long term are affective commitment, mutual bonds, and locked-in. According to Mavondo and Rodrigo (2001), affective commitment is determined by affective and/or normative attachments that define the strength and level of consumer intent to remain in a relationship with a supplier. Affective commitment shapes the degree to which a relationship is maintained in the long term. Also, consumers must define what attachments and bonds need to be secured by law via a contract document in order for them to enter a long-term contractual relationship and commit to it (De Ruyter et al., 2001). Some authors have described these bonds as relationship attachments. Nummela (2003) explained that the magnitude of attachment is defined by the degree to which a customer is committed to a relationship and wishes to renew his/her contractual exchange process.

Firms in general execute many actions to bond customers and they apply them in different ways. For the purposes of this study, a formal signed contract between a customer and a mobile supplier is considered one of the bonds that suppliers use to lock in customers; it is
a tool that they use to maintain their relationships with the customers. For example, Hammarkvist et al. (1982) analysed the dyadic mutual relationship and defined many bonds in their analysis including social, economic, legal, and administrative bonds. Other bonds have been defined by other researchers including interpersonal relationship (Lewis, 2000), joint new product development (Comer and Zirger, 1997), and level of investment in the supplier-customer relationship (Monczka and Carter, 1988). Additionally, Liang and Wang (2007) defined four additional types of attachments that minimize customer switching: physical, emotional, psychological, and economic attachments that enhance the interaction between two parties and foster contracts renewal. Psychological attachment is essential since it empowers interactive behaviour between both parties in the relationship (Houghton and Yoho, 2005). Part of the psychological attachment is emotional in that a subscriber expresses a level of confidence in and attraction to a specific operator or network. Some authors have developed the “psychological contract” concept as a bridge that maintains customer-supplier relationships (Schein, 1980). A psychological contract is characterized by Rousseau (1995, p.679) as “an individual’s belief in mutual obligations between that person and another party such as an employer”, which defines the level of one party’s judgements of another party’s obligations and responsibilities in the mutual relationship. Also, feedback and criticism, which function as positive informational reinforcement, increase the level of contractual psychological attachment, which in turn increases the probability of establishing a long-term relationship and increasing customer retention (Verlander and Evans, 2007).

Service firms use many programs to increase customer lock-in, such as discounts on virtual network, family wireless communication packages, and evening and weekend discounts (Yanamandram and White, 2006). Loyalty programs are also used. According to Colloquy (2000, cited in Lacey and Sneath, 2006), about 75% of consumers in the U.S. have participated in at least one loyalty program. Warranties are also considered a good lock-in tool that prevents customers from switching. Warranties provide limited services, such as maintenance contracts, to ensure customers are committed to their suppliers. Being committed is described by Morgan and Hunt (1994, p.23) as “believing that an ongoing relationship with another is so important as to warrant maximum efforts at maintaining it”. Thus, “locking in” mobile subscribers for long periods is one of the contract dimensions that determine consumer commitment and retention (Lee et al., 2001).
In the mobile phone industry, contract longevity is distributed between two categories: prepaid telecommunication subscription services or post-paid telecommunication subscription services which are distributed mainly between 12, 18, and 24-month contracts. According to Tingay (2009), who analysed data on contract length, around 91% of respondents expressed a preference for contracts lasting 12 months; this gives them the chance to switch or remain with their current provider, depending on whether they can gain more benefits from a new contract with another service provider or via contract renewal. One of the additional attributes of the mobile phone sector is that it is easy for a mobile user to transfer from non-contractual subscription to contractual subscription at any time and from contractual subscription to non-contractual subscription when his or her contract period finishes. Also, a consumer should be able to choose from among a variety of mobile communication contracting options and negotiate renewal issues when his or her contract is about to finish. The second purchase (e.g. contract renewal) seems to be easier than the initial purchase (e.g. first contract). That is because consumers accumulate information, knowledge, and experience through direct interactions with the products and services that suppliers offer, after their first point of product/service contact. Moreover, in the mobile phone sector, the main customer retention issue of concern to suppliers is the “churn rate”. The churn rate in this area is concerned with planning and analysing marketing activities towards accurate predictions of customer retention and turnover for future perspectives (Fader and Hardie, 2006). Bowes (2008) found that the loss rate within the British mobile telecom sector has increased from 33.4% in 2005 to 38.6% in 2007.

To summarise, the mobile contract is seen as a regulatory tool used by service firms to establish long-term relationships with customers to protect their rights within agreed terms and conditions. Also, the contract is considered a good tool for maintaining an existing customer-supplier relationship when it is adjusted or renewed for another period of time. This is important as Dalen et al. (2006) estimated that about 50% of contracts are renewed.

After discussing the customer retention phenomenon in the mobile phone sector and explaining the importance of the mobile contract for retaining customers, the next part of this study will summarise the relevant secondary literature that has helped to elucidate the gap for the present research and the question it seeks to ask.
The issue of customer retention has been approached from a variety of angles. Several customer retention studies have undertaken the investigation of the link between service quality and customer retention (Ennew and Binks, 1996; Zeithaml et al., 1996; Venelis and Ghauri, 2004), and many have considered the positive effect of customer satisfaction on customer retention (Gupta and Stewart, 1996; Murgulets et al., 2001; Hennig-Thurau, 2004; Patterson, 2004; Tsai et al., 2006; Keiningham et al., 2007; White and Yanamandram, 2007). In addition, various scholars’ models have examined the links between commitment and customer retention (Too et al., 2001; Bansal et al., 2004; Sanchez and Iniesta, 2004; Hess and Story, 2005), while some studies concentrate on explaining the effect of trust on customer retention (Crosby et al., 1990; Teichert and Rost, 2003; Wirtz and Lihotzky, 2003; Kjaernes, 2006; Liu and Louvieris, 2006). Their findings reveal that commitment and trust have positive effects on customer behavioural intention and retention. At the same time, many authors have illustrated that satisfaction, trust, commitment, and service quality are factors that enhance the firm-customer relationship quality generally and customer retention specifically (Gummesson, 1987; Ndubisi, 2006; Ulaga and Eggert, 2006; Wen-Hung et al., 2006; Caceres and Paparoidamis, 2007).

Relationship quality (RQ) concepts, including satisfaction, trust, and commitment, cannot be used to explain customer retention from a behavioural perspective because, as Morgan and Hunt (1994) theorized, successful relationship marketing requires relationship commitment and trust but these concepts are still seen as post-consumption evaluation approaches to long-term relationship outcomes (Grönroos, 1984). This coincides with what Sang-Lin et al. (1993) found concerning the main characteristics of mutual trust in a relationship and satisfactory exchange, although they do not explain how repeat business occurs with respect to a variety of pre-behaviour and post-behaviour environmental determinants. Many authors contend that RQ terms are factors that enhance the firm-customer relationship quality but, by describing them as “cognitive concepts” used in different approaches to explain mutual interactive behaviours between customers and suppliers to predict potential customer retention, they are not fully successful (Gummesson, 1987; Ndubisi, 2006; Ulaga and Eggert, 2006; Wen-Hung et al., 2006; Caceres and Paparoidamis, 2007). That is because the cognitive concepts explain
stimulus-perception link and relationship quality terms used to describe a consumer’s mental status with regard to a specific object. Some scholars such as Stich (1983) and Dennett and Kinsbourne (1997) demonstrated that a consumer’s mental status with regard to a specific object does not exist at all. Understanding consumer behaviour is based mainly on organism-environment interaction. That is because a customer exhibits particular behaviour according to her/his observations and interaction with different environmental influences that determine future behaviour with positive and/or negative consequences. For example, promotional materials stimulate needs as a result of the interaction process between a consumer and his/her behaviour setting stimuli that control his/her surroundings, not as a result of his/her internal objectives (e.g. beliefs). Surrounding stimuli influences are usually determined by a consumer’s learning history which signalled what to choose from a variety of options, each of which has different punishment or reinforcement. This view contradicts the mental black box which described the stimulus-perception relationship, not the stimulus-response relationship (Horst, 2005). Therefore, there is a need for a new approach to understand consumers’ long-term relationship continuation from a behavioural perspective, such as a stimuli-response approach with many factors, the effects and consequences of which can be determined, controlled, and assessed.

In addition, relationship requirements (e.g. trust, satisfaction, and commitment) are essential elements in building and developing continuing firm-customer relationships. However, such requirements are not sufficient to explain different mutual relationship-related elements such as social and economic interactions in which behaviour actors are engaged based on obvious stimuli and responses (Ranaweera and Neely, 2003; Seth et al., 2005). Accordingly, RQ terms without additional support are not enough to examine the effect of environment on consumer choices among predetermined options or to predict customer retention and future consumer intentions (Limon and Mason, 2002). For example, in the contractual behaviour setting, many elements need to be taken into consideration when studying customer retention behaviour, such as consumer behaviour setting, behaviour consequences, relationship benefits and adverse consequences in the long term. Also, it is essential to illustrate many relationship-related aspects which control the consumer retention behaviour setting, such as regulatory, temporal, social, and physical factors, when justifying consumer retention.
Moreover, relational benefits that are gained by firms when retaining customers have been extensively examined by many scholars, such as Gremler and Brown (1996). These benefits motivate firms to become heavily involved in building and maintaining long-term relationships with customers. However, relational benefits gained by customers as a result of retention and engagement in long-term relationships have not attracted much interest from scholars (Gwinner et al., 1998). Many retention models have focused on the organization side to build and maintain a long-term relationship to maximize earned income, and little interest has been shown in how to extend customer relationships by maintaining and controlling relational consequences (Rentschler et al., 2002; Verhoef, 2003).

The main retention angle that has attracted researchers’ interest engages the economic aspects of the bilateral relationship between suppliers and customers, such as customer profitability and cost (Ahmad and Buttle, 2001; Evanschitzky et al., 2006) and how retaining customers in the long term improves firms’ profitability (Patel, 2002; Ryals, 2003; Farquhar, 2005). However, few studies have approached customer retention behaviour determinants such as pre-behaviour stimuli and post-behaviour consequences. Based on an analysis of customer retention and relationship marketing literature, it has become evident that little research has been carried out directly to investigate customer retention behaviour and how firms can predict, motivate, and control repeat purchase behaviour. Even from a behavioural perspective, suppliers are mainly interested in how to maintain a ‘value-managed’ relationship through collaboration and communication with their customers; however, the actual behaviour still needs more explanation (Buchanan and Gillies, 1990).

With regard to the customer retention phenomenon from a behavioural perspective, there is a shortage of practical explanation of customer retention in the continuous behaviour context (Ranaweera and Prabhu, 2003). Previous studies lack the theoretical background to customer retention which clarifies the reciprocal relationship behaviours for both parties on a continuous, long-term, one-to-one basis (Farquhar, 2004; Grönroos, 2004). This is confirmed by Liang and Wang (2006) who illustrate that it is necessary to introduce practical evidence about the behavioural sequence and behavioural consequences at the individual customer level of analysis that signals whether a customer will remain with or leave an organization. Some customer retention studies have
approached the subject from the perspective of existing relationship quality and mutual relationships. Limón and Mason (2002) and Lemon et al. (2002) claim that current customer retention models have not incorporated the customer’s future considerations. Thus, there is a need to provide a new approach that takes into account the propensity for future behaviour and the basis on which customers might decide to continue the relationship exchange with the same firm.

To summarise, the need is to find a suitable approach to provide a solid and justifiable explanation of customer retention behaviour that shapes consumers’ operant selection. This lacuna has been highlighted by many scholars (Storbacka et al., 1994; Lang and Colgate, 2003; Verhoef, 2003; Palmatier et al., 2006; Ward and Dagger, 2007) and determined as:

“How to provide a complete explanation of customer retention from a behavioural perspective”

Having long-term relationships with customers cannot be achieved without building sustaining, mutually effective, and profitable relationships in order to enhance customers’ repeat purchasing behaviour continuously (Osarenkhoe and Bennani, 2007). In order to explain customer retention from a behavioural perspective, there is a need to shed some light on the main retention determinants that strengthen the mutual relationship and increase customer retention probability. These motivators encourage a consumer to lean toward one offer over others because it has gained his/her interest and offers greater benefits. Based on an analysis of previous research and the apparent gap in the academic field, the present study will be guided by the following research question:

“What are the main factors that drive customer retention behaviour?”

1 - 6: Research contribution and objectives

Customer retention has been a significant topic since the mid-1990s (Ang and Buttle, 2006). This is because many suppliers begin to lose their competitive edge as a result of customer attrition (Burgeson, 1998). Therefore, for many years, relationship marketing and customer retention researchers have focused on how to keep current customers satisfied. At the same time, customer retention has been the main goal of firms that practise relationship marketing (Grönroos, 1991). These firms seek to build and maintain
long-term customer relationships, which is central to improving business performance (Ennew and Binks, 1996). This cannot be achieved without extensive investigation to gain a deeper understanding of the interplay of continuous purchasing behaviour in relationships between customers and firms.

Numerous published studies have examined customer retention phenomena in depth and some have identified specific motives for customer retention and loyalty (Patterson, 2007). However, few studies have considered why customers prefer to continue purchasing from the same service provider in both the contractual and non-contractual behaviour settings. Moreover, these studies have not provided information with regard to what suppliers should do, from a behavioural perspective, to maintain their customers.

A number of authors have suggested various theoretical models in different trials to illustrate how and why some customers stick with their suppliers. For example, Richards (1996) demonstrated the conversion model which identifies commitment to different brands of goods or services. Also, White and Yanamandram (2007) proposed a model of customer retention of dissatisfied customers and presented a theoretical framework of the factors that potentially influence their decision to continue purchasing from their existing service providers. Further, Patterson (2004) proposed a contingency model of behavioural intention in a service context. The author examined the impact of switching barriers as potential motivators of the satisfied customer retention linkage (Rust and Roland, 1993).

From a practical perspective, many scholars (Richards, 1996; Bolton, 1998; Bolton and Lemon, 1999; Reinartz and Kumar, 2000; Mittal and Kamakura, 2001; Ahmad and Buttle, 2002; Ranaweera and Prabhu, 2003; Patterson, 2004; Gustafsson et al., 2005; Sim et al., 2006; Tsai and Huang, 2007) have investigated customer retention, focusing on how the customer-firm relationship expands over time by investigating the effects of a variety of relationship dimensions (e.g. service quality, trust, and commitment). One of the main studies to highlight the importance of customer retention was conducted by TARP in 1986 (Vavra, 1997). This study found that the average cost to a firm of attracting a new customer is five times more the cost of keeping a current customer happy. As a result, considerable attention has been paid to strengthening relationships with customers in order to retain them by building economic, social, personal, structural, and psychological bonds that reduce customer switching.
A consumer is usually not sure of the extent to which they will use a service in the future (e.g. mobile phone or credit cards), yet the factors that affect the continuation of the customer-firm relationship have been studied (White and Yanamandram, 2007). Therefore, this research concentrates on investigating how to retain mobile service users and enhance their future usage of such services in the UK market. This is achieved by providing an original theoretical approach in terms of theory and methodology to explain customer retention in the mobile service context. Accordingly, this research provides both theoretical and practical explanations of customer retention behaviour by applying the Behavioural Perspective Model (BPM) proposed by Foxall (1992) which will be explained at a later stage. Foxall himself suggested that the BPM can be employed to explain consumer behaviour in different behavioural contexts, such as the mobile phone sector, but no-one has used this opportunity yet.

Application of the BPM is based on the Skinnerian three-term contingency model to provide a full interpretation of customer retention behaviour based on a stimuli-response-consequences relationship within the operant behaviour situation. This type of explanation is considered a new approach with the intention of making essential contributions to the relationship marketing knowledge, especially in one of the highly competitive sectors with special circumstances, such as regulatory and temporal factors. The research contribution, using a justifiable approach, has been built on the notion of building long-term contractual and non-contractual relationships with existing mobile users. This approach will differ from other relationship marketing or consumer behaviour approaches, which focused on studying retention drivers in different service-purchasing settings such as bank services. That is because very little research has been conducted in the area of users’ purchase repetition in both contractual and non-contractual behaviour settings at once. Therefore, this study investigates the causes of repeat purchase actions in the mobile phone sector and takes the opportunity to make an original contribution to the study of service contract renewals/defections.

In addition, this study extends the customer retention literature by explaining customer retention behaviour based on using antecedents and consequences of learning contingencies in the mobile phone sector. This explanation provides more understanding of how to predict and maintain service users’ complex behaviour in the long term in the mobile phone sector, which is considered one of the most competitive and dynamic
sectors nowadays (Zander and Anderson, 2008). Customer retention investigation will help in explaining firm’s objectives as illustrated from the relationship marketing perspective. The marketing firm exists in order to reduce the transaction costs involved in finding and retaining customers for future businesses (Foxall, 1998b). Thus, the study can help suppliers to reinforce their retention of existing customers and to establish and maintain continuous relationship exchanges in the long term.

This thesis adds another issue to the literature by investigating how firms can use regulatory bonds (e.g. contractual bonds) in addition to other bonds (e.g. economic or social) to build and extend formal mutual relationships with existing users (Helm et al., 2006; Sweeney and Webb, 2007). From this perspective, contractual bonds include mutual contingency and involve both reinforcement and adverse consequences that are mentioned clearly within the contracts’ terms and conditions. These provide clear guidelines for both customers and suppliers that denote clearly the relationship’s stimuli and consequences for continuation, especially within renewal situations. That is because the basic philosophy underlying RM is to establish beneficial, continuous partnerships with customers (Javalgi and Moberg, 1997). Thus, there is a need to establish continuous customer-supplier relationships founded on mutual positive and/or negative consequences defined by contract and protected by law in the long term (Hines et al., 2000). Therefore, customer retention illustration needs a new approach (e.g. BPM) that has the capability to provide a clear understanding of how actual renewal behaviour occurs within the complex mobile phone setting; this has many factors that need to be taken into consideration (e.g. regulatory and temporal factors) in comparison to, for example, neutral food purchasing.

To summarise, the retention behaviour determinants need to be studied to help provide a sufficient explanation of how customer retention takes place. Based on the above discussion and by analysing the research question and reviewing customer retention literature, this thesis has three specific goals: First, there is a need to explore to what level the Behaviour Perspective Model can be used to predict customer retention behaviour. Second, there is a need to explore what factors drive customer retention behaviour. Third, there is a need to explore how the Behaviour Perspective Model can be used to explain customer retention behaviour in the mobile phone context.
1 - 7: Thesis outline

The thesis outline has summarised the way in which the research problem has been identified and investigated. Figure 1-1 charts the thesis skeleton and flow of the chapters.

![Thesis outline diagram]

Figure 1-1: Thesis outline

As shown earlier, chapter one provides a preliminary sketch of customer retention’s conceptual background and how it relates to relationship marketing. Also, it outlines the scope of the research problem in the UK mobile phone sector. The customer retention problem is highlighted by analysing the key behaviour repetition determinants based on previous studies’ analyses. This chapter ends with the research justification, contribution, and objectives. Chapter two details the theoretical background that is used to investigate customer behaviour from the customers’ point of view. The chapter is designed to study customer retention drivers in the mobile phone sector from a behavioural perspective. By applying the Behavioural Perspective Model (BPM), six propositions have been projected after providing an academic understanding of its related components. Chapter three explains the research design and data collection methods which have been applied in this study. Both quantitative and qualitative methods have been used to collect data from the study sample. The author illustrates how content analysis technique has been used to elicit study factors from a variety of mobile telephone contracts, mobile users, and mobile phone managers in the UK market. There is also a description of the process of using the
survey method to collect data from a sample of mobile phone users to test customer retention drivers. In addition, qualitatively, data collection methods from customer focus groups and managers’ interviews are reported in detail.

Chapter four details the empirical testing of customer data analyses and findings, starting with a full descriptive analysis of customers, suppliers, and mobile contract-related elements. Then the chapter describes statistical methods of regression analysis which are used to test the study model and the predetermined propositions. Various study components such as reliability, normality, and correlation tests are also reported. Chapter five provides a summarisation of the thesis by detailing how the BPM is used to explain customer retention behaviour, supported by the main study findings. Then the chapter ends by highlighting gaps for future academic study and implications for professionals that may help in designing better retention strategies.

**Summary**

Different approaches have been proposed to study the customer retention phenomenon from different perspectives. However, the intention of this thesis is to provide further explanation of the essence of the behavioural relationship exchange between customers and suppliers to predict how consumers make repeat purchases in the future. To achieve the study purposes, chapter one gives a brief introduction about how the customer retention issue has become one of the main relationship marketing challenges. By providing an academic understanding of customer retention, the scope of the customer retention phenomenon in the mobile phone sector was justified. Around half of all mobile subscribers have a formal contract with mobile suppliers; therefore, a brief explanation of the service contract and its role in maintaining the customer-supplier relationship has been given. To determine the research gap and objectives, there is a need to investigate the majority of previous customer retention-related studies which is discussed in depth in the following chapter. Based on that, previous studies which tackled the customer retention phenomenon have been summarised as key determinants of the mutual relationship. After determining the research problem and question, the research contribution was illustrated and the objectives were determined. The chapter ends with a thesis outline that illustrates the study skeleton and flow of chapters presented as a guidance to achieve the study purposes. The subsequent sections provide a detailed and systematic account of how repeat purchasing occurs.
Chapter Two: Theoretical background

Customer Service Retention
Introduction

Customer retention is considered one of the main relationship marketing concepts concerned with developing and maintaining a long-term customer-firm relationship. The importance of customer retention has increased since a majority of firms started to suffer a noticeable loss of customers, along with the complexity and high costs of acquiring new customers (Bird, 2005; Goyles and Gokey, 2005; Voss and Voss, 2008). Thus, the model of competition has shifted from acquiring new customers to retaining existing customers and luring customers away from rival companies (Kalakota et al., 1996). The rapid change and reform of the market has increased the types of service offered on a subscription basis in different service sectors such as the mobile phone market, in which the customer retention issue is critical (Lee et al., 2001). As technology and mobile network penetration have both increased, attracting rivals’ subscribers and maximizing customer retention have become urgent and timely concerns for mobile service providers (Kim and Yoon, 2004; Seth et al., 2005).

As explained previously, chapter one provides an overview of the research gap – the problem of customer retention in the mobile phone sector (Ranaweera and Prabhu, 2003). The definition of the research gap is based on a critical analysis of relationship marketing and consumer behaviour-related literature which will shed additional light on how actual customer retention behaviour is unfolding and will focus on illustrating the effect of retention drivers from the customer’s perspective. The customer-supplier phenomenon has inspired many scholars to study retention drivers from the supplier side while only minor interest has been shown in studying retention drivers from the customer side (Esposito and Passaro, 1998; Fink et al., 2006; Hovmöller et al., 2008).

Moreover, the retention phenomenon, from the customer’s perspective, has been studied from different angles. Customer retention has been studied heavily from an economic perspective by using a variety of indirect concepts such as the role of economic factors (e.g. price), customer profitability, level of investment in the mutual relationship, relationship benefits, the power of transaction cost, and economic performance and outcomes (Campbell, 1997; Mavondo and Rodrigo, 2001; Ryals, 2002; Humphreys et al., 2003; Verhoef, 2003; Gustafsson et al., 2004; Marzo-Navarro et al., 2004; Ahn et al., 2006; Fink et al., 2006; Simpson et al., 2007; Fink et al., 2008; Qu and Pawar, 2008).
Beyond the economic factors, many scholars (Geyskens et al., 1996; Hoffman and Peralta, 1998; Selnes, 1998; Cronin et al., 2000; De Ruyter et al., 2001; Friman et al., 2002; Vieira, 2005; Liang and Wang, 2006) have relied on indirect cognitive expressions (e.g. satisfaction, trust and commitment) to understand the customer-supplier relationship and how to retain customers in service markets. Even from the behavioural perspective, some scholars investigate the customer-supplier relationship using limited or unrelated concepts such as mutual communication, relationship duration and buying frequency to understand customer retention (Patterson, 1999; Eriksson and Vaghult, 2000; Dover and Murthi, 2006; Fink et al., 2008; Meyer-Waarden, 2008). Moreover, it has been found that the customer retention literature lacks the theoretical background to clarify the actual retention behaviour (Gummesson, 1987; Broderick, 1998; Lemon et al., 2002). Many scholars have found that studies on customer retention and the effects of impediments to switching within the mobile phone sector have little empirical support and few theoretical justifications (Lee et al., 2001; Ranaweera and Prabhu, 2003). This view is supported by Reinartz and Kumar (2000) who emphasise the need to study how to retain customers to ensure long-term relationships, especially in both contractual and non-contractual scenarios.

Previous research in this area has mainly focused on studying the determinants of acquiring more subscribers rather than studying the determinants of retaining existing customers (Ahn et al., 2006). Also, the existing literature does not sufficiently explore the factors motivating individuals to be loyal subscribers; further investigation is required into why a customer repurchases from the same service provider. Therefore, this thesis aims to follow this route to understand how retention drivers affect repurchase behaviour, which may provide a clear indication of how the service firm should manage in order to stimulate, attract, and reinforce customers to buy and continue buying in the long term.

Within the contractual context, understanding how consumers respond to a supplier’s offerings of reinforcement and utilities in the contractual behaviour situation will define the main factors that govern retention behaviour (Beckett et al., 2000; Choi et al., 2006; Pearlman, 2007). Accordingly, this study employs the Behavioural Perspective Model (BPM) (Foxall, 1998) to explain actual consumer behaviour and retention factors’ effects based on the antecedents and consequences of learning contingencies in the mobile phone sector which will be discussed extensively in chapter two. Chapter Two is organised as follows: section one discusses how previous studies have investigated and treated retention in the
literature, and will be supported by an explanation of the key determinants of customer retention in section two. In addition, this chapter discusses the customer retention phenomenon as behaviourists view it in section three; section four gives an idea of the BPM’s theoretical background; section five explains the application of the BPM in the mobile phone sector and supports it with the study propositions in section six.

2 - 1: Maintaining consumer retention

How firms maintain their relationships with current customers is still a critical issue, especially since most firms have the intention to do so but miss the opportunity (Bendapudi Leonard, 1997). That is because the majority of previous studies have concentrated on how to manage and investigate customer retention for the benefit of suppliers, with little attention given to consumer retention behaviour (addressing only one side of a dyadic relationship) (Reinartz et al., 2004; Davis and Mentzer, 2006). Most organizations focus their efforts on building, developing, and maintaining different kinds of relationships with a variety of partners in different markets. Some long-term relationships are between manufacturer and distributors (Janda et al., 2002; Ryu and Eyuboglu, 2007) or between manufacturer and representatives (McQuiston, 2001). Retailers seek to have a long-term and committed relationship with suppliers (Sheridan, 1997; Fynes and Voss, 2002) while firms are looking for a lasting relationship with their employees (Crosby, 2002). In addition, service providers focus their efforts on building and maintaining relationships with their customers (Harrison-Walker and Coppett, 2003). However, the majority of service delivery systems have failed to retain potential customers (Anderson, 1988). Egan (2001) explained that firms must identify and establish, maintain and enhance, and, when necessary, terminate relationships with customers and even with other stakeholders. This notion is supported by many authors who tried to predict how the customer-firm relationship is established and developed over time (Narayandas and Rangan, 2004; Salo, 2006; Ulaga and Eggert, 2006). Thus, some scholars have tried to design a theoretical relational life cycle (stages) in a way that helps to provide special care for customers to move them from one stage to another until they have become loyal (Dwyer et al., 1987; Landeros and Reck, 1995; Wilson, 1995; Leonidou et al., 2006; Palmatier et al., 2007).

In regard to what an organization does to maintain its relationships with customers, the main goal of maintaining a mutual relationship is explained by Zeithaml et al. (2001), who described how customer profitability can be increased and managed. Highly profitable
customers can be pampered appropriately and customers of average profitability can be cultivated to yield higher profitability. Moreover, unprofitable customers can either be made more profitable or weeded out. Dwyer et al. (1987) provided a hypothesized theoretical life cycle model of buyer-seller relationship stages in which a relationship develops through many different phases: meeting (awareness), dating (exploration), courting (expansion), marriage (commitment), and possibly divorce (dissolution of relationship). This model suggested that a relationship begins to develop significantly in the exploration stage when it is characterized by the attempts of the seller to attract the attention of the other party. The exploration stage includes attempts by each party to bargain and to understand the nature of the power, norms and expectations. The commitment phase implies some degree of exclusivity between the parties and results in an information search for alternatives. Finally, the dissolution stage depicts whether any procedures or practices, direct or indirect, are declared in order to leave the shared relationship.

Landeros and Reck (1995) provided a model for developing and maintaining buyer-supplier partnerships. Their model contains the following stages: buyer’s expectations, seller’s perceptions, mutual understanding and commitment, performance activity, and corrective action. These stages provide some techniques within different approaches to mitigate the performance problems and bring stability to the relationship. In addition, Kranton and Minehart (2001) provide a new model of exchange based on networks rather than markets of buyers and sellers. The authors proposed that the link begins with the empirically motivated premise that a buyer and seller must have within a relationship in order to exchange goods. Accordingly, both buyers and sellers should act strategically in their own self-interests to form the network structures that maximize overall relational welfare.

Some scholars argue for the importance of building different types of bonds with intended customers to maintain their relationship (Young and Denize, 1995; Rokkan et al., 2003; Spark, 2005; Szmigin et al., 2005; Tellefsen and Thomas, 2005; Aaserud, 2006). Establishing closer bonds enhances the development of cooperation, communication, and credibility among prospects. For example, Berry and Parasuraman (1991) contend that an organization can use one of three levels depending on the type and the number of bonds that firms use to foster loyalty: First, financial bonds (e.g. price) which are mainly used to develop and enhance customer loyalty; second, social bonds which are used to identify customers’ needs and wants through personal and group levels of analysis to try to satisfy them properly; third,
structural bonds which are intended to provide different services to customers using a variety of technology-based methods with a view to enhancing firms’ efficiency and effectiveness. Other authors have focused their studies on establishing other types of bonds with customers, such as emotional bonds (Jain and Jain, 2005), personal bonds (Walker, 2005; Aaserud, 2006), and public bonds (Arikawa and Miyajima, 2005). These take into consideration the notion of establishing bonds and bridging strategies with salespersons because, when they leave to work for competitors, customers may follow (Barnes et al., 2005).

Some scholars have used “loyalty”, in terms of expressed behaviour, as a parallel concept to mean retained customers; the firm’s aim was to keep customers satisfied in the long term (Keiningham et al., 2005). Service firms have recognised that customer loyalty is the end goal, and they must continue their businesses on the basis of sustainable long-lasting relationships with customers. Eisingerich and Bell (2007, p.254) defined loyalty as “customers’ commitment to increase the depth and breadth of their relationship with the firm” which can be expressed in many ways such as using the firm’s services for all their investment needs and being willing to speak positively of the service firm (Bettencourt, 1997). Meanwhile, Liljander and Strandvik (1993, p.27) have defined loyalty as “repeat purchase behaviour within a relationship”. Seth et al. (2005) mentioned that, in the past, the terms ‘customer loyalty’ and ‘customer retention’ have been used to describe the same phenomenon, while Gerpott et al. (2001) claimed that customer retention and loyalty are distinct constructs. The key to success in service businesses now lies in concentrating on and retaining existing customers to keep them in the long term. That is because a small number of brands attract a high level of loyalty (Jarvis and Goodman, 2005). Diller (2000) claimed that loyalty may exist only because of certain incentives provided by firms to their customers. For this reason, considerable attention has been paid to investigating the effect of customer loyalty on firms since it has a positive effect on repeat purchasing (Tellis, 1988; Oliver, 1999; Vanhamme and Lindgreen, 2001; Ulaga and Eggert, 2006). Thus, RM recognizes that it is not enough to attract buyers. The goal of RM is to convert buyers from one step to another on the loyalty ladder, from prospects to buyers, from customers to clients, and from supporters to advocates (Christopher et al., 1991). Lai et al. (2009) explained that firms try to move their customers from one step to another on the loyalty ladder because loyal customers may buy more, accept higher prices, and provide positive word-of-mouth advertising (Aydin and Özer, 2005).
Loyalty may appear in behavioural terms by the frequency of purchases for specific products or brands and in attitudinal terms by emerging consumer attitudes and preferences. Therefore, loyalty programs are closely studied by scholars and practitioners nowadays because they have positive effects on repeat purchasing from the same service firms (Bolton et al., 2000; Kivetz and Strahilevitz, 2001; Gómez et al., 2006; Craft, 2007). This is because loyalty programs enable firms to build stronger relationships, enhance customer retention, encourage customers’ recommendations, and increase the number of products and services sold to their clients (Steers, 2007).

Based on an analysis of customer retention literature, it has been found that few studies have investigated the use of contracts to maintain firm-employee relationships (Rousseau, 1995; Herriot and Pemberton, 1997). Also, the author has found few studies that have investigated how to maintain customer-supplier business relationships in the contractual behaviour context, which tends to serve customers and suppliers over a longer period of time (Reinartz and Kumar, 2000). More importantly, research is needed to study how contracts can be used to maintain a contractual relationship between two parties to achieve the shared purposes and to increase the shared relationship values (Robinson et al., 1994).

Sustaining the customer-firm relationship, especially in the contractual context, to create relationship continuity requires many elements, some of which have been illustrated in previous literature: mutual goals (Wilson, 1995), shared values (Morgan and Hunt, 1994), cooperation (Anderson and Narus, 1990; Chen, 2005), satisfaction (Ranaweera and Prabhu, 2003), trust (Schurr and Ozanne, 1985), commitment (Moorman et al., 1992), structural bonds (Sang-Lin et al., 1993; Wilson, 1995), social bonds (Wilson, 1995), comparison level of the alternatives (Anderson and Narus, 1984; Anderson and Narus, 1990), exit barriers (Dwyer et al., 1987), and switching costs (Sengupta and Krapfel, 1997; Burnham et al., 2003). In some cases, the mutual relationship requires other factors, such as interdependence and power (Anderson and Weitz, 1990), non-retrievable investments (Wilson, 1995), and shared technology (Sang-Lin et al., 1993; Vlosky and Wilson, 1994). The following section discusses the main determinants of customer retention.
2 - 2: Key determinants of customer retention

Based on Pride and Ferrell’s (2002) view, RM is necessary because it focuses on establishing a long-term, mutually satisfying customer-supplier relationship. This view is illustrated by Burnett (1998) who claimed that RM needs a specific type of marketing aimed at developing long-standing, positive relationships with customers and other stakeholders. Building sustained relationships with customers is essential to a business’s survival but it cannot be achieved without enhancing the relationship quality (RQ), which involves satisfaction, trust, and commitment (Shamdasani and Balakrishnan, 2000; Caceres and Paparoidamis, 2007). RQ is considered the key determinant of relationships and customer retention in service markets. A huge amount of interest has been shown in using RQ concepts to study mutual relationships among customers and suppliers in order to interpret how retention occurs. The effect of relationship quality on maintaining a continuing relationship has also been investigated (Chiung-Ju and Wen-Hung, 2006; Ndubisi, 2006; Ulaga and Eggert, 2006; Wen-Hung et al., 2006).

Ndubisi (2006) mentioned that relationship quality has been under-researched. Nevertheless, it is important for the continuation of RM for the following two reasons: First, firm-customer relationship quality can help the firm to sense the customer’s needs and serve the customer properly; second, customers who have good relationships with a firm are likely to remain loyal and make repeat purchases. RQ has two dimensions in the service domain: social relations and professional relations. Gummesson (1987) linked professional relations with the service provider’s demonstration of competence and social relations with the efficacy of the service provider’s social interactions with customers. Furthermore, Evans et al. (2006) pointed out that there are a number of concepts commonly employed to explain successful relationships and predict customer retention in the long term. These terms are satisfaction, trust, commitment, and service quality. These terms are known as RQ components. In order to understand how relationships evolve over time, the next section will investigate the primary RQ components’ effect on customer retention.

2 - 2. A: Satisfaction and customer retention

Businesses in the relationship marketing sector have tended to view any future sales opportunities as depending primarily on relationship quality and satisfaction (Crosby et al., 1990); these are the key tools for increasing customer retention (Sweeney and Swait, 2008).
Satisfaction is defined by Engel et al. (1995, p.273) as “a post-consumption evaluation that a chosen alternative at least meets or exceeds expectations”, while Ranaweera and Prabhu (2003) defined it as “an evaluation of an emotion, reflecting the degree to which the customer believes the service provider evokes positive feelings” (p.377). Therefore, satisfaction occurs with the enhancement of a customer’s feelings when he or she compares his/her perception of the performance of products and services in relation to his/her desires and expectations (Spreng et al., 1996). Caro and Jose (2007) studied the cognitive-affective model of consumer satisfaction and their results showed that the key affective factor that determines satisfaction is “arousal”, as opposed to “pleasure”, which has a non-significant effect. The cognitive element is also important for determining satisfaction and future behaviour intentions.

The relationship between customer satisfaction and customer retention has received growing attention in the relationship marketing literature. Therefore, many studies have investigated the effects of the former on the latter (Gupta and Stewart, 1996; Murgulets et al., 2001; Hennig-Thurau, 2004; Patterson, 2004; Tsai et al., 2006; Timothy et al., 2007; White and Yanamandram, 2007). Many authors have attempted to draw a clear model that depicts the link between satisfaction and customer retention (Hennig-Thurau and Klee, 1997; Bolton, 1998; Bolton and Lemon, 1999; Smith et al., 1999; Mittal and Kamakura, 2001; Bansal et al., 2004). For example, Sim et al. (2006) designed a model to assess the antecedent and consequential factors that affect customer satisfaction. The results illustrated that the latent construct of customer retention was directly dependent on the latent construct of customer satisfaction. Added value was found to have positive effects on customer satisfaction and customer retention. Also, Yu (2007) examined how customer satisfaction impacts customer revenue, customer costs, and customer profitability. The results indicated that several dimensions of customer satisfaction are positively associated with individual customers' repurchase intentions.

Ndubisi (2006) mentioned that overall customer satisfaction is a key determinant of relationship quality. The author found that service quality, communication, trust, commitment, and conflict handling are considered customer satisfaction indicators that support repurchase behaviour resulting from enhancement of the relationship quality. Meanwhile, Geyskens et al. (1996) distinguished between two kinds of satisfaction that are required to provide insight into the role of satisfaction in the development and maintenance
of a long-term relationship: economic satisfaction, which is described as a “member’s evaluation of the economic outcomes that flow from a relationship with its partner such as sales volume, margins, and discounts” and social satisfaction, which is described as a “member’s evaluation of the psychological aspects of its relationship, in interaction with the exchange partner [which] are fulfilling, gratifying, and facile”. Furthermore, satisfaction is considered to be central for successful relationship marketing and customer retention, and involves behavioural, attitudinal, affective, and calculative components (Rauyruen and Miller, 2007). Moreover, an article by Wong et al. (2004) investigated the relationship between emotional satisfaction and the key concepts of service quality, customer loyalty, and relationship quality, and clarified the role of emotional satisfaction in predicting customer loyalty and relationship quality. Results showed that service quality is positively associated with emotional satisfaction, which is positively associated with both customer loyalty and relationship quality, while feelings of happiness serve as the best predictor of relationship quality.

The relationship between customer satisfaction and economic returns has received growing attention in the customer satisfaction literature according to its effects on contract renewal, especially in the mobile phone sector (Gerpott et al., 2001). For example, Yu (2007) examined how individual customer satisfaction impacts customer revenue, customer cost, and customer profitability. The results indicated that several dimensions of customer satisfaction are positively associated with individual customers’ repurchasing intentions which positively affect the purchasing behaviour. Anderson et al. (1994) pointed out a critical question that needs investigating: Do the improvements in customer satisfaction lead to improvements in the economic performance of firms? This question was considered by Wetzels and De Ruyter (1998) who reported that committed customers have a much stronger intention to stay in a relationship with a service provider, which, in turn, affects a subscriber’s intention to terminate/extend the contractual relationship with his/her mobile phone supplier (Gerpott et al., 2001).

Some researchers have previously claimed that customer satisfaction is the core element of long-term consumer behaviour. Thus, ongoing satisfaction is required over time in order to keep the existing customer (Oliver, 1980). According to Bruhn and Homburg (1998), satisfaction comes as an initial stage in causal links. Conceptually, customer satisfaction comes as a result of accumulative, interaction-based evaluations according to a subscriber’s
levels of satisfaction when his/her expectations of services and products are fulfilled. Also, satisfaction comes as an assessment of the functionality of all direct and indirect utilities of any object purchased and consumed. If the level of fulfilment exceeds the level of expectations, the probability of repeat purchases and contract renewal is high. Accordingly, the opposite expectations occur when there is no customer satisfaction. That is because satisfaction increases the level of confidence in future purchase behaviour. The level of confidence in operators and services offered is a relative matter and differs from one subscriber to the next according to their experience and length of time with both a specific operator and a specific contract. For example, when a subscriber starts thinking about renewing his or her mobile contract, he/she usually relies on satisfaction and assessment levels to differentiate between alternative operators, i.e. current or previous mobile operators (Dick and Basu, 1994).

On reviewing some previous satisfaction and customer retention studies, such as Gremler et al. (2001), it was found that satisfaction may affect retention behaviour and post-purchase behaviour with the service firm. However, satisfaction alone does not ensure continued customer patronage (Jones et al., 1995). Therefore, a consumer may be dissatisfied with the consumer-service provider relationship, but will still remain in that contractual relationship because there are no other suitable choices, or the switching cost may be high compared to the desired benefits. This view is supported by Kennedy and Thirkell (1988) who claimed that customers may be able to absorb some unfavourable evaluations before expressing them in terms of dissatisfaction. This is in line with Gronhaug and Gilly’s (1991) contention that high switching costs render some dissatisfied customers loyal.

Briefly, in the context of relationship marketing, customer satisfaction with a firm’s products or services is often seen as the key to a firm’s success. It brings long-term competitiveness and is viewed as a central determinant of customer retention (Hennig-Thurau and Klee, 1997). Kotler (2000) mentioned that the key to customer retention is customer satisfaction. He noted that satisfied customers stay loyal longer, pay less attention to the competitors, talk favourably about the organization, offer service ideas to the organization, are less price-sensitive, and cost less to serve than new customers. However, Reichheld (1993) explained that customer satisfaction does not have a direct positive effect on customer retention since satisfied customers sometimes switch their suppliers while dissatisfied customers do not always leave their suppliers. Reichheld (1996, cited in Noordhoff et al., 2004) claimed that
many firms have fallen into a “satisfaction trap” and Gale (1997, cited in Bolton, 1998, p.46) claimed that “satisfaction is not enough”. Viewing satisfaction as one of the cognitive approaches to explain customer retention is not feasible (Kristensen et al., 1999; Tikkanen and Alajoutsijarvi, 2002). Based on the previous discussion, there remains a need to understand the actual consumer retention behaviour, while satisfaction alone cannot explain actual purchase repetition and contract renewal behaviour of mobile users. Some scholars combine the concepts of satisfaction and trust to study customer retention. It has been illustrated that satisfaction is an essential element when decisions need to be taken about extending a relationship’s duration (continuity), whereas trust is the key element when decisions need to be taken about expanding the scope of a relationship (Selnes, 1998). Thus, the next part will discuss the link between customer trust and customer retention.

2 - 2. B: Trust and customer retention

Trust has many definitions in the relationship marketing literature. Moorman et al. (1993) defined trust as “a willingness to rely on an exchange partner in whom one has confidence” (p.82). Also, Morgan and Hunt (1994) have described trust as “the perception of confidence in the exchange partner's reliability and integrity” (p.23). Evans et al. (2006) presented a number of concepts that are employed to explain and describe successful relationships; one of these concepts is trust. The author argues that trust is the basis for relationship exchange and the glue that holds a relationship together. Furthermore, Scott (2002 cited in Evans et al., 2006), describes trust as follows:

“Think of trust as natural resources, like water. It oils the machinery of human interaction in everything from marriage and friendship to business and international relations. There are reserves of trust, in a perpetual state of replenishment or depletion. And in this parched and suddenly sweltering spring, it is not just water supplies that are looking ominously low” (p.281).

Many research models have been developed to explain the effect of trust on customer retention (Crosby et al., 1990; Teichert and Rost, 2003; Wirtz and Lihotzky, 2003; Kjaernes, 2006; Liu and Louvieris, 2006). One of the study examples that investigated the relationship between trust and customer retention was conducted by Teichert and Rost (2003). The authors measured the effects of trust and involvement on customer retention, assuming general customer satisfaction. They found that trust serves as a strong trigger for enhancing customer retention, and involvement is revealed to play a prominent role in explaining both trust creation and customer retention. They also concluded that trust is a major constituent element of relational customer retention, supported in different measure by affective and
cognitive involvements. Kingshott and Pecotich’s (2007) study investigated the impact of psychological contracts on trust and commitment in relationship marketing and highlighted the significance of social exchange theory in helping to explain the relational paradigm; the results showed that trust increased the commitment level in a relationship.

Aydin and Ozer (2005) pointed out that, in order to gain a subscriber’s loyalty in the mobile sector, the service operator needs to increase subscriber satisfaction by raising the level of service quality, ensure subscribers’ trust in the firm, and establish a cost penalty for changing to another service provider, making it a comparatively unattractive option. The authors also mentioned that corporate image, perceived service quality, trust and customer switching costs are the major antecedents of customer loyalty. On the same theme, Ling and Wang (2005) commented that perceived value and trust are found to have a significant positive impact on customer loyalty.

Trust is considered to be one of the main cognitive terms used heavily by many scholars, such as Chiung-Ju and Wen-Hung (2006), to study customer retention, especially when customers enter a long-term contractual relationship such as buying mobile contracts to use Internet broadband mobile services. Trust is seen to be a deep-rooted belief in a partner’s altruism and is significantly associated with an individual's behavioural intention to continue to use the same service (Gounaris, 2005; Li et al., 2006). Trust has been described by Bhattacherjee (2002) as attitude, belief, intention, and behaviour. Mayer et al. (1995) viewed trust as an intention to accept and take risk. Trust relies on a subscriber’s (Truster) perception of a supplier’s (Trustee) attributes and the characteristics of its offerings that affect the levels and types of subscriber behaviour (Stewart, 2003). Trust usually precedes intentions, which encompass both affective and cognitive elements that are controlled by accumulated knowledge of uncertainty and personal judgements of other relationship partners in the contractual setting.

To conclude, trust is shown to have a positive influence on key relational outcomes (e.g. repeat purchase behaviour), customer loyalty, and share of purchases (Doney et al., 2007). However, Sang-Lin et al. (1993) claimed that there are many characteristics of a good relationship; among these, mutual trust in the relationship helps the customer to become involved in satisfactory exchanges. Thus, the concept of trust is used to describe a successful relationship (seen as one of the relationship outcomes or post-behaviour evaluation terms) between two parties; however, trust alone cannot maintain the continuation of the
relationship or explain retention behaviour. Also, it cannot be used to study the actual repeat purchase behaviour or how the contractual relationship with a subscriber can be extended on the basis of trust in an operator and elimination of the effects of other factors such as pre-behaviour stimuli and post-behaviour incentives. Hess and Story (2005) found that satisfaction is antecedent to trust but primarily contributes to functional supplier-customer connections. However, personal connections stem from trust. Accordingly, the relative strengths of personal and functional connections determine the nature and the outcomes of relationship commitment. Also, the level of trust is not stable enough to be used to predict retention. Byoungho and Jin Yong (2006) found that the source of consumer trust changes as the consumer’s purchase experience increases, whereas the source of consumer satisfaction remains the same regardless of consumer purchase experience. Some scholars have linked customer satisfaction, trust, and commitment when studying customer retention (Garbarino and Johnson, 1999; Rosenbaum et al., 2006). Thus, the following section will briefly describe previous literature that has examined the effect of customer commitment on future customer purchasing behaviour.

2 - 2. C: Commitment and customer retention

Commitment is considered one of the major elements of successful relationship marketing. Consequently, there is no successful relationship without commitment from both parties, especially if the relationship requirements and conditions have been agreed and written between them. This view is validated by many scholars (Too et al., 2001; Bansal et al., 2004; Sanchez and Iniesta, 2004; Hess and Story, 2005) who have examined the effect of commitment on customer retention.

Commitment in the relationship marketing research field is defined by Dwyer et al. (1987) as “an implicit or explicit pledge of relational continuity between exchange partners” (p.19). Likewise, Moorman et al. (1992), argue that commitment is essential to customer retention and describe it as an “an enduring desire to maintain a valued relationship” (p.316). Morgan and Hunt (1994), consider this phrase to be a relational commandment and define commitment as:

“an exchange partner believing than ongoing relationship with another is so important as to warrant maximum effort at maintaining it; that is, the committed party believes the relationship is worth working on to ensure that it endures indefinitely” (p.23).
Evans et al. (2006 cited in Geyskens et al., 1996) differentiate between four types of commitments which are seen as essential elements when proposing to use commitment as a means of studying how to extend the buyer-seller relationship: First, behavioural commitment, which represents the actual behaviour of parties in a relationship such as the efforts and choices they make; second, attitudinal commitment, which relates to implicit and/or explicit pledges of relational continuity between partners; third, affective commitment which represents the positive feelings towards the firm and guides consumers’ desires to seek alternatives or to engage in exchange; and fourth, calculative commitment, which reflects the outcome of a perceived lack of alternatives or evaluations of how switching costs might outweigh benefits. Stanko et al. (2007) depicted that the strength of buyer-seller attachments, or relational bonding, is vital for understanding the formation of commitment. The authors conceptualized four dimensions of attachment strength and examined their effects on the buyer firm's commitment to the selling firm, as well as the impact of commitment on favourable buyer behaviour. The results revealed that three of the four identified properties of strong relational bonding (reciprocal services, mutual confiding and emotional intensity) are positively related to buyer commitment to the selling organization and the strongest relationship was that between emotional intensity and commitment.

In different business organizations, the main goal of marketing activities can be viewed as maintaining and developing relationships with customers to encourage repeat business. Thus, the role of marketing is not just to win new customers but also to strengthen and extend relationships with existing customers; relationship continuation (loyalty) should be supported by predetermined marketing management strategies aimed at managing customers’ profitability. Clark and Maher (2007) explored the relationship between organizationally related factors and consumers’ attitudinal loyalty. The results indicated that trust, commitment, satisfaction, past behaviour, and value predict 60% of the variance in attitudinal loyalty. Also, Evanschitzky et al. (2006) explored the impacts of affective and continuance commitment on attitudinal and behavioural loyalty in a service context. The authors claimed that a continual commitment was the result of the perceived economic and psychological benefits of being in a relationship. Results suggested that emotional bonds with customers provide a more enduring source of loyalty when compared to economic incentives and switching costs. Therefore, commitment is considered an important antecedent to customer retention. However, a study by Bigné et al. (2001, cited in Morgan et al., 2000) showed that two kinds of limitations may affect the application and measurement of such concepts (e.g.
commitment) on relationship marketing: First, loyalty does not mean that the consumer will follow the same or previous behavioural performance; second, the consumer might lack traditional rational characteristics and may commonly exercise greater choice in purchase evaluation.

Commitment is considered an important ingredient of customer retention. This is supported by White and Yanamandram (2007) who propose five major factors that deter customers from switching to an alternative service provider: switching costs, interpersonal relationships, attractiveness of alternatives, service recovery, and inertia. These factors are mediated by dependence and calculative commitment. Thus, commitment is central to successful relationship marketing, and the level of trust influences it because it has been conceptualized that trust “exists” when one party has confidence in an exchange partner’s reliability and integrity. Moreover, commitment is one of the factors that mediates the level of long-term relationship maintenance and increases the level of loyalty (Sanchez and Iniesta, 2004). This, in turn, reduces the costs of acquiring new customers and servicing existing ones. Accordingly, Sanchez and Iniesta (2004) proposed five characteristics of commitment that need to be taken into consideration when studying customer retention: an affective element which is defined by a customer’s goals and values, a cognitive element which is defined by a customer’s beliefs and perceptions, a reciprocal element which relies on the perception of the other partner’s commitment, an intentional element which defines a customer’s desire or willingness to act, and a behavioural element which is defined as customer actions. Thus, commitment is seen as one of the most heavily used concepts in the study of retention behaviour and is directly connected to cognitive roots as a mental process to explain a variety of consumer issues (Lachman et al., 1979). Czaban et al. (2003) expressed the magnitude of the supplier-customer relationship which reflects the level of satisfaction in committed contractual promises provided by a supplier and received by a satisfied customer. The level of magnitude is measured by the level of expectation absorbed and exceeded by the types and levels of benefits provided by an operator and consumed by specific customers. The level of commitment is relatively connected to the level of fulfilment of mobile service options provided by current or previous mobile offers. Accordingly, fulfilled services affect satisfaction which affects, in order, commitment, loyalty, and purchasing behaviour in the long term (Davis-Sramek et al., 2008). Thus, commitment and loyalty are related concepts (Liljander and Strandvik, 1993).
Morgan and Hunt (1994) studied “the commitment-trust theory of relationship marketing” and claimed that commitment and trust are important dimensions in maintaining a desired valued relationship. They noted that relationship commitment and trust are the main intermediate variables in relationship marketing. However, commitment cannot be used to study actual retention behaviour because it is still considered one of the cognitive terms that describe successful relationships between two parties (Evans et al., 2006). Storbacka et al. (1994) mentioned that loyalty can occur within three different types of commitment: positive, negative or no commitment. A negatively committed customer might repeat his purchase from the same provider because of attachments (e.g. legal, economic, technological, geographical and temporal bonds) that sometimes work as effective exit barriers for the customer (Liljander et al., 1995). A committed partner in a mobile contract is essential to contract renewal when each party has delivered the promised benefits and penalties to the other party. Dwyer et al. (1987) have pointed out, however, that commitments alone are insufficient to extend a mutual relationship and they should be combined with continuous benefits for both parties involved in the exchange process. Some scholars add a critical element to the RQ components, which is used in the literature to investigate customer retention: the service quality (Chiung-Ju and Wen-Hung, 2006; Caceres and Paparoidamis, 2007). The following section will briefly examine the effect of service quality on customers’ future purchasing.

2 - 2. D: Service quality and customer retention

Service quality has gained a great deal of attention from researchers, managers, and practitioners during the past few decades. Many scholars have studied the effect of service quality on customer retention (Oliver, 1980; Lehtinen and Lehtinen, 1982; Ennew and Binks, 1996; Ranaweera and Neely, 2003; Venelis and Ghauri, 2004). Their findings reveal that there is a direct correlation between service quality and customer behavioural intentions and retention.

Service has many dimensions, definitions, and techniques which may affect its way of production, consumption, and delivery. Kotler and Armstrong (1997), defined service as “any activity or benefit that one party can offer to another that is essentially intangible and doesn’t result in the ownership of anything” (p.490). In order to facilitate service quality evaluation, Van Riel et al. (2001) divided service into five components: the core services, facilitating services, supporting services, complementary services, and the user interface,
through which the customer accesses the services. Also, there is no unified definition of quality and researchers are continuing to study a variety of quality dimensions in the service context. Gronroos (1984, p.38) defines service quality as:

“*A perceived judgment, resulting from an evaluation process where customers compare their expectation with the service they have received*”

The popular service quality definition is obtained by differentiating between the expectation and perception of service quality of the service perceived (Lewis and Booms, 1983; Grönroos, 1984; Parasuraman et al., 1988).

Early researchers attempted to define service quality in the service sector on the basis of tangible elements of products, such as technical specifications and physical appearance. Bebko (2000) mentioned that, because of intangible differences between product and service, marketers are unable to define the exact nature of the problem of purchasing and producing services that enable the creation of a standard set of guidelines and instructions on the delivery of service quality. The author divided the outcomes of tangibility into four categories: a purely intangible service outcome, an intangible service outcome which is bundled with a product, a tangible service outcome, and a tangible service outcome bundled with a product. Consumers usually consider these tangible elements to assess quality, which is easy to do with products or tangible parts of the service (Harvey, 1996).

Venelis and Ghauri (2004) studied the link between relationship marketing and service quality and the effect of this link on customer retention. The authors developed a model to capture the relationship between the two concepts and found that service quality indeed contributes to the extension of long-term relationships. Accordingly, several researchers have highlighted the importance of managing service quality; a firm could thus differentiate its service offerings to deliver better quality than its competitors (Maclaran and McGowan, 1999; Mazzarol and Soutar., 1999; Chow-Chua and Komaran, 2002). This would give firms competitive advantages leading to more sales and profits by motivating existing customers to repeat or extend purchases in order to achieve long-term success.

To summarise, many researchers agree on the importance of the correlation between service quality and customer retention (Turnbull et al., 2000; Holtz, 2003; Seth et al., 2005; Bolton et al., 2006; Kassim, 2006; Austin, 2007; Iyengar et al., 2007; Kassim and Souiden, 2007). So, the process of managing service quality starts with understanding customers’ expectations,
because service quality is a perception related concept. This means that firms need to measure how they offer a quality service that meets and exceeds customers’ expectations by asking them directly. Storbacka et al. (1994) said that the dominant perspective within service quality assumes that it has a positive correlation with satisfaction and leads to repeat purchase and increased loyalty. Therefore, many published academic studies focus on the link between service quality and satisfaction, and few take into account its effect on behaviour. Some authors found that service quality perception affects customers’ satisfaction, trust, and commitment, and it is seen as a driver of customer retention (Ranaweera and Neely, 2003; Seo et al., 2008). However, service quality still appears as a cognitive evaluation based on mental perception which cannot give a suitable explanation of repurchase behaviour or behaviour consequences, although it might be used to study behaviour intention (Boulding et al., 1993; Alexandris et al., 2001). Also, Liljandar et al. (1995) suggested that perceived service quality can be seen as an outsider perspective and a cognitive judgement of services but it is not suitable for studying customer retention behaviour.

To sum up, Geyskens et al. (1996) and Odekerken-Schröder (2003) have seen retention aspects (trust, satisfaction, and commitment) as relationship outcomes. Many customer retention models take satisfaction, trust, commitment, mutual goals, and cooperation as approaches used to describe successful relationship marketing (Lewin and Johnston, 1997; Evans et al., 2006). In addition to, some scholars studied customer retention and built their explanations by using unrelated or indirect factors such as trust and commitment (Murphy, 2006), price and non-price terms (Dygryse and Van Cayseele, 2000), loyalty categories (Fournier and Yao, 1996), relationship strength (Lye and Hamilton, 2001; Hewitt et al., 2006; Palmatier et al., 2006), and the classification of RQ into different categories as a theme to mean retention (Holden and O’Toole, 2004; Phillips et al., 2004; Richard et al., 2007). However, few studies have been carried out to investigate the buyer-to-customer transactional and relational motivators from a behavioural perspective that justify empirically and practically why a customer repeats the purchase experience from the same service provider (Khalifa and Shen, 2008). The next section gives an idea about how the behaviourists’ scholars view customer retention.
2 - 3: Customer retention as the behaviourist views it

This thesis explores consumer retention within the mutual customer-supplier relationship in order to analyse retention behaviour in the mobile telephone sector. The mutual relationship is considered a behavioural interaction between the two actors involved (Mandják, 2004). The dual interaction approach is translated by the exchange process within which both relational parties manage their interactions (Turnbull, 1987). The exchange process is determined by people involved within the behaviour setting, the customer from one side and the supplier’s marketer from the other side. The aim of conducting the exchange process is to interchange different objectives to the benefit of both relationship parties (Langowitz and Rao, 1995). Firms usually concentrate their marketing efforts on affecting consumers’ action to increase or decrease the rate of desirable or undesirable behaviour to be performed in a particular way, which may differ from one situation to another. In social science, an individual interaction with others is considered part of the individual-environment interactions (Bouwman and Koelen, 2007). Thus, it is essential to analyse the individual-situation scenario as part of the environmental contingent context to understand consumer choice selection, which occurs within many contextual factors (Swait et al., 2002). That is because individual actions are influenced by a variety of factors in the form of environmental influence stimuli including physical surroundings, social surroundings, task definition, temporal perspective, and antecedents and consequences status (Rowley and Dawes, 1999; Zhuang et al., 2006).

The starting point when investigating the effect of environment on consumer behaviour is to explain the difference between proximal and distal environmental stimuli (Troye, 1985 cited in Nicholson, 2004; Rudy et al., 1987). The proximal environment encompasses the direct space or context of consumption such as the social and temporal behaviour setting that occurs with the goal of guiding behaviour. The distal environment, on the other hand, encompasses a broader consumption context with elements including cultural, legal, and economic factors that locate the goal cues that occur with the goal object. Consumers’ perception processes are affected and mediated by the interactions among three types of analysis: between distal and proximal stimuli, between distal stimuli and perception, and between proximal stimuli and perception (Accarino et al., 2002). According to Quevedo and Coghill (2007), proximal stimuli are perceived as more intense than distal stimuli as they are closer to the consumption context and are more noticeable.
In order to understand why a consumer interacts with others in different ways, researchers exert much effort in explaining the action power, which is known as motive. According to Bettman (1979, cited in Huang and Yang, 2008), motive is a description for a direction, intensity, and a desire to translate efforts into actions. Motives and actions are considered the starting point of different analytical approaches that have been undertaken to understand consumer behaviour from different perspectives (Köster, 2009).

Studying consumer behaviour has been widely undertaken from different perspectives and mainly from both behavioural and cognitive approaches (Rowley, 1999). Social cognitive psychology argues that a consumer buys a particular product because he/she prefers it, likes it, or has a positive attitude towards it (Vermeir et al., 2002). This view is confirmed by the intentional psychology paradigm which assumes that beliefs and desires play a central role in providing the foundation of cognitive psychology which demonstrates different social, educational and economic applications (Foxall et al., 2007). Meanwhile, this approach expresses the environmental influence and adaptation to it as perceived by an organism; the level of interpretation is controlled by the multi-interaction of human needs and wants with the environmental characteristics and level of effects.

The cognitive paradigm is directly opposed to the behaviourism paradigm but it is possible to compare both approaches, as the behavioural one avoids all intentional terms like beliefs and desires (Parmerlee and Schwenk, 1979). This is because intentionality is related to the mentalistic import process that refers to or represents something other than itself, for example ‘I feel that’. However, other words are different because they do not have mentalistic import, such as ‘we do not walk’, or ‘push that’. Also, the inevitability of intentionality is a big issue in behaviour science and its use as an explanation is dubious. However, Foxall (1998) has lately provided a different behavioural explanation of intention based on environment contextual determination rather than cognitive determination. Prior to the 1960s, the cognitive approach to understanding the relationships of proximal and distal effects with the environment-perception analysis was a subjective approach considered unsuitable for use in individual analysis. Using the cognitive approach to explain organism-situation and organism-organism interactions is inadequate for analysing the mechanism of seeking information within both proximal and distal contexts. This idea has been supported by many scholars. For example, Maturana et al. (1972, cited in Veltman, 1992) explained the
shortcoming of this approach for providing an operant analysis of environmental factors and the process of adaptation to them, and claimed:

“Perception and perceptual spaces, then, do not reflect any feature of the environment, but reflect the anatomical and functional organization of the nervous system and its interactions. The question of how the observable behavior of an organism corresponds to environmental constraints cannot be answered by using a traditional notion of perception as a mechanism through which the organism obtains information about the environment” (p.102).

Based on previous discussion, a more objective approach started to appear in order to translate the relationship of environment-response instead of the environment-perception relationship view (Franck, 1987). The new approach was known as behaviourism, which represents a school of thought based on psychology aimed at explaining learning practice as an interactive process with environment (Kennair, 2002). The behaviourism approach has been based on two main elements: environment shapes an organism’s actions or behaviour, and the idea of relying on the mental processes which occur internally, such as beliefs and emotions, is useless in explaining behaviour (Hogbern and Dyrne, 1998). However, how an organism behaves within specific circumstances and specific natural situational contexts has been studied extensively by cognitive scholars, but more explanation is needed from behaviourist scholars in different settings, especially in the contractual behaviour ones. Accordingly, in social science, social behaviour is clarified within the proximal environment which includes both objective and subjective approaches. In the supplier choice situation, a consumer’s behaviour, within a specific physical environment such as the mobile shop outlet or a virtual environment such as the mobile online shop (website), is based on the amount and types of physical setting stimuli received and manipulated. Huge numbers of stimuli are available in any specific behaviour situation, such as a mobile phone contract’s attributes and specifications. Based on this, a consumer behaves according to a selection process of receiving certain stimuli apart from others, which is connected directly with the situation-object relationship that creates his response in a different way if he receives other stimuli (situation and object effect-individual-response relationship) (Barker and Wicker, 1975). Accordingly, radical behaviourism as a philosophy is based on behaviour referential transparency. It is distinguished from cognitivism by avoiding the language of intentionality, which includes thinking and feeling (Foxall et al., 2007). Consumer behaviour analysis is concerned with the extent to which a radical behaviourist account of consumer behaviour is feasible and useful, and the epistemological status of such a model of choice (Nord and Peter, 1980; Foxall, 2007). However, neither program can succeed entirely without the other
(Foxall, 2007). Also, it has been agreed by many scholars, such as Watson and Pavlov, that behaviour and emotion are mainly conditional responses despite being biologically induced (Browne, 1967).

Some researchers tried to provide better explanations for customer behaviour by studying many other factors beyond the classical theories, such as anthropological, sociological, and psychological factors (Katona, 1953). From the psychological knowledge side, many concepts (e.g. learning, motivation, perception, attitude, and hierarchy of needs) were incorporated into the behaviour explanation in order to stand for the behaviour drivers and motivation (Black et al., 2003). In order to understand the effect of the behaviour drivers’ principle, the following example may help. Consumers are usually exposed to a variety of information which is delivered to them by different sources (e.g. promotion mix) and they usually store them in their memory, which will affect their behaviour accordingly.

Information that affects consumer behaviour in different purchasing settings is seen as cues or stimuli that shape the way of thinking and perception. Information is defined as “data that have been organised or given structure - that is, placed in context - and thus endowed with meaning” and the meaning is seen as the function of information’s role in facilitating exchange (Glazer, 1991, p.2). Products- or services-related information which is stored in consumers’ minds (e.g. what they know, feel, and evaluate) affects the perception process and this influence comes mainly from the process of learning. In this case and to understand how an individual behaves differently from one situation to another, even when he or she is influenced by the same types and levels of stimuli, there is a need to explain how a customer learns.

In order to understand the philosophy of repeat behaviour, learning approaches should be brought within this context to give a clear explanation of consumer repeat behaviour. Based on learning theories literature, associative and respondent learning can help to explain how learning takes place and how experience can affect and change a consumer’s knowledge, attitude, and behaviour (Engel et al., 1995). That is because, according to Hogg and Lewis (2005), most consumer behaviour is derived from experience and learning which are both aimed at acquiring information. Consumer learning may be defined, according to Nord and Peter (1980, p.32), as “a trend, change, or modification of consumer perceptions, attitudes, and behaviour resulting from previous experience and behaviour in similar situations”. Moreover, learning refers to those “changes in behaviour which occur through time relative
to external stimulus conditioning” (Bayton, 1958, p.282). Based on this definition and to understand how learning occurs, there is a need to highlight the idea behind the perception and behavioural approaches which are both conceptually connected to the learning process. Also, to know how a consumer responds to an environment according to psycho-social stimuli, learning can be explained in terms of either a cognitive paradigm (stimulus-perception) or a behavioural paradigm (stimulus-response) (Foxall and Goldsmith, 1994).

Researchers, in general, differentiate between two types of theories which are concerned with learning and consumer behaviour: cognitive learning theories and behavioural learning theories. Cognitive learning consists of verbal learning, vicarious learning, and information processing, while behavioural learning divides into classical conditioning and instrumental learning (Foxall and Goldsmith, 1994). Classical conditioning includes the stimulus-response relationship which proposes that a response is elicited by certain stimuli that have stimulated previously; learning results from the combining of both natural stimuli and unconditional stimuli (Dworkin, 1993). Some authors have investigated consumer learning based on association from two angles: classical conditioning and operant conditioning.

Operant conditioning deals with the amendment of voluntary (operant) behaviour which started from the end point that modified the form and the occurrence of behaviour by using and controlling the behaviour consequences. To explain the operant conditioning status, there is a need to explain Skinner’s Box (Heyes and Dawson, 1990; Williams, 2001). Simply, operant conditioning is considered one of the learning types that occur as a consequence of the contingency association between the responses (behaviour) within the presence of reinforcement. In this situation, trained pigeons aimed to press a lever in order to gain a specific amount of food as a (positive) reward for each action. The experiment was designed to achieve a certain motivated output (pressing the lever) by using it to activate its occurrence with an unconditional stimulus (US) (e.g. water or food). During this test, a discriminative stimulus (SD) (e.g. light) exists when the contingency of behaviour-unconditional stimulus (R-US) was executed correctly. After many trials, the studied subject showed the required conditional response (CS) such as touching and activating the cause (Trigger). Even with the absence of US availability, the studied subject memorizes the R-US relationship.

Classical conditioning is another learning process based on association. The Russian psychologist Ivan Pavlov (1904-1980) studied the salivation of dogs in his learning experiments. What gained Pavlov’s interest was not the food salivation process but why dogs
salivated when they saw the people who would produce the food to feed them. After that, Pavlov wondered whether dogs could be induced to salivate by using additional objectives such as lights, music, and electric shock. Pavlov started to ring a bell whenever food (unconditioned stimulus or UCS) was produced for the dogs, which already caused salivation (unconditioned response or UCR); after many trials, the bell (conditioned stimulus or CS) started to cause the salivation effects (conditioned response or CR) even in the absence of food. Based on that, the conditioned stimulus is seen to cause the same effect as the unconditioned stimulus.

Based on the previous explanation, classical conditioning deals with the conditioning of reflex behaviour which is elicited by antecedent conditions which simply cannot maintain behaviour by consequences (Pierce and Cheney, 2003). Janiszewski and Warlop (1993) mentioned that classical conditioning techniques focus basically on the transferring of affective responses. Transferring of responses can be attributed to the cognitive orientation of consumer behaviour and can shape the attitude construct within a specific discipline (Shimp, 1991). The emphasis on transferring of responses can be attributed to the viewing of conditioning as learning process (Pavlov, 1927 cited in Janiszewski and Warlop, 1993). Pavlov (1849-1936), argued that classical conditioning is an essential method of learning through which organisms adapt to the environment (Sackney and Mergel, 2007). Therefore, classical conditioning includes stimulus-response theories which suggests that learning is the development of behaviour (response) as a result of exposure to a set of stimuli, and that consumer behaviour is conditioned by association (Hogg and Lewis, 2005). Furthermore, Watson argued that the science of psychology should be an objective science based on observed behaviour. By this notion, all actions including thinking and physical activities should be interpreted as behaviour.

Moreover, Thorndike (1874-1949) studied instrumental learning; his experiments were executed on cats escaping through a puzzle box. With experience (many trials), successful responses occurred more frequently. This notion complies with Beran’s (2001) findings, that rewarded procurement behaviours which are directed toward the experimenter occurred significantly more often on correctly completed search trials than on incorrectly completed trials; ineffective responses occurred less frequently. Thus, Thorndike explained that successful responses (behaviour) were those that gave satisfying consequences and outcomes. Meanwhile, reinforcement is effective in maintaining behaviour but learning
sometimes occurs naturally without positive (e.g. rewards) or negative reinforcement (good or bad effects) following the behaviour (Bellack and Simon, 1976). However, Skinner (1938, 1974) built his laboratory-based investigation on prediction and control of behaviour by referring it to its environmental or consequences (operant behaviour).

Moreover, Foxall (1993) provided an evolutionary explanation for the operant conditioning which required a causal mechanism to account for future predictions. A consumer’s future selection process is based on an evidence-based selection according to environmental factors and consequences (Richardson et al., 2009). Thus, the operant conditioning is a process in which a consumer’s response (and rate of response) is based on previous trials’ consequences of interacting with the environment; it is not based on a stimulus-response interaction (classical conditioning) which explained that the response is a reflex process according to the stimulus. A response that is maintained by the environment to produce required outcomes or consequences is known as an “operant response” (Skinner, 1959) or operant (free) choice situations (Nathan and Wallace, 1965). The rate or shape of a specific action (response) which is required by a firm is usually based on the way (task) of controlling the environment which signalled specific consequences (Foxall, 1998a). Not all behaviour consequences that come out of the controlled environment are the same or needed. The required consequences are just those that increase the probability of a response being shaped in similar circumstances, which are known as reinforcers. However, consequences that decrease the rate of performed response are known as punishers. Therefore, there is a need to expand the discussion about how reinforcement affects behaviour. Reinforcement is seen as:

“an event, a circumstance, or a condition that increases the likelihood that a given response will recur in a situation like that in which the reinforcing condition originally occurred” (TAHMDC, 2007).

Meanwhile, Azrin and Holz (1966, cited in Skiba and Deno, 1991) defined punishment thus:

“Our minimal definition will be a consequence of behaviour that reduces the future probability of that behaviour. Stated more fully, punishment is a reduction of the future probability of a specific response as a result of the immediate delivery of a stimulus for that response” (p. 381)

Moreover, Skinner (1981) differentiated between positive and negative reinforcement. Positive reinforcement strengthens any behaviour that produces it, while negative reinforcement strengthens any behaviour that reduces or terminates it (Robert, 1990). The main hypothesis, tested by Mcleish and Martin (1975), is that reinforcement is not something contrived in laboratories with animal subjects but is a process that can be explored under the
constraints which govern ordinary people’s behaviour in a normal social situation. Based on that, reinforcement plays an essential role in enhancing the probability of repeating the same required behaviour or response. In other words, when a specific behaviour has a specific type of outcome (consequences) which is called “reinforcing”, it is more predictable that this behaviour will recur if it passes through the same or similar circumstances (Skinner, 1981). This is explained by Skinner’s main behaviourism concept called “operant behaviour” which demonstrates that the “voluntary” behaviour is under the control of the behaving person (Skinner, 1974) and the operant behaviour “operates upon the environment to generate consequences” (Skinner, 1953 cited in Reyna, 1979, p.339).

According to Kendler (1961), behaviour might be simplified to a stimulus-response formulation (S-R) or even translated by a stimuli-behaviour-reinforcement (S-B-R) relationship (Foxall, 1995). This relationship explained that consumer behaviour (R) (or repeat behaviour) can be predicted from the reinforcing consequences (SR+/-) that have previously been produced in the behaviour context by discriminative stimulus (Sd) (Foxall and Greenley, 2000). This relationship, known as “three-term contingency”, is translated as illustrated in Figure 2 - 1, where Sd is a discriminative stimulus or the behaviour environment situation that specifies what response (R) is reinforced or punished (Sr+/r)

\[ S^d \rightarrow R \rightarrow S^{r+/r} \]

**Figure 2 - 1: The three-term contingency model**

Element Sd means the physical or social setting variables that signal certain outcomes, Sr+/r represents the rewarding or punishing elements that usually flow from the particular performing or response (R). Simply, Sd does not necessarily lead to the creation of R, and R certainly does not lead directly to Sr+/r. Many scholars have illustrated that there are many operant behaviour dimensions (e.g. force, duration, response rate, location) influencing response (Fowler et al., 1986; Belke and Belliveau, 2001). Neuringer (2002) claimed that operant dimensions are seen as “variability” which is controlled by discriminative stimuli and reinforcing consequences. Thus, repeat responses are expressed by a response rate of behaviour occurring under the control of the reinforcement schedule which explains the soul of the proposed model and how to induce repeat purchasing in future trials. To give a clear picture of customer retention and repeat purchase behaviour, the three-term contingency is a useful tool to analyse both firm and customer operant behaviour and their mutual relational interaction with each other. From the customers’ side, consumer behaviour (Rc) can be predicted from the reinforcing consequences (Sc+/-) that were previously produced in the
behaviour context by discriminative stimulus (Sc$^d$) as shown in Figure 2 - 2 (Foxall and Greenley, 2000).

\[ Sc^d \rightarrow Rc \rightarrow Sc^{+/−} \]

**Figure 2 - 2: The three-term contingency - customer side**

Understanding the nature of the firm in the market place requires an account of consumer behaviour on the one hand as well as an account of managerial response on the other (Foxall 1998), and understanding the relational organisation behaviours with the other five markets in the business environment. That is because a firm is embedded with different types of relationships or network of relationships as described by Eng (2005). Sorenson and Waguespack (2006) declared that the firm is embedded with different types of exchange processes to achieve its goals. The authors stated that the apparent mutual advantages of embedded exchange can also emerge from endogenous behaviour that benefits one party at the expense of the others by offering better terms of trade and allocating more resources to transactions embedded within existing social and economical relations. Organisation behaviour is often analysed, from the behaviour perspective, as a collection of its employees’ behaviours. Also, it is critical for organisations to learn from the past in many ways, especially how, when, where, why, which, and who to manipulate different types of stimuli that might affect their customers behaviour. This idea is highlighted by Senge (1990, p.139) who claimed that “organizations learn only through individuals who learn”.

Zubac et al. (2007) mentioned that firms predominantly exist to satisfy the payment demands of their owners. However, Foxall (1998b) depicted that the marketing firm exists in order to make marketing relationships possible/more economic, and to reduce the transaction cost involved in finding and retaining customers with which consumers and marketers behaviours are mutually reinforced, which in some cases need a literal exchange. Analyzing a firm’s behaviour is considered one of the main dimensions in analyzing relationship marketing of which the most important activity is retaining customers. That is because the majority of organisations organize their marketing and sales functions around specific customer segments (Javalgi et al., 2006). Accordingly, Three-Term-Contingency is used in this part to give an idea about operant suppliers’ behaviour as expressed by their managers’ and marketers’ actions. Thus, from the supplier side, supplier behaviour which is presented by its marketers behaviour (Rm) can be predicted from the reinforcing consequences (Sm$^{+/−}$) that were previously produced in the behaviour context by discriminative stimulus (Sm$^d$) as shown in Figure 2 - 3 on the following page (Foxall, 1999).
Sm\(^{r+}\) \rightleftharpoons Rm \rightleftharpoons Sm\(^{d}\)

**Figure 2 - 3: The three-term contingency - supplier side**

Moreover, Foxall (1998) built his explanation of the marketing firm relationship with customers by using the three-term contingency. His explanation required an account of consumer behaviour interacting with one of managerial responses, thus illustrating that both consumer and marketer behaviours are mutually reinforced enough to develop a mutual exchange process and to repeat it continuously, as shown in Figure 2 - 4.

Sc\(^{d}\) \rightarrow Rc \rightarrow Sc\(^{r+}/c\)

Sm\(^{r+}/c\) \rightleftharpoons Rm \rightleftharpoons Sm\(^{d}\)

**Figure 2 - 4: The interactive customer-supplier relationship - The Marketing Firm Theory**

In order to provide a clear analysis of customer choice in the complex operant behaviour setting, this study employs the Behaviour Perspective Model (BPM) (Foxall, 1998) to serve its objectives. Understanding consumer choice presents a summary of different empirical, philosophical, and theoretical developments (Foxall, 2005). This led Foxall to develop the BPM, which is considered one of the leading empirical research tools in consumer behaviour analysis concerned with the prediction of consumer behaviour with respect to his or her reaction to the environment of purchase and consumption (Foxall et al., 2007). Foxall and Goldsmith (1994) illustrated that the explanation of the BPM is based on the three-term contingency approach which depicts that behaviour is explained in terms of two things: First, the antecedent or pre-behaviour stimuli which can help in predicting and controlling the behaviour-setting elements and show how they can interact with a customer’s individual history; second, the consequences and post-behaviour outcomes which can help in explaining how the individual’s behaviour unfolds, based on a mix of reinforcing and punishing consequences that are signalled by the pre-behaviour stimuli. Usually, the pre-behaviour stimuli do not reflex the response but they might signal the availability of reinforcement or punishment if a particular response is performed.

Based on the previous explanation, the repeat purchase behaviour approach will not be explained based on the mental process but on the environmental events and circumstances in its context, and the probability of repeat behaviour occurring can be predicted by practising enhancing reinforcement and/or minimizing punishment (Thyer and Myers, 1998; Foxall, 2003). One of the terms linked directly with repeat future purchase is customer behaviour.
intention. Foxall et al. (2004) derived a framework of conceptualization and analysis called “intentional behaviourism” which is founded upon a critique of both behavioural and intentional psychology and embraces two levels of contextual-intentional theories. Based on this approach, behaviour analysis can be used to deal with some subject areas that lie at the heart of cognitive psychology, such as decision-making and thinking (Foxall, 2003). The following part discusses the theoretical framework which will be used as the main explanatory model for customer retention behaviour within the mobile telephone context.

2 - 4: The Behavioural Perspective Model

The Behavioural Perspective Model (BPM) of purchase and consumption, as shown in Figure 2 - 5 in the following page, is a complementary explanatory framework that provides a satisfactory interpretation of consumer behaviour with respect to both setting and consequences’ key variables in which the behaviour occurs (Foxall, 1992; Soriano et al., 2002; Fagerström, 2005). Foxall reconstructed the three-term-contingency and operant conditioning learning concepts within a new behaviour analysis model known as (BPM). Foxall highlighted a neo-Skinnerian theory of situational factors to explain their influences on consumer choice (response) which are determined by the contingencies of reinforcement under which they are performed (Skinner, 1981 cited in Pennypacker, 1992). It is considered an operant radical behaviourists’ interpretation framework that can be used to give a clear view of how a consumer choice takes place based on the notion that consumer behaviour is performed within simultaneous punishment and reinforcement situations (function of consequences) (Foxall et al., 2006). The model explains consumer behaviour with reference to pre-behaviour antecedent and post-behaviour consequential learning contingencies to translate person-situation interaction relationships in different behaviour contexts. This model will be valid enough to be used to analyse customer retention as a process of customer-environment interactions and show how customers can be reinforced to renew the contractual relationship.

Foxall (1998) proposed that consumer behaviour according to this model consists of economic purchase and consumption activities that are reinforced via utilitarian and informational incentives in regard to reducing aversive outcomes through a number of options (Foxall, 1998). These activities have been categorised in a harmonized way as antecedents and consequences learning contingencies to explain consumer behaviour (Foxall, 1995).
Before explaining BPM components in depth, it is important to give a brief justification for the application of this model. On many occasions, scholars have tended to justify why a specific theory should be applied. Many reasons have been identified by many scholars; the main goal of theories application and why a specific theory is chosen in special circumstances is to provide a better approach and solution that contribute significantly to both theory and practice for the targeted research problem (Koletzko et al., 2002; Evans et al., 2009). Creating a particular solution is achieved by using a particular model that is described as simple, adaptable, appropriate for the specific and unique situation, and which can be robustly implemented in realistic practices (Burkhardt and Schoenfeld, 2003; Alsop et al., 2006).

Why apply the BPM? The model is used to explain consumer repeat behaviour at the individual level of analysis. It will give a picture of whether a consumer is likely to engage in the same purchasing action in the future based on the interaction of behaviour setting elements and individual learning history, both of which signal the maximization of reinforcement and minimization of adverse consequences to a mobile user. Thus, the appropriateness of using the BPM will be explained according to many essential practical and theoretical points.

The explanatory power of the BPM differs from other approaches in two main aspects (Foxall, 1998). First, it takes account of variations in contingencies or reinforcement due to possible variations in the behavioural setting. Behaviour setting plays an essential role in the extent to which behaviour contingencies can be vary within the scope from (relatively) open to (relatively) close of behaviour setting. Second, reinforcement in humans is divided into utilitarian (deriving from functional and economic incentives) and informational (deriving from feedback) functions. Thus, the model provides more analytical power to investigate
consumer behaviour within both contractual and non-contractual behaviour settings based on the function of selecting a mobile operator that offers different types and levels of consequences, which might signal each choice separately. The BPM provides additional benefits when it extends the economic utility behaviour to utilitarian and informational reinforcement. In this sense, the model shows that consumer retention behaviour can be explained not only by economic consequences but also by informational consequences. The BPM clarifies the role of marketing management in the control of the immediate environment of consumer behaviour; i.e. the management provides the intended information (stimuli), incentives and reinforcement or punishment which entices the customer into engaging in a relationship and remaining with the same firm for a long time. Also, the model considers the full range of cause and effect in decision-making and can be applied in both initial consumer choice and continuing purchasing behaviour or loyalty to a brand or a supplier. Foxall (1995) claimed that the BPM covers a distinct gap in the literature. This is because the applied behaviour analysis lacked an integrative model of consumer behaviour that approaches the environmental antecedent and consequential dimensions and explains their effects within a critical evaluation of behaviour theory (Geller, 1989; Foxall, 1995).

An additional explanation will be provided on how consumer retention and contract renewal occurs based on relational behaviour consequences which are signalled by the behaviour antecedents. Previous behaviour experience is essential for explaining future behaviour when a customer plans to renew or switch his mobile supplier; this can be clearly illustrated by applying the BPM. In addition, many behaviour setting elements are available in the contractual situation, such as regulatory and temporal elements which control consumer relational behaviour in the long term. Thus, the BPM will be a good tool for explaining how behaviour setting stimuli are employed by marketing management to retain contractual customers with respect to many future contextual, relational, and environmental considerations. Lemon et al. (2002, p.1) claimed “current customer retention models have not incorporated customer’s future consideration”. The future retention considerations will be handled by the BPM which explains whether the customer is planning to keep or drop his or her service provider in future by providing an idea of the role of behaviour setting, antecedents and consequences. Thus, the model provides an idea of the customer’s future propensity and provides a solution for this question: Does a customer want to repeat his/her purchase or renew his/her contract with the same supplier in future? To answer this question, the following section discusses the application of the BPM in some of the previous studies as
a preliminary stage to apply this model in explaining customer behaviour and how repeat purchase might take place.

The BPM has been used to analyse consumer behaviour in different situations, such as consumer brand choice (Foxall, 2003; Foxall and James, 2003; Foxall and Schrezenmaier, 2003; Foxall et al., 2007), product search behaviour (Oliveira-Castro, 2003), and understanding and predicting online consumer behaviour (Fagerstrøm, 2005). Also, many scholars have used this model as a theoretical base and have tested it empirically in predicting and explaining consumers’ responses in different marketing arenas (Foxall and Greenley, 2000; Soriano et al., 2002; Nicholson, 2004; Oliveira-Castro Jorge et al., 2005; Foxall, 2007; Xiao, 2007). For example, Soriano et al. (2001) provided an evaluation of the BPM of consumer choice based on prediction of emotional responses derived from environmental stimuli explained by Mehrabian and Russell’s theory. The model is used to differentiate between different consumers behaviour situations ranked from open to close in terms of pleasure, arousal, and dominance. The outstanding issue in this application is that, after providing empirical testing, verbal responses have been capable of predicting actual behaviour (Venezuelan consumers’ case) from their reported action to a variety of behaviour situations.

Fegerstorm (2005) explained consumer online purchasing behaviour by using the BPM as an alternative approach of using both the Theory of Reason Action (TRA) and Theory of Planned Behaviour (TPB). This study discussed the shortcomings of attitudinal theory in employing cognitive concepts to explain the online social purchasing phenomenon by focusing on intentionality without focusing on many behavioural contextual elements. That is because the BPM uses different elements to explain complex social phenomenon. The first element, consumer behaviour, is seen as a consequence of previous actions. In the second element, the BPM explains the interactive behaviour setting with consumer behaviour setting as a mix of interactive elements which signal and predict future behaviour which is not available in cognitive theories such as TPB and TPB. The author has built his explanation on the idea that previous online purchasing behaviour explains the antecedent factors of intention to buy online, but fails to explain the factors that effect actual buying behaviour. The main results of this study show that online shopping behaviour is a series of continuous buying actions, by which a customer establishes his rule-governed behaviour to buy online.
which is affected and shaped mainly by behaviour setting elements which are physical, social, temporal, and regulatory settings.

Based on the previous explanation, applying the BPM will contribute to several theoretical and practical dimensions for both relationship parties. It will shed light on consumer behaviour in both contractual and non-contractual behaviour situations and identify the main customer retention drivers that affect users’ renewal decisions from a behavioural perspective. This explanation is essential because it highlights the effect of mutual relationship determinants, in terms of antecedents and consequences, which firms normally use to effect, maintain and control relationship behaviour situations. Also, applying this model will give insights into other marketing and relationship areas such as studying customer retention in other situations (e.g. banks) with a different level of behaviour analysis, such as transactional and relational situations.

2 - 4. A: Behaviour situation

The BPM model represents an adaptation of the three-term contingency in which consumer behaviour is located at the intersection of the consumer’s learning history and the behaviour setting effects which signal stimulated consequences. It has been explained that most theories would agree that a situation comprises a point in time and space (Belk, 1974; Foxall et al., 2007). Meanwhile, the “behaviour setting” concept is expanded by Barker (1968) to include not only both time and place determinants, but also to encompass a complete sequence of behaviour or an “action pattern”. Belk (1974a, p.157) viewed the characteristics of consumer behaviour as comprising “all those factors particular to a time and place of observation which do not follow from knowledge of personal (intra-individual) and stimulus (choice alternative) attributes which have a demonstrable and systematic effect on current behaviour” as illustrated in Figure 2 - 6.

![Figure 2 - 6: A revised S-O-R paradigm](image)

Later, Barker and Wicker (1975) studied the effect of situational variables on consumer behaviour and provided two fundamental comments on the previous model’s analysis which
attempted to bring the effect of the environment into psychological theory: these are the temporal and spatial extents of the environment that interact with its dynamic properties. The authors claimed that an individual’s surroundings range from the narrowest situation “a point in time and place” to the total circumstancing environment. Results showed that the situational variables can substantially enhance the ability to explain and understand consumers’ behavioural acts. The unit of analysis selected for study in this thesis is the mobile retention situation. A number of scholars (Belk, 1974; Barker and Wicker, 1975; Nicholls et al., 1996), have determined many situational characteristics which affect behaviour in a retention situation: First, physical surroundings in which the behaviour occurred; second, social surroundings which represent the effect of other people on the setting behaviour; third, the time of day, season, and the length of time since the last related behaviour; fourth, the antecedent states, which encompass many things (e.g. consumer’s mood); fifth, the consequence options which are stated by the antecedent stimuli; and finally, the way in which a consumer conducts the predetermined task in regard to the risk at hand.

In summary, the behaviour situation consists of two antecedent elements of discriminatory stimuli that signal two main types of post-behaviour consequences. The pre-behaviour elements are the behaviour setting stimuli that usually interact with the consumer’s learning history which signals different types of positive and/or negative outcomes resulting from specific event consumption (Foxall and Greenley, 2000). The following section will discuss the antecedent dimensions: environmental influences and learned influences.

2 - 4. B: Behaviour setting

The first part of the antecedent setting dimensions is the environmental influences which shape part of the behaviour. The environmental influence, known as behaviour setting, is defined as the “social and physical environment in which the consumer is exposed to stimulate signalling a choice situation” (Oliveira-Castro et al., 2008, p.448). Four behaviour setting dimensions were identified according to Foxall (1998): Temporal, Physical, Social and Regulatory factors, as shown in Figure 2 - 7 in the next page. As mentioned earlier in this thesis, the pre-behaviour antecedents (stimuli) do not reflect response but they may signal the availability of reinforcement or punishment if a particular response is performed.
Belk (1974) and Quester & Smart (1998) illustrated that all the factors that affect consumer behaviour in a specific situation are related, particularly to the time and place of observation. Also, Belk and Wicker (1975) categorised the behaviour setting into many broad elements including social surroundings, physical surroundings, temporal perspective, task, and antecedents status. Based on the evaluation of a service as intangible, physical evidence is a concept used by many scholars to mean physical surroundings (Bebko, 2000). Physical evidence is defined as “the environment in which the service is delivered and where the firm and the customer interact, and any tangible commodities that facilitate performance or communication of the service” (Zeithaml and Bitner, 1995, p.518). A paradigm has been developed to illustrate the nature of the physical environment and how it influences consumer behaviour in the purchasing setting (Baker, 1987). This paradigm is divided into three main categories. First, there are ambient factors, which include some background conditions available below the level of immediate awareness and which draw attention when absent or unpleasant, such as noise level. Ambient factors’ influence was found to be negative or neutral. Second, there are design factors, which include the visual stimuli that appear to the customer, such as architecture. Design factors were found to have great potential for producing and enhancing positive customer perception and encouraging the desired behaviour. Third, there are social factors, which refer to the human components of the physical environment - customer and service personnel. Social factors have been found to have a positive effect on consumer behaviour and repeat patronage in service purchase situations. The physical surroundings have many elements, including service store availability, online shop availability, convenience of store location, store design and atmosphere, design of interior space, and store lights and colours (Greenland and McGoldrick, 1994; Orth and Bourrain, 2005; Danilovic, 2006; Huang and Oppewal, 2006; Huang et al., 2008; Verkasalo, 2009; Verkasalo, 2009). For example, store availability is critical for many services, especially those that provide more technical support and

Figure 2 - 7: Behaviour setting elements - Foxall (1988b)
consultations for customers (Davis et al., 2004; Huang and Wong, 2006). Customers in general prefer to buy from the service provider’s physical store where the consumers can directly evaluate, touch and try, and choose the purchased object that satisfies their needs and reflects their self-images, and interact with service representatives who may provide technical and social support (Yim et al., 2007). This is because in-store services offer additional benefits to customers, such as providing special treatment and care, and increasing customers’ pleasure, both of which lead to the strengthening of the customer-supplier relationship and the encouragement of repeat purchasing (Reynolds and Beatty, 1999; Reynolds and Beatty, 1999; Thang and Tan, 2003).

The main issue that suppliers focus on is the personal interaction between customers and service firm personnel. That is because customers are usually “in the firm’s factory” and they interact directly and personally with the service personnel (Parasuraman and Berry, 1985 cited in Bitner, 1990, p.70). While intangibility is considered one of the main characteristics of a service, consumers’ purchasing behaviour is heavily reliant upon people’s views, especially firms’ employees (Bebko, 2000). People’s views are seen as cues supporting consumers in their purchasing process and influencing their evaluation of the purchased object. Also, to make potential customers engage in long-term relationships with service firms, they should be given great personal attention and social support during the pre-purchase evaluation (Shostack, 1977). Social surroundings have many dimensions, starting with different consultant reference groups such as friends, family, neighbours, and salespersons, who help consumers with their purchase decisions (Fortunati, 2002; Yang et al., 2007; Yang, 2007). The importance of social surroundings lies in their essential role in shaping part of the behaviour, especially for customers who have no initial experience with the purchased object or seller and those who are uncertain and assess their purchasing decision as risky (Mitchell, 1992; Constantinides, 2004).

Many scholars have been particularly interested in investigating the role of temporal effect as one of the consumer behaviour setting components. This is because it has been argued that temporal behaviour is a product of the dynamic interaction between situation, personality, social dimensions and cognitive factors (Hornik and Zakay, 1996). The temporal effect appears in three behaviour situations: In the pre-purchase situation when a customer consumes his time, energy, and money searching for the best option (Berry, 1979); during the utilization process when the product, service, or activity is purchased (Feldman and
Hornik, 1981); and in the post-purchase period such as that time related to temporal guarantee and maintenance issues (D'Astous and Guèvremont, 2008). The temporal effect is clear in different cases such as the day, week, month, and season when the customer makes the purchase. Scholars are in relative agreement that the temporal elements are critical in the behaviour situation where a consumer is locating his behaviour in regard to special circumstances of space and time, such as having an appointment with a dentist (Oliveira-Castro et al., 2008). Also, consumer behaviour occurs within temporal consumption circumstances which in most cases cooperate and interact with other behaviour setting elements such as the regulatory determinants seen in different cases, such as temporal regulatory conditions of the contract or guarantee. Thus, it is important to illustrate the regulatory effect within the behaviour setting.

The regulatory effect is considered one of the factors that influence consumer behaviour in the behaviour settings. The regulatory environment is arranged by one or more parties who are involved directly or indirectly in organising the exchange process, such as organizations and persons other than the consumer (Foxall, 1999). Regulation usually organises the majority of business activities between varieties of partners. The regulatory effect is seen as a proposed set of rules aimed at organising all types of exchange processes between trading parties in regard to many business-related issues such as risk and safety of products, service, data, content, and procedures used (Viscusi, 1985; Jonge et al., 2004). The direct effect of regulatory elements may be very clear and strict in many situations, such as pharmacy or medical treatment and prescribing behaviour (Goel et al., 1996). During July 2007, the UK mobile telecommunication regulator announced new procedures that reduce the amount of time, from five to two working days, needed by a consumer to transfer his/her mobile number when he/she switches suppliers. These procedures came into effect from April 2008. Such regulations affect both relationship parties involved in the exchange process (Xavier and Ypsilanti, 2008). An example of indirect regulatory effect can be seen in the social regulatory influence which shapes part of the consumer’s behaviour. This effect appears when an individual sends a birthday card or present to a friend; the choice will be limited by his/her age, gender, and the occasion. In this instance, the consumer’s behaviour is controlled by specific social rules to which he or she responds (Yani-de-Soriano and Foxall, 2006).

One of the key concepts that highlight the importance of explaining the effect of behaviour setting when the consumer behaviour takes place is the scope of the behaviour. All behaviour
setting elements provide the discriminative stimuli, which are managed and controlled by other organizations and person(s), not by the consumer. The behaviour scope is described as the extent to which a particular consumer behaviour setting compels a specific pattern of behaviour within different operant classes (Foxall, 1995). The behaviour setting scope is expanded from closed to open. An open behaviour setting is one that lacks the majority of physical, social, verbal, temporal, and regulatory bonds that restrict the space where a particular behaviour is taking place (Foxall and Greenley, 1999). In an open behaviour setting, a consumer is free to choose from among a variety of organizations’ offerings and his or her behaviour is positively reinforced via the setting effects contingency (e.g. buying a new mobile contract). Meanwhile, the closed behaviour setting is one full of social, physical, temporal, and regulatory bonds that restrict the space where a particular behaviour is taking place. In a closed behaviour setting, a consumer is limited in his or her choice of organizations’ offerings and his or her behaviour is negatively reinforced via the setting effects contingency (e.g. contract renewal setting). Four general contingency categories have been proposed by the BPM; based on them, a consumer behaviour situation belongs to one of the operant classes in terms of both behaviour consequences and the stimuli that lead to them (Foxall, 1995). The four categories are accomplishment, hedonism, accumulation and maintenance (Foxall and Yani-de-Soriano, 2005). The maintenance category is described as a closed behaviour setting seen to be low in both utilitarian and informational reinforcement (e.g. mandatory shopping - grocery shopping at a supermarket) (Foxall, 1992). The accumulation category is described as a relatively closed behaviour setting seen to be low in utilitarian reinforcement, and high in informational reinforcement (e.g. buying food for a meeting or birthday party) (Foxall et al., 2006). Pleasure/hedonism category is described as a relatively open behaviour setting that is seen to be relatively low in informational reinforcement and high in utilitarian reinforcement (e.g. health club sporting activities) (Foxall, 1999). Finally, accomplishment is described as an open behaviour setting that is seen to be high in both utilitarian reinforcement and informational reinforcement (e.g. buying healthy food or gambling at a casino) (Foxall, 1993). In this category, a consumer is enjoying his/her consumption and usage of a particular product/service.

To gain a clear picture of pre-behaviour antecedents’ effect on consumer behaviour, behaviour setting elements cannot separately shape how consumers behave and signal behaviour consequences. Behaviour setting elements interact with a consumer’s learning history through which he/she can assess the behaviour situation based on similar experience
gained before involvement with the current behaviour setting (Oliveira-Castro et al., 2008). Accordingly, the second element of behaviour antecedent discriminative stimuli is the learning history of a consumer, which will be explained in the following section.

2 - 4. C: Learning history

The second part of the antecedent setting dimensions is the learning history influences which shape part of the behaviour. The consumer’s learning history includes accumulated prior knowledge, skills, and information which both directly and indirectly interact with one another (Hwang, 2003). Thus, customer experience is critical in defining what to buy according to the direct and indirect customer interaction with the purchased object, especially in the repeat purchase situation (Verhoef et al., 2009). Customer experience is described as the internal and subjective response a customer has to any direct or indirect contact with a company, which encompasses all facets of a supplier’s offerings (Meyer and Schwager, 2007) Experience plays an essential role in a learning process, which is known as knowledge acquisition (Peng and Gero, 2006). Thus, experience is defined as “the accumulation of knowledge or skill that results from direct participation in events or activities” (Jain, 2003 cited in Kankanhalli et al., 2006, p.938).

There are many situations in which a consumer repeats similar behaviour (purchasing) from the same provider. This type of behaviour can be predicted mainly by previous experience and by information relevant to the current buying task or choice. In the repeat purchase situation, a customer has direct experience with many mobile supplier-related issues such as offers of mobile products and/or services, suppliers’ online websites, and suppliers’ sales employees, all of which affect his or her overall feelings, attitude, and satisfaction (Spreng et al., 1995; Moutinho and Smith, 2000). Positive satisfaction and attitude affect consumers’ experience which in turn increases the possibility of the consumers making repeat purchases (Cronin et al., 2000; Goode et al., 2005). Also, the positive attitude of a consumer who purchased/consumed a product or service tends to improve the probability of future purchase, especially if the consumer has a positive attitude towards the same purchasing object or seller (Clow et al., 2005; Foxall, 2007). Based on that, consumer repeat purchase probability increases according to his or her positive expected rewards which are anticipated with the next purchase. Customer expectation is usually shaped by many elements including previous experience, reviewing competitors’ comparable alternatives, reference groups’ word of mouth, customer needs, and the customer’s future decision effect which relies on both
evaluation and judgement between real experience and future expectation of reinforcement and punishment (Woodruff and Gardial, 1996; Meyer and Schwager, 2007).

While past experience is one of the factors that shape and predict consumers’ desires, learning history duration (experience longevity) can be considered one of the factors that influence the customer-supplier relationship (Barkur et al., 2007). The customer-supplier relationship duration is an important variable in explaining what drives a customer to purchase from a supplier over time (Fink et al., 2008). The more a consumer deals with a supplier, the more his or her learning history increases according to gained knowledge of services and products’ usage. Therefore, both relationship parties may benefit greatly from analysing the temporal-related dimensions of the interaction to enhance their performances. This notion illustrates that suppliers can enhance their performance by enhancing customers’ commitment, face-to-face interactions, customer experience and performance over time (Cannon and Homburg, 2001; Fink et al., 2008).

To sum up, it has been illustrated that customers’ accumulated knowledge has gained little attention in the management literature, especially in customer relationship management (Garcia-Murillo and Annabi, 2002). Customer knowledge is seen as a mix of many elements including individual contextual information, learned information, values, expert insight, and framed experience (Davenport and Prusak, 1998). Customers’ practical experience and knowledge relating to the environment-related element, such as specific product or supplier, is derived from a distinct output of information-processing acquired in the relevant context such as frequency of purchasing product/service and any other related experience such as product familiarity (Toften and Olsen, 2003). Accordingly, customers’ behaviour is shaped in terms of surrounding effects and prior positive or negative experiences (Yoon and Nilan, 1999). This notion is confirmed by Foxall and Greenley (2000) who illustrated that the behavioural setting which interacts with learning history exercises not only the utility effect but also the aversive effect. It should be borne in mind that the antecedent or pre-behaviour stimuli do not affect response, but they may affect the likelihood of reinforcement or punishment following a response. Thus, the post-behaviour consequences which include both utilitarian and informational reinforcement affect decisions positively or negatively in any behavioural situation (Foxall et al., 2004). This means that both consequential reinforcement and punishment elements that have been taken into consideration by the consumer are also
considered in the BPM. The following part explains the behaviour consequences which are classified to include both reinforcement and punishment.

2 - 4. D: Reinforcement and punishment

The second part of BPM is the behaviour consequences, which encompass both the reinforcement and punishment that have been taken into consideration by a consumer. Foxall (1992) differentiated between different types of behaviour consequences which are both informational and utilitarian reinforcement or punishment. Based on Foxall (1998), utilitarian reinforcement can be described as the direct positive benefits and consequences that both parties attain from the reciprocal relationship which comes from the tangible functional or economic benefits that stem from choice or consumption. Also, it is expressed by Foxall (2004, p.239) as “the practical outcomes of purchase and consumption, that is, functional benefits derived directly (rather than mediated by other people) from product and service possession and application”. Meanwhile, informational reinforcement can be described as the positive benefits and consequences that both relationship parties indirectly gain from the reciprocal relationship feedback or recommendation (Foxall and Yani-de-Soriano, 2005). Also, it is described by Foxall (1998e, p.326) as the “symbolic, usually mediated by the responsive actions of others, and closely akin to exchange value”. It is usually derived from many dimensions including social status and prestige, and feedback or recommendations from others.

Consumers tend to maximize overall benefits and minimize overall costs from their purchasing and consumption behaviours by considering a range of target objectives (Petersons and King, 2009). So, the essential question is: how can firms manage customers’ benefits in a way that retains the customers in the long term? Foxall (1998) described three ways in which marketers manage the reinforcement availability to consumers: enhancing the effectiveness of reinforcement; controlling the schedule by which reinforcement is presented; and increasing the quality or quantity of reinforcement.

Moreover, Foxall (1992) highlighted the importance of investigating aversive consequences that arise as negative results of using products and services; these are divided into utilitarian and informational punishment. Aversive consequences are described as the main distinct behaviour outcomes that negatively affect and reduce the chance of a specific behaviour being repeated in the future (Foxall, 1998). There are many utilitarian punishment examples
that affect customer behaviour, especially when he or she chooses a mobile supplier and the
supplier’s product offers, such as monthly cost, switching costs (the cost of ending a mutual
relationship), and lost utilitarian benefits attached to other attractive alternatives. Also, a
variety of informational punishment can affect both purchase behaviour and repeat purchase
behaviour, or even a customer relationship such as regret and negative feedback from others
concerning the use of mobile products and services. Aversive emotion is considered an
example of an informational punishment known as psychological relationship cost (Dwyer et
al., 1987; Grönroos, 1992; Egan, 2001; McDevitt and Williams, 2001; Ahearne et al., 2007).
Psychological relationship cost is described as “the cognitive effort needed to worry if the
supplier will complete his commitment or not” (Gronroos, 1992 cited in Ravald and
Gronroos, 1992, p.29). While a customer is looking to have a long-term relationship with one
of the mobile suppliers, he or she is sometimes not sure of the extent to which the supplier
will treat him or her properly and fulfil the future promises of the contract (Ravald and
Gronroos, 1996). Therefore, to avoid some of the psychological relationship costs which are
considered part of the informational punishment, a customer looks to form a relationship
with a well-known branded supplier, a supplier which has earned positive publicity and
recommendations from other customers, even if this means paying more for specific types of
mobile services (Jarvis and Wilcox, 1977; Jevons et al., 2002). Such elements will help to
enhance the supplier’s overall image, which justifies repeat purchase behaviour.

The previous section gave an overview of the BPM’s background, and while the BPM is
considered an inherently interpretive framework, the next section will explain the empirical
phase of the thesis in which the BPM is applied to explain the customer retention
phenomenon in the mobile phone sector.

2 - 5: The application of the BPM in the mobile phone industry

Customers are considered the focal point of all marketing management efforts and actions
(Leverick, 2005), especially for firms that focus on attracting and sustaining customers in the
long term (Harwood, 2005). Despite numerous publications within the last decade exploring
consumer behaviour, there are many factors affecting consumer behaviour that make it
difficult to predict or assess how a consumer behaves in different behaviour situations, such
as within the contractual and non-contractual behaviour settings. For this reason, many
theoretical and empirical studies have been conducted to understand, predict and analyse the
ways in which a consumer collects information and analyses and evaluates it to reach a
decision to retain or switch his or her service supplier. A customer’s retention or switching behaviour is based on his or her knowledge and experience of many elements such as the product, colour, size, design, brand, and many supplier-related issues such as publicity, service quality, and aftersales services. It should be borne in mind that both service churn and retention rates remain central constructs in firms that practise relationship marketing and invest in remedy plans to minimize customer switching and encourage customer repeat purchasing (Schweidel et al., 2008). Thus, organizations try to attract and retain consumers by managing various marketing relationship activities (Kivetz and Simonson, 2002; Thomas and Housden, 2002). Marketing activities directly or indirectly influence consumer behaviour in many ways, such as affecting the consumer’s experience (Henkel et al., 2007; Hume et al., 2007), generating certain shifts in beliefs and attitudes (Schouten et al., 2007), and controlling the situational behaviour (Bhate, 2005). Also, every organization sends out a collection of reinforcements that are intended to shape or maintain specific purchasing action (Foxall, 1993; Gómez et al., 2006). However, marketing management activities are not the only forces that influence consumer behaviour - other business bodies aim at the same target in different ways (e.g. rivals’ stimuli and reinforcement, and social and governmental rules). Accordingly, consumer behaviour differs from one situation to another according to many factors (e.g. time, money, efforts, information, personal characteristics, and experience) which constrain his or her purchasing decision, choice, and even retention choice (Kornelis et al., 2007). Gabbott and Hogg (1998) differentiated between three primary resources: economic, temporal, and cognitive. Thus, firms prefer to use these resources to employ mediating technology to retain current customers and facilitate relationships with them (Eriksson et al., 2007).

Every consumer has different traits and characteristics, and each personality develops over time with the accumulation of knowledge and experience. For example, Vázquez-Carrasco and Foxall (2006) studied the relationship between aspects of consumers’ personalities and their perception of relational benefits, satisfaction, and loyalty in a personal service context. Based on this study, essential issues have been indicated. The perception of relational benefits leads to higher satisfaction, passive loyalty, and the need for social affiliation, all of which are strong determinants of many relationship marketing elements: relationship benefits, relationship proneness, and active loyalty (Dubelaar et al., 2005). Thus, benefits seen to form the core of purchasing and repeat purchasing behaviour, and the relationship
parties are keen to maximize them, especially the utilitarian and hedonic relational components (Ryals, 2002; Yavas and Babakus, 2009).

The retention of customers offers major benefits to many service firms, such as improving customer profitability and lowering acquisition costs (Patel, 2002; Farquhar, 2005). Clapp (2006) studied the customer retention phenomenon. He claimed that some service firms (e.g. banks) can easily connect with new customers, motivate them to stay and forge long-term relationships. The study showed that banks which focus on retention and integration of new customers in the first three months of a relationship enjoy financial gains as well as highly satisfied customers. However, the problem of keeping customers arises after the introduction stage which focused on attracting customers for long-term relationships but failed to keep them in spite of spending a large amount on the process. In some cases, customer attraction costs are significantly higher than customer retention costs; besides, keeping customers is more profitable than acquiring new ones (Ennew and Binks, 1996; Bird, 2005).

Studying customer retention behaviour in the contractual and non-contractual mobile purchasing settings is essential, especially when the goal is to establish long-term customer relationships based on mutual motives which determine their future exchanges (Furinto et al., 2009; Svahn and Westerlund, 2009). This view is confirmed by Sheth and Parvatiyar (1995) who illustrated that there is only a limited amount of literature investigating behavioural retention motivations related to theories of relationship marketing within the customer markets, while there is a huge amount of literature on supplier markets. Even in the industrial services, there is not a great deal of literature on the contractual relationship phenomenon and its related behaviour studies, and the majority of the previous studies were focused on the contractual outsourcing issue for some service operations and services maintenance (Lai et al., 2006; Panesar and Markeset, 2008). Some transaction exchanges were seen to be contractual transactions rather than relational ones (Dubois and Gadde, 2000). Thus, additional research is required to tackle the contractual and non-contractual customer retention behaviour topic especially within the individual level of analysis (Reinartz and Kumar, 2000).

2 - 5. A: Consumer behaviour situation

In any behaviour situation, selecting a product is not the starting point of the behaviour. Consumer behaviour includes a wide range of activities and is seen as a process by which
individuals or groups select, purchase, use and dispose of one or more product, service, idea or activity (Gabbott and Hogg, 1998). Gabbott and Hogg stated that consumer behaviour can be defined as “the act of an individual directly involved in obtaining and using economic goods and services, including the decision processes that precede and determine these acts” (p.56). According to this definition, there are many pre-behaviour and post-behaviour determinants that affect consumer behaviour and lead to its execution, as illustrated by the BPM in Figure 2 - 8. These determinants are seen as discriminative stimuli that signal post-behaviour reinforcement; they are normally used by marketing management and marketers to affect consumer behaviour and cause the consumer to make a simple transaction such as buying a chocolate bar or becoming engaged in a long-term relationship, such as opening a bank account or buying an 18-month mobile contract (Simintiras and Cadogan, 1996).

The operant analysis of marketing proposed that complex consumer behaviour consists of a mix of economic purchasing and consumption activities reinforced via utility and informational consequences (Foxall, 1999). Accordingly, establishing a relationship with a customer should consist of close literal exchanges and mutuality interactions. Firms tend to have close and regular interactions with their immediate customers as well as with some significant third parties in their network of exchange relationships, where the actors mutually adapt to each other and also learn from each other in an operant behaviour setting to serve customers properly (Awuah, 2007). Based on these mutual interactions and operant consumer behaviour analysis, the consequences of consumer behaviour are usually remote from its performance and can affect whether a consumer makes a repeat purchase or switches to another supplier (Foxall, 1995). Studying customer behaviour in the mobile retention situation is aimed at examining whether a customer will engage in similar behaviour in the
future and this is usually determined by behaviour stimuli and consequences dimensions proposed by Foxall (1998) within the BPM components; these are consumer behaviour setting, consumer learning history, utilitarian reinforcement and punishment, and informational reinforcement and punishment.

In service marketing, Mattox (1995) claimed that keeping customers is not an easy task and customer fulfilment has become more complicated as more competition, marketing sophistication and knowledgeable consumers have contributed towards providing a challenging environment. The author mentioned many practices that help to keep a good relationship with customers, including having a quick turnaround, having creative continuity, setting limitations, providing communication, and planning for lifelong customers. Marketing serves the purpose of maximizing customer lifetime value (CLV) and customer equity, which is the sum of the lifetime values of the company's customers (Gupta et al., 2006). This is achieved by providing continuous or scheduled stimuli and reinforcement for customers during the exchange relationship between a customer and a firm (Alessio, 1984).

The customer life cycle has been divided into three stages: initial stage, purchasing process, and consumption process (Grönroos, 1984). Some studies have focused on facilitating the process of enticing customers at the first stage of the interaction life cycle with the firm (Conrad, 2006).

According to Foxall and Greenley (1999), the consumer retention situation can be described as one where the interaction between the discriminative stimuli of behaviour setting elements interacts with the consumer's learning history and signals behaviour consequences at a specific place and time. Within this context, supplier stimuli should indicate and signal valuable benefits for users, thus encouraging them to repeat their purchase. Foxall (1997) illustrated that the stage that combined the interaction between discriminative stimuli with the consumer's accumulated previous experience defined the consumer situation. In the retention situation stage, a consumer should value his or her existing supplier’s relational benefits more than the rival suppliers'; otherwise, he or she will switch. Many researchers have tried to find the main factors that affect a consumer’s retention behaviour and which make him or her choose a specific service provider and establish a relationship with it instead of others. Many scholars have agreed that the behaviour (relationship) benefits that a customer gains when he/she decides to purchase and consume a product/service (to be involved in a long-term relationship with a service firm) are the core drivers of behaviour.
(Ganesan, 1994; Homburg et al., 2005). Gwinner et al. (1998), for example, examined the benefits the customer receives as a result of engaging in a long-term relational exchange with a service firm. They claimed that, the longer the duration of the relationship, the more benefits the customer is likely to receive from the relationship. Findings indicated that consumer relational benefits can be categorized into three distinct types: confidence, social and special treatment benefits. Other researchers have investigated consumers’ motivations for being in a long-term relationship with the same firm and proposed that firms need to recognize customers’ motivations for engaging in a relationship with them (Sääksjärvi et al., 2007). Positive motivation such as pleasure or social approval arises from positive situations that reinforce consumers’ decisions to buy specific products or services that provide specific benefits. However, in some cases, consumers are motivated to escape negative outcomes such as illness or a high-cost option by purchasing specific products or services that have been reinforced by the addition of special benefits to help them get rid of their problems (Evans et al., 2006).

Leonidou (2004) investigated the discriminating role of the buying situation in industrial manufacturer-customer relationships in order to establish a link between alternative buying situations that an industrial seller may encounter and the atmosphere governing working relationships with customers in each situation. It has been revealed that the atmosphere governing their relationships with organizational buyers differs markedly in each buying situation. In new buying situations, those of a routine nature are characterized by greater dependence, trust, and understanding, but lower distance and uncertainty. Also, the more unchanged the buying situation, the higher the level of adaptation, commitment, communication, and cooperation in the working relationship, while the conflict is higher under conditions of modified re-buying. Moreover, the level of both social and financial satisfaction derived from the working relationship tends to be higher in the case of straight re-buying than in modified re-buying or new-task buying situations.

Braun-La et al. (2007) investigated how a common situational factor that a consumer faces, such as mood influences, undermines consumers’ ability to process incongruent information in an overloaded environment. Two experiments found that a positive mood increases (and a negative mood decreases) consumers’ ability to respond to incongruent information. Moreover, Mehrabian and Russel (1974) provided an additional approach to investigate the effect of environmental psychology. They argued that environmental influence on consumer
behaviour is mediated by three affective responses encompassing pleasure, arousal, and dominance. Foxall and Greenley (2000) have confirmed that Mehraban and Russel’s results are in line with what they found when they studied the structural features of the consumer situation proposed by the BPM. Both pairs of authors reported that pleasure is higher for consumer behaviours defined in terms of relatively high utilitarian reinforcement; they also reported that arousal is higher for consumer behaviours defined in terms of relatively high informational reinforcement, and reported that dominance is higher for consumer behaviours enacted in relatively open settings (Foxall and Yani-de-Soriano, 2005). Availability and quality of information in turn affects types and levels of consumer action flexibility in the behaviour setting (Ndubisi and Wah, 2005; Liang and Wang, 2007). The information-action effect relationship is classified within three separate studies. Yeuing and Soman (first paper) explored how consumer familiarity with the products’ attributes influences choice. The authors showed that the asymmetric range affects the behaviour. A harder-to-evaluate attribute (e.g. quality) is more susceptible to the range effect than an easier-to-evaluate attribute (e.g. price). Also, Min and West (second paper) examined how the timing of the consumer’s receipt of the product’s availability information affects consumer choice. The authors mentioned that consumers switch to another product type when they experience psychological adverse reaction. However, Hamilton (third paper) examined how the consumers’ knowledge about the selection of alternatives in the choice context affects susceptibility to context effects. The author showed that a construct comparison among alternatives is critical and can affect consumer choice, especially if the missing product is the preferable one. In this situation, other people may have an effect on the consumer’s choice in the purchasing situation, such as a friend or sales person (Hamilton, 2003). These papers give some explanations about the effect of different environmental factors that affect consumer choice and which may encourage purchase repetition or switching.

To summarise, the purchase action is not just one act, it is developed until the purchase decision has been made then continued through future consumption to the benefits gained from planned consequences. In a repetition situation, a consumer’s conditioning and learning process shows how he or she evaluates a variety of mobile offer options according to his or her previous experience (e.g. previous formal contracted interactions or current consumption of mobile supplier services); this experience helped the consumer to learn why and how to renew or switch supplier for his or her next mobile phone purchase. Repeating similar purchasing episodes (repeat subscription) is described as a stimulus-discrimination and
stimulus-generalization relationship (Berlyne, 1960). That is because a subscriber in the mobile phone sector has learned to generalize from previous stimuli and consequences and can respond properly to the new contract offer’s attributes and consumption circumstances in the renewal situation stage. This stage is essential for a consumer to also develop his or her capabilities and accumulated experience (self-rules) to distinguish his/her current mobile supplier’s stimuli from other competitors’ stimuli to determine which will propose long-term benefits in the future (Sheth and Parvatiyar, 1995). To understand the types of stimuli that affect consumer behaviour and to give a deeper view on how they shape consumer retention behaviour, the next section gives a broader view of consumer behaviour stimuli, which are divided into many categories within the behaviour setting.

2 - 5. B: Behaviour setting

Marketing as a function and philosophy has been defined when the goal is to have the capabilities to manage the exchange process properly in the long term. Thus, Dannon (2004) has divided the marketing management functions into four main activities: defining and understanding customers’ needs and values, developing products and services that satisfy customers’ needs, communicating firms’ offerings to specific customer segments with which customers wish to exchange, and ensuring that firms’ offerings are delivered to the target markets. Therefore, marketing managers are spending more time, money, and effort on understanding how customers behave in different situations (e.g. mobile contractual context) to satisfy their needs.

While the starting point of consumer behaviour is its stimuli, consumer stimuli is considered the focal point of suppliers’ behaviour. The main concern of marketing management and marketers is to investigate how consumers respond to various marketing actions (stimuli) (Xiao, 2007). Marketing management behaviour represents the main consumer behaviour stimuli that control and influence his or her behaviour setting. In order to illustrate this, a series of marketing management activities have been designed and properly executed to communicate suppliers’ stimuli by using different methods such as marketing mix elements.

To communicate with and reach a variety of customer targets, firms usually segment their customers and differentiate between them by offering different types of products and services with different levels of stimuli and incentive consequences. Some suppliers often customize their offerings and marketing policies in order to offer suitable value to customers and gain a competitive advantage over their close rivals who also target the same segments of customers.
In the repeat purchase situation, by knowing both customer lifetime value and customer referral value, service firms can segment customers into four constituent parts (Kumar et al., 2007): those that buy a lot but are poor marketers (which they term affluent); those that don't buy much but are very strong salespeople for your firm (advocates); those that do both well (champions); and those that do neither well (misers). It is important to provide purchasing incentives to advocates, referral incentives to the affluent, and both to misers. Results from a series of one-year experiments showed that they were able to move significant proportions of all three into the ‘champions’ category. The incentives were important and signalled by stimuli which tend to strengthen the consumer-firm relationship and enhance likelihood of repeat purchasing.

There are many types of stimuli that affect and enhance the likelihood of a customer being enrolled in a continuous relationship with a firm. These stimuli mainly come from the external environment as action strategies of marketing management behaviour. At this stage, it is important to explain the different stimuli categories provided by a firm, according to the BPM, which affect the consumer’s choice and persuade him or her to engage in a longitudinal relationship (e.g. contractual relationship). According to the theory of buyer’s behaviour, at any time, the construct which describes the consumer’s status is affected by a variety of stimuli available in the environment which are defined mainly by social and/or commercial elements (Howard and Sheth, 1969). Meanwhile, behaviour stimuli are classified into four elements: physical, social, temporal, and regulatory factors, as shown in Figure 2 - 9 (Foxall, 1998). These dimensions are initially responsible for creating the discriminative stimuli which help to shape and signal repetition behaviour outcomes. Foxall (1993) illustrated that behaviour setting consists of all physical, social, temporal, and regulatory components that facilitate or inhibit consumer choice and movement, and signal what the consequences will be for a particular way of behaviour. The following section will discuss each element separately in depth.

![Figure 2 - 9: Behaviour setting elements - Foxall (1998b)](image-url)
2 - 5. B-1: Physical setting

Behaviour setting is described as the surroundings in which consumer behaviour takes place such as a museum, theme park, and mobile shop outlet (Foxall and Greenley, 1999). Berry and Parasurman (1991) proposed three categories that are needed to create the service’s physical evidence: physical environment, communication, and price. These elements are administrated and managed by firms to help a customer to gauge and evaluate service alternatives. One of the main explanations that highlight the effect of physical setting was that carried out by Baker’s (1987) model. Baker has provided a model which includes three elements: ambient factors, physical and design factors, and social factors. Physical and design factors were found to be one of the main element concerned with providing visual stimuli effect to customers, such as the store’s architecture, colour, and design. As explained by Hightower et al. (2002), physical elements are found to be essential as they affect customer choice and play a positive role in enhancing repeat purchase behaviour.

Retail outlets are the formal gates through which service firms interact directly with their customers because, here, the firms can introduce themselves and their offerings. Many scholars highlight the importance of both physical and online retail outlets’ capacity to sell service firms’ products/services directly to customers (Eroglu and Machleit, 1990; Greenland and McGoldrick, 1994; Tai and Fung, 1997; Degeratu et al., 2000; Sanchez and Iniesta, 2004; Parsons and Conroy, 2006; Demangeot and Broderick, 2007). Physical store setting and its environment have engaged the interest of many scholars over many years. Depending on the nature of the service, the physical store is considered the ‘factory’ in which the service or some of its elements are designed, tested, and tried by consumers before the purchase stage (Chase and Erikson, 1989). It has also been illustrated that online shopping availability and environment have played an essential role in enhancing the customer-supplier relationship (Demangeot and Broderick, 2007). This is because online shopping is considered a human activity controlled by marketing management; managers can organise cues and motives to prepare, design, and allocate within the virtual context (Tauber, 1972).

Store atmosphere is an essential element in the physical behaviour setting because it contains a set of stimuli designed in a creative way to gain customers’ attention and stimulate some of their possible responses (Bitner et al., 1990). Andreu et al. (2006), for example, studied the relationships between consumers’ perceptions of a retail environment and their emotions, satisfaction and behavioural intentions with respect to that shopping setting. The authors
developed a model and tested it in two distinct retail settings: shopping centres and traditional retailing areas. The main findings declared that positive perceptions of a retail environment have a positive influence on emotions, repeat purchasing intentions, and the desire to extend the visit to the shopping area in both retail settings. Results highlighted some interesting differences which have emerged between shopping centres and traditional retailing areas: First, the internal environment has a negative effect on the disposition to pay more; second, the internal environment has a stronger effect on emotions in shopping centres than in traditional retailing areas. These results are partially in line with Baker et al’s (2002) study which empirically examined the extent to which environmental cues (e.g. social, design, and ambient) influence consumers’ assessments of a store on various store choice criteria. Results depicted that environmental cues did influence consumer store choices and patronage intentions.

Many researchers have examined the influence of different physical elements (e.g. music, colour, crowding, and scent) on consumer behaviour and repeat behaviour. For example, Areni and Kim (1993) examined the influence of background music on shopping behaviour in a centrally located wine store; Hui and Dube (1997) examined the effects of music on consumers’ reactions while waiting for services and their emotional response to waiting; Milliman (1982) and Milliman (1986) studied the effect of background music on the behaviour of restaurant patrons and supermarket shoppers; and Garlin and Owen (2006) provided an analytic review of background music’s effects in retail settings. The main findings of these studies illustrated that music affects the pace of in-store traffic flow, purchase, length of stay, and dollar sales volume. Another example was provided by Halliday (2004) who investigated how dealers improve waiting areas to boost loyalty. Through waiting room facilities like television, Internet availability and faster service, automobile dealers are forming good relations with a larger part of their customers.

Some researchers have examined the effect of colour on consumer behaviour (Ogden, 2005; Barber et al., 2007). Bellizzi et al. (1983), for example, evaluated the effects of colour in retail store design. Their findings suggested that colour can physically attract shoppers toward a retail display and that certain perceptual qualities of colours can affect store and merchandise image. Studying the effect of scent on consumer behaviour has also gained special interest from scholars (Orth and Bourrain, 2005). Managers of retail and service outlets diffuse scents into their stores to create more positive environments and develop a
competitive advantage (Spangenberg et al., 1996). Moreover, the positive effect of other physical evidence-related elements on consumer behaviour and patronage intentions has attracted some researchers’ attention: e.g. the effect of a crowded physical setting (Eroglu and Machleit, 1990; Dion, 2004; Eroglu et al., 2005); the effect of store atmosphere (Donovan and Rossiter, 1982; Donovan et al., 1994; Bonnin, 2006; Carpenter and Moore, 2006; Parsons and Conroy, 2006); a store’s physical attractiveness (Darden et al., 1983); a store’s physical size (Joseph and Loo-Lee, 2007); music, colour, atmosphere, and smell (Newman and Foxall, 2003); and store location (Greenland and Newman, 2005). From the store design perspective, Greenland and McGoldrick (1994) provided a systematic approach for investigating how a store’s designed environment affects consumer behaviour, by exploring the impact of multiple store stimuli. Their approach offers a framework for evaluating the effects of retail store and branch environment on users by using special techniques of design appraisal, measuring emotional states and service assessment, and comparing the effects of modern and traditional-style bank branch designs on customer opinions and behaviour. Results suggested that the modern styles have a more favourable impact on customers, and managers should focus their efforts on designing retail settings.

One of the physical evidence elements that scholars investigate with special care is how service firms interact with customers (Antonacopoulou and Kandampully, 2000; Batonda and Perry, 2003; Polo-Redondo and Cambra-Fierro, 2008). Thus, one of the physical setting elements to have been discussed in depth is the importance of the delivery of the service process in service firms. In today’s competitive environment, service firms’ customers are demanding more variety of high-quality products and services through faster delivery processes (Lummus et al., 2007). Some service firms combine an online presence with physical outlets, which can provide additional value for both relationship parties (Adelaar et al., 2004). Thus, the main issue regarding the delivery of services is the process used by mobile suppliers to contact customers via online shops (websites) or via physical outlets. The process of service delivery represents the core step in a mutual relationship, through which customers buy, acquire, and consume the desired products or services. When cross-buying is involved, a more complicated process is required (Tsung-Chi and Li-Wei, 2007). Two main issues should be taken into consideration when designing the services’ processes. On the one hand, customer behaviour should be studied in order to define the aspects of service attributes that catalyze and match the customers’ awareness and work as stimuli for their needs and wants. On the other hand, customers should be involved directly or indirectly in
planning, designing and testing service processes and related tools in order to improve productivity and build a system for easy service delivery (Chase, 1985; Hirsch and Glanz, 2006; Boyazis, 2007).

Service firms introduce different types of stimuli to attract different target customers. The basic premise is that demand patterns result from choice behaviour, where customers choose a product/service to maximize their utility (Jun et al., 2002). Firms usually introduce their products and/or services to the market by using different types of discriminative stimuli that express their benefits and features. Brands’ features (e.g. shape, design, name, and colours), product/service’s core and minor attributes, and suppliers’ features are considered special reinforcing stimuli targeting customers to make their future purchase more probable. Also, product class, as a part of a certain brand, provides additional stimuli that may satisfy consumers’ needs in different market segments. Foxall (1997, p.122) defined product class as “a set of reinforcingers that, in combination and shape, maintain specific purchase and consumption behaviour”.

Products’ and services’ features can affect consumer purchasing behaviour; packaging features, for example, are found to have a potential influence on the respondents’ choice of products (Peters-Texeira and Badrie, 2005). If a consumer believes that all brands within a specific consideration set are the same and have similar features, the product becomes more distinct. Otherwise, the more the consumers perceive product differences, the more extensive is the search to find the best choice. Also, the stability of product category may affect consumer behaviour. Durable products with a long life cycle, such as cars, have different features, utilities, reinforcement stimuli, and evaluations from non-durable products like mobile phones (Engel et al., 1995).

In the mobile phone sector, operators usually provide different types of price plans to enable a customer to choose from among them. Each price plan has a mix of services and product elements which provide different benefits marketed within one price umbrella. For example, mobile operators usually provide different mobile phone types with different features depending on whether the customer chooses an 18-month contract or a 12-month contract. Those operators usually deliver a variety of stimuli and/or utilities during the consumption period in order to keep customer satisfied and ensure that he or she does business with the same provider. The main UK mobile contract elements include the following: mobile handset, number of airtime minutes, number of text messages, contract longevity, contract
cost, and a variety of mobile handset accessories. Mobile price plan elements can be divided into tangible and intangible ones. An example of a tangible element derived from a user’s choice is the mobile handset and its related accessories. Many studies have been carried out to investigate the effect of several mobile service contract elements on consumers’ choice, such as the effect of mobile service/products’ attributes on consumer choice (Mazzoni et al., 2007), mobile phone price, image, and functions (Lin et al., 2010), mobile payment services (Schierz et al., 2009), and mobile services’ attributes (Cassab, 2009). Horvath and Sajitos (2002), for example, studied the role of mobile design on the buyer decision process and consumer responses. The authors explained that consumers’ relationship with product form is dependent upon their personal characteristics, surrounding products, utilities, experience, enjoyment of use, and the contribution to the fulfilment of the object’s purpose. Thus, consumers’ stimuli should be designed based on defining consumers’ characteristics and satisfying their needs. A brief overview of product stimulus cannot be fully understood without explaining its relationship with price stimuli.

Evaluation of products’ and/or services’ alternatives in any purchasing situation depends on the presence of different cues and signals that a customer considers when making his or her purchasing decision. Price usually represents one of the main signals that consumers take into consideration when evaluating different service alternatives (Linnemer, 2002). The importance of price depends on the customer’s personal traits, income, and alternative purchase behaviour settings. Price information contains both positive and negative aversive stimuli for different customers and the price payment is the main aversive consequence of purchasing an item (Foxall, 1998; Oliveira-Castro, 2003). Price covers many purchased items presented under one umbrella for customers (e.g. the mobile contract package elements) (Monroe and Krishnan, 1985) and is linked directly with many potential issues for customers; it represents the financial risk which signals the amount of money a customer sacrifices in order to purchase and consume a specific object, and it also signals products’ and services’ quality. Some customers frequently use price as a signal of quality (Steenkamp, 1988; Estelami, 2008). The relationship between price and quality has been investigated by many scholars, such as Rust and Oliver (1994) and Al-Hawari and Ward, (2006). Results indicated that a positive relationship is available, especially when a customer is informed about both price and quality attributes (Rust and Oliver, 1994).
Price plays a crucial role that may affect the firm-customer relationship and customer retention. From the organization side, price is a vital part of the marketing mix because it generates revenues. Price strategy and related decisions will determine product/service attributes and affect the perception of quality. In addition to the traditional use of price signals, Ramaseshan and Hsiu-Yuan (2007) depicted that marketers use price to signal the brand’s perceived quality to the consumer. From the consumer side, it has been found that price is the main motivator in encouraging a customer to engage in a specific behavior situation (e.g. online purchasing) and to engage in a relationship with a supplier, especially in the contractual behavior setting (Surjadjaja et al., 2003: Kulmala, 2004). Also, price influences the buyer’s perception of goods offered and their values. Rust and Oliver (1994, p.142) argued that “relationship pricing is the appropriate form of pricing which respects the long-term contact between service provider and customer”. Relationship pricing determines the value of the service provided, which predicts the potential profit streams over the customer’s lifetime. While more benefits mean more reinforcement and stimuli, a customer is willing to pay more if he/she perceives that more benefits will be provided by a service provider. Regarding service intangibility and inseparability attributes, price provides more indications about the service which the consumer cannot assess until the consumption process has begun.

Price has a strong link with relationship value. That is because a customer is usually concerned with the amount of money that he or she will invest in a relationship and the relationship value that he or she expects to receive when establishing a new long-term relationship with a new supplier or when maintaining a long-term relationship with the current supplier (Ulaga, 2003). Value is what the customer gets in relation to what the customer gives. Smith and Nagle (1995, p.98) defined value based on Anderson et al.’s (1992) value description as “the perceived worth of benefits received by a customer in exchange for the price paid for a product offering”. Price-perceived value is one of the important concepts through which firms try to provide a range of benefits within their offerings to maximize customers’ perceived value, because people will shop with a person or company that makes them feel they are getting more value for their money (Hackett, 2005). One of the problems that appears later is how a value should be defined, evaluated, and priced, because it reflects the seller’s pricing strategy that impacts customers’ satisfaction and their willingness to pay positively or negatively (Homburg et al., 2005). Motley (2007) offered advice from management and leaders on how to successfully retain customers and
staff. He mentioned that the key to remaining competitive in any business is to build a relationship that is resilient to price.

Goods’ attributes and benefits are linked directly with their prices; this affects consumers’ behaviour. However, how do customers acknowledge service firms’ offerings, attributes and benefits? The answer is an element essential for completing the stimuli effect circle, which is to explain the importance of promotion and communication methods to communicate service firms’ stimuli and stimulate the consumers to purchase. Promotion is considered one of the main marketing management activities, and it plays a huge role in communicating and introducing service firms’ stimuli to consumers (Nandan, 2005). The promotion mix has a variety of elements including advertising, sales personnel, sales promotion, public relations, word of mouth, and direct mail. In most cases, service firms use a mix of promotional methods, known as the Integrated Marketing Communication (IMC), to contact different sets of users.

Products and services are different in their nature and attributes; goods are objects and services are performances, so advertising of each must reflect these differences. Promotion in services is essential because it adds tangible hands that donate services with more significant stimuli and enables customers to make a better evaluation of the offerings (Payne, 1993). In the mobile phone sector, suppliers differentiate themselves by informing targeted customers that they provide a variety of reinforcement schedules distributed over a predetermined contractual period of time to lock in customers in the long term using a selection of promotional tools. Also, mobile operators use a mixture of promotional approaches to inform customers that they have the best customer base, best network technology, wide geographical coverage, best mobile technology, and high-quality mobile services. Usually, mobile suppliers rely on some promotional elements more than others to communicate with customers and publicise stimuli and reinforcement, such as TV advertisements, monthly magazines, Internet promotions, and mobile advertising (Tellis, 1988; Rajiv et al., 2002; Hardesty and Bearden, 2003; Reyck and Degraeve, 2003; Funk, 2006; Leek and Chansawatkit, 2006; Funk, 2007; Kondo et al., 2007; Sutherland, 2007). One of the essential, unpaid, promotional elements with a strong social effect is word-of-mouth (WOM) stimuli. WOM plays an essential role in consumer behaviour. Bhardwaj (2007, p.60) claimed that WOM advertising is “the most powerful form of persuasion”, especially if this promotion comes from another consumer who has used the word-of-mouth object, as it will be more
credible. In general, many scholars have investigated the effect of different promotional elements on consumer behaviour and their roles in establishing the firm-customer relationship (Page et al., 1996; Rajiv et al., 2002; Fruchter and Zhang, 2004). For example, Aab et al. (1995) highlight the effect of advertising and promotion in initiating and maintaining customer relationships with supplier, brand and product (Zinkhan, 2002; Pang et al., 2009). However, some scholars, such as Izquierdo et al. (2005), claimed that promotion is not greatly effective in attracting new customers or even increasing customer awareness.

To summarise, many authors have produced practical evidence suggesting that behaviour setting elements trigger behavioural responses and affect customers’ reactions in a way that stimulates the likelihood of repeat purchasing (Babin and Darden, 1995; Tai and Fung, 1997; Koernig, 2003; Greenland and McGoldrick, 2005). Thus, effective retail environments are crucial for attracting and acquiring customers in service firms because customers normally use different physical setting stimuli to evaluate and choose from among different service providers and their related offers (Greenland and McGoldrick, 2005). Accordingly, mobile suppliers periodically need to change and update the physical setting-related dimensions that affect their service climate, to diversify consumer stimuli.

2 - 5. B-2: Social setting

Within the complex behaviour situation, social contexts include any social cues indicating positive or negative stimuli that affect consumer purchase and consumption behaviour. Social cues are seen as socially discriminative stimuli that affect the social environment of behaviour (Collins and Marlatt, 1981). There are many sources of social pressure such as friends, family, neighbours, salespeople, marketers, and any individual attending a consumer purchasing situation (Foxall and Greenley, 1999; Leek et al., 2000). In addition, a consumer usually has many social memberships of other groups such as club, family, and organization. In each social group, a consumer has specific social roles and status that define his or her position and the actions and activities he or she needs to perform. Thus, social environment must be taken into consideration when studying consumer repeat purchasing likelihood, especially if a specific purchased object has gained social admiration from others.

Customer confusion is considered another important issue nowadays; this is the idea that the consumer is bombarded with a huge amount of information (stimuli) because the firm has
employed different promotional elements simultaneously (Mitchell and Papavassiliou, 1999). Accordingly, some researchers have focused on explaining the importance of social support that is gained by a consumer from different sources and mainly from close social reference groups who support his/her purchase decision and minimize his/her confusion. Leek and Chansawatkit (2006) examined the aspects of the mobile phone industry that are confusing and the sources of information that are commonly used to reduce this confusion. The authors found that handsets, services, and tariffs are the main problematic issues. In terms of reducing confusion, family and friends are the most popular sources of information because both are reliable and credible (Marquis and Dubeau, 2006).

One of the main atmospheric elements in the behaviour situation and the customer-supplier relationship is customers’ personal and social interactions with any of service firm’s personnel. In service organizations, employees’ face-to-face interactions with customers are essential (Young, 1995; Shapiro and Nieman-Gonder, 2006). Because services are intangible, some customers often rely on employees’ behaviour to form their opinions about the service offering (Shostack, 1977; Grönroos, 1983). Moreover, in some services, employees form particularly close relationships with customers because they often work together in the creation of services, in that they are produced by employees and consumed by customers simultaneously; moreover, employees actually become part of the service in the customer’s eyes (Berry, 1980; Lovelock, 1981). Accordingly, employees’ knowledge, skills, training, experience, and appearance are critical issues, especially for firms that have a high level of direct interaction with customers (Conduit and Mavondo, 2001; Bielski, 2002; Wooten and Prien, 2007). Employees regularly provide friendly assistance when dealing with customers directly from sales outlets or indirectly through customer service units or call centres (Hicks et al., 1996; Steven et al., 1996; Zapf et al., 2003; Kurniawan, 2008). Some organizations usually find it difficult to hire first-rate people and keep them trained, productive and happily employed (Russell, 2007). Well-trained employees treat customers properly and behave in a friendly manner towards them (Mersmelstein and Zid, 2005; Bowers et al., 2007). In some cases, customers have long-term relationships with a firm because they have good relations with the employees (Deadrick et al., 1997; Tellefsen and Thomas, 2005). Thus, many scholars have emphasized that fact that building social bonds with customers will enhance their retention in the long term (Frankwick et al., 2001; Evanschitzky et al., 2006; Wen-Hung et al., 2006).
How can telecommunication companies retain their loyal customers? One useful approach highlighted by many scholars is to keep current employees satisfied (Berry, 1995; Griffeth and Hom, 2001). In order to keep internal customers (employees) satisfied and win their loyalty, many researchers have discussed potential techniques to achieve this goal: providing employees with incentive programs (Slafky, 1998); focusing on employees’ training and experience (Walker, 2001; Cebrzynski, 2006); and retaining employees to retain customers (Wolson, 2000; Friday, 2004). Additional approaches found to be important include providing a service via happy employees (Popp, 2005), focusing on treating customers properly via different service support units (Parasuraman et al., 1985), and empowering customer service employees to establish strong relationships with consumers (Alonzo, 2001; Mooney, 2001).

Different social groups can clearly affect consumer choice, including family, friends and sales people (Mitchell, 1993; Teo and Pok, 2003). Salespersons represent one of the most effective influences on consumer decisions and repeat purchase behaviour. That is because they can lead customers towards a purchase by relying on their social and personal relationships with customers and by applying different follow-up techniques, such as telephoning in the post-purchase stage and redeeming customers’ complaints and claims (Gilly and Gelb, 1982; Ganesan, 1994; Sharma, 2001). In order to understand the influence of different social groups on consumer purchasing behaviour, a study has been carried out by Jiaqin et al. (2007) to investigate the different social effects on mobile phone users in the US and China. The study found that there is a statistically significant difference in the utilitarian influence between Chinese and US mobile phone users. Also, reference group influences were found to have a significant impact on consumers’ purchasing behaviour, especially the informational influences which came from peer pressures (e.g. close friends’ and family members’ recommendations).

One of the methods discussed by Anderson (2004) is to ensure that the same salesperson and service employee who have always dealt with a particular customer are assigned to that customer's account. Lings (1999) mentioned that firms need to balance between internal and external market orientations. They also need to establish a service orientation with both full-time and part-time marketers (George, 1990; Piercy, 1998). In addition, according to ‘Empowering Employees’ article, firms should give more attention to those employees who are dealing directly with the public and should sometimes empower them to establish good
customer relations (1989). Moreover, According to ‘Keeping good staff inside’ article, some firms announced a policy to recruit specific skilled people who can easily adapt to the work environment and build relationships with their immediate managers (2000), because trained employees have suitable experience of how to deal with customers and solve their claims, especially those who work in maintenance or service departments. Also, a customer tends to make repeat purchases or extends his or her relationship with a supplier when his social relationship with one or more of the employees is healthy, well-nurtured, and in some cases has a psychological bond (Patterson and Ward, 2000).

To sum up, in different marketing organizations, and specifically in service firms, employees play a central role in attracting customers, and building and strengthening relationships with them. Customers’ repeat purchasing occurs essentially as a result of employees’ genuine attention and friendly behaviour because customers appreciate prompt attention from employees who treat them properly. Thus, internal marketing benefits employees’ recruitment, training, communication, and motivation, all of which serve customer retention positively (Tansuhaj et al., 1988). According to Sellers (1990, p.63) “customer retention and employee retention feed one another”.

2 - 5. B-3: Temporal setting

Marketing management is responsible for using different types of stimuli aimed at maximizing the possibility of signalling utilities and benefits for customers within the behaviour setting. Temporal stimuli are critical in the mobile phone service sector. That is because the temporal, physical, regulatory, and social are the main dimensions that determine the behaviour setting scope which shapes the effects of external stimuli (Trillin, 1969 cited in Belk, 1975). There are many issues attached to the temporal environment which should be considered when mobile suppliers plan their service offerings, such as mobile contract longevity, the contract’s starting and ending times, temporal upgrading and termination issues, and when to introduce the mobile offers to the market.

Mobile services are used and renewed within specific temporal units based on a period of one month (Zhao and Cavusgil, 2006). The basic unit of subscription and accountability for the mobile services’ use and consumption in both a contractual and non-contractual connection is the number of airtime minutes. Temporal utilities and stimuli are categorized according to the airtime minutes in a way that suits different situations for both relationship parties. For example, a customer can buy a specific amount of airtime minutes for future usage
distributed via a predetermined schedule, such as 300 minutes each month continuing during a 12-month contract, or a more flexible amount of airtime minutes where a customer charges his or her account as required using a Pay-as-you-go subscription. Some researchers explained the role of the time utility as customer stimuli and reinforcement (Png and Reitman, 1994). The authors used two elements as stimuli to minimize the time usage of a specific service; this enabled some consumers to spend less time in a gasoline station and pay more whereas others accepted lower prices and longer queues. Customers are, on average, willing to pay about 1% more for a 6% reduction in congestion.

In regard to contract longevity, which determines the customer-supplier relationship duration, organizations usually embrace relationship marketing, focusing on maximizing customers’ lifetime value (Dibb and Meadows, 2004). Bolton (1998) developed and assessed a dynamic model to study the linkage and related effects of customers’ satisfaction and relationship duration to identify specific actions that can increase retention and profitability in the long term. This article modelled the duration of the customer’s relationship with an organization that delivers a continuous service such as utilities, financial services, and telecommunications. The lifetime revenue in this sector is determined by the customer-supplier relationship duration and the average amount a customer spent over the billing cycle. The data was collected through a time series describing cellular customers’ perceptions and behaviour over a 22-month period. The main findings are as follows: First, it is necessary to investigate users’ satisfaction prior to them cancelling or remaining loyal to a service supplier, as they can be affected positively by the relationship duration; second, the level of accumulated experience has a positive relationship with accumulated satisfaction, which is linked directly to the relationship duration; third, the length of users’ prior experience affects the strength of the relationship duration and satisfaction.

Reinartz and Kumar (2000) studied the profitability of lifelong customers in a non-contractual setting. The authors test four different propositions: First, there exists a strong, positive customer lifetime-profitability relationship; second, the costs of serving lifelong customers are lower; third, profits increase over time; fourth, lifelong customers pay higher prices. The core finding of this study is that lifelong customers are not necessarily profitable customers. Level of customer involvement, behaviour consumption, and relationship quality (satisfaction, trust, and commitment) differ over the relationship duration. Moreover, there are many benefits (e.g. revenue growth over time, cost saving over time, referral income, and
price premiums) that can be obtained from existing customers which increased within the relationship duration, as confirmed by other scholars (Reichheld, 1996; Egan, 2004). Within this context, one of the future research gaps can be defined in the following question: What is the impact of contractual relationship duration on customer retention and loyalty?

Fink et al. (2008) confirmed the idea that customer-supplier relationship duration is an important variable in explaining what drives a customer to repurchase from the same supplier. The interaction duration is translated by the contract longevity which represents the formal relationship length which suppliers should exploit to make mobile users renew their contracts simultaneously. Therefore, both relationship parties may derive great benefit from analysing the interaction’s temporal-related dimensions to enhance relationship performances. This idea is confirmed by Cannon and Homburg (2001) and Fink et al. (2008), who claimed that suppliers can enhance their performance by enhancing their customers’ commitment and performance during the mutual interaction duration.

2 - 5. B-4: Regulatory setting

Regulatory setting in the mobile phones sector has a major effect on both mobile suppliers’ functioning and consumer choice behaviour. Different wireless authorisation bodies usually regulated business-to-business and business-to-customer activities without which suppliers are not, in most cases, allowed to operate in a specific market. For example, the European Commission is the main normative body behind the expansion of mobile phone services in Europe (Gruber, 1999). The effects of mobile service regulation appear in many aspects: economy development and growth, investment requirements and operation licensing, mobile carriers competition regulations, network operations and mobile technology regulations, compliance with local and international regulations, and cooperation to organise suppliers’ relationships with other partners in the market (Mutula, 2002; Bomsel et al., 2003; Li and Xu, 2004; Varoudakis and Rossotto, 2004). Regulatory factors which affect suppliers’ behaviour also influence and control customers’ behaviour and consumption of mobile services because parts of the mobile sector regulations are prearranged to organise a mutual customer-supplier relationship in many aspects, such as contract longevity and service consumption charges. From a wider perspective, regulation provides many benefits for both relationship parties include organizing the customer-supplier relationship, providing new products/services, determining different types and levels of mobile services, cost and price regulations, safety regulations and obligations, defining contracts’ renewal and termination.
conditions, defining benefits’ types and qualities, and providing additional customer benefits such as lowering mobile service prices (Ireton, 2007; Liddle, 2007; Molony, 2007; Sutherland, 2007; Cheng, 2009). Moreover, mobile regulations are designed to protect consumers’ privacy and mobile service contents such as voice, personal, financial, and data materials when a customer uses a mobile phone for Internet shopping services (Zhu et al., 2002; Mackay and Weidlich, 2007).

Within the thesis context, the main regulatory tool in the behaviour setting that focuses on organizing the customer-supplier relationship is the mobile contract. The mobile phone contract usually defines both relationship parties’ rights and sanctions as declared in its mutual written rights and terms. A mobile contract has many terms and conditions that explain the service’s type, attributes, and circumstances of usage. These terms need to be agreed by both parties because they shape the behaviour context in different situations, such as termination and upgrading (Albon and York, 2006; Baake and Mitusch, 2009). However, the main issue for customers is that the mutual terms are imposed rather than agreed upon; in most cases they serve the supplier’s rights rather than the customer’s rights (Slawson, 1970).

The majority of the contracts’ sanctions and statements have been agreed and obligated by the mobile telecommunication organizers (e.g. Ofcom). These types of organizations are established not just to organize customer-supplier relationships also but to organize all mobile suppliers’ relationships with other partners in the market, such as Internet service providers (to organize mobile shopping) and the financial institutions (to organize mobile payment processes). That is because mobile phone suppliers by themselves cannot offer all types of mobile services, such as mobile TV services; such services are contracted with other partners (outsourcing) within the regulation umbrella to serve customers within pure competitive business activities (Ounnar et al., 2007; Loh et al., 2008). Within the regulation context, a contracted customer can renew and extend his or her relationship with the current mobile supplier formally according to the contract’s conditions and terms. A customer can renew a contract up to seventy days before it ends, as illustrated within UK mobile legislation. Contracts can be renewed on the same terms, conditions, reinforcement, and punishment or both relationship parties can agree on new ones. Based on the previous discussion of the main behaviour setting elements, the behaviour setting effect on repeat purchase behaviour can be proposed as follows:
**P 1:** A subscriber’s retention behaviour is a function of behaviour setting. Accordingly, the greater the effect of behaviour setting elements, the greater the possibility of customer retention.

**2 - 5. C: Learning history**

Repeat purchase behaviour is critical for most service firms. There are many situations where a consumer repeats similar purchase behaviour with the same provider based on the accumulated experience of direct or indirect interaction with the service firm’s employees and offerings (Andreassen and Lindestad, 1998). The accumulated experience is translated by some scholars as the consumer’s attitude towards and satisfaction with the attitude objectives, seen as the output of mutual relationship consequences (Zins, 2001). Attitude is built up based on the customer’s direct and/or indirect experienced interactions with the purchased (attitude) object of products/services and suppliers (Bredahl, 2001). Attitude response has many related issues (e.g. verbal response) which give a better understanding of customer-supplier relationship interactions and purchased object consumption process outputs resulting from such activities (Smith and Swinyard, 1983). Thus, a consumer choice is signalled and takes place at the intersection of the learning history and the behaviour setting effects when a number of apparently similar alternatives need to be evaluated (Foxall, 1999; Foxall, 2008). As a result, customer experience plays a critical role in repeat purchase behaviour, especially when a customer is satisfied with previous purchase incident and object (Wong and Sohal, 2003). A satisfied customer will have a positive attitude toward the mobile supplier and the purchased items, which will usually lead him or her not just to repeat the purchasing behaviour but also to impart a favourable impression to others (Parasuraman et al., 1985). That is because the satisfaction will motivate a customer to go through another purchase experience from the same supplier and/or brand (Bitner et al., 1990). For example, Ewing (2000) studied the future purchasing behaviour and its expectations based on past behaviour which formed the consumer’s attitude. Attitude is frequently formed as a result of direct contact with the attitude object (Engel et al., 1995). The attitudes of a consumer who purchased and consumed a product should improve the probability of future purchasing especially if that consumer has a positive attitude towards the purchased object and the same supplier (a positive relationship is established with a product and/or a supplier) (Clow et al., 2005).
From a behavioural perspective, repeat behaviour can be predicted regardless of whether a consumer engages in similar behaviour in the future, mainly by relying on his/her previous experience preference and current information relevant to the new buying task or choice (Morwitz, 1997). A mobile user evaluates different mobile options when he/she plans to renew his/her mobile contract based on his/her assessment of many drivers. The main drivers that encourage customers’ repeat purchase behaviour are the amount of benefits that will be gained after the purchase behaviour occurs and the amount of monetary value that will be sacrificed to obtain a specific amount of benefits. The accumulated experience is utilised at the intersection stage to weigh up the amount of benefits and punishment in order to choose a suitable supplier and related offer based on the consumer’s knowledge of many suppliers’ attributes, such as relationship interactions, consumption benefits and punishment, after-sales services and call centres.

Meyer and Schwager (2007) defined customer experience as “the internal and subjective response customers have to any direct or indirect contact with a company” (p.118). Both authors mentioned that direct contact is usually initiated by customers, such as purchasing, using, and consuming. Meanwhile, indirect contact represents the unplanned encounters with one of more of the company’s representations (e.g. product, service, and brand) and takes the form of word of mouth. Many authors have investigated the link between the received information and the experience accumulation (Molnar and Rockwell, 1966; Wemmerlöv, 1990; Lacity and Willcocks, 1998). Dholakia and Bagozzi (2001) and Hoyer (1984) illustrated that consumers bring their previous experience to the current purchasing behaviour situation based on the accumulated information and knowledge over time which make this situation habitual, and repeat purchasing sometimes seems to require very little cognitive effort. Also, Gursoy and Chen (2000) and Murray (1991) explained that a consumer usually searches for any product- or service-related information from two sources: internally, based on storing and retrieving information from memory, and/or externally, based on searching and collecting information from other sources such as friends or newspapers. Accumulated information usually shapes consumer knowledge and affects his or her attitude positively or negatively toward the purchased object. If previous experience is available, it becomes the main credible source of information to provide some indicators of future behavior (Metzger et al., 2003). Also, consumer information search behaviour differs from one behaviour setting to another because it relies mainly on personal factors and product factors (McColl-Kennedy and Fetter, 1999; McColl-Kennedy et al., 2009). Further, a consumer’s experience of dealing
with a specific source of information limits the perceived value and source credibility, such as the Internet (Grant et al., 2007).

Some researchers provide a clear link between experience and word of mouth that usually expresses a customer’s verbal experience. For example, Zeithaml (1981, cited in Gabbott and Hogg, 1998) suggested that there is a need for experienced information because it encourages a reliance on a word-of-mouth source that is perceived to be less biased and more credible. The stability of product category may affect consumer experience and knowledge. Consumers rely heavily on their knowledge and experience of product category and the probability of repeat purchasing increases if products are similar and their attributes are relatively stable. However, unstable products require consumers to update their knowledge and experience (Engel et al., 1995).

Some researchers have used the term ‘past behaviour’ to test and predict future behaviour. Romaniuk (2004), for example, mentioned that past behaviour is the simplest and most accurate measure of the future behaviour prediction at both brand and individual levels. Thus, past behaviour should be an integral part of any study aimed at testing the predictive accuracy of any measure. Thogersen (2002) investigated whether the behavioural influence of personal norms with regard to repeated pro-social behaviour depends on direct experience of this behaviour. The author hypothesised two things: Firstly, direct experience strengthens the influence of personal norms on behaviour; secondly, direct experience is a stronger moderator in this case than in the attitude behaviour case. Results reveal that both hypotheses are confirmed. Also, the scholars found that the outcome of consumers’ choice between organic and non-organic wine depends on their personal (moral) norms that are directed by experience after controlling for both attitudes and subjective social norms.

According to Oliver and Winer (1987), a consumer learns from his or her previous negative and positive experiences with many objectives such as supplier, product, and brand. In any new task situation, a consumer sometimes has no experience. Thus, a consumer usually concentrates more on the decision-making process to collect additional information that will help him or her evaluate different elements in the purchasing situation (e.g. risk) (Espejel et al., 2009). Also, a consumer may sometimes have positive or negative attitudes towards a specific product or service without previous experience (Meyer, 2008). That comes as a result of the direct or indirect effect of different sources such as other consumers’ feedback or a formulated promotional mix effect.
How does a consumer evaluate his relationship with a service provider based on his/her experience? A service firm focuses its marketing activities on retaining customers by satisfying their needs; it does so by gauging their value of long-term relationships in terms of customers’ expectations of the future value of exchange. Davies and Palihawadana (2006) found that relationship value between agencies and their clients is based on many factors including experiences of parties, performance attraction, beliefs about relationships, and environmental context. Accordingly, Carmon and Vosqerau (2005) presented three main findings related to customers’ experience which play important roles in repeat buying: First, customers weigh up information drawn from direct experience more heavily, controlling for content, format, vividness, and reinforcement learning; second, consumers judge immediate feelings to be more intense than equivalent past feelings due to greater accessibility for visceral arousal states; third, consumers prefer immediate broadcasts over less immediate ones. Therefore, experience does not necessarily end when a sales transaction has been conducted and customers physically leave the premises; the aftersales service offered by the store builds credibility and has a favorable influence on customer perception (Boon and Lin, 1997).

To sum up, there are many factors that affect customer experience as explained previously. Customers’ experience with the purchased, used or consumed object, and customer relational experience with the service supplier can potentially cause future repeat purchasing or switching. Experience provides many benefits that can lead a consumer to repeat his or her purchasing; it can increase the likelihood of trying out purchased objects, help in determining and increasing consumers’ expectations, increase relationship extension when a customer is not familiar with other purchased object alternatives, and increase customer propensity to report complaints of unsatisfactory purchase objects (Kim and Sullivan, 1998; Cho et al., 2002; Inman and Zeelenberg, 2002). Some scholars illustrated that those consumers’ consumption ought to be a useful indicator of repeat business prospects with respect to prior experience of positive or negative conditions (Fornell, 1992; Inman and Zeelenberg, 2002). While prior experience can affect consumer repeat purchase behaviour positively and negatively, Meyer and Schwager (2007) discussed the importance of monitoring customer experience and provided several methods for measuring and improving it. This is done by analysing past experience which focuses on capturing the recent experience and by analysing present experience which tracks current relationships. Accordingly, based on the previous
discussion, the learning history effect on repeat purchase behaviour can be proposed as follows:

**P 2:** A subscriber’s retention behaviour is a function of learning history. Accordingly, the greater the effect of positive learning history with the service provider, the greater the possibility of customer retention.

**2 - 5. D: Behaviour consequences**

To retain existing customers, firms usually use their marketing management to stimulate customers to engage in long-term relationships. Some suppliers rely on the maximization of customer equity which is seen as a core objective of customer-company retention management (Dong et al., 2007). Meanwhile, other suppliers rely on maximizing brand portfolio and leveraging the corporate brand for their customer in order to offer a valued relationship with them (Aaker, 2004). To determine the suitable levels of offerings which have a variety of customer benefits, firms need to determine the suitable levels of concessions to grant to customers when pursuing retention. Thus, it is vital to understand how customers generate benefits according to the firm’s retention efforts (Becker, 2007).

There are three types of contingent consequences in the retention behaviour situation signalled by the behaviour setting discriminative stimuli: utilitarian and informational reinforcement, and aversive consequences (Foxall, 1998). The aversive consequences have been divided by Foxall (2007) into utilitarian and informational punishment. The utilitarian reinforcement contains the tangible function or economic benefits that stem from a consumer’s decision to consume, while the informational reinforcement contains the intangible function that stems from others’ feedback (Foxall, 2005). It has been determined that reinforcement is the main distinct behaviour outcome that increases the chance of specific behaviour being repeated (Foxall, 2003).

Two main issues need to be explained at this stage: how consumers evaluate and choose the best option not just according to product and/or service utilities but also according to relationship value in the short or long term, and how firms employ the relational consequences to encourage customer repeat purchasing in a way that strengthens and extends the customer-supplier relationship.
How customers perceive value is considered one of the most important dimensions of analyzing the effect of reinforcement on consumer choice and relational behaviour. Heinonen (2004, cited in Monroe, 1990) suggested that customer-perceived value is formed from the trade-off between benefit and sacrifice. Some researchers use the term “value” as a total sum of positive reinforcement which aims to maximize different types of customer benefits (Gautam and Singh, 2008; Du, 2009). The idea behind value as a concept stems neither from offering high-quality products or services at high prices nor by offering lesser quality at very low prices. The idea is to satisfy different customer segments’ needs and wants, and treat them properly.

Marketers usually design many financial and non-financial methods to offer customers a “greater value” relationship than competitors when a purchase is repeated and when a contract is renewed. Greater value means “the right combination of product quality and good service at a fair price” (Kotler et al., 2005, p.103). A customer defines the relationship value when the benefits received and consumed from the product/service exceed the associated costs of obtaining them. Gronroos (1996) suggested further research is needed for an in-depth understanding of how customers perceive value in a relationship marketing setting on episodic and relationship levels.

A consumer should perceive the relationship value in the long run to repeat his purchase (Paul et al., 2009). Therefore, a relationship between two parties should not consist of just one or multiple separate transactions. Lovelock and Wirtz (2007, p.362) defined transaction as “an event during which an exchange of value takes place between two parties”. In separated purchase events, there is no record of purchasing or a past history database of customers. Conversely, within a relationship, both firm and customer can easily maintain purchase records and co-operate in the interchange of benefits, information, and experience. A continuous relationship is the main goal but it cannot be achieved without enduring and shared benefits and preparing the activities and procedures needed for continuations, such as contracts. Accordingly, the relationship for both parties should be financially profitable over time. However, the firm’s profitability might be greater in order to cover the cost of serving customers, which may extend beyond specific selling episode costs to encompass additional ones such as continuous communication expenses.

Service firms normally use relational consequences to maintain customer-supplier relationships. Maintaining mutual relationships is achieved by initiating different strategic
approaches such as loyalty and/or club cards. For example, do suppliers initiate membership relationships with customers and what benefits can be attained through them? A membership relationship is defined by Lovelock and Wirtz (2007, p.365) as “a formal relationship between the firm and an identifiable customer which offers special benefits to both parties”, such as loyalty programs and specific membership contracts. Gustafsson et al., (2004) found that many service firms, including the communication wireless suppliers, have used loyalty programs and club cards intensively to encourage customers’ repeat purchasing in the long term. These programs are aimed at increasing sales, guaranteeing limited flows of cash and profitability, locking in contractual and non-contractual customers over a future period of time, and stabilising the churn rate of customer switching. However, not all customers are willing to enter long-term relationships or ask for loyalty memberships. For example, in the mobile phone industry, suppliers provide different types of incentives to encourage customers to be loyal and extend their contractual agreements. When explaining the relational incentives by which a customer gains when he or she purchases additional benefit units or renews his or her mobile contract, the supplier provides additional benefits for both prepaid and post-paid subscribers including a monetary discount on renewal or additional benefits such as “Top-up” incentives whenever a customer buys additional prepaid airtime minutes. Wendlandt and Schrader (2007) investigated consumer resistance to loyalty programs. They found that contractual bonds aggravated resistance consequences, while psychological and social bonds did not increase resistance and enhanced the perception of loyalty programs’ utilities. However, economic bonds have an essential effect on customers’ perceived utility. The core outcome of the firm-consumer relationship interactions is that a customer will continue to be involved in a relationship with the supplier if he or she gains continuous care and benefits provided by either scheduled or unscheduled programs. Otherwise, a customer leaves the supplier relationship if only modest benefits can be gained from the current supplier; the probability of the customer switching to competitors is high. Consequently, both relationship parties may find more utilities and benefits outside the mutual (contractual) relationship. The next part provides an in-depth discussion of the main reinforcement components that a customer might gain when engaging in a long-term relationship with a supplier.

2 - 5. D-1: Reinforcement consequences

Understanding why a customer feels the need to be engaged in a relationship and desires a continuing one with a service provider is the core of relationship marketing. Little empirical research has been conducted to explore the relational benefits from the customer’s
perspective as part of studying customer retention benefits (Martin-Consuegra et al., 2006). The following question will provide pointers to filling this gap. What benefits does a customer obtain when committing to and renewing his or her relationship with the service provider? Customers’ benefits work as drivers or reinforcement for establishing and sustaining a relationship with a firm. Two main categories of behaviour reinforcement consequences were determined: utilitarian (utility) and informational (symbolism). Utilitarian reinforcement is described as functional benefits gained from the purchasing, ownership, usage, and consumption of products/services (Leek et al., 2000).

To explain the types of benefits that a customer gains, two in-depth interviews have been conducted by Bitner et al. (1998) to investigate the motivations and benefits a customer receives when he/she engages in a relationship with a service supplier. The first study’s outcome summarised four relational benefits: psychological, social, economic, and customisation. The second study revealed three relational benefits: social, confidence (psychological), and special treatment (economic and customisation benefits). Results expressed the idea that multi-objectives encompass relationship consequences, and benefits are necessary for relationship continuation between the two parties, especially when a customer is contracted and locked into a supplier relationship for a period of time. Based on that, a customer usually maintains his relationship with his service provider; likewise, a service provider should reciprocate by maximizing a customer’s benefits and minimizing the aversive consequences in the long term. For example, increasing customer value and delivering continuous benefits are considered part of the relationship reinforcement that affects consumers’ behaviour and engages them in a relationship with a supplier. Kotler et al. (1999) suggested three ways in which a company can deliver more value than its competitors: charge a lower price, help a customer reduce his/her other costs, and add benefits that make the offer more attractive. These methods can successfully persuade customers to make repeat purchases and renew contracts from the same service provider, as claimed by (Walters and Lancaster, 1999). The authors illustrated that suppliers are recommended to devise different plans to enhance repeat purchasing, such as establishing differences that can preserve and deliver greater value to customers than their competitors, and create a comparable value at lower cost. That is because delivering higher value allows a supplier to charge a higher price (higher average unit price) and enhance work performance and efficiency which both eventually lead to lower average unit price and cost. Moreover, Perry (1995) explained four main types of factors that need some attention from managers because they affect customer-
firm relationship maintenance in service firms (e.g. banks). First, there is environment
dynamism and complexity. Complexity means that the environment is full of interactions
described as complex in which much information needs to be analysed about products and
services in the behaviour setting, as illustrated by Aldrich (1979). Meanwhile, dynamism
means that the rate of change in the environment is relatively high, which makes it difficult to
analyse managers’ mission and predict future activities, as illustrated by Gibbs (1994).
Second, there is partners’ perception which encompasses three issues: how a consumer
perceives another partner’s investment in the shared relationship, the expertise of the bank,
and the firm’s perceived similarity to the customer. Third, there is the issue of special care for
many customers’ variables: relationship-specific investments, expertise, and social bonding
with the service firm. Finally, there is the interaction between the customer and the service
provider, which encompasses frequency of interactions, termination cost such as the time,
effort, and money required to identify an alternative firm and establish a new relationship,
performance ambiguity of the service firm’s activity, and satisfaction with past interactions
with the service firm. Moreover, Lacey (2007) studied the relationship drivers of customer
commitment and developed a model to capture many key motivations as to why customers
engage in marketing relationships. The model contended that firms should simultaneously
strive to offer economic, social and resource drivers to its customers across different
customer relationship levels. The findings highlighted the importance of service firms
blending various marketing sources to secure more committed customer relationships.

In addition, some authors studied the process by which firms provide different types of
reinforcement to intended customers to stimulate them to extend the mutual relationship. For
example, Alessio (1984) studied the continuous and intermittent reinforcement schedule. He
hypothesized that intermittent reinforcement (low predictability) is a better predictor of
cohesiveness than continuous reinforcement (high predictability). However, additional
research is needed to explain the effect of general and tailored reinforcement that is provided
to different customer segments. In addition, Kahn et al. (1986) studied the process of
measuring variety-seeking and reinforcement behaviours by using panel data of 16 brands in
five separate product categories. The authors differentiated between two types of behaviour.
The first is variety-seeking behaviour, which is characterized by a reduction in the repeat
purchase probability. The probability of purchasing brand 1, given that brand 1 was
purchased on the last purchasing occasion, is lower than the probability of purchasing brand
1 in the absence of any variety-seeking or reinforcement behaviour. The second is short-term
behaviour which increases the repeat purchase probability. The purchasing of brand 1 on the previous purchase occasion reinforces and hence increases the probability of purchasing brand 1 in the present time period.

What types of reinforcement are used by suppliers to influence consumer retention behaviour? Few researchers have examined the benefits a customer receives as a result of engaging in long-term relational exchanges with a service firm. In the mobile phone sector, mobile suppliers provide a mix of products and services to attract and satisfy different customer segments. On monthly bases, the main elements on offer are: a specific number of airtime minutes, a specific number of text messages, a specific number of Skype minutes, free or discounted weekend and/or evening calls, free mobile handsets, a variety of handset features and accessories, a variety of handset types and brands, mobile broadband services, voicemail services, and free gifts in some cases. Also, some suppliers offer many additional benefits such as stop-the-clock service, online or printed itemised bills, group calling discount, and the possibility of using the allowance of airtime minutes to make international calls. These benefits work as reinforcement encompassing different utilitarian attributes that affect consumer behaviour in the contractual retention context. It should be borne in mind that mobile benefits have been rather ephemeral. Mobile offers change continuously, from one offer to another and from one time to another (Townsend, 2000). Also, mobile suppliers usually play within a wide range of products and/or services and their related attributes, specifications, and quality in order to design different prepaid and post-paid mobile offers to satisfy different target customers. For example, Wray et al. (1994) illustrated that providing a high level of product or service quality and delivering them via a mutual relationship becomes an important means not just of retaining existing customers but also gaining a competitive advantage (Wray et al., 1994). In the contract renewal situation, the mobile supplier or the mobile users usually contact each other up to seventy days before the contract finishes to negotiate the renewal circumstances and agree on what benefits should be gained if the user plans to accept another contractual period.

A mutual relationship provides many benefits for both relational parties. These benefits rely on the amount of effort exerted by both parties in contributing to the relationship as much as they can. Some scholars investigated the relationship efforts introduced by the supplier side (e.g. firm, retailer, wholesalers, marketers) but few studies have been conducted to investigate the relationship efforts exerted by the customer (Duffy, 2005; Liang and Wang,
Berry and Parasuraman (1991) differentiate between three ways in which retailers stimulate consumer behaviour loyalty. Firstly, financial bonding and benefits stimulate consumption behaviour and motivate retention by using many price dimensions (e.g. price discounts). The financial bonds and benefits are somewhat similar to functional bonds that provide utilitarian benefits as illustrated by some researchers (Smith, 1998; Oliveira-Castro Jorge et al., 2005). Secondly, there is social bonding and benefits (e.g. personal ties and shared social linkages between the buyer and the seller), by which a consumer requires private or special treatment, and empathy. Thirdly, structural bonds and benefits relate to the structure and administration norms in a relationship. Organizational policies and systems can provide more benefits, such as a clear and customised invoicing system which can enhance customers’ credibility and convenience in repeat purchasing occasions. Customers’ long-term benefits do not arise by chance. Suppliers’ diversified benefits arise in many ways: learning from customers, building customer retention, reducing market uncertainty (Maklan et al., 2005), acquiring new customers, and increasing brand equity (Eechambadi, 2005). Also, Gómez et al. (2006) analysed retailers’ customers in order to investigate the role played by loyalty programs in the development of both behavioural and affective loyalty. The authors mentioned that firms should establish strategies to retain loyal customers and to bridge the reinforcement of affective bonds linking the customer to the retailer. Also, Kivetz and Strahilevitz (2001) pointed out that marketers tend to rely heavily on utilitarian incentives more often than on hedonic incentives when selecting a reward for sales promotion. The author mentioned that the effectiveness of reinforcement comes from the utilitarian and hedonic nature of the benefits delivered, and the marketing management should link these incentives with the offered products and tasks to help decision-makers with their retention choices. This is in line with Staniskis and Stasiskiene’s (2006) finding that many companies are increasingly interested in the application of economic incentives at least as supplements or reinforcement of environmental standards, in some cases, to enhance customer purchasing repetition. Based on the previous discussion, the utilitarian reinforcement effect on repeat purchase behaviour can be proposed as follows:

**P 3:** A subscriber’s retention behaviour is a function of utilitarian reinforcement. Accordingly, the greater the amount of utilitarian reinforcement received by the customer, the greater the possibility of customer retention.

From an informational reinforcement (IR) perspective, many studies have highlighted the importance of indirect positive informational incentives and utilities that a customer may
receive during mobile phone products/services consumption, such as emotional attachments, admiration, and positive feedback received mainly from the social surroundings arising from the relationship with a supplier (Ilgen et al., 1979; Ilies et al., 2007). Foxall (2007) mentioned that informational reinforcement is symbolic, usually mediated by the responsive actions of others, and closely related to exchange value. It results from many dimensions such as social status and prestige, and arrives as feedback and recommendations from others. The informational reinforcement plays an essential role in repeat purchase behaviour or even decisions to renew mobile contracts with the same suppliers. To illustrate this element, there are many informational reinforcements that customers are willing to gain, either from using mobile phone products and services or from other social surroundings such as family or suppliers’ employees. Such customer benefits are diverse: special treatment and care, establishing social bonds through conversational use of the mobile, improving social relationships and interactions with others, feeling safe and secure, gaining pleasure and entertainment, enhanced confidence, admiration, social status, and expressing self-esteem (Parasuraman et al., 1991; Gibbs, 1994; Bitner et al., 1998; Reynolds and Beatty, 1999; Reynolds and Beatty, 1999; Leung and Wei, 2000; Thang and Tan, 2003; Cheok et al., 2004; Counts, 2007).

One of the main benefits to the customer is conceptualized by Barnes (2001) as the ‘emotional investment’. This is considered the core of establishing and maintaining suppliers’ relationships with customers. Emotional investment precipitates additional benefits beyond incremental purchases, including referrals, word-of-mouth recommendations and increased likelihood of recovery from failures. Also, recommendations from other consumers are essential as they support consumers’ decisions and confer more symbolic values such as confidence and admiration (Zhou and Hui, 2003). Mattila (2005) investigated the relationship between customer satisfaction and intention to recommend mobile internet services. Findings denoted that the level of satisfaction after using mobile internet services affects the intention to encourage the use of these services and willingness to recommend them to other users.

Moreover, Ilies et al. (2007) studied individuals’ differential affective reactions to negative and positive feedback. This study has two concerns: First, how performance’s feedback positively and negatively influences individuals across a different feedback range; second, whether self-esteem moderates individuals’ affective reactions to feedback. Results mainly indicated that behaviour and implementation feedback did influence both negative and
positive affect within an individual’s performance. Put another way, progress toward a goal is influenced by positive feedback which causes a positive mood while lack of progress is influenced by negative feedback affect which causes a negative mood. Also, Foxall (1998a) differentiated between two types of available reinforcement as functionally distinctive within an actual behaviour context. Contingency-derived reinforcement shapes the behaviour that is derived directly from its environment. Contingency-derived reinforcement contains both primary and secondary elements: the primary reinforcement is associated with pleasurable effects while secondary reinforcement, such as food, usually has utilitarian effects. However, rule-derived reinforcements are social or verbal and their effect is the virtue of being specified in rules and mediated by others (e.g. the social group rule that money is a measure of individual prestige or as a medium of exchange). Within the same context, Leek et al. (2000) provided a clear description of informational reinforcement which is derived from product and/or service consumption and performance’s feedback. Based on the BPM, the model can provide an explanation of the effect of informational reinforcement on repurchasing decisions from the current mobile supplier based on positive responses and feedback (symbolism utility) gained from either the informational contingent of suppliers’ relational reinforcement consequences or from other social members’ positive informational treatments and recommendations during the consumption and usage of mobile products and services. Based on the previous discussion, the informational reinforcement effect on repeat purchase behaviour can be proposed as follows:

**P 4:** A subscriber’s retention behaviour is a function of informational reinforcement. Accordingly, the greater the amount of informational reinforcement received by the customer, the greater the possibility of customer retention.

**2 - 5. D-2: Punishment consequences**

One of the main behaviour consequences of purchase and consumption of mobile offers which has a combination of products and/or services is the ‘aversive outcome’ or ‘punishment’. Foxall (1998) placed aversive outcomes into two main categories: utilitarian punishment and informational punishment. Utilitarian punishment can be described as all tangible and direct or indirect negative functions of using and consuming mobile offers, such as the monthly contract cost, while informational punishment can be described as all the intangible and direct or indirect negative functions of using and consuming mobile offers in the form of negative feedback, such as regret (Ratchford, 1982; Foxall, 2005).
From the behavioural perspective, the prediction of a consumer’s choice relies mainly on the probability of reducing the aversive consequences and increasing the positive consequences resulting from the aggregate patterns of repetitive choice (Foxall, 1998). Thus, it has been determined that punishment is the main distinct behaviour outcome that reduces the chance of specific behaviour being repeated (Foxall, 2003). Based on that, firms need to focus their marketing activities to increase the probability of current consumers making repeat purchases and renewing their contracts by minimizing the aversive consequences and increasing the reinforcement consequences. This is because, in today’s competitive environment, losing customers is the main concern of service firms because no firm can afford to lose sales through losing current customers; this means lost business and profits (Keiser, 1988; Stuart, 2004). Therefore, to understand the aversive outcomes of being engaged in one relationship instead of another, it is important to investigate some of the direct or indirect mobile services-related punishments such as costs (relationship cost - e.g. monthly contract cost or total contract cost during the consumption), relationship termination cost (which is known as switching cost as a part of the barriers to switching), monetary deposit required if applicable, relationship upgrading cost, and customer’s time and effort spent searching for another mobile offer.

There are many types of aversive outcomes resulting from involvement in a relationship with one of the service firms in the long term. Grönroos (1992) differentiated between three types of relationship cost: direct, indirect, and psychological costs. Based on cost classification, it is easy to determine direct cost which focuses on maintaining and terminating a relationship (e.g. the mobile handset cost as a separate item, or the total contract cost). However, determining the indirect relational cost is not an easy task; it has different facets, such as customer’s time and efforts spent searching and evaluating various mobile suppliers and their related mobile offers (Lee et al., 2006). On the same theme, the psychological relationship cost is also hard to determine and evaluate; it is described by Ravald and Grönroos (1996) as the cognitive effort needed to worry whether a supplier will fulfil his commitment or not.

Relationship cost (mobile subscription cost) is the main direct punishment that a customer is willing to pay each month to use specific types and levels of mobile services. Selection of one of the different suppliers’ mobile offers relies mainly on the amount of monetary value that a customer plans to pay. Usually, a customer determines to spend a specific amount of money each month on a mobile service with regard to many other factors such as income,
types of service needed (such as the Internet), and the approximate number of airtime minutes and text messages needed each month. Also, relationship termination cost is considered one of the categorised aversive consequences that may occur when a contracted customer plans to switch from his or her mobile supplier to another; there are many possible reasons for switching, such as having a conflict with the current mobile operator, getting a better mobile offer before the current contract finishes, and when transferring the service subscription with the current mobile supplier from a post-paid to a prepaid service. In the relationship termination situation, a supplier is not just losing a transactional sale or the income stream from the customer who is switching; the supplier might also be losing the friendship of the customer and their family or experiencing negative word of mouth.

The reasons behind switching behaviour and the causes of the ending of relationships between customers and suppliers have been investigated by many scholars (Aydin and Ozer, 2000; Xavier and Ypsilanti, 2008). Keaveney (1995), for example, identified eight causes of switching behaviour in service industries: core service failures, price, inadequate employee responses to service failure, inconvenience, involuntary factors, ethical problems, competitive issues and service encounter failures. Also, Stewart (1998) studied the phenomenon of customer exit behaviour. The scholar determined many reasons for relationship termination including quality decline and alternatives being available to the customer who also perceives them to be different and better. Moreover, Matheis (2007) studied the phenomenon of creating and sustaining customer relationships. Findings illustrated that consumers terminate their relationship with a supplier for many reasons including high prices, poor service, poor product quality, and the firm’s failure to deliver on its promises. In addition, according to Desouza (1992), switching has many causes. To illustrate this, he divided defecting customers into six categories: Firstly, price defectors - those customers who switch to a low-priced competitor; secondly, product defectors - those customers who switch to a competitor that offers a superior product; thirdly, service defectors - those customers who leave, because of poor service, to find a better service; fourthly, market defectors - those customers who leave but do not go to a competitor; fifthly, technological defectors - those customers who have converted from using one technology to another from outside the industry; and finally, organizational defectors - those customers who are lost to competitors.

The main punishment element that a supplier might face is losing its customers to rivals. In the mobile phone sector, the probability of switching is high in relation to other sectors and is
estimated at more than 30% per year (Seo et al., 2008). Determining the causes of switching is important in determining the service failure’s facets, which may help in reducing the defection rate. Reichheld et al. (1990) studied the customer defection rate and provided the concept of “zero deflections” which means keeping every customer they can profitably serve. The authors mentioned that reducing the defection rate by just 5% generates 85% more profits in one bank’s branch system, 50% more in an insurance brokerage, and 30% more in an auto-service chain. To reduce the defection rate, the majority of suppliers normally use a number of switching barriers to deter contractual customers from switching. The main exit barrier that has been investigated is the cost of switching. Switching cost is not a new phenomenon in relationship marketing and customer retention studies. However, tackling this matter from the customer-supplier contractual relationship angle is not so common. In the mobile phone sector, there are many costs attached to switching suppliers. Mobile contract price (cost) is the main element that a customer sacrifices to obtain such a relationship. When a customer terminates his/her mobile contract for any reason, there is an obligatory cost. This cost includes many additional elements: paying the market price for the handset and all other accessories if available, paying all monthly instalments until the last day of the contract, paying the cost of unlocking the handset, and all other costs clearly mentioned in the contract termination conditions. Thus, losing customers to other mobile suppliers when a contract is finished, as a result of contract-derived rules, especially at the end of first contractual round, tends to worry operators’ executives. That is because switching antecedents pertaining to utility maximization (moving for a better offer) and expectation disconfirmation (usually service failures) confirm previous research findings (Lees et al., 2007).

Some researchers differentiate between switching costs and switching barriers. According to Pels (1999), Tsiros (2009), and Mittal and Kamakura (2001), exit barriers that relating to specific situational aspects can be described as exchange structures that result in difficulty for customers who wish to cancel the mutual exchange relationship. In addition, some authors differentiate between positive and negative switching barriers. For example, Egan (2001) argued that some switching barriers are perceived as acceptable by the customer (e.g. searching costs) and they may naturally occur in any relationship. Nevertheless, other barriers are perceived as coercive (e.g. financial switching costs) and the customer feels locked into the relationship when he or she perceives negative consequences from such a provider. Jones et al. (2007) studied the positive and negative effects of different types of switching costs (e.g. procedural, social, and lost benefits) on relational outcomes. One of the main findings
was that the social switching costs and lost benefits costs appear to bolster affective commitment, which subsequently decreases negative WOM and increases positive emotions and repurchase intentions. Further, the authors found that procedural switching costs appear to bolster calculative commitment but also increase negative emotions and negative WOM. Accordingly, exit barriers are seen as part of the aversive relational consequences that exist, which seem to be less common in consumer markets than business markets (Dwyer et al., 1987). Furthermore, Patterson and Smith (2003) studied switching barriers and propensity to stay with service providers across different cultures - Australia (Western, individualistic culture) and Thailand (Eastern, collectivist culture) - within three main service types. Six potential switching barriers are examined: search costs, loss of social bonds, setup costs, functional risk, attractiveness of alternatives, and loss of special treatment benefits. Results showed that switching costs capture a substantial amount of the explained variance in the dependent variable which is the propensity to stay with a focal service provider. Based on that, switching barriers and costs appeared to be universal across Eastern and Western cultures and further research may be needed to investigate this issue.

On the other hand, switching cost is conceptualized by Porter (1980, cited in Vazquez-Carrasco and Foxall, 2006, p.368) as “the perception of the magnitude of the incremental costs required to terminate a relationship and sector an alternative”. According to Sengupta and Krapfe (1997), switching costs encompass the psychological, social, and economic costs a customer incurs when changing a supplier. In some cases, switching costs serve suppliers in many aspects. According to Bansal et al., (2004) and Jones et al., (2007), switching costs are increasingly recognized as a means of keeping customers in relationships regardless of their satisfaction with the service providers. Although some customers are dissatisfied with their contractual relationship, high switching costs and penalties deter them from terminating their contracts. Moreover, one of the direct utility punishments that a mobile user may face is the upgrading cost of the mobile contract and the amount of monetary deposit required. Upgrading sometimes occurs before the end of the contract, such as when a mobile user plans to change his/her subscription category by adding more mobile services or when a mobile user plans to buy a new version or brand of mobile handset. Also, some operators used to ask for a monetary deposit from customers for using specific mobile services such as mobile phone banking or using different mobile payment methods (Hughes and Lonie, 2007; Torres, 2009).
Burnham et al. (2003) examined the antecedents and consequences of switching costs and differentiated between three types of cost: First, procedural switching cost which mainly involves the loss of time and effort; second, financial switching cost which involves the loss of financially quantifiable resources; third, relational switching cost which involves psychological or emotional discomfort due to the loss of identity and breaking of bonds. Thus, customers’ time and effort spent searching for a new mobile offer are considered an additional punishment that a switcher faces. This view is confirmed by Keaveney (1995) who mentioned other costs that a customer incurs when switching suppliers, such as time and effort associated with changing the current service provider and finding another one. Sometimes a consumer depends on his or her relationship to minimize the risk of time loss when he or she feels that a purchase will take too long or waste too much time (Pope et al., 1999). In some cases, time and effort punishment-related elements have a significant influence on consumers’ intention to stay with their existing service provider. Thus, firms should increase customers’ awareness regarding different utilitarian punishment-related elements (e.g. termination cost) in order to lock them into a relationship (Farrell and Klemperer, 2004). Based on the previous discussion, the utilitarian punishment effect on repeat purchase behaviour can be proposed as follows:

**P 5:** A subscriber’s retention behaviour is a function of utilitarian punishment. Accordingly, the smaller the amount of utilitarian punishment compensated by the customer, the greater the possibility of customer retention.

Firms are concerned about what consumers think of them and their products, especially when complaints of unpleasant experience occur (Clark et al., 1992) or dissatisfaction is felt (Bearden and Teel, 1983). This is because there are many types of informational punishment harm that can befall both customers and firms directly or indirectly resulting from product/service use and consumption, such as negative customer feedback and unfavourable word of mouth. Informational punishment is described as indirect negative feedback that firms receive regarding their offerings of products/services. Informational punishment, according to Oliveira-Castro et al., (2008), occurs when people do not approve of what consumers purchased and consumed because they find it unpleasing.

Why is informational punishment important in the mobile phone sector? A mobile phone service is considered one of the personal services where consumers evaluate, choose, and seek feedback from others with care (Sharples, 2000). When a consumer receives unpleasant feedback from others regarding a mobile phone service, switching behaviour rather than
retention behaviour may occur, especially if the feedback is unfair. Firms should deal carefully and immediately with consumers’ informational punishment (e.g. complaints) to minimize the chances of any possible negative behaviour that may occur accordingly, such as bad-mouthing, boycotts, complaints to a third party, and switching to a rival supplier (Singh, 1990; Mattila and Wirtz, 2004).

In order to understand consumer repeat purchasing behaviour, some researchers have discussed a number of retention-related concepts that affect consumer behaviour and supplier selection such as feedback, risk, uncertainty, conflict, defection, complaints, low authority in contract design, and poor protection of customers’ financial and personal data. These issues are considered among the main factors that affect relational repeat behaviour. The main source of informational punishment that affects a customer’s behaviour is the risk of repeating the same behaviour, especially if he or she has experienced negative consequences. Risk has been studied in relation to such consumer behaviour constructs from many angles, such as price risk and customer retention (Matheis, 2007), risk in mobile internet shopping (Monsuwé et al., 2004; Yang and Zhang, 2009), the role of perceived risk in the quality-value relationship (Sweeney et al., 1999), relationship risk in business markets (Ryals and Knox, 2007), and risk from internet shopping behaviour (Amit et al., 2000). Risk has received attention from both scholars and practitioners because it can be conceived in terms of the uncertainty and consequences associated with a consumer’s actions (Mitchell, 1999). Other research has shown that perceived risk consists of multidimensional parts, including physical risk, financial risk, psychological risk, functional risk, social risk, and time loss risk (Jacoby and Kaplan, 1972). Moreover, perceived risk in some cases is measured as a multidimensional construct including financial loss, physical loss, psychological loss, performance risk, time loss, and social risk (Roselius, 1971). Furthermore, Lovelock et al. (1999) differentiated between seven types of perceived risk in purchasing services: functional risk (unsatisfactory performance outcomes), financial risk (monetary loss and/or unexpected costs), temporal risk (wasting time and/or consequences of delays), physical risk (personal injury or damage to possessions), psychological risk (personal fears and emotions), social risk (how others think and react), and sensory risk (unwanted impacts on any of the five senses).

Mobile users’ informational punishment comes from different facets, such as the uncertainty in using mobile phones for online shopping where customers doubt whether handsets can be
used to execute many of purchasing activities. Also, customers usually face other informational punishment, such as poor protection of financial and personal data (Brown et al., 2003). This is because mobile suppliers normally share both personal and financial data with other partners such as banks or insurance firms in order to fulfil customers’ basic needs such as buying train tickets or choosing gifts (Birch, 1999). Also, a customer may face a credit assessment before signing a contract. A perceived informational punishment is considered one of the main evaluation steps that affect consumer behaviour and it might reflect some negative consequences, preventing repeat purchasing behaviour. Therefore, prior to, during, and after purchase, a consumer evaluates his or her purchase activities to decide whether he or she can achieve satisfaction from the purchased object and from his or her relationship with the service firm. During the decision process, a consumer frequently faces many issues that affect his/her choice, such as brand name, manufacturer reputation, quality, price, and expected benefits. Iyengar et al., (2007) mentioned that, in many services (e.g. the wireless service industry), consumers choose a service plan according to their expected consumption of benefits which they plan to obtain. In such situations, consumers experience two forms of uncertainty. First, a subscriber may not be fully aware of the quality of his or her mobile operator, and his or her experience is increased after signing the first contract and repeating the purchase. Second, consumers may not know exactly how many minutes they are likely to use and they estimate their usage properly after discovering their actual airtime consumption. The main finding of this research mentioned that there is a change in the retention rate - with and without customer learning - which minimizes the uncertainty level.

Additionally, Macintosh (2002) provided the role of perceived utilities and punishment within a model of antecedents and consequences of perceived value in a retail setting by studying an electrical appliances customer sample. One of the main findings was that perceived value for money is found to be a significant mediator of perceived quality, price and risk, and willingness to buy. Also, it was not only the perceived quality of product and services that led to perceived value for money in a service encounter; the reduced quality of components constituted a variety of punishment elements. Accordingly, this thesis has two main links with the utility theory which explained that consumer behaviour must be recognized within its utilitarian/economic benefits that settle for more value (Foxall, 2007). The first link depicted that the utility-economic relationship should be evaluated in order to minimize both financial and non-financial risks that might come from paying more for a contract than was necessary or not getting the expected value for the money spent (Roehl and
Fesenmaier, 1992). The second link to the utility theory is concerned with providing a variety of behaviour outcomes such as those related to social status and expressed self-esteem. Positive social outcomes resulted from the reduction of the social risk which is concerned with a service user’s ego and from the positive influence of reference groups’ opinions (Pope et al., 1999).

Humphrey (2004) studied the feedback-conditional regret theory and testing regret-aversion in risky choice. The author defined regret as “an aversive emotion experienced upon the discovery that, had a different choice been made, a higher level of utility would have obtained than actually did” (p.839). The results showed that determining a high level of repeat purchasing from the same supplier (when re-contracting or regarding a post-purchase decision) is based on the amount of informational punishment discovered through the previous act or decision and the new chosen option determinants. The more successful a customer is in determining any informational punishment-related issues (e.g. risk or negative feedback) in the first stage, the more he or she will minimize the level of punishment (e.g. regret) in the second-stage decision. Accordingly, in the re-contracting situation, a customer’s level of perceived risk should be minimized according to many factors encompassing the accumulated knowledge of contractual experience through dealing with the same and/or other service provider(s), being knowledgeable about other types of services when dealing with the current service provider, knowing more about the usual service failures the customer used to face, and being aware of the main service industry claims which are more generally known by customers.

One of the main issues at this stage is to explain how customers reduce the level of informational punishment that may occur prior to, during and after a behaviour has taken place, especially when renewing the contractual relationship. In order to minimize aversive outcomes regarding initial or repeat purchasing which are associated with the customer-firm relationship in the mobile industry, marketing management uses 4ps or 7ps to enhance customer familiarity, deliver high-quality information, and provide attractive rewards (Siau and Shen, 2003). Also, some types of informational punishment are reduced by increasing customer knowledge which comes with repeat exposure to and increased familiarity with the service providers and their related offers (Coulter and Coulter, 2002; Coulter and Coulter, 2002). Additionally, the author mentioned that the more encounters the consumer has with his or her service providers, the more accumulated information about the service provider and
about a specific service industry he or she will gain. However, some informational punishment-related issues (e.g. uncomfortable feelings, risk or negative feedback sensitivity) that are associated with switching costs increase as a result of a long-term relationship (Keaveney, 1995). For example, Lovelock (1999) pointed out a variety of methods to reduce uncomfortable feelings when purchasing a service: looking for guarantees and warranties, relying on the reputation of the firm, seeking information from respected personal sources (e.g. friends), looking for opportunities to try the service before purchasing, examining tangible cues or other physical evidence, and using the Internet to compare service offerings. Lovelock’s previous methods were used to reduce not only the functional risk (referred to as performance or quality risk), which is based on the belief that a product will not perform as expected or will not provide the benefits needed, but also customers’ negative feedback received from others by searching for friends’ experience or other individuals’ experience (Su, 2003).

Moreover, additional related aversive consequences that affect customer retention need to be explained, such as uncertainty and complaints. On the one hand, uncertainty is considered one of the main factors that affect a consumer’s choice of service firm, especially during the pre-purchase stage or when a customer is planning to enter into a long-term contractual relationship. Urbany et al. (1989) studied buyer pre-purchase uncertainty and information search. The authors differentiated between two general types of uncertainty: knowledge uncertainty (uncertainty regarding information about alternatives) and choice uncertainty (uncertainty about which alternative to choose). Results found that choice uncertainty appeared to increase information search but knowledge uncertainty had a weaker effect on information search. On the other hand, some customers usually send their complaints and claims to their service suppliers when they receive negative feedback on products and services, especially when they have long-term contracts. Complaints represent one of the unpleasant side effects of doing business in the contractual behaviour setting. Organizations need to identify, collect, and analyse problems or unpleasant situations that cause customer defection. McGovern et al. (2007) claimed that some systematic problems which cause customer defection can be solved by product or service redesign. Reichheld et al. (1990) claimed that, when a company lowers its defection rate, the average customer relationship lasts longer and profits climb steeply. Reichheld and his colleagues provided an empirical example about the importance of dealing with customer defection in one of the credit card companies (MBNA America, a Delaware-based credit card company). There were two main
findings. First, a 5% improvement in defection rates increases its average customer value by more than 125%. Second, when the credit card company cuts its defection rate from 20% to 10%, the average lifespan of its relationship with a customer doubles from five years to ten and the value of that customer more than doubles - jumping from $134 to $300. Meanwhile, Bielski (2002) discussed an important area of unpleasant situations (e.g. conflicts) resolution: improving personnel skills in many aspects (e.g. employee selection, recruitment, training, performance evaluation, and employee retention, especially in both front and back offices) to cut down on errors and make customers happy. Further, Eshghi et al. (2007) provided another way to minimize unpleasant occurrences in firm-customer relationships and the tendency to switch wireless service providers: providing better offers and improving customer satisfaction in order to minimize customer defection. By minimizing customers’ informational punishment-related issues such as negative feedback, risk and uncertainty, organizations can make a major shift in their resources to customer retention through improved service, enhanced business performance, and being closer to the customers, all of which lead to savings in expensive customer acquisition campaigns (Foss and Stone, 2001; Eshghi et al., 2007).

To sum up, in customer retention issues, when the goal is to increase business with existing customers, firms need to consider how to offer better value for money expenditure in order to gain a competitive advantage (Ulaga and Chacour, 2001; Stump et al., 2002). In turn, this cannot happen without further investigation of different informational punishment-related issues which may occur prior to and/or during products/services consumption. That is because symbolic consumption suggested that consumers buy supplier offerings not only to utilize the functional utilities but also to symbolise the purchased object and related elements (e.g. colour, size, product type and brand name) with their self-concepts (Patterson and Hogg, 2004). Based on the previous discussion, the informational punishment effect on repeat purchase behaviour can be proposed as follows:

**P 6:** A subscriber’s retention behaviour is a function of informational punishment. Accordingly, the smaller the amount of informational punishment received by the customer, the greater the possibility of customer retention.

The following section summarises the main propositions that have been developed based on the BPM application in studying the customer retention phenomenon.
2 - 6: Study propositions

The BPM is used to explain consumer choice of contract renewal as a basic analytical approach to behaviour. In view of this, customer retention analysis is about how individuals respond to stimuli and reinforcement. Customer retention investigation relies on the description of the customer-supplier relationship strength which is seen as “the extent, degree or magnitude of relationship” (Bove and Johnson, 2000, p.492). Thus, a customer will choose the highest magnitude option of informational and reinforcement utilities offered by a mobile supplier in the retention situation based on his/her learning history and setting stimuli (Foxall et al., 2004).

The magnitude of relationship is described by the BPM consequences’ elements as encompassing both utilitarian and informational reinforcement that will be gained by a customer when his or her purchase has taken place, attached to the utilitarian and informational punishment that he/she will compensate during the use and consumption of the utility agreed between the two parties. The contract is design to formalise the two parties’ way of interacting in which the customer and supplier relationship parties’ rights, utilities, and punishment are defined and protected by law. Accordingly, to use the BPM as the main study framework for explaining and analysing consumer repeat purchasing behaviour as shown in Figure 2 - 10, six propositions have been designed with respect to many scholars’ views (Ferrell and Gresham, 1985; Radenhausen and Anker, 1988; Anshel, 1998) as follows:

![Figure 2 - 10: The Behavioural Perspective Model of consumer retention - Foxall (2007)](image_url)
1. A subscriber’s retention behaviour is a function of behaviour setting. Accordingly, the greater the effect of behaviour setting elements, the greater the possibility of customer retention.

2. A subscriber’s retention behaviour is a function of learning history. Accordingly, the greater the effect of positive learning history with the service provider, the greater the possibility of customer retention.

3. A subscriber’s retention behaviour is a function of utilitarian reinforcement. Accordingly, the greater the amount of utilitarian reinforcement received by the customer, the greater the possibility of customer retention.

4. A subscriber’s retention behaviour is a function of informational reinforcement. Accordingly, the greater the amount of informational reinforcement received by the customer, the greater the possibility of customer retention.

5. A subscriber’s retention behaviour is a function of utilitarian punishment. Accordingly, the smaller the amount of utilitarian punishment compensated by the customer, the greater the possibility of customer retention.

6. A subscriber’s retention behaviour is a function of informational punishment. Accordingly, the smaller the amount of informational punishment received by the customer, the greater the possibility of customer retention.

**Summary**

Customer retention is increasingly important for all businesses and is seen as one of the main relationship marketing and management issues (Ahmad and Buttle, 2002; Yunus, 2009). Before providing any theoretical and/or empirical insight, evaluation or solutions to it, there is a need to take in the theoretical and conceptual aspects of the customer retention phenomenon by aggregating the previous practical and empirical studies that have extensively discussed the research problem, before starting the empirical stage (Ahmad and Buttle, 2002). Thus, this chapter provides an overview of previous studies which targeted the customer retention phenomenon in the mobile phone sector from different perspectives. This chapter is divided into six main sections. The first section discusses how researchers have studied customer retention supported by the main previous studies that investigated customer retention drivers in section two. Section three discusses customer retention behaviour as behaviourists view it, supported by a brief overview of the theoretical background of learning theories and their links with operant behaviour philosophy, ending with an explanation of behaviour intention from a contextual perspective. The fourth section presents the BPM conceptual framework in more detail, supplemented by a separate, in-depth exploration of its primary components. The fifth section discusses the application of the BPM in the mobile
phones sector in a trial, to provide a clear interpretation of how behaviour retention occurs at an individual level of analysis. Finally, the chapter ends with a summary of the main study propositions to be investigated in a simple and comprehensible way.

The following chapter will discuss the research design and methodology as well as the main data collection methods which will be used to collect mobile users’ data from a sample of UK mobile customers and managers; these data will be used in the empirical chapter at a later stage. The methodology chapter will discuss different data collection methods in depth, supported by the initial data analysis and evaluation of the pilot study stage.
Chapter Three: Research design and methodology
Introduction

This study targets customers’ long-term relationships with suppliers and tries to draw a complete picture of customer retention in service firms. The previous chapter gave an overview of the customer retention literature, which was divided into three main parts. Part one gave an idea of how a customer interacts with his/her environment; it outlined the pre-behaviour stimuli and post-behaviour consequences by employing the BPM theoretical framework, supported by an examination of each component of that framework in depth. Part two addressed the process of applying the BPM conceptual framework in the mobile phones sector in order to explain customer choice drivers and their effect on retention behaviour within environmental psychology and consumer behaviour analysis literature. The third part summarised the main study propositions which interpret determinants of customer retention theoretically by measuring them empirically. To achieve this aim, a rigorous and systematic methodology is needed to comprehend how to collect essential data from customers. This chapter provides an overview of the research methodology which employed different data collection instruments to test the study propositions and solve the research problems empirically. The research methodology approach described four data collection instruments: mobile contracts content analysis, mobile subscriber focus groups, mobile suppliers’ managers’ interviews and mobile users’ survey. Descriptions include methods’ administration, purpose, and nature, and are supported by proper justifications.

Data collection began by analysing mobile phone contracts, which represent the formal bridge for the mutual customer-supplier relationship. The process of employing a contract content analysis technique to elicit essential customer data is discussed thoroughly. After that, initial customer data were collected by conducting focus group sessions with mobile phone users and by conducting interviews with suppliers’ managers. Afterwards, the chapter discusses how the study factors were defined and employed to design the survey instrument which was used to collect mobile users’ retention data. The processes of designing, testing, and assessing the survey instrument and its factors will be illuminated through the pilot study stage. Additional explanations about population size, sample size, scale design, and related ethical considerations will be provided.
3 - 1: Behaviourists’ view of data collection methodology

Identification of the research gap and proposed objectives has been discussed in detail in chapter one; the aim is to give a suitable interpretation of customer retention from a behavioural perspective. The research question usually determines the methodological approach and data collection techniques which have been employed within specific philosophical theoretical backgrounds (Sim and Wright, 2000). It has been claimed by Silverman (1993) that there is no true or false methodology but only more or less useful ones.

In social science, scholars sometimes have doubts when choosing between positivist or interpretivist paradigms. Positivism represents the idea that the social world exists externally, and any issue related to it should be measured through objective techniques, rather than being inferred through reflection, sensation, and intuition (Easterby-Smith et al., 2002). Accordingly, ontological assumption comes to mean the nature of reality which is objective and external (Hudson and Ozanne, 1988), and epistemological assumption regards knowledge as being based on the observation of external reality (Svensson, 1997). The positivist paradigm is operationalized in ways that seek to search for facts or causes of social phenomena quantitatively (Howe, 2003). Based on this approach, the basis of explanation is different and intends to predict the occurrence of social phenomena by establishing a causal relationship between many predicted variables to investigate their occurrence practically, by collecting specific data to explain a natural phenomenon. Meanwhile, the idea of social constructionism, which is known as the interpretivist paradigm, focuses on the way in which people make sense of the world (Easterby-Smith et al., 2002; Grant and Giddings, 2002). Reality within this construct is determined by people and based on the evaluation of external factors. The idea here is not to collect facts or measure them but to express suitable explanations for specific social phenomena based on people’s experience and supported by external causes. Thus, the interpretivist paradigm is more related to quantitative methods, which are likely to be less structured, and it does not give as much attention to deduction or proof as it does to inquiry to understand behaviour (Ragsdell, 2009). The interpretive paradigm illustrates that the world, in a social context, has a different meaning from natural science. Thus, the investigation of a particular social phenomenon will produce different interpretations depending on the different investigative bases, which differ from one investigator to another (Rabinow and
Sullivan, 1979). So, how can social phenomena (e.g. the behaviour of organisms) be analysed and interpreted?

Behaviour analysis has two categories: experimental behaviour analysis and applied behaviour analysis. Experimental behaviour analysis involves simple responses, in a closely regulated laboratory setting, to environment events which are controlled by a discriminative-reinforcing-punishing stimuli relationship. Within experimental analyses of behaviour, laboratory methods are normally used to manipulate environmental variables while observing the functional relations between related variables and behaviour (Donahoe and Palmer, 1989; Delprato and Midgley, 1992). Many scholars started to use the methodology of experimental behaviour studies to demonstrate whether the laboratory setting and related concepts, such as punishment, escape, and avoidance, can be reproduced in humans. The application and illumination of radical behaviour analysis has been extended from studying simple animal behaviour (experimental settings) using the operant chamber - Skinner’s Box - to include more social, human, verbal, and even cultural practices (Alexandra, 2003). The applied behaviour analysis was formulated later as a result of the application of observation and principles derived from laboratory experiments and operant response analysis to explore real-world situations and understand different complex behavioural phenomena (Donahoe and Palmer, 1989). Applied behaviour has been defined as follows:

"Applied behavior analysis is the science in which procedures derived from the principles of behavior are systematically applied to improve socially significant behavior to a meaningful degree and to demonstrate experimentally that the procedures employed were responsible for the improvement in behavior (Cooper et al., 1987, p. 14).

As explained by Baer et al. (1968), two significant events in 1968 shaped the formal creation of applied behaviour analysis: the initial publication of the “Journal of Applied Behaviour Analysis” and the publication of a paper called “Some current dimensions of applied behaviour analysis”. Within these two events, the adequacy and criteria of behaviour analysis research shaped the scope of work in this field (Morris and Smith, 2005). Subsequently, experimental behaviour analysis was relatively neglected after it led to unlimited research venues in which applied behaviour analysis could study different human and social phenomena.

While social science is somewhat different from natural science, institutions and scholars have transformed natural scientific methods into an inductive research science. The
success of inductive behaviour science is pragmatic rather than realist, because the issue of understanding and controlling people’s behaviour is fundamentally different in characteristics and circumstances from explaining the material world and employing it (Mackenzie, 1987; Yonay, 1994). The concept of pragmatism was conceived by Peirce as a method of helping to make our ideas clear, and it was later developed to help translate ideas into behaviour and reduce meaning to something public and observable rather than private and personal (Lattal and Laipple, 2003). Experimental behaviour analysis, which represents the scientific model, should have three main conditions as explained by Foxall (1994). First, it should specify clearly both its independent variables and dependent variables with respect to how the explanation should be proposed. Second, the relationship between the proposed variables should be specified in order to illustrate how empirical testing can be executed. Third, the proposed variables’ rules must be linked to its theoretical categories with the operational, measurable, empirical entities to which it refers. However, in applied behaviour analysis, behaviour research execution and circumstances are not clear. Skinner (1974, cited in Donahoe and Palmer, 1989, p. 401) claimed that “we cannot predict or control human behaviour in daily life with the precision obtained in the laboratory, but we can nevertheless use results from the laboratory to interpret behaviour elsewhere”. Thus, the major issue in applied behaviour analysis is how to interpret different behaviour phenomena. In complex human behaviour studies, the interpretation of behaviour should be carried out with caution because there are many restrictive factors, such as the following: the complexity of the study object and related circumstances, shortage of information, the complexity and inaccessibility of some necessary contingency observation by investigators and interpreter, the ideological acceptance of the theoretical frame that lies behind the study’s structure and design, and language-related issues such as grammar, syntax, and vocabulary selected to interpret a specific phenomenon (Donahoe and Palmer, 1989; Foxall, 1994). Skinner (1974, cited in Wagenaar, 1975) argued that scholars should be careful when using the interpretivist analytical approach instead of other approaches when addressing different complex social behaviour phenomena. That is because, according to Donahoe and Palmer (1989), knowledge is limited and affected by accessibility and not by the nature of facts. Also human beings usually lack the information sometimes needed to predict and/or control any phenomena and researchers prefer to use the interpretation paradigm instead of experimental ones.
Researchers sometimes have doubts about whether a particular research method and analysis are suitable for investigating a specific behaviour event and helping a scholar to give a justifiable degree of interpretation, especially within the radical behaviour contexts. Relying mainly on statistical analysis to investigate behaviour issues, especially in the radical behaviour context, is a problematic issue. This is because behaviour is environmentally driven. Every organism is localised in a specific environment; so, using the same specific adaptive environment for different situations or for different organisms may be completely wrong (O'Gorman, 1999). Thus, radical behaviourism does not usually employ hypothesis testing because of the risks involved in relationship explanations and interpretation issues. Also, repeating the effects of a specific piece of behaviour research and generalisation are dubious issues. This is because behaviour in most social cases tends heavily towards individual consumer-oriented sciences, and behaviour analysis output cannot establish reliable predetermined results to generalise a hypothetical issue to present a broader view of how a group of people behave in a specific situation. Skinner (1988, p.103) demonstrated:

“Behavior is one of those subject matters which do not call for hypothetic-deductive methods. Both behavior itself and most of the variables of which it is a function are usually conspicuous... if hypotheses appear in the study of behavior, it is only because the investigator has turned his attention to inaccessible events - some of them fictitious, others irrelevant.”

As part of applied behaviour studies, this thesis employs the BPM to study consumer behaviour in an operant purchasing context to interpret how customer retention occurs. The interpretative power of the BPM for customer retention behaviour has built upon a three-term contingency model which is considered a suitable tool for interpreting how behaviour occurred according to antecedent stimuli and subsequent consequences effects. According to Vollmer et al. (2001), reinforcement contingency involves behaviour and subsequent environment events. Within this context, behaviour occurrence is not just a result of environment activation but is seen as guided rather than controlled by an environmental stimulus-consequences relationship (Donahoe et al., 1997). This view helps in providing fair views of human behaviour interpretation in different contexts.

To avoid the deep debate among social scholars about the best philosophical research paradigm to employ, this thesis relies on both quantitative and qualitative data collection methods and analysis in one of the applied behaviour research situations, so as to increase the possibility of meaningful interpretation of findings (Hartley and Chesworth, 2000).
The methodological strategy for studying mobile users’ retention behaviour as a function of a person-environment interaction is initiated by illustrating quantitatively the possibility of using the BPM as an explanatory tool to help give an operant retention interpretation in the mobile phone sector. Also, statistical method analysis has been employed within the radical behaviour analysis to explore and describe the retention drivers. Also, quantitative method analysis is used to assess study propositions derived from the operant view of customers’ responses based on their verbal behaviour as exploratory techniques rather than to offer a completely interpretative view of their contingency-shaped users’ retention choices (Foxall, 1998). Consumer behaviour interpretation will be provided when the qualitative data are utilized at a later stage. The analysis results will not be used to generalise conclusions to practitioners or scholars; rather, they will help in providing reasonable explanations of how customers behave in a specific situation. Thus, the statistical procedures employed in this work tend to inform the evaluation of propositions on retention behaviour drivers, rather than to test them as experimental hypotheses. This means that the statistical test is used to explore those drivers rather than check their confirmatory role as used in the hypothetic-deductive method, which cannot be used as a source of behaviour explanation (Skinner, 1988; Hurley et al., 1997).

The methodology of studying customer retention is heavily reliant on the use of qualitative content analysis for studying customer behaviour and consultant managers’ views, in order to generate some statistical data that help draw an operant perspective of customer retention behaviour. Within this context, qualitative approaches are employed to falsify study phenomena and provide a viable interpretation of retention behaviour. Qualitative data are preferable for explaining complex consumer behaviour, which has a variety of causes that cannot be revealed using statistical analysis (Foxall, 1998). Statistical analysis is considered a servant tool to help answer research questions, rather than a master of science (Martin et al., 1993). The interpretative approaches employed in this study tend to provide a justified explanation of retention behaviour in terms of analytic phenomenology using operant psychology, which might help academic scholars by providing an additional understanding of theories’ applications on the one hand and enhancing managerial practices on the other. This idea is stressed by Foxall (2001, p.178) who stated that “the tendency has been to concentrate on the potential contribution of
operator psychology to managerial practice rather than to examine the potential of behaviourism to provide a theoretical basis for marketing and consumer research”.

3 - 2. A: Research design

This study seeks to investigate the drivers of customer relationships with service suppliers and the effect of these drivers on customer retention. In order to do so, it is important to apply the appropriate research methodology that uses suitable instruments to help in collecting the necessary data that reflect customers’ views. Research is defined as “the systematic process of collecting and analyzing information in order to increase our understanding of the phenomenon about which we are concerned or interested” (Leedy and Ormrod, 2005, p.4). Key points in this definition are the systematic steps and logical manners of collecting and analysing the study data, which represent the main research steps that are determined by the methodology. Methodology is described as “the steps that will be taken in order to derive reliable and valid answers to those questions and … defines the appropriateness of a given research tool” (Ellis and Levy, 2008, p.21). Thus, this thesis investigates the customer retention problem by using an organized, systematic, and justified data-based investigation based on a reliable theoretical framework to help find an appropriate solution.

The theoretical framework is described by Kerlinger (1979, p.64) as “a set of interrelated constructs (concepts), definitions, and propositions that presents a systematic view of phenomena by specifying relationships among variables, with the purpose of explaining and predicting the phenomena”. The applied theoretical structure that has been chosen to study the customer retention phenomenon in this study is the Behavioural Perspective Model (Foxall, 1998). According to Collis and Hussey (2003), the theoretical approaches or frameworks are a collection of theories and/or models from the literature which strengthen the positivistic research study and define its factors, which have been investigated and explained thoroughly in chapter two. Thus, this study can be described as a piece of deductive research which relies on applying and testing conceptual and theoretical structures by using empirical methods (Collis and Hussey, 2003). Figure 3 - 1 on page 132 explains the order of the main steps that have been followed in order to apply the BPM to investigate the research problem. Bell and Bryman (2003) highlighted the importance of following the systematic process of inquiry that adds to the library of knowledge for both practitioners and scholars.
This research has been conducted by collecting both primary and secondary data using qualitative and quantitative research methods to study customer choice and renewal behaviour. Both quantitative and qualitative methods of data collection were used under a methodological triangulation paradigm (Collis and Hussey, 2003). Denzin (1978, p.291) defined the triangulation term as the “combination of methodologies in the study of the same phenomenon”. Accordingly, mixed methods of theoretical and empirical approaches are employed to address the research question. Data in this study are collected using many steps. First, Figure 3 - 2 on page 133 describes the customer-firm relationship in the mobile phone sector. In the mutual behavioural context, two parties interact with each other to form a relationship which is shaped in most cases by a written document called a contract. This relationship may last longer than the contract duration (usually contract duration can be 12, 18, or 24 months). After the contract expires, the customer may remain with the same supplier or switch to another. The mobile non-contractual behaviour setting (Pay-as-you-go) is described as a prepaid communication service subscription where a customer buys a SIM card, which enables him to use the operator’s network, and pays for it using special prepaid cards or/and numbers. This kind of relationship may last longer than the usual contract but it can be described as the weakest form of relationship.
Mobile contract analysis is the first stage of data collection. This stage is explained in greater detail in section 3 - 3 (page 138) of this chapter. The content analysis technique is used in this step to analyse mobile phone contracts in order to elicit the main reinforcement items that a customer is looking to maximize and punishment items that a customer is looking to minimize, and any other behaviour setting-related elements that affect and control the mutual relationship such as contract terms and conditions. Suppliers in the UK mobile marketplace usually offer a mixture of reinforcement and punishment to interest a customer in buying one of the price-plan contracts. Also, the contract, which represents the formal offer of the service provider, has benefits, punishments, conditions, and terms through which suppliers stimulate or entice a customer to buy and establish a contractual relationship. Secondly, the researcher conducted three focus groups with different mobile phone users to investigate which factors gain subscribers’ interest based on a study of theoretical models. Special key questions have been developed and reviewed by two separate researchers to ensure they are valid for use in this stage. Focus group design and analysis are explained in section 3 - 4 (page 147) of this chapter. Thirdly, the researcher conducted many interviews with managers who are working in the wireless telecommunication sector in order to discover their opinions regarding some mobile offerings and how they stimulate customers to buy suppliers’ contracts. This technique is demonstrated in section 3 - 5 (page 161) of this chapter. Finally, when the researcher had collected the initial data about the main study factors that cover different applied theory dimensions, a pilot study was executed, and the primary data were collected using 418 final self-reporting questionnaires. The process of designing, reviewing and validating the main research data collection (survey) is illustrated extensively step-by-step in section 3 - 6 (page 173).

Figure 3 - 3 in the following page explains the flow of data collection and analysis techniques that were used to elicit the main study factor elements from customers; these were supported by suppliers’ interviews.
Taken in sum, the research design illustrates that three methods have been used to define different pre-behaviour stimuli and post-behaviour consequence factors that drive customers to make repeat purchases. In the first step, the researcher analyses the mobile relationship ties, which are represented by formal contracts, using a content analysis technique. In the second step, three focus groups were conducted and analysed to define the study's elements from the customers’ point of view. In the third step, a number of interviews with managers were conducted to obtain managers’ opinions regarding some customer retention determinants from the mobile suppliers’ viewpoint. In the final stage, study elements which were collected directly from contracts analysis and focus group discussions were used to survey mobile users in order to identify those factors that affect subscribers’ retention behaviour from the customers’ viewpoint.

3 - 2. B: Research approach

This study seeks to investigate customer retention drivers within the mobile telephone relationship marketing context. In order to properly achieve the proposed objectives that have been derived from the research problem, it is important to use a suitable research methodology that defines the research tools. Research methodology is defined by Leedy and Ormrod (2005, p.14) as “the general approach the researcher takes in carrying out the research project”. Also, the authors defined a research tool as “a specific mechanism or strategy the researcher uses to collect, manipulate, or interpret data”. Two different parties are involved in relationship marketing. Thus, in order to study customer retention within a coherent mechanism that efficiently manipulates and interprets data, the researcher intends to use different data collection techniques to test and apply the proposed theoretical model; these techniques connect and reflect customers’ views in most cases and suppliers’ views in some cases in targeting the customer retention phenomenon.
This section provides a brief description of the research tools that have been used to achieve the study’s purposes. Figure 3 - 4 shows the sequence of methodological steps and research tool usages that lead to the design and development of the customer survey and the rationale behind the selection and usage of the research approaches.

The research was conducted by collecting both primary and secondary data. Secondary data are collected mainly from previous literature reviews that have been carried out to satisfy other research objectives; they are explained more fully in chapter two. As Parasuraman (1986) illustrated, secondary data are collected from different respondents (individuals and/or organizations) for purposes other than the research situation at hand. In addition, many other sources provided highly beneficial data that have been used in this study, such as mobile service providers’ panel data which encompass websites, annual reports and brochures, formal contracts that organise firm-subscriber relationships, firms’ booklets, suppliers’ monthly magazines, and newspaper reports.

![Diagram of survey development and implementation](image_url)

**Figure 3 - 4: The steps of survey development and implementation**
The reasons for using secondary data in this research have been highlighted by many researchers to achieve many benefits. Secondary data represent real decisions that have been made by real decision-makers in real environments (Winer, 1999). Thus, they are less likely to have been influenced by self-reporting biases that may be present in data collected through different attitudinal scales (Clapham and Schwenk, 1991). Also, secondary data overcome concerns related to maintaining access to the research setting and gathering sensitive information (Van de Ven, 1992). Meanwhile, Campbell & Fiske (1959) claimed that the main benefit of utilizing secondary data is that alternative types of data can provide a multi-method triangulation to other research findings. However, some researchers claimed that using secondary data has certain weaknesses in marketing and behaviour studies. For example, Winer (1999) explained that secondary data usually reported the actual consumer behaviour but no process measures (e.g. attitudes or behaviour intentions) are reported and may not have been carried out. In addition, it is sometimes difficult to match secondary data to other types of data (Houston, 2004). Tomarken (1995) claimed that secondary data indicants frequently reveal the influence of multiple processes; thus the relationship between the indicant and a construct is difficult to clearly specify. Therefore, this study relies heavily on the collection of primary data.

Primary data are collected from subjects mainly by using two methods: focus groups and surveys. Some primary data were also collected from managers who work for the mobile phone suppliers in the UK market. Primary data are described by Lee et al. (2000) as data collected specifically for the study in question. Lee explains that using primary data provides many advantages while it also has many disadvantages. The main advantage is that the investigator determines the types of required data and controls how such data are collected. Applying a framework like the BPM in a new service context such as the mobile phone sector required the design of new methods, elements, and factors that fit the new space based on the literature review. The second benefit is accuracy. Usually there is no specific method that can be used as the standard for all research situations. Developing, designing, and testing a new data collection method that fits a new study situation requires a lot of time, money, effort, and experience from the researchers. However, it will be the most accurate way to obtain the data from the study target.
On one hand, customers’ primary data are gathered from subjects (mobile subscribers) via two methods. The first is to conduct three different focus groups to find the initial elements of mobile offers that gain customers’ interest. A variety of factors have been elicited from the focus group discussions used in designing the first draft of the survey, which was initially tested by conducting a pilot study. The pilot study was aimed at testing the reliability of the survey instrument that was established to study customer retention behaviour and determine its drivers. The second method was to develop and distribute a self-reporting questionnaire to achieve the study’s purposes. The questionnaire is primarily intended to collect the main subscriber data such as demographic aspects, contract features (which encompass different mobile price plans), and main supplier-related elements. Then, the study survey is aimed at collecting data related to different types of qualities or quantities of reinforcement that help improve consumer retention for a particular supplier or the punishments that motivate the customers to switch (Herrnstein, 1997). As in this study, many researchers have used a variety of quantitative techniques such as questionnaires to study behaviour analysis in different contexts (Sen, 1973; Sarason et al., 1983; Powell and Ansic, 1997; Söderlund, 1998; Degeratu et al., 2000; Slack et al., 2008).

On the other hand, mobile suppliers’ primary data are collected by conducting a number of interviews with managers who have good experience in the UK mobile phone sector. Managers’ interviews were aimed at exploring managers’ views on the causes of some customers’ repeat behaviour, such as benefits, punishments, and stimuli. Different customer retention studies have been investigated by using managers’ interviews as a qualitative data collection method (e.g. Bensaou and Anderson, 1999; Hales, 1986; Fournier, 1998), and others have been carried out by interviewing managers over the phone (Getman and Marshall, 1993; Cavusgil and Zou, 1994; Bendapudi and Leone, 2002), or by face-to-face interviews (Daft et al., 1987; Kenneth et al., 2001).

A mixture of methodological and data triangulations has been used in this study to collect primary and secondary data. The aim of triangulation is to avoid any weakness in one method by using an additional method of data collection; this may give a more rounded picture of subscribers’ choice elements and influences. Also, as explained by Paul (1996), between methods, triangulation is a means of leveraging the strength of several methods while mitigating the weaknesses. In research methods and design, Denzin (1970)
differentiated between data triangulation and methodological triangulation. Data triangulation means that researchers gather different data through several sampling strategies, so that different data from different time periods and social situations, as well as from a variety of participants, are collected. Meanwhile, methodological triangulation is the process of using more than one method of collecting data from the study target.

The following sections discuss the research data collection methods used in this study, supported by a rational justification for their use. They are: contract content analysis, customer focus groups, managers’ interviews, and survey instruments.

3 - 3: Contract analysis technique

The context of this study is the mobile cellular phone industry. Most mobile phone suppliers provide quite a broad range of wireless telecommunication service pricing plans for customers. Mobile price options aim to satisfy customers’ needs by giving them the chance to choose from among different mobile options such as pay-per-minute plans or unlimited voice calls (Gerpott and Jakopin, 2008). In most cases, when a customer buys any post-paid telecommunication service offer, he/she usually signs a contract with one of the mobile suppliers. A contract is usually issued within a specific formal written document signed by both parties in the relationship (customer and supplier). A contract is defined as “as an agreement concerning promises made between two or more parties with the intention of creating certain legal rights and obligations upon the parties to that agreement which shall be enforceable in a court of law” (Gibson and Fraser, 2006). Meanwhile, they defined bilateral contracts as “contracts in which the parties exchange promises to perform or not perform respective acts; the promise of one party is correlative to the promise of the other party (exchange of promises)”. A valid contract usually has adequate disclosure of elements and statements, the type of products sold or used, and conditions, terms, and disclaimers which organise the selling process and the usage patterns of the service. A valid contract is described as “a contract that is legal and that meets all of the legal requirements of law” (Motiwala, 2008, p.101).

Mobile contracts have many forms and types which define the shape of all products and service characteristics provided and explain their usages. Mobile phone contracts can be divided principally into two types of wireless communication services subscriptions: prepaid (Pay-as-you-go) and post-paid. In the prepaid subscription type, a mobile user
does not need to sign a contract but there are some simple conditions and terms attached to the mutual relationship. In the post-paid subscription type, a mobile user needs to sign a contract which is divided mainly into three categories: 12, 18, and 24-month contracts.

Mobile phone contracts are the main source of secondary data because they represent a formal design of mutual contractual relationship between the two parties. A variety of mobile phone contracts have been collected and categorised from the main UK mobile phone suppliers; these are O2, Vodafone, Orange, 3 Store, and T-Mobile. Four types of contracts have been addressed from each mobile supplier mentioned previously: Pay-as-you-go, 12-month contracts, 18-month contracts, and 24-month contracts. Suppliers’ mobile contracts were analysed using content analysis technique (CAT) which serves two purposes at this stage: Firstly, it describes and analyses the CAT that has been used and the rationale behind its use; secondly, it describes how to elicit and define the main factors that suppliers used to offer through contracts to establish, maintain, and extend mutual relationships in the long term.

CAT is seen as one of a number of systematic ways to identify the suppliers’ main elements of enticement offered to customers in terms of products and/or services to establish a relationship or to extend it. CAT is defined by Krippendorff (1980, p.21) as “a research technique for making replicable and valid inference from data according to their context”. Using CAT as one of the qualitative methods is a highly preferred process for data reduction that facilitates classification and coding. Basit (2003) found that this notion remains cogent in the social sciences.

In the social sciences, content analysis is intieally used to achieve the principal objectives, as recommended by Morris (1994): First, to make inferences about values, sentiments, intentions or ideologies of the sources or authors of the communications; second, to infer many shared values through the content of communication; third, to evaluate the effects of communications on the audiences they reach. Many disciplines in marketing, such as advertising and international marketing, have used this type of technique (Cutler et al., 1992). In addition, many researchers (Lacho et al., 1975; Courtney and Lockeretz, 1971; Resnik and Stern, 1977) have used this technique in investigating different marketing disciplines.
As explained by Carley (1993), text analysis and coding processes discussion should convey information about the tools used and the procedures followed. Thus, two different methods have been used in analysing mobile suppliers’ documents to quantify a variety of sentences, words, figures, and numbers that can be classified within the BPM elements. Nvivo version 10 and manual analysis (paper and pen) methods have been used to analyse the mobile suppliers’ contracts that had been given to subscribers when they bought cellular telecommunication services. Nvivo software is a well-known method that can be used in the social sciences to analyse textual recourses, interviews, field notes, and other qualitative and textually-based data such as focus group discussions. As argued by Jones (2007), the use of appropriate analysis software (such as SPSS or Nvivo) provides more rigorous and thorough interpretation and coding, minimizes the analysis timeframe, and provides scholars with enhanced data collection and analysis management. In addition, this software can provide more comprehensive and wide-ranging methods of searching, collecting, storing, coding, analysing, and reporting the intended data by using more versatile and efficient systems (Basit, 2003; DeNardo and Levers, 2005). Many qualitative studies have encouraged the use of different software to analyse qualitative data in their research (Miles and Huberman, 1994; Silverman, 2000; Jones, 2007).

The rationale behind using CAT in this study is supported by its three main characteristics which are systematization, objectivity, and quantification (Holsti, 1968). Systematization means that the content analysis technique is a multistep process that should be done in harmonization from one step to another, especially if the study in hand has many variables, connected with one another in a specific way, that need to be taken into consideration (Holsti, 1968; Titscher and Jenner, 2000). While applying the BPM, which has many components connected with one another in a special way to explain consumer behaviour, the systematic process guarantees that analysis is designed in a proper way to secure relevant data to help in investigating a research problem designed by a hypothesis or propositions approach (Berelson, 1952). Meanwhile, objectivity means that the category of analysis (mobile phone contracts) is defined so precisely that different analyses may be applied to the same body of content and secure the same results (Berelson, 1952). Quantification means the process through which judgements distinguish content analysis technique from ordinary critical reading (Kassarjian, 1977). Furthermore, the CA method is considered one of the main analytical techniques when the data are limited to documentary evidence and when the objective is to study something like a
written mobile contract (Shani et al., 1992).

In any CA process, the task is to make inferences from data about certain aspects of their context and to justify these inferences in terms of the knowledge about the stable factors in the system of interest (Krippendorff, 1980). Some researchers analysed documents in terms of sentences or even words, which maintained the degree of disclosure which organizes and clarifies the customer-firm relationship in more detail (Deegan and Gordon, 1996). Zeghal & Ahmad (1990) argued that the word is the smallest unit of contract content analysis which may increase the strength of retention elements identification. Consequently, the aim of analysing mobile contracts is to infer and define a variety of utilitarian reinforcement (direct benefits), utilitarian punishment (direct adverse consequences), informational reinforcement (positive feedback), and informational punishment (negative feedback) that firms usually offer, and any other factor that might be considered when thinking of behaviour setting elements such as physical, social, temporal, and regulatory behaviour settings.

3 - 3. A: Contract analysis levels

Mobile contracts analysis passed through many levels. The first level of analysis encompassed all mobile phone operators that have been actively working in the UK market and providing different mobile phone telecommunication services during the data collection stage duration of this study (Sep/2008 until August/2009). The second level of analysis covered service periods of varying lengths that have been provided by UK mobile operators: pay-as-you-go subscribers, 12-month contract subscribers, 18-month contract subscribers, 24-month contract subscribers, and the out-of-contract group (mobile subscribers who continue to use the same mobile telecommunication services after their mobile contracts have expired). The third level of analysis was designed to provide a clear picture of the main bundles of pricing plans that every mobile operator provides for each mobile service time period explained in the second level of analysis.

The final level of analysis is the mobile phone contract that has been agreed between a mobile phone user and a mobile telecommunications service provider. The unit of analysis (contract) is a formal document which sets out the terms of the agreement between the two parties (Linsley, 2005). The standard form of contract usually contains four main sections:
the articles of agreement, the contractual conditions, the appendix, and the supplementary agreement.

3 - 3. B: Contract coding and analysis processes

Coding is a process by which a researcher or a coder reviews a set of text statements or notes, synthesized or transcribed, and converts them into meaningful items or symbols, while keeping the relations between the categories intact (Miles and Huberman, 1994). The coding process in this study passed through three main steps as illustrated by Shapiro and Markoff (1994): First, the process of creating and defining code categories; second, the process of converting the themes of the texts into those symbols defined by the researchers or coders; third, the process of scale construction, executed by grouping subsets of themes or symbols together. Further explanation of these stages is given in the following part because each step is a solid foundation on which to execute the next one to build a strong analysis pyramid and reach the required results.

Initially, before developing a list of coding categories, which is usually derived from the theoretical background on which the study has been built, many issues should be determined and explained clearly in order to make the process of coding and analysis valid and easy. These issues encompass agreeing about the number of main categories, their names, meanings, language, and the relationships between them, before coding and analysis processes start. Concepts’ languages and meanings is one of the most important elements of this stage because the language used to categorize these themes into specific codes is repeated throughout the entire contracts analysis process and other data collection instruments later on, such as focus groups and interviews. Thus, natural language is used to assist in the processing of content analysis coding, especially when using technological methods (Downe-Wamboldt, 1992; Insch et al., 1997). Therefore, the language used to categorize these themes into specific codes is repeated throughout the entire contract analysis process to create the links between factors and symbols. The aim of this step is to decide which concept types, numbers, and levels that have been defined and coded from the literature will be explored in the analysis.

As Carley (1993) stated, coding choices should be made prior to employing content-analytic procedures, and map analysis procedures are necessary when additional coding choices are required. This is because the main focus of content analysis is on the concepts,
while map analysis focuses on the concepts and the relationship between them (Danowski, 1982). There is no specific method or technique of relational analysis; researchers usually develop their own procedures according to the nature of their subjects or based on the theories that they rely on. Also, Basit (2003) and Denardo and Leavers (2005) expressed the fact that the researcher’s ability to code is an important part of the analysis.

In the first step, the process of creating the main categories’ codes is defined based on the theoretical basis, which is the BPM. These categories should cover all the study dimensions that have been defined by the theories at hand. Based on that, statements that present subscribers’ stimuli, behaviours mentioned in the contract’s code of conduct, reinforcement, and behaviour setting elements, all of which explain supplier choices, are determined then coded. Based on the BPM (Foxall, 1998), defining and coding processes encompassed all antecedents and consequences factors that affect retention behaviour, which comes in two categories: the purchase setting elements which interact with the customer’s learning history, and reinforcement or punishment factors indicated by features of the setting as determined by the consumer's learning history. Therefore, as shown in Table 3 - 1, the final codes and theoretical phrases used in all the study stages are as follows: Utilitarian Reinforcement (UR), Informational Reinforcement (IR), Utilitarian Punishment (UP), Informational Punishment (IP), Learning History (LH), and Behaviour Setting (BS). Different behavioural setting factors were considered, encompassing Physical Factors (PhF), Temporal Factors (TF), Regulatory Factors (RF), and Social Factors (SF).

<table>
<thead>
<tr>
<th>No.</th>
<th>Domain or theme name</th>
<th>Codes</th>
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<tbody>
<tr>
<td>1</td>
<td>Utilitarian Reinforcement</td>
<td>UR</td>
</tr>
<tr>
<td>2</td>
<td>Informational Reinforcement</td>
<td>IR</td>
</tr>
<tr>
<td>3</td>
<td>Utilitarian Punishment</td>
<td>UP</td>
</tr>
<tr>
<td>4</td>
<td>Informational Punishment</td>
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<td>5</td>
<td>Learning History</td>
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<td>6</td>
<td>Behaviour Setting</td>
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<tr>
<td>6-A</td>
<td>Physical Factors</td>
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<td>6-B</td>
<td>Social Factors</td>
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<td>6-C</td>
<td>Temporal Factors</td>
<td>TF</td>
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<td>6-E</td>
<td>Regulatory Factors</td>
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In the second step, the author fragmented the mobile contracts’ texts into separate figures or textual segments, each of which reflects a distinct meaning and is connected to one of the BPM categories which are defined by the coder in the first step. This process is guided by Tesch (1990), who recommends that a textual segment be a piece of text which should
give a full meaning when it is split from its original source. The coding is a process by which a coder transfers all contracts’ texts and statements into the main study dimensions. Coding the texts into manageable content categories, which are defined on the basis of the theoretical background, is a very important step because it aims at selective reduction; the contents are broken down into manageable and clear, definite units of information which helps to create or define certain characteristics that are easy to interpret and analyse.

The third step is about the process of constructing scales by grouping subsets of items or symbols together. The perceptual grouping is defined by Feldman (1999) as the process by which raw elements are aggregated into larger and more meaningful collections. Text items grouping is aimed at reducing the number of items into more concise units and reaching agreement about any fuzzy elements or items if present. Analysing the defragmented texts and defining their themes enables the process of allocating these themes into the contract’s main benefits and punishment categories which include the following: calltime lease items, the usage regulation items, mobile handset and SIM card items, cost and penalties-related items, text messages items, mobile entertainments items, and data protection and security items. When the main texts’ concepts were defined and coded, and the codes grouped into categories, the categories’ relationship similarities and differences were defined, and a contract categories comparison was executed to find the main shared benefits and punishment items. Contracts’ text comparison is fairly straightforward and typically focuses on the types and numbers of concepts shared and whether there is a pattern to those concepts that are shared or not shared. Standard procedures for categorical analysis, clustering, grouping, and scaling for all items are useful and beneficial for facilitating the contract analysis process. This step is very important because it guides all analysing and coding procedures that have been used and will follow in the coming steps with all target documents. After the first contract has been despatched, analysed, and coded, the rest of the contracts for other mobile suppliers are converted and coded by following the same procedures.

One of the main points in this analysis is editing. Editing the main defragmented texts and all notes and comments was done through the process of coding in order to facilitate the reflection and conceptualization processes as advised by Richards (2002). Also, during the coding and analysis process, the use of software as recommended by Blismas and Dainty (2003) utilised a quick process through the different options available, such as font,
colours, shapes, and styles. The main factors that were elicited from the mobile contract analysis are summarised in the appendices 9 and 10.

3 - 3. C: Contract analysis reliability

The contract content analysis reliability evaluation process is achieved by many coders or judges deciding, comparing, and distributing all contract texts’ statements according to agreed study categories and factors. This is confirmed by Carmines and Zeller (1979, p.11) who mentioned that reliability “concerns the extent to which an experiment, test, or any measuring procedure yields the same results on repeated trial”. The analysis is conducted in order to show to what extent different mobile contracts’ categories are contributing to the informational and utilitarian reinforcement or punishment factors which in turn affect consumer behaviour. Each judge classified all the contract statements into different independent factors by examining how each statement agrees with or contradicts different study factors. As explained in the analysis and coding processes in the previous section, all study factors and their descriptions, names, and classification have been built on the basis of Foxall’s classification of the BPM components which were clarified to the second coders.

The contracts’ statements classification and coding processes were repeated by another independent judge separately in order to determine whether he agreed or disagreed about the fragmented texts; then the percentage of coding agreements was ascertained in order to assess the reliability of applying the contracts’ content analysis process. The percentages of agreements between the researcher and the second coder were assessed not only for each contract type and longevity, but also to encompass all utilitarian and informational reinforcement and punishment contents for each supplier separately. As explained by Mitchell (1979), a high percentage of agreements between coders provides some indications or evidence that themes and classification have quite a good external validity.

Content analysis reliability can be viewed from two angles: reproducibility and stability (Scott, 1955; Krippendorff, 1980). Reproducibility is the degree to which a process can be recreated under varying circumstances, at different locations, using different coders. In this type of research, data are checked under test-retest conditions. More than one individual applies the same recoding instructions separately in the same set of data. This method of analysis allows the researcher to find out if there is any disagreement in the
ways those coders record the data; it reflects both intra-observer inconsistencies and inter-observer differences in the way a recording instruction is interpreted. Also, it allows the researcher to see the intersubjective agreement or the consensus achieved among observers. Second, the stability or ‘consistency’ is the degree to which a process is invariable or unchanging over time. Data were rechecked under the test-retest formula, such as when the same coder is asked to code a set of data twice, at different times (Krippendorff, 1980, p.130). Stability is not a common method and is not usually preferable or trusted because the same inferences and analysis come from the same documents, coders, and instructions, if available. The researcher was coding the same documents (contracts) from the same suppliers within similar and different contract text time ranges, starting from Pay-as-you-go up to the 24-month contract.

A high level of inter-coder agreement is evidence that a coding has some external reliability and is not just a figment of the investigator's imagination (Mitchell, 1979, cited in Chen, 2005). The level of agreement in mobile contract analysis was ascertained by two independent coders who have similar marketing and analysis knowledge, and their level of agreement exceeded 90% in total statements and figures. Meanwhile, inter-coder agreement is still an ad hoc issue, as confirmed by Mitchell (1979), but 70% can be considered acceptable, as suggested by Krippendorff (1980).

To sum up, in order to investigate the possible effects of utilitarian and informational factors that affect subscribers’ choice, contract content analysis attempts to identify different levels of magnitude of utilitarian and informational reinforcement or punishment offered by mobile suppliers to different target markets through mobile contracts. Contract benefits and punishment classification was based on the supplier’s offers, rather than the consumer’s perception of benefits and adverse consequences. Therefore, the level of informational and utilitarian factors are programmed and planned to function as benefits for the majority of consumers. This notion was confirmed by the fact that the supplier acts as manufacturer, who usually charges higher prices for their planned benefits (Foxall, 2007). Analysing different types of contracts for many suppliers tends to produce a clear picture of the main mobile suppliers’ offered benefits aligned under many price plans in the mobile telecommunication services in the UK market.
3 - 4: Focus groups

Introduction

Focus group techniques were initially developed in the 1940s in order to produce rich detailed data for analysis purposes (Merton et al., 1956). This instrument has been used in different market research areas since the 1950s, as stated by Goldman and Mcdonald (1987). A clear example of using a focus group discussion as the main method in social science can be seen in Morgan’s (1993) research. Hess (1968) claimed that snowballing, synergism, stimulation, spontaneity, and security are the main benefits that emerge from participants’ interaction. This section provides in-depth descriptions of the focus group instrument’s design and execution steps. The focus group execution plan has many dimensions which cover the following items: the rationale behind using this type of approach supported by the main focus group advantages and disadvantages, the process of creation of focus group questions, focus group design, participants selection process, conducting the focus groups and execution considerations, and finally the focus groups’ discussion transcription, coding, and analysis processes.

3 - 4. A: The rationale of using focus groups

Focus group research became one of the main methods to be widely used in marketing research; it has been intensively applied in the consumer arena since 1980, and its usage nowadays increasingly encompasses different research applications (Blumberg et al., 2005). Focus group methodology is group interviews, described by Barr and Schumacher (2003) as a way of using an informally and easily structured brainstorming format to produce new ideas by listening to a sample of the target customers and learning from them. The focus group is seen as a collection of individuals (usually five to ten members) who have been brought together to discuss a particular research matter of interest to the researcher (Stewart et al., 2007)

The focus group technique is valuable when there is a need to obtain qualitative data filled with vivid and rich descriptions through bilateral communication between the moderator and/or researcher and participants (Becker et al., 2008). The exploratory potential obtained by using focus groups as a qualitative method at this stage is essential to help provide a clear and beneficial understanding of customer retention topics; this is achieved by having groups of people involved in discussions, then employing the contents of their
discussions to support the study survey instruments rather than relying on a single qualitative method, such as a survey (Howze, 2000). Focus group discussions are intended to collect initial data about participants’ experiences and their relationships with mobile phone service providers in the UK market. Initial data elicited from the discussions in this stage serve as a preliminary step in the initial development to validate the study questions and survey instruments to determine the dimensions of the main suppliers and the effect of these dimensions on customer retention. As Litosseliti (2003) stated, the main reason for conducting focus groups in the initial stage prior to other methods, such as questionnaires, is to provide more insight into the targeted study, which encompasses different participants’ views and thoughts. Therefore, focus groups in this study have been used as a primary source to explore different mobile subscribers’ issues such as benefits and punishment offered to customers to encourage them into enrolling in long-term relationships. Additionally, this method is used and repeated as a supplementary source of data, as in triangulation between methods (Litosseliti, 2003). This notion is confirmed by Ward et al. (1991) who relied heavily on focus groups at this stage because they found that they had the ability to produce more in-depth information on the topic investigated. Calder (1977) and Morgan (1997) have stated that using focus groups is highly suitable for conducting exploratory investigations, especially when little is known about a specific study phenomenon (Rao and Perry, 2003). Consequently, drawing a clear picture of customer retention issues based on the suppliers-customers relationship phenomenon fell into this category (Herington et al., 2005).

Focus groups were used in this study for many reasons; they operate as a convenient method for interviewing a number of people who are familiar with mobile phone usage and have contracts with mobile suppliers (Calder, 1977). In specific circumstances, such as complex terms and ideas, the exploration process is required to decide what concerns and themes are important to the participants in different situations, such as customer retention and switching (Lawrence and Berger, 1999). Focus groups are considered an excellent technique for collecting data on the insights of the people of interest, whose opinions on a specific phenomenon are important (Garee and Schori, 1996), and whose language and conceptualization, used to describe particular terms or ideas, is a valuable source of information (Basch, 1987). According to Morgan and Kruger (1993), producing a special type of data about customer retention in different behaviour settings (e.g. the mobile phone sector) is not an easy mission without discussion among groups of
subscribers who interact and reflect in some depth on the matter. Moreover, participants’ experiences related through the congruency of focus group membership are more likely to add more value to this technique, which encourages the participants to reveal their feelings and opinions, than might be obtained using another form of questioning, such as interviews (Krueger and Casey, 2001). The use of focus groups is preferable when a range of ideas and feelings from participants about certain areas of research is required (Rabiee, 2004). Therefore, the authors claimed that the objective was to uncover the factors that affect participants’ opinions, behaviours, and motivations toward a specific issue such as re-buying from the same mobile operators or switching to competitors. For this reason, some researchers claimed that the main disadvantage of using this method is the difficulty of eliciting specific information from a large amount of qualitative data, especially if these data are related to multifaceted motivational sources, and the way in which ideas emerge from and are linked to the groups’ discussions. Although the discussions in themselves were not important, the values that lie within the complex and deep discussions need to be carefully analysed in order to make inferences from them, and to minimize external misinterpretation of the ideas; furthermore, researchers must be cautious about the transcription, coding, and analytical processes in further steps ( Rubin, 2005).

3 - 4. B: Creation of focus group questions

One of the main focus group administration steps that many researchers have highlighted is to decide which questions should be used to elicit suitable data (Herington et al., 2005). The use of focus groups is intended to help define the factors that affect consumers’ retention behaviour and mutual relationship behaviours. Therefore, it was decided to conduct three focus groups in order to elicit some qualitative data from a number of mobile users by developing many open-ended questions; these questions cover BPM components which are designed to study both relationship parties. Using open-ended questions as a qualitative method in consumer behaviour research to elicit raw consumer data is a familiar technique and is supported by many scholars (Bobby, 1977; Hoyer, 1984; Zeithaml, 1988; Ruyter and Scholl, 1998; Garrison et al., 1999; Hair et al., 2002).

The process of developing key questions for focus groups has passed through many stages. The process began with a review of the relationship marketing and consumer behaviour literature. After that, a procedure of allocating the main previous ideas and questions was carried out according to the BPM’s theoretical background; this has six
main components: behaviour setting dimensions, consumer learning experiences, utilitarian reinforcement, utilitarian punishment, informational reinforcement and informational punishment. Establishing, revising, and editing open-ended questions that cover all study categories had been accomplished by consulting a number of practitioners in the mobile phone sector and some academic scholars. A list of all initial key questions that have been used in this step is provided in the attached appendix 4.

The rationale behind designing open-ended questions is explained as follows. Behaviour setting questions tend to assess the effect of environmental factors used by mobile suppliers to stimulate consumer selection behaviour. This part covered many dimensions: physical setting, and social, regulatory, and temporal elements. The learning history part had many questions designed to check whether a customer had a relatively good or bad experience with his or her previous mobile operators and how he/she had employed the experience to choose from among different mobile options. The utilitarian reinforcement section also had many questions designed to investigate the main direct benefits that a customer gained through his or her usage of the wireless telecommunication lease contract. This part also tried to identify the main contract dimensions that a customer looks for in order to maximize the benefits within a single mobile contract and how he or she chooses the best price plan to satisfy his/her needs. Meanwhile, the informational reinforcement key questions were formulated to identify the main indirect positive elements that a customer received through mobile products/services consumption, such as positive feedback and satisfaction. In addition, the utilitarian punishment part has many questions designed to study the main direct punishments, represented by the direct monetary cost that should be paid, that deter the customer from repeating his or her purchase behaviour with his or her current mobile supplier and encourage switching; this has many facets such as searching-time, amount of effort required, and mobile service consumption monthly expenditure. Finally, the informational punishment dimension has many questions that seek to identify the main indirect adverse consequences that a customer tries to minimize, such as purchasing risk, regret, and negative feedback resulting from selection and use or consumption of one of the mobile offers (Ravald and Grönroos, 1996).
Focus group design has been discussed in terms of the following main dimensions: the researcher’s or moderator’s role in administering and conducting focus group discussion, the number of participants in each discussion, number of focus group discussions, discussion duration and environment.

The researcher or moderator represents one of the main elements in the technique of conducting focus groups because he or she usually carefully arranges the focus group plan and procedures, provides a discussion structure for the participants, gives a brief about the study objectives and dimensions, and raises the topics for consideration by asking open-ended key questions and encouraging participants to become involved in the discussions (Vaughn et al., 1996; Kitzinger and Barbour, 1999; Stewart et al., 2007). The researcher steers the discussion and exchange of ideas between participants of the study topic in such a way as to ensure that all relevant information desired by the researcher is considered by the groups. There is no strict agreement among researchers about the optimal number of participants in a focus group or the number of groups that researchers should utilise in a single study. It has been claimed that there is no maximum or minimum for the number of focus groups that should be conducted for any particular study but the recommendation is that more than one focus group should be conducted on the same theme (Morgan, 1997; Krueger and Casey, 2008). Each group meets on a specific occasion for a period of one to two hours in order to collect broad feedback from key issues that can be assessed and used in the phrasing of specific questions and designing the study survey (Kitzinger and Barbour, 1999). The flexibility of the focus group technique gives it the ability to collect precious qualitative data that come from participants’ experiences in terms of insights and beliefs. Types of data that can be elicited by this method can be more useful than those obtained from interviews because researchers can avoid both overlapping and repetition (Morgan, 1997; Johnson and Turner, 2003). As Morgan (1998) explained, focus groups are heavily employed in different fields of marketing applications, especially developing new products, generating new product ideas, refining products or marketing, and monitoring consumer response.
3 - 4. D: Participants selection

What participants say and discuss during the interview process determines the data to be collected, analysed and reported. Therefore, careful recruiting of participants is essential for facilitating group discussions (Greenbaum, 2000; Willgerodt, 2003). In some cases, it is recommended that participants be acquainted with one another in order to promote a warm discussion which will enable the elicitation of essential data (Seymour et al., 2002). Potential end users of mobile phone services in the UK participated in three groups during November and December, 2008, and January 2009, in County Durham, UK. Each focus group comprised 5 to 7 participants who had a variety of experiences and different relationship levels in dealing with one or more of the mobile phone service providers or operators in the UK. Participants were recruited through email messages that had been distributed by Ustinov College (Postgraduate College in the University of Durham) E-networks to student, asking for mobile phone users, and by personal communication with other mobile subscribers among local consumers. A copy of the published email/letter is available in the appendix table 1.

The researcher received a potentially significant number of responses from mobile users who expressed their interest in taking part in the focus group discussions. Additional communication had been conducted to organize and reach agreement about focus group execution procedures, such as the best time and place to conduct focus group discussions, number of participants supported by their demographic characteristics, and participants’ experience levels with the current or previous mobile operators with respect to the types of problems that they faced during their relationship with the operators. Also, additional elements were taken into consideration such as contract types, mobile handset types, mobile suppliers’ names, and relationship longevity. In addition, characteristics of participants’ contracts were taken into consideration when selecting the potential participants by asking them to fill in a simple questionnaire that reflected their contracts’ main characteristics. The initial data collected from focus group participants encompass contract length, monthly contract cost/price, free minutes per month, free messages per month, mobile handset prices after the purchase had been completed, browsing emails and videos, handset insurance, free weekend calls, free evening and night calls, area coverage, and voice clarity. Moreover, some demographic data were collected from all participants, encompassing the following: contact details, gender, age, educational level, occupation,
and nationality. A copy of the focus group participants’ questionnaire is available in appendix table 3.

3 - 4. E: Conducting the focus groups

Generally, a panel of subscribers was guided by the researcher who met discussion groups for 90 to 120 minutes using a predetermined set of questions and supported by focus group guidance as explained in appendix 2. In order to stimulate the participants to express their attitudes, beliefs and experiences with their mobile phone suppliers, the researcher gave a brief introduction about the discussion’s theme and illustrated the main discussion dimensions in order to familiarise them with the subjects of the thesis. Also, informal talks were held with the participants in order to break down any barriers to discussion; this practice is supported by the explanation of some ethical considerations related to focus group discussions as guided by Krueger and Casey (2008) and Vaughan et al. (1996). At the beginning of the session, all participants were asked to introduce themselves to one another and give a brief account of their mobile suppliers and contracts data.

A brief description of each focus group now follows. The first focus group was conducted with five MBA students, who have different levels of experience in dealing with different mobile service providers in the UK market, in Durham Business School on Monday 17th of November, 2008. The second focus group was conducted with UK mobile users from County Durham on Thursday 25th of December, 2008, during the Christmas vacation in Keenan House-Ustinov College, The University of Durham, to give the participants the chance to choose their most suitable time. Choosing the optimal time for participants is recommended by Krueger and Casey (2000) who mentioned that the best time for conducting a focus group is one that has been determined by the participants. Seven participants were involved and they had a variety of experiences. The third focus group was conducted with the cooperation of many students and staff from the University of Durham on Tuesday 6th of January, 2009, in Durham Business School. Seven participants were involved in a deep discussion about different study categories which were formulated by a group of reviewed questions that had been used in previous focus groups. Generally, participants were aged between 25 and 46 and their experiences with mobile phone usage and the selection of providers had taken place over a period of between 6 and
12 years. Participants’ subscription types were either Pay-as-you-go or a variety of monthly contracts with different longevity provided by many different mobile suppliers.

The method of conducting the group discussions relied heavily on the interaction between individuals during the conversations and the groups’ synergy (Kitzinger, 1994). The author was cautious about the focus groups’ homogeneity. Therefore, he ensured that the participants consisted of a group of friends who shared some common characteristics that might help stimulate them to express their behaviours, opinions, and motivations; this would elicit more qualitative data that would contribute towards achieving the study’s objectives. As Erlandson et al. (1993) illustrated, the validity of the data can be enhanced by using purposive sampling in which the process of selecting participants belonging to specific user groups is recommended. This is confirmed by Calder (1977) who claimed that an open and positive atmosphere helps to produce good information-sharing. Thus, group homogeneity is recommended and has two types: specific, such as participants having similar jobs, or general, such as participants living in a certain area or community (Kitzinger and Barbour, 1999). To achieve this, the author separated the participants into three groups based on different dimensions: gender, employment status, education, when they were able to take part, and friendship; this was intended to ensure an intense discussion and freer deep interaction Hawe et al. (1990). Times and locations of focus groups were selected based on convenience for the participants (Knap and Propst, 2001). Refreshments were provided and transportation assistance offered for some participants. No compensations were provided for the participants: they kindly agreed to participate voluntarily. All participants received an equal amount of time to spend on answering the questions. The focus groups continued until the discussions had answered all the required questions that satisfied the main research themes. No specific data or notes were identified or recorded during the three focus group sessions. Group discussions were conducted several times using the same key research questions and by following the same procedures with different participants so the researcher could easily identify patterns and trends in the participants’ experiences and level of relationships.

3 - 4. F: Analysis of focus group discussions

Catterall and Maclaran (1997) claimed that a lack of attention has been paid to focus group discussion analysis in the literature and in market research practice. This notion was supported by many other researchers (Griggs, 1987; Robson and Hedges, 1993).
Therefore, a variety of approaches have been adopted by researchers to manipulate and treat focus group discussions.

Gordon and Langmaid (1988, cited in Catterall and Maclaran, 1997) differentiated two ways of analysing focus group discussions. The first one is the manual or computerised (cut and paste) method which is called the ‘large sheet of paper’ approach. It involves breaking the transcript down into many segments then allocating the segmented parts under headings and themes identified by the author according to the theoretical backgrounds applied inductively and/or deductively. The second is the ‘annotating the scripts’ method which involves reading the text after the focus group discussion has been transcribed (and /or listening to the audio tapes) and setting out the interpretive ideas and thoughts behind the textual body of the discussion. Additional discussion on the differences between the two main analysis processes for focus groups, which were described as analysis (data handling) and interpretation (data thinking), was provided by Robson and Hedges (1993). It has been claimed that social scientists who employ the focus group as a data collection method in their studies have a more positive attitude to using computer techniques after text segmentation, following by grouping (Kaplan and Maxwell, 1994; Catterall and Maclaran, 1997); sometimes they use computer programs to help them in the analysis processes. Both methods have been applied and adopted in this study to elicit the study factors and their related items (Weitzman and Miles, 1995).

All conversations were tape-recorded. Then, the focus group audiotapes were transcribed by the researcher to produce written documents; this facilitated the coding and analysis processes based on the coding scheme that has been determined in the contract content analysis in the previous section (3-3-B). As recommended by Wesslén et al. (1999), it is preferable to transcribe each focus group and interview faithfully, word by word, into written document formats in order to encompass all the phrases, words, and participants’ tone of voice (Wesslén et al., 1999; Shekedi, 2005).

The focus group transcripts were reviewed by an independent researcher to compare the written documents with the audiotapes of the focus group discussions. Minor differences were found and rendered faithfully. In the first and second focus groups, the manual cut and-paste method was adopted after the discussions had been transcribed. Meanwhile, in the third focus group, the interpretive method was adopted to determine the study elements after listening to the audiotape discussion.
The focus group analysis process passed through many stages as shown in Table 3 - 2 in the following page. These steps were guided by many scholars (Byers and Wilcox, 1991; Sommer and Sommer, 1992; Morgan, 1993; Morgan, 1997; Kidd and Parshall, 2000; Millward, 2000; Stewart et al., 2007) and will be used simultaneously in the following two sections which include both focus group and interview discussions analysis.

<table>
<thead>
<tr>
<th>Step</th>
<th>Analysis Procedure</th>
<th>Overview of analysis procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Review data</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Create coding guide</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Organize data using interview guide questions</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Categorize focus group responses using FIB (Factors Influencing Behaviour) domains by using the coding guide</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Interpret data</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Create a Final Report which summarised the final elected study elements.</td>
<td></td>
</tr>
</tbody>
</table>

Step 1 - Analysis Procedure – Review data

Before proceeding with the coding and analysis processes, the research data and material should be reviewed by the researcher(s) and/or by independent scholar(s). Data in this study had been re-examined from many angles including study terms and definitions, discussion analysis guide, audiotape materials, transcripts, and any notes or briefing comments that had been written during and after conducting focus groups and interviews. The review stage is important because it facilitates the extraction of the required themes and patterns which are related to factors influencing mobile phone users (Jung and Connelly, 2007). Also, reviewing the study material is recommended, as a great deal of other beneficial and obvious data can be elicited.

Step 2 - Analysis Procedure – Creating a coding guide

There are a variety of ways in which a researcher can organize the required data. The most appropriate approaches are those that serve the study’s purposes within the social, time, and place domains (Morgan, 1997). Therefore, all mobile users’ discussions have been conducted using the same questions format and coded using the same coding guide. Also, the main themes’ headings are formulated in a way that can be easily recognised when coding and categorizing discussion texts. This was done by creating some abbreviations to represent the main themes which will be repeated in the three discussion groups. Also, colouring is used to differentiate between different types of categories. Ultimately, the coding process is divided into two phases:
Phase 1: Coding guide using the BPM’s main broad elements.

Coding group discussions involves allocating two or three letters as signs to represent the main study factors, as shown in Table 3 - 3. According to the BPM, there are six components that have been defined by Foxall (Foxall, 2007) with headings as follows: utilitarian reinforcement (UR), informational reinforcement (IR), utilitarian punishment (UP), informational punishment (IP), learning history (LH), and, finally, behaviour setting domain (BS). In addition, the behaviour setting (BS) has four sub-domains: Physical Factors (PhF), Temporal Factors (TF), Regulatory Factors (RF), and Social Factors (SF); these sub-domains provide further explanation of the mobile phone purchasing behaviour setting.

<table>
<thead>
<tr>
<th>No.</th>
<th>Domain or theme name</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Utilitarian Reinforcement</td>
<td>UR</td>
</tr>
<tr>
<td>2</td>
<td>Informational Reinforcement</td>
<td>IR</td>
</tr>
<tr>
<td>3</td>
<td>Utilitarian Punishment</td>
<td>UP</td>
</tr>
<tr>
<td>4</td>
<td>Informational Punishment</td>
<td>IP</td>
</tr>
<tr>
<td>5</td>
<td>Learning History</td>
<td>LH</td>
</tr>
<tr>
<td>6</td>
<td>Behaviour Setting</td>
<td>BS</td>
</tr>
<tr>
<td>6-A</td>
<td>Physical Factors</td>
<td>PhF</td>
</tr>
<tr>
<td>6-B</td>
<td>Social Factors</td>
<td>SF</td>
</tr>
<tr>
<td>6-C</td>
<td>Temporal Factors</td>
<td>TF</td>
</tr>
<tr>
<td>6-E</td>
<td>Regulatory Factors</td>
<td>RF</td>
</tr>
</tbody>
</table>

Phase 2: Coding guide using limited concept themes

In every main broad element, there are many limited elements into which the texts were fragmented. For example, in terms of the mobile suppliers’ effectiveness, there are different factors that may be taken into consideration such as face-to-face communication and friendly behaviour towards the customers, and receiving prompt service from employees and customer service units. Accordingly, the literature was used to determine which aspect of each construct in the actual mobile offerings would be taken into consideration. For example, the main utilitarian reinforcement dimensions included in the majority of mobile contracts on offer are the following: Free handset, number of minutes, number of messages, number of Skype minutes, free weekend and evening calls, mobile handset type and brand, the possibility of using some of the airtime minutes to make international calls, and any free gift with the offer, if available.
Step 3 - Organizing data using interview guide questions

In this step, focus group discussions are organized by the transcriptionist, firstly according to the list of codes for the BPM components’ discussion-guiding themes (as mentioned previously in phase one), and then according to each of the construct items, which are listed in the following Table 3 - 4 on page 159. The organizational process consists of listing all responses that relate to the appropriate discussion question by using the coding guide explained in phase one. Some individual responses are related to more than one theme and other responses which are not related to any of the discussion questions are removed in order to facilitate the categorized data. The organization of the data is reflected by the categorization process which explains the links between different themes of the theoretical construct in hand (Richards and Richards, 1994).

Step 4 - Categorizing focus group responses

After distributing all the responses according to main themes and categories, every sentence is allocated to its related theme. The ultimate goal of organizing and categorizing group discussions is to identify the main factors that influence subscribers’ purchasing retention behaviour. Coding design is essential for referring all text segments to the main defined categories. Then the analysis is carried out by reading each response and allocating it to the related theme. Some authors refer to this as the coding process (Sommer and Sommer, 1992; Macchia et al., 2008).

Step 5 - Interpreting data

This step is designed to make explicit links between data after the coding process is completed. This step is aimed initially at unifying different participants’ responses and to establish meaningful links among them to facilitate frequency-counting in order to determine which elements need to be used when designing the survey questions later. Establishing the links between the main categories of participant behaviour and experiences is essential because it reveals different alternative responses supported by a variety of explanations. This process leads to the acceptance of what the data analysis reveals, especially when defining the main ideas which are repeated by the majority of participants, thus removing the minor ones that presented only rare incidents. Also, this step is helpful in evaluating the quality and quantity of the data that have been recorded.
and the main themes that have been elicited from the behaviour of the target sample (Koechlin and Zwaan, 2001).

Step 6 - Creating final construct elements

The final step is aimed at summarising the final construct elements that will be included in the next preparation phase of the study survey according to the frequencies of the participants’ reported incidents. Table 3 - 4 gives all the main BPM construct elements that were elicited from the focus group discussions. Also, Table 3 - 5 on page 160 summarises the main behaviour setting construct elements that will be used in preparing the study survey.

Table 3 - 4: A list of elements that are included in each study construct

<table>
<thead>
<tr>
<th>No.</th>
<th>Domain or Theme (Code)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Utilitarian reinforcement (UR)</td>
</tr>
<tr>
<td></td>
<td>Number of free minutes given by the supplier</td>
</tr>
<tr>
<td></td>
<td>Number of free text messages given by the supplier</td>
</tr>
<tr>
<td></td>
<td>Group calling discount or allowances (e.g. family pack)</td>
</tr>
<tr>
<td></td>
<td>The possibility of using allowed minutes to make</td>
</tr>
<tr>
<td></td>
<td>international calls</td>
</tr>
<tr>
<td></td>
<td>Number of free Skype minutes allowed</td>
</tr>
<tr>
<td></td>
<td>Free weekend and evening calls</td>
</tr>
<tr>
<td></td>
<td>Free handset with mobile contract package</td>
</tr>
<tr>
<td></td>
<td>Mobile handset type and brand</td>
</tr>
<tr>
<td></td>
<td>Mobile handset features - e.g. Cameras</td>
</tr>
<tr>
<td></td>
<td>Mobile broadband offers</td>
</tr>
<tr>
<td></td>
<td>Free gift attached to mobile contract offer</td>
</tr>
<tr>
<td>2</td>
<td>Informational reinforcement (IR)</td>
</tr>
<tr>
<td></td>
<td>Using allowed minutes for social chatting</td>
</tr>
<tr>
<td></td>
<td>Improve relationship and interaction with others</td>
</tr>
<tr>
<td></td>
<td>Feeling safe and secure by using the mobile phone</td>
</tr>
<tr>
<td></td>
<td>Convenient mobile entertainment</td>
</tr>
<tr>
<td></td>
<td>Convenient flexibility</td>
</tr>
<tr>
<td>3</td>
<td>Utilitarian punishment (UP)</td>
</tr>
<tr>
<td></td>
<td>Contract monthly price/cost</td>
</tr>
<tr>
<td></td>
<td>Amount of monetary deposit required</td>
</tr>
<tr>
<td></td>
<td>Cost of terminating mobile contract</td>
</tr>
<tr>
<td></td>
<td>Cost of upgrading mobile contract</td>
</tr>
<tr>
<td></td>
<td>Time and effort searching for the best mobile contract</td>
</tr>
<tr>
<td>4</td>
<td>Informational punishment (IP)</td>
</tr>
<tr>
<td></td>
<td>Risk in mobile Internet shopping</td>
</tr>
<tr>
<td></td>
<td>Credit assessment check issue by mobile suppliers</td>
</tr>
<tr>
<td></td>
<td>Low authority in the contract items and conditions</td>
</tr>
<tr>
<td></td>
<td>Low financial data protection</td>
</tr>
<tr>
<td></td>
<td>Low personal data protection</td>
</tr>
<tr>
<td>5</td>
<td>Learning history (LH)</td>
</tr>
<tr>
<td></td>
<td>I rely on my experience to evaluate and choose among</td>
</tr>
<tr>
<td></td>
<td>mobile phone contract offers</td>
</tr>
</tbody>
</table>
My bad experience with my previous mobile supplier makes me switch to another one

My good experience with my previous mobile supplier makes me renew my contract

6- The behaviour setting elements (BS) have four constructs which are: Physical, Social, Temporal, Regulatory

<table>
<thead>
<tr>
<th>No.</th>
<th>Behaviour setting elements (BS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>Physical elements (PhF)</td>
</tr>
<tr>
<td></td>
<td>Mobile shops availability</td>
</tr>
<tr>
<td></td>
<td>Mobile shop’s atmosphere, design, music, colours, and sales peoples’ uniform</td>
</tr>
<tr>
<td></td>
<td>Seeing and trying the actual product and service inside the mobile shop</td>
</tr>
<tr>
<td></td>
<td>Mobile supplier’s online shops availability</td>
</tr>
<tr>
<td></td>
<td>Mobile contract purchasing process via supplier’s website</td>
</tr>
<tr>
<td></td>
<td>Mobile contract purchasing process via mobile shop</td>
</tr>
<tr>
<td></td>
<td>TV advertisement effects</td>
</tr>
<tr>
<td></td>
<td>Monthly magazines</td>
</tr>
<tr>
<td></td>
<td>Supplier’s website promotion</td>
</tr>
<tr>
<td>2-</td>
<td>Social elements (SF)</td>
</tr>
<tr>
<td></td>
<td>Friends’ recommendations</td>
</tr>
<tr>
<td></td>
<td>Family’s recommendations</td>
</tr>
<tr>
<td></td>
<td>Sales persons training and knowledge</td>
</tr>
<tr>
<td></td>
<td>Sales person face-to-face communication</td>
</tr>
<tr>
<td></td>
<td>Friendly behaviour and personal attention</td>
</tr>
<tr>
<td></td>
<td>Receiving prompt service from mobile suppliers’ employees</td>
</tr>
<tr>
<td></td>
<td>Receiving prompt service from mobile suppliers’ customer service</td>
</tr>
<tr>
<td>3-</td>
<td>Temporal elements (TF)</td>
</tr>
<tr>
<td></td>
<td>Mobile contract airtime longevity</td>
</tr>
<tr>
<td></td>
<td>Offer’s time introduced to the market and the flexibility of upgrading the contract</td>
</tr>
<tr>
<td></td>
<td>The end of contract’s time</td>
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<td>4-</td>
<td>Regulatory elements (RF)</td>
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<td>Contract’s terms and conditions</td>
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<td>Mobile contract upgrading flexibility</td>
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<td>Rights protection and sanction</td>
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Table 3 - 5: A list of items that are included in each BS construct

To sum up, focus group technique has been used in this part to collect primary data from the study sample targets who, in this study, are mobile phone users. This method is associated with a phenomenological methodology which is normally used to gather data relating directly to the opinions and feelings of a group of selected people who are involved directly in the studied phenomenon (Collis and Hussey, 2003). Three focus groups have been conducted as a preliminary stage for developing the main study elements within the theoretical background components in order to define the main
questionnaire items to be used in the pilot study in a later stage. Designing the pilot study questionnaire cannot be achieved without the explicit use of focus group discussions which leads to the elicitation of the main primary data from real sample participants. However, merely taking the mobile subscribers’ opinions into consideration when studying the customer retention behaviour phenomenon is not enough without also taking some practitioners’ and managers’ opinions into consideration regarding different study constructs. That is because relationship marketing is considered a dual interactive process between both suppliers and customers. Accordingly, customer retention comes under the effect and control of management behaviour that organizes and manipulates the process of introducing different levels of reinforcement, utilities, and punishment with a variety of wireless communication price packages. Lindgreen and Pels (2002) emphasised that the relationship should be studied from a supplier, as well as a customer perspective. This notion is confirmed by Amant and Still (2007, p.581) who argued that “it is not enough to study a relationship from the point of view of one party alone and the analysis of value creation also should not focus on only the customer's perspective”. Thus, there is a need to take a look at the suppliers’ side and consult their marketing management on different retention-related elements especially those factors which are seen as the main customer retention determinants. The following section explains the process of contacting mobile suppliers’ managers and the execution process of the interviews.

3 - 5: Interviews

Introduction

Relationship marketing between the firm and the customer is a two-way interaction. Each part affects the other. Firms try to influence consumer behaviour within the scope of competitive and environmental forces. That is because firms exist in order to market. All marketing and managerial activities are used to promote the firm itself and its products and/or services. Thus, understanding customer retention requires an account of consumer behaviour as well as one of managerial response (Foxall, 1998). The firm-customer relationship is controlled by managerial plans and activities which determine managers’ and marketers’ behaviours aimed at maintaining the interchangeable relationship with customers. This is achieved through the firm’s efforts in organising the setting in which buying an item or services is rewarded (Reed, 1999). Therefore, investigating the supplier-customer relationship issues, especially customer retention, cannot be done without taking
into consideration managers’ views, especially when the managers’ main responsibility is
to maintain the driving forces of successful customer relationships (Walter, 1999).

This part investigates the methods of collecting the required data from managers in order
to signify what suppliers do to retain their customers. Accordingly, the outcomes from
management data analyses may help to shape customer behaviour and specify the drivers
that affect their relationships with suppliers. In this thesis, conducting interviews with
managers was undertaken on a small scale with respect to the idea that the customer
retention phenomenon is investigated mainly from the customers’ perspective. This idea is
supported by Helander and Möller (2007) who claimed that additional studies are needed
to describe how marketing management behaves to attract and retain customers
(Reichheld, 1996; Backhaus, 2003), and to explore management’s role in maintaining
customer relationships (Weitz and Bradford, 1999; Ford and Berthon, 2002). To achieve
the study’s purposes, a qualitative methodology has been applied using the interview
technique to collect data from managers. The main goals of conducting interviews with
managers is to see whether data elicited from consumers were comprehensive and to take
into consideration their opinions regarding many customer retention-related issues such as
utilitarian benefits provided and how they design mobile plan offerings. This method is
highlighted by O’Driscoll and Cooper (1996) who claimed that organizational behaviour
studies often use different quantitative approaches to collect the required data in order to
study the components of transactions with customers and others in the marketplace. It has
been mentioned that the utilization of linguistics in philosophy has increased in the last
few decades, especially in different administration and business arenas. This science
attempts to predict human behaviour by expressing individuals’ experiences and by
focusing on language and verbal expressions (Alvesson and Deetz, 2000). Therefore,
interviews with managers were conducted to collect data from the suppliers’ side.
Interviews are considered one of the main qualitative techniques and have been used
intensively in different marketing arenas in general; lately, they have been used
extensively in customer retention studies (Rust and Zaborik, 1969; Gruen et al., 2000;
Gustafsson et al., 2005). Kvale (1996, p.1) described the aim of using qualitative research
interviews as “attempts to understand the world from the subjects' point of view, to unfold
the meaning of peoples' experiences, to uncover their lived world prior to scientific
explanations”.
This following part explains how the interview participants were chosen, how the interview questions were selected, how the interviews were conducted, why phone interviews were used, and how the interview discussions were coded and analysed.

3 - 5. A: Interview participants selection

There are many ways in which interview participants can be chosen. However, choosing interview participants and contacting them depends on many factors including the researcher’s skills, time, budget, study objectives, and which organizations and managers are willing to cooperate (Bryman, 1989; Ferreira and Merchant, 1992). Mainly, the way of defining and choosing interview participants and the way of contacting them depends on what types of information are needed and how the data will be used (Silverman, 2006). Eliciting the required data is achieved by noting participants’ (actors) verbal expressions and studying people’s knowledge, attitudes, and experiences from the viewpoint of the actor rather than by viewing things or expecting responses from the interviewer’s personal perspectives (Foddy, 1994). According to Hannabuss (1996), actors, in this case, are those people who work in different mobile supplier organizations and do particular jobs; they gave responses to specific questions and their opinions about what they do is an important element in qualitative data.

The second important issue concerns the number of participants considered sufficient for contacting and selecting. In quantitative data collection, the main factor that defines the number of participants is the statistical method(s) that will be used to analyse the collected data. However, in qualitative studies, there is no correct answer to this question. Therefore, many issues have been taken into consideration to increase the number of participants, which in turn increases the response rate and the amount of required data. Interview candidates were chosen according to many criteria: a) could the candidates provide critical evidence and clearly express their experiences related to the study themes?; b) could each participant be guaranteed to provide the required data and to provide evidence connected directly to his/her job experience?; c) all candidates had been asked the same ‘core’ questions which were defined and agreed based on BPM theoretical background to consult managers about customer retention behaviour drivers. This process is aimed at collecting different responses to the same study issues; d) all candidates had been asked the same questions, within a short period of time, with respect to their
ethnicity, gender, origin, age, employer, level of management, and firm’s size, age, and geographical location.

When the target had been identified, the following issue was how to contact the potential interview candidates. The search for the targeted managers began with the academic community; consideration was given to all potential candidates who were registered as Durham Business School alumni, or were Durham University alumni and were working for a variety of mobile service organizations in the UK. This link has advantages from many perspectives. Firstly, it was easy to classify their characteristics, outline their job descriptions, delineate their personal organization details, and contact them directly. Accordingly, it was easy to define them, confirm their availability and reach agreement on a convenient time and place to contact them. Secondly, it was easy to match participants’ management skills and qualifications to the types of required data. Managers’ eligibility as suitable candidates to be contacted and interviewed was agreed upon by two additional scholars and two practitioners. Thirdly, all candidates are linked directly to Durham University as graduate students and/or external lecturers invited to give seminars. They have sufficient management qualifications in addition to adequate knowledge about the research environment and data collection methods, especially interview techniques.

After reviewing all the alumni lists, 87 managers were identified as shown in the appendix Table 5. All identified managers were contacted formally by email. The emails were supported using an electronic formal letter. The format of the contact letter was designed in a formal way and included the Business School stamp and logo as shown in the appendix Table 6.

Twenty-three participants agreed to take part in the interview process and revealed their willingness to be contacted at any time to agree on the time and place of the interview. Five of the respondents asked the researcher for a report to explain more about the study’s purpose, objectives, and other processes of communication. A follow-up procedure, using emails and phone calls, was undertaken to motivate the rest of the intended candidates to take part in the interview process. The final contact list had 18 candidates who definitely agreed to take part in the interviews stage. Finally, 14 managers were interviewed successfully by phone because the majority of them travel extensively and have tight time schedules. Participation in this process was voluntary and each interviewee agreed formally to take part by sending emails bearing their organizational and personal details.
Some of the managers had sent their personal profiles and details of their organizations’ websites which gave a broad picture of their business activities and their firms’ products and/or services.

3 - 5. B: Interview questions

Investigating managers’ views on customer retention issues will be the main interest in this section. It is concerned with what suppliers do to establish and promote good relationships with existing customers, such as offering highly qualified customer service units which handle everyday queries and deal with customers’ claims (Dyche, 2001). This will lead to the study of management’s main concerns about how these are represented in their staff’s behaviour regarding customer retention. This notion is translated by Osarenkhoe and Bennani (2007) who asked what efforts are made to link the component of Customer Relationship Management (CRM) as a strategy and operative approaches? To achieve this aim, the questions to the managers were developed in such a way as to elicit their logical answers on the main customer retention themes. Sometimes, it is impossible to predict what questions a researcher may use during the interview but a questioning guide was prepared by the scholar to help identify some of the participants’ actions before conducting the interview discussions (Goulding, 2002; Ghauri and Grønhaug, 2005). For example, questions were formulated to explore what managers do to provide suitable mobile contracts through which they maintain the supplier-customer relationship and influence consumers’ purchasing behaviour. Thus, some questions were devised to steer the discussion towards contract elements and each mobile supplier-related issue such as contract longevity, handset types provided, and any special service provided, such as family communication packages.

The number of questions should be considered carefully when preparing for the interviews (Matzler and Hinterhuber, 1998; Hansemann and Albinsson, 2004). This is because the interviews usually last between one and two hours. To prevent the participants from becoming tired, which can in turn affect the quality of responses, a questions guide has been designed which indicates that no interview should last more than an hour and a half, which is the ideal length. The number and type of questions is defined based on the applied theoretical framework (BPM) and the main behavioural aspects that are defined according to analysis of mobile subscribers’ focus group discussions, as explained
previously in section 3-4. The main themes of the managers’ questions and key elements have been listed in the appendix Table 7.

In order to avoid any confusion arising from the wording of the questions, a few simple rules were applied to make sure that the questions were easily understood (Parfitt, 1997). For example, simple language was used, thus obtaining clear answers; questions were designed to be short and ordered in several parts for each section. No prior judgements were suggested by the questions, thus helping participants to answer freely and not feel embarrassed. Key questions were prepared in advance based on the literature review for each study element; this enabled the researcher to focus on obtaining answers on the different BPM key dimensions. The questions were divided into eight parts which encompassed the following: behaviour setting questions, learning history questions, behaviour situation questions, utilitarian reinforcement questions, informational reinforcement questions, utilitarian punishment questions, informational punishment questions, and conclusion questions such as ‘what are the main strategies that a manager recommends to strengthen the mutual supplier-customer relationship?; and, what makes a customer repeat his purchase from the manager’s organization?’

The interview questions were designed to be open-ended for the following reasons: it allows the interviewees to participate freely and describe what was important from their perspective by using their own words and statements. This method of question-building gave participants more space to describe each issue in considerable detail; this might be crucial if the study is to achieve its aims. Open questions gave the interviewees the chance to voice their opinions based on their accumulated experiences and without interruption; they were thus in a relaxed frame of mind when answering the interviewer’s questions (Hargie and Dickson, 2004). When the participants communicated some general characteristics to the moderator, they were asked some open-ended questions requiring them to answer according to their experience. In brief, a conscious effort was made to ensure that questions were clearly formulated, neutral, appropriately sequenced, and easily understood (Foddy, 1994; Schwarz and Oyserman, 2001; Becker et al., 2008).

3 - 5. C: Conducting the interviews

The conducting of the managers’ interviews passed through many steps that have been divided basically into three stages: pre-conducting, conducting, and post-conducting.
In the pre-conducting stage, each candidate’s employment history was checked and his educational and professional backgrounds were evaluated (Hackney and Kleiner, 1994). Also, it was necessary to ensure that all the contact details were correct in order to support communication between interviewer and interviewees. Each manager was contacted many times by email and/or phone in order to arrange the following: a) agree time, place, and methods of communication, b) inform potential participants about the study elements and its objectives in order to be sure that their experience matched the study’s purposes, c) secure participants’ acceptance before conducting the interviews or transfer the communication and correspondence process to those managers whose profiles are closer to the study’s objectives. Some managers were asked to look in advance at the interview questions in order to plan suitable answers which needed, in some cases, a little preparation. Some of them were asked to answer the study questions after the interviews had finished. Repeat interviews were conducted by agreement with managers one by one after making supplementary enquiries by email, phone calls, reports, and document exchanges that facilitated the communication process and obtained the required data (Remenyi et al., 1999). Supplementary procedures are essential for communication, and this enabled the researcher to obtain managers’ input, as confirmed by Yin (2003). In total, 14 managers were interviewed separately using the same questions. The researcher organized the interview process in a way that matched different study domains in order to identify customer behaviour drivers according to managers’ experience. The majority of interviews were carried out over the phone and just two of them were conducted personally.

At the beginning of each interview, a brief introduction was given to participants in order to clarify the study’s purposes and explain all the ethical issues regarding the collection and manipulation of data. To gain the interviewee’s attention, it is useful to start by asking him to speak about himself and give a brief summary of his job description. Other introductory questions designed to gain participants’ attention were “How long have you worked for your firm? And what positions have you held?” This method is confirmed by Mellon (1990) who declared that the “introduction and small talk” serves as the initiation phase and is intended to build up a direct relationship with participants and to inform them about the study’s purpose and uses of the interview data.
During an interview, much emphasis has been placed on listening carefully to the participants’ explanations and comments while some of them tend to give a broader view of the situation (Roulston et al., 2003). The communication environment has been designed to maintain the scholar’s and participants’ interest without causing any confusion (Black, 1982). Interviews were sometimes conducted less formally in that the sequence of questions was changed from time to time according to the themes emerging from the discussions. In some instances, the wording of questions was changed to explain some ideas to a few candidates. The questions flowed sensibly; the initial questions were designed to capture participants’ attention and moved directly to the purposes of the interview. The majority of questions were in an “open answer” form whereby the participant had the chance to explain his ideas freely on each theme. This is because “the purpose of open-ended interviewing is not to put things in someone’s mind…but to access the perspective of the person being interviewed” (Patton, 1990, p.278).

The interview sequence went from the general to the specific and many examples were used by the author in order to involve the participants so that they would speak openly about their thoughts and experiences. Some supportive questions were used including opening questions that anyone could answer; the interviews continued with critical questions which related directly to their daily work and problems they encountered, and ended with concluding questions which thanked the participants for their time and cooperation. Some guidance has been followed in conducting managers’ interviews in a proper way which may enhance the quality of the qualitative data: Questions and answers were executed in a way that was relevant to the participants’ jobs of which they had a good knowledge; the interviews were conducted as an interaction process or as a two-way process; the aim of conducting the interviews was to collect proper data by giving each candidate enough time and space to provide suitable evidence about essential incidents occurring in their business activities.

While conducting and recording the interviews, the scholar would also write simple notes. While it was not possible to reproduce the sessions word-for-word, some important notes were taken and supported by abbreviations. After the interview sessions finished, the scholar reviewed the notes and added some detailed supplements which might have been forgotten if left until later. The majority of the registered comments were written by the observer as essential comments, not as judgemental notes by the researcher. Finally, the
interview discussions and answers to questions were recorded on a USP recorder and copied later to a computer to facilitate coding and analysis processes.

3 - 5. D: The rationale behind using the phone interview method

This section explains the rationale behind using the telephone interview method with the majority of participating managers in the mobile phone sector; its main weaknesses and strengths are detailed.

Managers in the mobile phone sector are considered part of the basic unit of study: the relationship between service suppliers and customers, and the managers’ role in customer retention. The majority of managers’ interviews were conducted by phone. Phone interviews have many advantages over face-to-face interviews for various reasons. Mobile suppliers’ managers are scattered over a wide area because the majority of them travel extensively inside and outside the UK, although they are primarily based in the UK market. Thus, as illustrated by Colombotos (1969), telephone costs are lower than the expenses the interviewer would have incurred in travelling from one candidate to another, especially if the respondents were not at home, busy, or unavailable. Uhl et al. (1969) illustrated that, when comparing the cost per return between personal, postal, and telephone interviews, the latter is much the cheapest option. Also, in impersonal situations, some evidence indicates that a participant is more likely to be candid (Buzzell et al., 1969), and a significant level of anonymity is secured by telephone usage (Falthzik, 1972). Meanwhile, Larsen (1952) argued that face-to-face interviews may increase the likelihood of prestige-motivated overstatements by participants as compared with phone interviews. However, many authors confirmed the failure of telephone interviews to obtain in-depth information about complex topics or to allow for reflection compared to face-to-face interviews, especially if the phone interviews are short. This notion is contradicted by Payne (1956) who claimed that the length of telephone interview and the range of subject matter are not as limited as believed. Also, Hochstim (1963) made a wide comparison of data collected by different methods - telephone interview, personal interview, and mail questionnaire - from randomly selected subsamples of his study target. In general, similar results were obtained from all three data collection methods. To avoid the possibility of missing some in-depth information, two of the interviews in this study have been conducted face to face with a few applicants.
To sum up, data collection by phone is becoming increasingly popular because it produces quick results and the response rate is usually higher than that achieved by mail questionnaire; it also has large cost-saving advantages over personal interviews (Dillman et al., 1976). In addition, suitable responses can be achieved, and sensitive topics (e.g. health) can even be successfully discussed in phone interviews (Dillman and Frey, 1974). Moreover, a phone interview has a much lower level of bias than a face-to-face interview as, in the latter, the interviewer can unwittingly impart visual and verbal clues to the participants when they answer some of the structured questions. However, the length of the phone interviews may directly affect the response rate of participants. This claim is supported by Collins et al., (1988) who reported a 9% refusal rate for the 20-minute interview versus a 14% refusal rate for the 40-minute interview. Therefore, a long interview is less likely to be accepted by mobile phone managers because they lack free time and they have no detailed previous knowledge about the length of interviews, which are indeterminate in some cases (Bogen, 1999).

3 - 5. E: Coding and analysing managers’ interviews

The major goal in analysing managers’ interviews is to find out how their actions determine and shape consumers’ behaviour, especially in the mobile phone retention context. In other words, interviews were conducted in order to determine the main factors that managers concentrate on to retain customers with respect to their behaviour stimuli and consequence factors. This will help explain how the interaction between customers and suppliers takes place and whether the interaction indicates customer retention or switching. The process of analysing the interview texts followed the manner which had been used in taping, transcribing, coding, and analysing customer focus group discussions as explained in section 3-4-F. The processes of coding and analysing interview discussions were executed with respect to many scholars (Belk, 1974; Belk, 1975; Nicholson et al., 2002; Collis and Hussey, 2003; Nicholson, 2004; Alshurideh, 2009). Also, some evidence from quantitative analysis has been identified to determine the degree to which spoken behaviour positively and negatively supports the main study constructs which are classified according to the Behavioural Perspective Model (Foxall, 1998).

Prior to the analysis process, interview discussions were transcribed into texts for analysis. The interview transcription process was reviewed by another scholar in order to increase
the reliability and validity of transferring spoken behaviour into written texts. After reviewing the written documents, the texts were ready to be coded and analysed.

The process of analysing interview texts was based on a number of methods. First, a codes list was established, representing the main management themes which are summarised by BPM components (Foxall, 1998). The codes list includes six parts as illustrated in section 3-4-F, which are: utilitarian reinforcement (UR), utilitarian punishment (UP), informational reinforcement (UR), informational punishment (IP), learning history (LH), and behaviour setting elements (BS). Collected items were allocated to the main behaviour drivers. Second, a text fragmentation process was executed by reviewing each statement and referring it to one of the study codes. The coding process has been carried out in two ways: either a statement is identified clearly or it is translated by theme into one of the study codes. Third, a data-reducing step was aimed at determining the main incidents that would give a clear meaning about related study themes that have a high frequency, thus removing any unrelated or minor incidents. This step is accompanied by text fragmentation, which tends to find evidence to form particular arguments. Fourth, data were structured and grouped by defining the main category specifications and referring all defined incidents to suitable categories. This step is not easy to carry out as it needs considerable effort to think about the data themes emerging into the body of the theoretical framework. Then, the process of quantifying the qualitative data was conducted by counting all incidents and evidence pertaining to each category to provide richness and insights, using numerical data. One of the main reasons for quantifying the qualitative data is to examine and count repetitive actions to denote how such behaviour is important, whether it occurs very frequently or rarely (Chi, 1997), and to avoid repetitions (Lindlof, 2002). In order to add more valuable elements to the analysis process and provide additional meaning, the study is augmented by some participants’ quotations (Simon et al., 1996).

Some scholars have highlighted the importance of mixing some managers’ oral quotations with some participants’ views (Simon et al., 1996; Corden and Sainsbury, 2005). This method of analysis adds richness to the data and explains the analysis more logically. According to Patton (1987, p.28), quotations are important for the analysis process because they reveal “the respondents' levels of emotion, the way in which they have organized the world, their thoughts about what is happening, their experiences, and their
basic perceptions.” In addition, the methodology in this part is supported by using some of the managers’ Critical Incidents which expressed their experience, as recommended and guided by the theory of development in marketing (Zaltman et al., 1982; Deshpande, 1983). The process is started by defining the main interactive incidents that affect the customer-supplier relationship positively and negatively. More specifically, the process is initiated by collecting the ‘actual events’ expressed by managers about their behaviour in managing their interaction with customers. Managers’ interviews yielded some ‘grounded events’ that were planned to retain customers and prevent switching as part of a mutual relationship with customers. The Critical Incident Technique (CIT) was first used by Flanagan (1954) to mean a set of actions and procedures used to collect some observations of human behaviour. The process of determining the ‘critical events’ has been applied in different relationship marketing and customer retention studies (Glaser and Strauss, 1967; Bitner et al., 1990; Ahn et al., 2006; McColl-Kennedy et al., 2009). The critical incidents were defined in Keaveney’s (1995, p.72) study as:

“Any event, combination of events, or series of events between the customer and one or more service firms that caused the customer to switch service providers. Critical incidents were defined broadly to cast a wide net: Incidents could include not only employee-customer service encounters but any relevant interface between customers and service firms”.

As mentioned by Keaveney (1995), CIT is appropriate when the goal of analysis includes both managerial usefulness and theory application and development. The critical incidents method has been described by Smith et al., (1994) as “event management” and used by some scholars such as Jaakson et al. (2004) in the same way to analyse organizational behaviour. That is because, according to Keaveney (1995, p.73), CI can refer to “either the overall story or to discrete behaviours contained within the story”. When managers’ incidents have been identified, many similar incidents have been counted and others have been unified positively and negatively, such as success and failure in service situations (Lockwood, 1994).

To sum up, this section has focused on providing a clear picture about the methods of designing, conducting, and analysing qualitative interview data elicited from mobile phone managers working for some of the UK’s mobile operators. By recording, transcribing, coding, summarising, identifying, categorizing, and counting study themes, this work relied on the quality of interview text interpretation and fragmentation into small statements categorized by the BPM. To enhance qualitative data collection, many
considerations have been taken into account. For example, managers have been chosen by careful procedures to ensure that the right data will be collected from practitioners who work in the mobile phone sector. This method uses a rigorous research technique which collects valid and reliable data from participants, with a low level of probable errors and bias that may occur through the process of interviewing target managers. Therefore, the participants’ selection procedure is properly implemented in the constitution of this study to ensure that participating members have the requisite degree of managerial experience, willingness, and ability to assume responsibility and participate voluntarily in this research.

3 - 6: Survey instrument

Introduction

This part discusses the main study instrument employed to collect primary data from customers and the rationale behind its selection and usage. Many dimensions are explained in this part as follows: a preliminary section that gives a general idea of the survey instrument and how it links to relationship marketing and to consumer behaviour studies; the rationale behind using the survey instrument as the main data collection method supported by briefly listing its advantages and disadvantages; survey items selection; survey items ordering; and a description of the study scale design.

The survey method is a quantitative research tool that has wide applications and usages in different business studies (Campbell and Katona, 1953; Ghauri and Gronhaug, 2002). It is described by Sekaran (2000, p.233) as a “pre-formulated written set of questions to which respondents record answers, usually within rather closely defined alternatives”. Also, it is described by Collis and Hussey (2003, p.66) as a “positive methodology whereby a sample of subjects is drawn from a population and studied to make inferences about the population”. Studying consumer behaviour by using a research survey as the main data collection method has been undertaken by many scholars in different behaviour contexts (Hackett and Foxall, 1997; Leek et al., 1998; Leek et al., 2000). This study has added valuable input to the consumer retention behaviour literature by using a survey method as the main research instrument, especially in one of the highly developed service industries - the mobile phone sector.
3 - 6. A: The rationale behind using the survey instrument

The survey in this thesis aimed to collect the required primary and factual data from mobile subscribers by developing and administering standardised groups of questions within one questionnaire to a sample of mobile phone users. Initially, the survey method is chosen because it is seen as one of the most efficient data collection mechanisms; the researchers know how to deal with it and how to test the variables of interest. In addition, this method offers certain benefits: it is cheap, can be quickly distributed and collected, produces a reasonable response rate, and is easy to structure and organize. The unit of analysis for the customer’s side is any subscriber who used mobile telecommunication services and subscribed to one of the UK mobile service providers; the subscribers were drawn from all the users in the United Kingdom during the period when this study was conducted. A unit of study has been described by Collis & Hussey (2003) as the kind of case to which the variables or phenomenon under investigation and the research problem refer, and it is from a group of units that the data are collected and analysed. Based on Kervin (1992), it is recommended that a unit of study be chosen at the lowest level of analysis and where decisions need to be taken. Using a questionnaire in this study is aimed at achieving many purposes that support the study’s validity in a number of dimensions. The survey method’s advantages include ease of distribution, the ability to analyse results using different statistical software, and the fact that it is a cost-effective method of data collection, especially for studies that require a large sample size (Bachrack and Scoble, 1967; Moser and Kalton, 1971; Clausen, 1998). From the respondent’s point of view, a questionnaire is a common method of collecting data and the majority of people are familiar with it (Berdie et al., 1986; Sekaran, 2000). When a participant receives a questionnaire, he or she feels free to complete it whenever the chance arises without any interruptions that might occur with the other methods, such as phone interviews (Jahoda et al., 1962). However, a written questionnaire is not an appropriate data collection method for poorly-educated people.

Subscriber bias is at its minimal level with written questionnaires because all participants receive the same uniform groups of questions and are not influenced by the interviewer’s verbal or visual clues when answering the questions, which can often happen with face-to-face interviews. This view is confirmed by Dohrenwend et al. (1968) and Barath & Cannell (1976), who claimed that interviewer actions such as voice mannerisms and
inflections can influence subscribers. However, the absence of an interviewer minimizes the chance to explore specific responses, especially ones related to behaviour intention. In addition, a written structured questionnaire as described by Walonick (1993) loses the flavour of response because participants usually want to clarify their views qualitatively when answering specific questions. Some researchers deal with this shortcoming by allowing some space for respondents to register their comments in some debatable areas. This study employed a self-reported questionnaire which was distributed and collected between May and July 2009 in the Northeast of England. The author used this process because the validity of the study will increase when a researcher is sure that the person who answered the questionnaire is the targeted one. This is confirmed by Scott (1961) who reported that up to 10% of returned questionnaires had been completed by someone other than the targeted respondent.

3 - 6. B: Questionnaire design

A questionnaire is a research instrument defined by De Vaus (2002, cited in Saunders et al., 2009, p.360) as “all techniques of data collection in which each person is asked to respond to the same set of questions in a predetermined order”. Sir Francis Galton was the first person to apply statistical methods (questionnaire) to collect data from human communities (Godin, 2007).

The majority of researchers’ problems arise from weaknesses in the data collection design stage. The main goal in quantitative research is to make sure that a good questionnaire design has been planned and applied to achieve the study’s objectives (Bartholomew, 1963). This cannot happen without putting a great deal of effort into developing the different stages of the survey instrument properly in order to gain respondents’ interest so that they will complete it. In order to achieve these goals, the researcher took into consideration many recommendations that help in preparing a well-designed questionnaire. A special questionnaire was developed for the purposes of this study. The developed questionnaire passed through many stages, explained and guided by Delerue’s (2005) recommendations. First, by reviewing academic literature explained earlier in chapter two, some questionnaire items were taken directly from previous studies in the same field, such as customers’ demographic aspects. Second, some items were developed specifically for this study, such as mobile phone service utilitarian reinforcement. These items were elicited and checked through managers’ initial interviews and customer focus
group discussions. The researcher conducted three focus groups with samples of mobile subscribers and many interviews with managers in the mobile phone sector to support the study elements and elicit the investigated factors. Third, a small group of subscribers, managers, and experts have reviewed the preliminary version of the questionnaire to assess the face validity of its selected items and to ensure that selected items reflect the study’s dimensions and factors. Some research questions and scales were reviewed and revised accordingly. Questionnaire drafts were prepared by a number of academic scholars and mobile practitioners, and pre-tested with different groups of potential samples to assess whether the questions were appropriate and representative for both proposed independent and dependent factors, and to map the possible options for survey questions.

In addition, a short and simple title has been added to the study questionnaire in order to enhance its credibility with respondents (Berdie et al., 1986). The questionnaire title is followed by a brief introduction. A well-designed questionnaire should have a concise and simple introduction that gives a clear idea of the study subject for the respondents and instructs them how to complete it. The introduction was written using simple and short sentences that make the questionnaire appear easier to complete and provide some incentives for respondents to start filling it in. Also, the survey questions were designed using simple and direct language (Freed, 1964). In the same manner, the questions’ wording was simple and direct in order to elicit accurate and relevant answers, as explained by Moser and Kalton (1971).

3 - 6. C: Items selection

The main objective of this study is to investigate mobile users’ retention behaviour drivers. To define these drivers, study items are defined according to the BPM components. Additional investigation had been carried out by analysing mobile contracts, customer focus groups, and managers’ interviews in order to define which factors needed to be included in the study survey. On the basis of the previous explanation, sixty-eight items were developed to represent the theoretical basis of the questionnaire. The survey’s items were reviewed and tested before starting the distribution process. The questionnaire review process passed through three stages to check the subsequently performed study factors properly.
From the subscribers’ relationship side, the first stage of questionnaire items selection was elicited from mobile contracts content analysis which is discussed in more detail in section 3-3. The most important utility items for customers of the wireless telecommunication industry were defined. These items are normally used by mobile suppliers to manipulate subscribers’ behaviour. Mobile suppliers offer different price plans which have different utilitarian items to satisfy different customers’ needs. The second stage of factor determination was done by conducting three customer focus groups, which were discussed in section 3-4. As a result of the focus group discussions’ analysis and recommendations, some questionnaire items were amended, a few questionnaire items were removed, and others were added.

From the suppliers’ relationship side, the initial stage of questionnaire items selection was mobile contract content analysis that aimed to define utility items and punishment items within price plans aimed at satisfying customers’ needs. The second stage involved interviews with mobile phone managers at different management levels, which are discussed in section 3-5. Interviews were analysed in order to add or remove study factors where possible, as recommended by participants who represent the suppliers’ side.

The first draft of the questionnaire was prepared according to these items. Further questionnaire administration issues will be discussed below, including questionnaire construction, the order of the survey questions, research instrument reliability and validity, scale design, sample design, and the pilot study.

3 - 6. D: Questionnaire construction

In terms of construction, a questionnaire represents a collection of well-worded questions mainly aimed at generating accurate data that is targeted to solve the management issue (Wrenn et al., 2007). A research questionnaire should be constructed in a way that translates the research objectives according to the theory in hand and divides them into specific questions within different sections that should follow a basic, smooth sequence (Sandhusen, 2000).

The study questionnaire has been divided into four sections. The first one is the mobile supplier section which has eight questions. This part is aimed at collecting the main mobile supplier data starting by defining the current and previous mobile supplier names
and brands, any problems the participants faced with their mobile suppliers which may affect the mutual relationship and retention opportunity, and the likelihood of switching suppliers or renewing with the present supplier. The last part of section one has eight sub-questions about the main suppliers’ elements that affect consumers’ choice and behaviour when they plan to buy or renew a mobile contract, such as network coverage, aftersales services, and suppliers’ billing system. The second section is related to mobile contracts and has ten questions. The second part is aimed at collecting contract data such as different contract types (prepaid or post-paid) and longevity (Pay-as-you go, 1 month, 6 months, 12 months, 18 months, and 24 months), contract cost, and mobile handset brand name and price. Also, this section investigates whether the respondents had read their mobile contract and if there were any cancellation or upgrading clauses in their mobile contracts. Meanwhile, the final contract section is aimed at collecting the main contract element that is usually sold as one package for both categories of telecommunication subscribers: pay-as-you-go and monthly contract. The major contract elements are the number of minutes allowed and the number of text messages allowed. While mobile contracts have different elements and come with different reinforcement and punishment, this question asked about other elements that have been included into the contract such as mobile handset, handset insurance, evening and weekend calls, land calls, calls to other subscribers in the same network, UK voicemail calls, itemised online billing, mobile internet and webmail checks, and the option of using free minutes for international calls.

The questionnaire’s third section asks the participants about the main elements that affect their purchasing choice and supplier retention behaviour when dealing with mobile phone service providers in the UK market. This section has fifty questions which represent the main BPM components and every part is represented by a definite number of items which represent utilitarian reinforcement, utilitarian punishment, informational reinforcement, informational punishment, learning history, and behaviour setting; the latter encompasses the following elements: physical factors, social factors, temporal factors, and regulatory factors. The final section is the sample’s demographic data. It has eight questions that cover the participants’ main descriptive data. These questions ask about gender, age, level of education, occupation, income, the person who pays the telecommunication service usage cost, and the accumulated mobile phone usage experience in total and for the last mobile phone supplier. The final draft of the questionnaire, which was distributed between May and July, 2009, is available in the appendix Table number 8.
While the questionnaire in this step was designed to elicit some primary answers from mobile subscribers, there is a need to exercise very careful judgement in choosing the most appropriate questions that will be used and ordering them in a way that facilitates the collection of data from mobile users. The process of designing the questionnaire was subject to many general considerations that have been identified by Collis and Hussey (2003). Different types of questions have been used in designing the study questionnaire, and they include three main types. The first is open and closed questions. Open questions are used to ask respondents about their personal opinions. The purpose of using these types of questions is to make the respondents write down their views precisely using their own words. Closed questions were used to make the sample candidates choose from among a number of predetermined options. Closed questions are a convenient method of collecting data in a way that is considered easy to analyse by a distinct range of alternatives (Wolcott, 1994). An example of closed questions is multiple-choice answers which are used in this study to make subscribers choose from a predetermined list of categories. The second type is classification questions which are aimed at collecting factual data to describe the study sample, such as age, gender and occupation. The third type is rating scale questions, used to gather data from respondents by making them choose from a number of values which represent a scale of opinions. The most famous method of rating questions is the Likert Scale method which allows respondents to indicate their level of agreement or disagreement by allocating one value to each statement.

3 - 6. E: The order of survey instrument questions

The survey questionnaire is considered one of the main data collection methods in many relationship marketing and consumer behaviour studies. The mode of questionnaire administration and design can have a serious effect on data quality in various ways, such as the method of contacting respondents and the way of administering the survey’s figures and questions (Bowling, 2005). Many authors have paid close attention to the ordering of questionnaire items because they believed it could affect participants’ responses (Schuman and Presser, 1981). The author followed many recommendations about how to order the survey questions. For example, Evan and Miller (1966) and Erdos (1957) recommended that the questionnaire should begin with a few easy-to-answer items to encourage the respondents to complete all the survey questions. Likewise, questionnaire items have been grouped into sections which are logically connected to one another in
order to make it easier to finalise and to obtain a similar response format (Moreno, 1998). One study conducted by Carp (1974) reported that it is necessary to introduce specific questions before general questions to avoid response contamination. This claim is supported by McFarland (1981) who argued that participants tend to exert more effort and exhibit more interest in the general questions if they appear after specific ones.

3 - 6. F: Study instrument reliability and validity

In order to design a solid survey, the author followed many recommendations indicated in previous studies in order to increase questionnaire validity. The chosen recommendations aimed to improve the questionnaire thus reflecting more confidence in the data collected and the results elicited. The first piece of advice stresses the inclusion of other experts’ and other researchers’ and practitioners’ views in considering the questionnaire design process (Lohfeld and Brazil, 2000). All factors elicited from the contracts content analysis had been reviewed by other independent academic scholars and a few practitioners. In addition, the way of eliciting study factors from the focus group discussions had been reviewed and amended in some cases by two other researchers, and then combined with contracts content analysis items to increase the agreement among the people involved in choosing the main items which will be employed in the survey instrument. Each item in the first questionnaire draft had been reviewed by other scholars in the academic area and consultations had taken place with two additional managers who worked in the mobile phone sector.

From the customers’ point of view, 15 questionnaires had been distributed among mobile users to gain direct feedback about the type, number, and design of the survey questions before going ahead with the pilot study stage. Essential feedback had been collected and the relevant questions amended accordingly. For example, some questionnaire items were not understood by the initial sample and some amendments to the wording had taken place. Finally, and before distributing the final questionnaire draft, a pilot study had been done to check the survey validity and reliability, and to make any essential amendments before collecting final data from a large number of customers. The pilot study stage will be explained in the following section (3-8) on page 189.

The validity and the reliability concepts were discussed in the analysis chapter. A brief explanation about both concepts is mentioned within the study instrument validation
process. The validity of the study instrument is intrinsically linked to its reliability (Litwin, 1995). If the study instrument is not reliable, then there is no need to discuss its validity. A validity check will determine whether the study instrument (questionnaire) can measure what it is intended to measure which, in this study, is customer retention (Meyer et al., 2001). Part of the questionnaire’s reliability is concerned with the research findings which tend to assess the degree to which the findings are close to one another if more than one scholar carried out the same research and obtained the same results (Collis and Hussey, 2003). Initially, two techniques have been used to estimate the degree of reliability of the responses. The first is the Internal Consistency method; in this method, every item should be correlated with every other item across the entire subgroup and then within the entire sample as explained in the following page, and the average of entire-item or item-to-total is taken as the index of reliability which will be discussed later in the analysis chapter (Collis and Hussey, 2003; Stamer and Diller, 2006). The second is the Split-halves method; here, the respondents’ answers are divided into two equal halves, then the correlation coefficient of the two sets of data are computed and compared (Callender and Osburn, 1977). When measuring the split-halves reliability, Cronbach's Alpha was also high with 88% for the first part and 86.2% for the second part. An indication of the reliability scores for the second draft of the questionnaire has been shown in Table 3 - 6 in the following page.
<table>
<thead>
<tr>
<th>No.</th>
<th>Reliability - Cronbach’s Alpha for all Study questions and subgroups</th>
<th>α</th>
<th>Items no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>all study factors and suppliers elements</td>
<td>0.923</td>
<td>60 items</td>
</tr>
<tr>
<td>2-</td>
<td>all BPM elements</td>
<td>0.917</td>
<td>54 items</td>
</tr>
<tr>
<td>3-</td>
<td>Suppliers items</td>
<td>0.720</td>
<td>6 Items</td>
</tr>
<tr>
<td>4-</td>
<td>Utilitarian reinforcement items</td>
<td>0.747</td>
<td>11 Items</td>
</tr>
<tr>
<td>5-</td>
<td>Informational reinforcement items</td>
<td>0.838</td>
<td>5 Items</td>
</tr>
<tr>
<td>6-</td>
<td>Utilitarian Punishment items</td>
<td>0.712</td>
<td>5 Items</td>
</tr>
<tr>
<td>7-</td>
<td>Informational Punishment items</td>
<td>0.793</td>
<td>5 Items</td>
</tr>
<tr>
<td>8-</td>
<td>Learning History items</td>
<td>0.683</td>
<td>3 Items</td>
</tr>
<tr>
<td>9-</td>
<td>Behaviour setting elements items</td>
<td>0.858</td>
<td>23 Items</td>
</tr>
<tr>
<td>9-A</td>
<td>Behaviour setting - Physical items</td>
<td>0.789</td>
<td>9 Items</td>
</tr>
<tr>
<td>9-B</td>
<td>Behaviour setting - Social items</td>
<td>0.839</td>
<td>7 Items</td>
</tr>
<tr>
<td>9-C</td>
<td>Behaviour setting - Temporal items</td>
<td>0.467</td>
<td>3 Items</td>
</tr>
<tr>
<td>9-D</td>
<td>Behaviour setting - Regulatory items</td>
<td>0.757</td>
<td>4 Items</td>
</tr>
</tbody>
</table>

Cronbach’s coefficient alpha is described as a statistical measure used to test reliability in questionnaires, which estimates the degree of internal consistency among a group of items and gives an idea of the variances among them (Cronbach, 1951; Ryu and Smith-Jackson, 2006). Accordingly, results show that the reliability (internal consistency) for all study questions is high, with a Cronbach’s alpha of 92.3%. It should be borne in mind that a reliability coefficient of 70% or higher is accepted in most social science studies (Santos, 1999) but lower thresholds are sometimes used in the literature (Nunnally and Bernstein, 1978). Also, the internal consistency for all BPM items is high, with a Cronbach’s alpha of 91.7%, and the reliability for behaviour setting items is also high, with a Cronbach’s alpha of 85.8%. By reviewing the reliability for all behaviour setting elements, it has been found that their reliability is within the acceptable level – more than 70% - apart from the temporal factors which have a low reliability of 46.7%. Special attention was given to the temporal construct by redesigning and reordering its questions to be more comprehensible to respondents; this will increase its reliability, especially when targeting a larger sample size (more than 101 responses) when distributing the final questionnaire. Another reason for amending the temporal construct elements and not deleting them is that they are one of the core elements in the behaviour setting construct and an essential part of the BPM interpretive framework. Based on that, the effect of the temporal construct will be part of the behaviour setting element and it will not be counted alone. The behaviour setting element has a remarkable reliability with a coefficient of 85.8 %, as guided by many scholars in similar studies (Cronin et al., 2000; Campbell and Russo, 2003; Cohen and Lemish, 2003; Tsang et al., 2004; Birke and Swann, 2006).
3 - 6. G: Scale design

This study employed a survey instrument to gather a large amount of quantitative data based on customer focus groups and managers’ interviews data analysis, which has been explained in the previous sections. Respondents’ answers on their own do not provide much benefit without making some comparisons and studying the relationships between them. Thus, response categories were developed for all the questions in this study in order to make the processes of data coding, transferring, and analysis much easier. Therefore, it is important to rely on a solid scale that has been used before by other scholars or to design a new one to satisfy the study’s purposes including summarising the required data, generalising the attitudes and expressions, sequencing the data and performing the required statistical analysis (Fagence, 1974; Debreceny et al., 2005).

The respondents were asked to fill in a structural questionnaire with a 5-point Likert scale concerning their preferences, beliefs, and experience towards factors affecting their mobile supplier and contract choice. The scale is aimed at quantifying the intensity of attitudes of the participants (Moser and Kalton, 1971). The Likert scale is the most frequently-used variation of the summated rating scale (Blumberg et al., 2005), which consists of statements that express either a favourable or unfavourable attitude toward the object of interest (Subscriber). The Likert scale is distributed and coded using the numbers 1-5 (5=“Strongly agree”, 4=“Agree”, 3=“Neutral”, 2=“Disagree”, and 1= “Strongly disagree”) and the participant is asked to agree or disagree with each statement. The 5-point Likert scale is used in every question to create the possibility of differentiation and to compare the relative importance of these factors. Many previous studies in the mobile phone sector have used the Likert scale to collect data about subscribers’ preference and choice (Parasuraman et al., 1991; Zikmund, 1991; Cronin et al., 2000; Mittal and Kamakura, 2001; Munnukka, 2006). The scale evaluation is based on two criteria: proportion of scale scores that explain the variance of the studied factors, and validity which explains the probability of scale scores measuring the studied constructs accurately. Based on this, the scale should be able to reflect any changes that occur according to direction, strength, and intensity of responses to survey items, as explained in the reliability Table 3 - 6 on page 182 (Ute and Wolfgang, 1972). Accordingly, Cronbach’s Alpha, which reflects the internal consistency construct validity for the pilot study items, is excellent for confirmatory purposes because it is more than 90%.
3 - 7: Sample design

The sample is considered one of the main elements in designing the research methodology in any study. This is because it is described as “a part of the target population, carefully selected to represent that population” (Blumberg et al., 2005, p.64). Meanwhile, Berger and Benbow (2006, p.552) provided a general definition for a sample as “A group of units, proportion of material, or observations taken from a larger collection of units, quantity of material, or observations that serves to provide information that may be used as a basis for making a decision concerning the larger quantity”. Thus, the rationale and guidance for drawing a sample from a population for this study have been illustrated by Berenson and Levine (1988) as follows: First, it would be time-consuming to study and analyse the complete list of mobile phone users in the UK market, which is expected to reach 78.0 million by the end of 2010, with the wireless penetration rate expected to reach 126% in 2010 (Literral, 2008); second, it would be too cumbersome and inefficient to obtain a complete count of the target population. Additionally, it would be too costly to take a complete census. Meanwhile, Blumberg et al. (2005) added three more reasons for sampling: greater accuracy of results, greater speed of data collection, and availability of population elements. Therefore, it is important to define the sample frame and type of sample that has been used to determine the study sample.

The sample frame will be a list of all subscribers who are using a mobile phone service and are subscribing to one of the mobile phone suppliers in the UK. Although there are some difficulties in obtaining lists of all subscribers’ names and characteristics from the mobile service providers, the researcher was encouraged to use one of the probability sampling methods for collecting data. Sampling is an essential selection process of research subjects (elements) from a defined population based on specific criteria (Czaja and Blair, 2005). This study applied an opportunity sample in distributing the customer survey. According to Miles (2001, p.79), an opportunity sample is defined as “a sample of individuals who happen to be available”. This type of sample is initially obtained by asking some members of the population whether they would like to participate in this research. Convenience sampling (sometimes known as opportunity sampling) is considered one of the non-probability samples as the sample participants are chosen initially because they ready, available, and convenient (Denscombe, 2007; Kumar, 2008). Thus, opportunity sampling is different from the simple random sample in which every
element in the population has the same chance of selection as every other subject, and in which the selection of one element does not affect the chances of any other subjects being chosen (Berenson and Levine, 1988). According to Blumberg et al. (2005) convenience sampling is usually the easiest and cheapest data collection method. Accordingly, the author was relying on the previous definition of random sample in deciding to use the opportunity sample. An opportunity sample is a recognised technique that enables researchers to make statistical inferences from a sample to a population and translate the analysis outcomes probabilistically (Lunsford and Lunsford, 1995). Therefore, the next step to clarify before determining the sample size is to determine the population size, and its characteristics, from which the sample is to be selected. This is because a sufficient number of sample units are required from the population to carry out the suitable statistical analysis which should be appropriate for answering the research problem (Collis and Hussey, 2003).

3 - 7. A: Population determination

A population is described by Berenson and Levine (1988) as the totality of items or things under consideration. In this study, the population is all mobile phone subscribers who use mobile phone services and subscribe to one or more of the mobile phone service providers in the United Kingdom. The population includes all subjects who are categorized into one of the following groups: contracted customers, pay-as-you-go customers, and subscribers whose contracts have expired but who are still using the same operator network and services. This is because the proposed study aims to provide a comprehensible picture about the effect of the firm-customer relationship on customer retention; thus, it is important to include all possible participants, especially those who are continuing to use mobile supplier services even though their contracts have expired. An assessment of the population size from 2005 until 2010 is mentioned in Table 3 - 7. For example, at the end of 2007, the total number of subscribers was 73.1 million, with a wireless penetration rate of 116.5%, which accounted for about 9% of the total European mobile subscribers market (Literral, 2008). It was estimated that this number would reach 78 million in 2010 with an expected mobile wireless penetration rate of 126%.

<table>
<thead>
<tr>
<th>Items /Years</th>
<th>2005</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile subscribers</td>
<td>69.9</td>
<td>73.1</td>
<td>76.4</td>
<td>77.1</td>
<td>78.0</td>
</tr>
<tr>
<td>Penetration Rate %</td>
<td>110.1</td>
<td>116.5</td>
<td>121.8</td>
<td>124.6</td>
<td>126.0</td>
</tr>
</tbody>
</table>

Sources: IEMRC (2009) and Wood (2005)
In the UK market, there are five main mobile phone operators who control the wireless communication services competitively: Orange, T-Mobile, O2, Vodafone, and 3 UK. Figure 3 - 5 gives an idea of the subscribers’ percentages for each operator in the first quarter of 2008. Vodafone and O2 were closely matched with market shares estimated at about 25.4% and 25.2% respectively. Also, both the Orange and T-mobile operators had relatively similar percentages of customer segments with an estimated 21.6% and 23.4% of the total market respectively. However, 3 UK gained the smallest market segment with 4.5% of the total market.

3 - 7. B: Sample size

How was the sample size determined for this research? Scholfield (1996) explained that the relation between sample size and the population size is misunderstood. Therefore, determining sample size is considered one of the more controversial elements in research design and sampling procedures for the majority of studies. This is because drawing a large sample may waste time, resources and money. On the other hand, a small sample may not give accurate results, which will in turn affect the research’s validity and reliability. Noorzai (2005) enquired into the optimal sample size that could represent a population and provide a level of confidence. Many authors have proposed different ideas to determine sample size. Comfrey and Lee (1992), for example, suggested rough guidelines for determining adequate sample size: 50-very poor, 100-poor, 200-fair, 300-good, 500-very good, 1000 or more-excellent. However, others, such as Nunnally and Bernstein (1978) suggested the rule of thumb ratio, by which the number of subjects-to-
item ratio should be at least 10:1, and Gorsuch (1983) and Hatcher and George (2004) recommended a 5:1 ratio. Noorzai (2005, cited in Wimmer and Dominick, 1991) explained that researchers are recommended to use as large a sample as possible within the economic constraints of the study.

The main element that researchers agreed would affect the sample size is the extent of the precision and confidence desired (Sekaran, 2000). The size of the sample is decided by the level of confidence and maximum error (Scholfield, 1996). It was explained by Freedman et al. (1978) that, for most sociological studies, the standard error is 5 per cent. Babbie (2004) argued that the accuracy for sample statistics, in terms of a level of confidence in the statistics, falls within a specified interval from the parameter. The author also confirmed that confidence interval and confidence level can determine the appropriate sample size if the accuracy of the findings falls within -2.5 or +2.5 per cent of the population parameters. Berenson and Levine (1988) explained that 95% confidence interval estimates can be interpreted to mean that, if all possible units of the sample size n were taken, 95% of them would include the true population mean somewhere within the interval around their sample means, while just 5% of them would not.

There are different statistical formulae that can be used to measure sample size. The most effective and simplest equation, which is used by many scholars such as Swim and Stangor (1998) and Bell & Bryman (2003), is

\[ n = \frac{N}{1 + N(e)^2} \]

Where: \( n \) = sample size, \( N \) = Population size, and \( e \) = margin of error. Therefore: \( n =? \) N= 7,310,000, (Number of UK subscribers in 2007) and the researcher determined, based on the literature, that \( e =5\% \).

\[ n = \frac{7,310,000}{1 + 7,310,000 (5/100)^2} = 7,310,000/ (7,310,001 X 0.0025) = 400 \]

Based on the above reasoning, the sample size for this study is determined to be about 400 respondents at least. The majority of consumer behaviour studies use a convenience sample, which was adapted to collect data from more than 400 mobile users randomly selected by specific criteria explained in the following section 3-7-C. In this thesis, sample size and participants selection process were guided by many behaviour studies to achieve the study’s purposes (Bearden and Netemeyer, 1999; Lee and Turban, 2001;
Ghauri and Grønhaug, 2005; Fraj and Martinez, 2006; Rashidian et al., 2006; Thong, 2007; Saunders et al., 2009).

3-7. C: Participant selection

There are no previous or predetermined conditions for the sample participants who will fill in the study questionnaire. Different subscriber categories are required; some of them have only just signed their mobile contracts and have no previous experience. This study is aimed at investigating which factors affect their choice of a specific contract and/or supplier. In contrast, the second group has considerable previous experience dealing with different mobile suppliers. It was essential to include this group within the sample because some of them have a variety of experiences of dealing with more than one mobile supplier and have some targeted reasons to switch from one supplier to another. Also, experienced subscribers are seen as reference groups for other least knowledgeable and least experienced customers according to their valuable accumulated usages and knowledge about the best operators or contracts (Garbarino and Johnson, 1999). The third group represents those subscribers who used the Pay-as-you-go (prepaid) wireless telecommunication services; these customers might have little information about long-term formal contractual mobile services from service operators but they are dealing on a monthly basis with their suppliers. Studying this segment is crucial because looking for a low level of contractual relationship from a prepaid wireless service usage point of view is different from studying high levels of contractual relationship which are available in the first two groups, who used post-paid subscription services. Knowing their selection criteria and how they evaluate mobile options and monetary price plans will add beneficial value to this study. The last sample part is those subscribers who still use the mobile telecommunication services after their contracts have expired and who have the right to stop their phone usage at any moment. Their opinions about not changing their mobile suppliers and/or contracts will shed light on why they are continuing to use the same services and supplier even though there is no formal requirement for them to switch and find better operators.

Before conducting the pilot study and sending out the questionnaires, a small sample of 15 mobile subscribers who renewed their mobile contracts were contacted and asked to fill in the survey instrument to supply some feedback about the questionnaire’s structure and design. The respondents provided essential feedback and comments on the data.
collection instrument’s clarity, wording, length, and flow of questions; this feedback helped to increase the questionnaire’s face validity (Kalton and Schuman, 1982; Edwards et al., 1997).

3 - 8: Pilot study

A pilot study is a trial run-through to test the research design with a small sample of respondents who have similar characteristics to those identified in the main study sample (Gill and Johnson, 1991). The piloting stage is necessary as it is not easy to anticipate how the target sample will respond and react to the survey questions. In addition, it provides an opportunity to identify and correct any potential problems in the format of the research questions.

A pilot study is described as a small study aimed to “test research protocols, data collection instruments, sample recruitment strategies, and other research techniques in preparation for a larger study” (Polit and Beck, 2004, p.196). Pilot studies are used in different ways in social science research to serve many aims including the preparation for the main study and to pre-test a particular study instrument (Baker, 1994; Polit et al., 2001; Teijlingen and Hundley, 2001). One of the main advantages of conducting the pilot study in this research is guided by De Vaus (1993, p.54) who said “Do not take the risk, pilot test first”. Additionally, it is used to check the full study analysis and results, assess the suitability of the study scale, define the sample design and frame properly, and collect some initial data about the study field and customers (Teijlingen and Hundley, 2001).

The main roles of the pilot study in this research were to examine the true relations among variables and the flow of effect between the study dimensions. The minor roles were to test the adequacy of the research instrument and enhance the questionnaire’s internal validity by eliminating unnecessary questions or amending others to remove any ambiguities. Therefore, 150 second-draft questionnaires were randomly distributed during February and March, 2009, for mobile phone subscribers. 115 questionnaires were collected within eight weeks of distribution and 101 accurately completed questionnaires were used in the analysis stage, giving a valid response rate of 67.3%. The responses were analysed using SPSS software program version 15.1. The results of the pilot test were evaluated using many measurement analysis outcomes such as reliability, normality, and correlations.
The goals of analysing initial data and testing the study instrument were achieved in this stage. In general, the respondents provided essential feedback and comments on the clarity of some questions which helped in evaluating the language, wording, and misunderstandings in a few of the questionnaire’s statements; the feedback also identified some deficiencies in the survey’s design and questions, as recommended by Teo and Pok (2003). In more detail, the pilot study provided additional benefits to this study which can be explained as follows. First, six questions were amended from the perspectives of language and meaning based on some of the respondents’ feedback which mentioned that some statements were not clear or did not match the study’s purposes. Second, two questions were deleted according to their low correlation with other questions in the same subgroup and for their low contribution to explaining consumer retention behaviour. Third, two new questions were added to the questionnaire to elucidate the need to explain participants’ retention causes and to define participants’ previous mobile phone suppliers for those subscribers who had switched their mobile operators. Finally, two questions were moved from one construct to another because they served the supplier factors rather than the customer factors.

For each of the composite constructs, Cronbach’s alpha is used to test the internal reliability for all BPM components. Reliability describes the degree of consistency between numbers of measurements for each construct (Hair et al., 2006). Reliability for all study categories was high (92.3%) and the reliability for all BPM components, which accounted for 54 questions, was high (91.7%). Meanwhile, reliability for BPM components is acceptable; they were distributed between 70% and 83.3%. A Cronbach’s alpha of at least 70% is highly acceptable as recommended by many scholars in similar studies, such as Hair et al. (1998) and Stanley & Markman (1992). This indicates that the internal consistency of the study items which were employed to construct the study model and test customer retention behaviour were reliable (Cronbach, 1951). Table 3 - 6 on page 182 summarises the reliability scores for all constructs.

According to correlation analysis, Robinson and Moses (2006) mentioned that there are many diagnostic measures of reliability. This study adopted the item-to-total correlation measure that computes the effect of each item to the summated construct elements. The questionnaire was designed to test the study model which its independent variables divided into many constructs. In order to check whether there is a harmonised fit in every
construct from one side and the whole model from another, the collected data were tested using the sample adequacy for each variable. All variables’ correlations in each construct with less than 30% were dropped (Kaiser, 1974). When the correlations of each item to the total single construct were counted, two elements from utilitarian reinforcement were removed due to their low correlation with the subgroup total compared with other elements in the same utilitarian construct. These elements are ‘number of minutes’ and ‘number of text messages’ provided within mobile phone contracts. Correlations for those elements were 0.279 and 0.125 respectively, which were less than 30%. Also, two more items were removed from the survey instrument for the same reasons, their correlation values being less than 30%. These are ‘customer service recommendations’ and ‘salespersons’ recommendations’ from the social factor construct.

In summary, according to the pilot study analysis outcomes explained previously in this section, fifty questions were divided into six constructs after refining, amending, and dropping some questions that might have minimized the internal validity and reliability when collecting and analysing the final data. In addition to re-establishing some of the contract and suppliers questions, the final questionnaire draft, which is available in the appendix Table 8, was ready to be distributed. All initial results and amendments had been discussed with two additional scholars who approved the validity of the final draft of the study instrument to be distributed.

3 - 9: Ethical considerations

This research is concerned with human behaviour; therefore, all necessary ethical procedures including that of Durham University’s guidance were taken into consideration at all stages of this research accomplishment. This study is conducted under Durham University’s ethical procedures according to which the author promises (pledges) not to reveal any participant’s data, and the information is only to be used for research purposes. Respondents’ data were strictly confidential and their privacy was guaranteed. The purpose of the study was explained to all the participants, and anonymity and confidentiality in the transfer, storage and use of data was controlled. Also, the purpose of the study was explained before the distribution of questionnaires, and the subjects had been informed that the process of completing the forms is voluntary (Sekaran, 2000). In addition, participants were informed that everything regarding focus groups and interview discussions would be recorded, and each participant agreed verbally to take part.
There are two main issues regarding the ethical considerations which need more explanation at this stage: anonymity and confidentiality. This is because anonymity and confidentiality procedures largely affect the response rate for different studies (Jones, 1979). However, other scholars such as Skinner and Childers (1980) contradicted this idea.

Anonymity is considered one of elements that authors care about, for many reasons. “An anonymous study is one in which nobody can identify who provided the data on completed questionnaires” (Berdie et al., 1986, p.47). Further, Fuller (1974) confirmed that the lack of anonymity decreased the response rate. Some participants feel threatened if their identity can become known, especially when investigating some critical issues (Alsmadi, 2008). Conversely, confidentiality is an important issue which is related to those who conduct the study on the one hand and those who have a direct relationship with all the research steps on the other (Kumar, 2005). All participants’ data including focus groups and interview participants’ names, opinions, contact details, and demographical characteristics have been kept anonymously within the researcher’s records.

Summary

This chapter provided an overview of the research design and methodology used to develop study factors that affect consumer choice, in order to comprehend the customer retention behaviour phenomenon. The survey’s items were elicited from previous studies, mobile contract analysis, mobile subscriber focus groups, and interviews with mobile suppliers’ managers.

Suppliers’ mobile contracts were analysed using a content analysis technique. Contracts from the main mobile phone suppliers in the UK market were collected then classified into pay-as-you-go, 12-months, 18-months, and 24-months contracts. Then these contracts went through an analysis process which included the creating and defining of code categories, and the converging of themes of the texts into symbols defined by the researcher. Next, the determined factors were coded and grouped, and frequency of each subset of symbols was counted. This process was repeated twice to achieve better reliability. Mobile subscribers’ data was elicited by conducting three customer focus groups. Focus group questions were developed according to BPM constructs. The
rationale behind using focus groups, development of the questions, and method of selecting participants were illustrated. Then focus group administration, conduct, and analysis were described in detail.

To consult mobile suppliers about the determinants that affect consumer retention behaviour, mobile suppliers’ data were collected by interviewing some managers in the UK mobile market. Interview questions were developed according to BPM constructs. Participants’ selection, interview procedure, coding, and analysis processes were explained in detail. The previous steps were employed to elicit the main study elements used to collect data from mobile subscribers using the survey method. After explaining the rationale behind using the survey instrument and how its items were developed, the survey tool design and construction have been illustrated, providing sample design information including population size, sample size, and participants’ selection procedures. The final step was to conduct a pilot study to assess the data collection instrument’s validity and reliability. Finally, ethical considerations have been taken into account and were explained with respect to the different instruments employed.

In the following chapter, the applied stage will start by analysing the data which have been collected from mobile subscribers, supported by a report of the findings accompanied by a reasoned and justifiable discussion.
Chapter Four: Data analysis and discussion
Introduction

This thesis studies customer retention in the mobile phone sector. Before starting the empirical stage and giving a full analysis of the data collected in this chapter, a brief reminder is given about the preceding methodology chapter, which explained the data collection methods and measurements that have been used to collect customer and supplier data in the UK mobile phone sector. The chapter began by explaining the main factors that drive customer retention from the behavioural perspective by applying the Behavioural Perspective Model. This model encompasses a set of pre-behaviour and post-behaviour factors which will be used to investigate customer choice and predict customer retention within the mobile purchasing context. Each factor has a variety of elements which were determined by previous consumer behaviour and relationship marketing literature, as discussed previously in the literature review chapter. The BPM primary factors were studied quantitatively and qualitatively in depth using different data collection methods. The methodology chapter gives deep explanations of these methods employed in this thesis; they are content analysis technique, focus group, interview, and survey instrument, supported by a reasonable justification for each of them separately. In short, the methodology chapter provides a clear preliminary introduction to the empirical stage of the thesis.

This chapter gives a comprehensive analysis of the set of data that has been collected from a sample of mobile users in the UK market, supported by a full discussion of different relationship- and behaviour-related elements of customer retention. The analysis chapter is divided into three parts: sample description analysis, quantitative data analysis, and qualitative data analysis. Part one describes customers’ demographic characteristics, customers’ evaluation of different mobile service suppliers’ elements, mobile contracts’ main elements, and customer-supplier relationship-related dimensions such as longevity, switching, cancelling, and upgrading behaviours. Part two analyses customer retention factors including validity, reliability and normality, and quantitatively tests the study model and the study framework’s propositions using different types of regression analysis. Part three investigates the main factors affecting retention behaviour from the subscriber’s perspective using a qualitative technique to explain how the BPM can be employed in explaining customer patronage behaviour and how its components draw their effect within the retention behaviour context.
4 - 1: Sample size and response rate

Response rate (RR) is considered one of the main survey elements of concern to researchers when they distribute survey questionnaires; it is vital that they receive a suitable number of responses to fit the both sample size and analysis methods. RR consists of the number of completed and returned questionnaires divided by the total number of questionnaires sent out (Rada, 2005). It is an indicator of the confidence that may be derived as a result of legitimization of a survey usage. Two different arguments have been attached to this rate. Some researchers have indicated that a low RR can affect the reliability of any study (Church, 1993; Edwards et al., 2002), while others argued that the RR does not necessary increase the precision of the survey results (Kanuk and Berenson, 1975; Dillman, 1991). Nevertheless, Berdie et al. (1973) indicated that researchers should do everything to increase the RR. Thus, to maximize the response rate, many sequential steps have been followed: First, the respondents were briefed about the research objectives and aims; second, participants were informed that ethical considerations regarding privacy and confidentiality in data collection, analysis, and publication would be taken into account; third, although the survey was distributed personally, some respondents were provided with fully addressed and postage-paid envelopes to give them more spare time to complete the questionnaire and return it when they had the chance (Kalman, 1988); fourth, some respondents were asked to complete the survey electronically by email, to overcome their geographical dispersion (Foo and Hepworth, 2000); finally, many emails were sent to non-respondents to help them to fill in the questionnaire, in order to minimize response attrition (Boys et al., 2003).

Two goals have been achieved through calculating and defining the RR indicator in this study: it has helped in assessing the survey results’ accuracy and criticizing the self-reported questionnaire as a data collection instrument in investigating mutual relationship marketing. Table 4 - 1, page 197, explained that seven hundred questionnaires were distributed, of which four hundred and fifty-nine were returned. After assessing the returned questionnaires, forty-one were rejected, for a number of reasons. The main one was the failure to provide some principal data considered essential for the analysis. Four hundred and eighteen questionnaires have been accepted and used to test the study objectives. Accordingly, the sample size is sufficient to run the main statistical tests that have been used to investigate the study objectives.
The survey response rate in this study was 60%, which is considered reasonably good compared to other studies in the mobile phone sector. Other researchers in this sector have achieved similar response rates. For example, Bolton (1998) obtained a 44% RR when he used a probability sample to collect data from customers subscribing to services from a single cellular communication firm. Seth et al. (2008) achieved a response rate of 65.9% and a non-response rate of 34.4%. Meanwhile, the possibility of non-response bias was difficult to examine because of the lack of information concerning basic data design, such as having a full record of the selected participants (Delerue, 2005). Data collection, analysis, and results for this study have not been affected by “oversampling” issues (Bolton, 1998). Oversampling in this study has two groups: customers who terminate their mobile contracts during the initial trial period or before the end of the contract period, and customers who are still dealing with the same operator following the completion of their contracts. Those two parts of the sample may add more value when investigating the reasons for termination or continuation of a mobile service after the contracted time.

<table>
<thead>
<tr>
<th>Table 4 - 1: Questionnaire response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaires sent</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>700</td>
</tr>
</tbody>
</table>

4 - 2: Data screening

Study data have been collected from different segments of mobile phone subscribers in the UK market. Before starting the analysis process, many researchers are keen to assess the suitability of the data in hand to check whether they fall within the known measurements’ regulations and statistical standards. Otherwise, data will give illogical results or biased outcomes. As Hair et al. (1998) claimed, violation of the measurements’ conditions and obligations will lead to biased outcomes or non-significant relationships among the study factors. Out-of-range values and outliers are examples of tests that scholars normally use to screen data. This study used the following statistical tests to achieve this goal: missing data, multicollinearity, sample stratification, and multivariate normal distribution.

Many descriptive analyses have begun by defining the missing data; this is considered one of the main issues in management studies analysis that needs to be dealt with. Missing data is a result of respondents’ failure to answer any question, either by accident or because they do not want to answer such questions (Bryman and Bell, 2007). All missing values were defined by checking the frequencies of each question within each construct. Some of the missing values, which came to light when the scholar entered the codes into
the SPSS program, were obtained after reviewing the answers twice. Other missing values were defined easily with some demographic questions such as age and income categories. Missing values were coded as 99 and they were imported in such a way that the computer software is notified of this fact in order to take it into account during the analysis process. The number (99) is chosen for two reasons: it’s easily recognisable and cannot be a true figure within the code values - a computer cannot read it as anything other than missing values.

The research variables had been grouped into six constructs to form a study model. Based on that, normality was checked for all study constructs, as a lack of normality can twist the outcome and validity of the analysis. Regarding sample stratification, the study sample had been tested according to subgroups which don’t differ greatly in means from their total sample mean. It is preferable to execute this process before proceeding with the multicollinearity and correlation tests analysis. Multicollinearity is a matter of degree that checks the suitability of the data in hand. It cannot be counted but there are many issues that need to be checked in order to find any indications or signs which suggest there may be problems with the outcomes. In this study, many tests had been done to detect the degree of multicollinearity. No dramatic changes occurred in the model outcomes when adding or dropping different study variables; this denotes that the multicollinearity is not present or is very low. Dummy variables are used accurately by including identical variables twice in the analysis process. The inclusion process is achieved by ensuring that all variables are used once and not repeated or combined with other variables. Accordingly, the majority of correlation coefficient values are above 50%, and a few variables whose correlation values are less than 30% were removed. The problem of multicollinearity occurs where two or more independent variables are highly correlated (say, between 90% and 100%). This issue makes the process of determining or isolating the effects of every individual variable difficult when one variable is highly correlated with other variables (Morrison, 1969; Murphy et al., 2005). Accordingly, the multicollinearity issue has been remedied by: a) dropping those variables whose correlations are less than 30% in the pilot stage (Jagpal, 1982), b) modifying some variables by adding more construct elements which could enhance the correlation among variables (Timmermans, 1981), c) making some data alterations by adding more responses to the study sample, rising from 101 responses in the pilot stage to 418 responses in the final stage (Farrar and Glauber, 1967; Timmermans, 1981).
4 - 3: Descriptions analysis

This part will include the descriptive analysis for the main relationship parties: customers’ description, suppliers’ description, and contracts’ description. From the customer side, the explanation will target the customers’ main demographic characteristics which are gender, age, education, income, cost of mobile wireless services, and sample distribution of subscription percentages of different UK mobile phone suppliers. Meanwhile, in the supplier context, the supplier description will give a brief outline of customers’ opinions regarding the main suppliers’ elements that affect customer retention behaviour. The main supplier factors are network geographical coverage, voice clarity, customer support units, billing systems, and mobile supplier brand name. A customer will have various experiences during interaction with his or her mobile supplier and, based on these factors, the customer will switch or retain his or her supplier. The last part of the data description analysis is the mobile contract description. This part will give a brief outline of the main mobile contract components which include contract longevity, wireless service average monthly cost, and mobile handset availability and cost within the mobile offer. Also, this part will describe the main wireless services provided within mobile contracts, such as the following: stop-the-clock service, free weekend and evening services, mobile insurance, using minutes to call other subscribers and make international calls.

4 - 3. A: Sample descriptions

This section will discuss the participants’ main demographic characteristics as a sample of UK mobile subscribers, which are as follows: gender, age, education, income, cost of mobile wireless services, and sample distribution among different UK mobile suppliers.

4 - 3. A-1: Gender

First of all, Table 4 - 2 illustrates that 53.6% of the research sample are females and 46.4% of them are males. Studying the effect of gender on customer retention is not the purpose of this study. However, it is worth mentioning that Hung et al. (2003) found that young male users are more enthusiastic than females about adopting and using wireless services.

<table>
<thead>
<tr>
<th>No.</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>Male</td>
<td>194</td>
<td>46.4</td>
<td>46.4</td>
</tr>
<tr>
<td>2-</td>
<td>Female</td>
<td>224</td>
<td>53.6</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4 - 3. A-2: Age

Table 4 - 3 explains that the majority of the sample’s respondents (about 85.6%) are between 20 and 50 years old. For the purposes of this study, sample age distribution is guided by the national UK population age distribution as clustered by the British National Statistics. This study is mainly focused on customers who are eligible to sign a mobile phone contract within the UK legislation. Customers below the age of 20 account for 2.2% of the total sample. Ofcom, the UK’s communications regulator, reported that that 65% of children aged 8-15 have their own mobile phones compared to 82% of children aged 12-15 (MLA, 2009).

<table>
<thead>
<tr>
<th>No.</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>&lt;20 years old</td>
<td>9</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>2-</td>
<td>20 - 30 years old</td>
<td>164</td>
<td>39.2</td>
<td>41.4</td>
</tr>
<tr>
<td>3-</td>
<td>31 - 40 years old</td>
<td>124</td>
<td>29.7</td>
<td>71.1</td>
</tr>
<tr>
<td>4-</td>
<td>41- 50 years old</td>
<td>70</td>
<td>16.7</td>
<td>87.8</td>
</tr>
<tr>
<td>5-</td>
<td>51 - 60 years old</td>
<td>26</td>
<td>6.2</td>
<td>94.0</td>
</tr>
<tr>
<td>6-</td>
<td>&gt;60 years old</td>
<td>11</td>
<td>2.6</td>
<td>96.7</td>
</tr>
<tr>
<td>7-</td>
<td>missing value</td>
<td>14</td>
<td>3.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4 - 3. A-3: Education

Sample analysis shows that 82% of the study participants are graduates who finished their university studies and about 17% completed at least their school education, as shown in the Table 4 - 4. This means that respondents are educated and are sufficiently knowledgeable to collect enough data to choose their mobile contracts from among a variety of alternatives. Seo et al. (2008), who studied demographic effects on customer retention, found that both age and gender can affect customer retention behaviour indirectly.

<table>
<thead>
<tr>
<th>No.</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>Not educated</td>
<td>4</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>2-</td>
<td>School level</td>
<td>71</td>
<td>17.0</td>
<td>17.9</td>
</tr>
<tr>
<td>3-</td>
<td>Graduate level</td>
<td>131</td>
<td>31.3</td>
<td>49.3</td>
</tr>
<tr>
<td>4-</td>
<td>Post-graduate level</td>
<td>212</td>
<td>50.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4 - 3. A-4: Income

In terms of the participants’ yearly income, Table 4 - 5 in the following page illustrates that around 62.7% of the respondents had an income of less than £20,000, about 18.4% of the participants had an income of between £20,000 and £40,000, and around 10.5% of
them received more than £40,000 yearly. Different income levels are demonstrated among the studied sample, which might produce more valuable results according to the variety of mobile service options which satisfy different customers’ needs; these may differ from one income level to another.

Table 4 - 5: The participants' average yearly income (£)

<table>
<thead>
<tr>
<th>No.</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>&lt;10,000</td>
<td>162</td>
<td>38.8</td>
<td>38.8</td>
</tr>
<tr>
<td>2-</td>
<td>10,001 - 20,000</td>
<td>100</td>
<td>23.9</td>
<td>62.7</td>
</tr>
<tr>
<td>3-</td>
<td>20,001 - 30,000</td>
<td>47</td>
<td>11.2</td>
<td>73.9</td>
</tr>
<tr>
<td>4-</td>
<td>30,001 - 40,000</td>
<td>30</td>
<td>7.2</td>
<td>81.1</td>
</tr>
<tr>
<td>5-</td>
<td>40,001 - 50,000</td>
<td>20</td>
<td>4.8</td>
<td>85.9</td>
</tr>
<tr>
<td>6-</td>
<td>50,001 - 60,000</td>
<td>8</td>
<td>1.9</td>
<td>87.8</td>
</tr>
<tr>
<td>7-</td>
<td>60,001 - 70,000</td>
<td>5</td>
<td>1.2</td>
<td>89.0</td>
</tr>
<tr>
<td>8-</td>
<td>&gt;70,001</td>
<td>11</td>
<td>2.6</td>
<td>91.6</td>
</tr>
<tr>
<td>9-</td>
<td>Missing value</td>
<td>35</td>
<td>8.4</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4 - 3. A-5: Cost of wireless services

Respondents were asked about the source from which they paid for their wireless telecommunication services. Monthly cost represents one of the main utilitarian punishment factors that affect the choice of mobile phone contract type. The purpose of mobile contract usage will determine the customer’s contract choice, which differs from personal to business usages. Business contracts are not the target of this thesis because they have different rates, usually sponsored by employers, and are used for different purposes other than personal ones. Table 4 - 6 illustrates that around 85.2% of the research sample are paying for themselves and about 8.9% of the wireless telecommunication bills were paid by parents. Meanwhile, just a small minority (1.4%) of respondents’ mobile communication costs were found to have been paid by the employer. However, mobile telecommunication bills for the rest of the sample, estimated at around 4.5%, are paid by spouses.

Table 4 - 6: The source of payment for mobile phone services

<table>
<thead>
<tr>
<th>No.</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>User</td>
<td>356</td>
<td>85.2</td>
<td>85.2</td>
</tr>
<tr>
<td>2-</td>
<td>Employer</td>
<td>6</td>
<td>1.4</td>
<td>86.6</td>
</tr>
<tr>
<td>3-</td>
<td>Parents</td>
<td>37</td>
<td>8.9</td>
<td>95.5</td>
</tr>
<tr>
<td>4-</td>
<td>Others</td>
<td>19</td>
<td>4.5</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4 - 3. A-6: Sample distribution and mobile suppliers’ segments

It is crucial, before starting the suppliers’ assessment process, to gain an idea of mobile supplier segment estimations and their penetration rates; Table 4 - 7 gives an idea of the
numbers and percentages of study participants who subscribed to each of the main mobile phone suppliers in the UK market. There are five main mobile operators in the UK: O2, Vodafone, 3, Orange, and T-Mobile. Also, many additional operators provide these types of services, such as Mobile world, Virgin and Tesco. Results show that 29.9% of participants subscribed to O2, which gained the largest participants’ segment. Vodafone and Orange were ranked second and third with 17.9% and 16% of the study sample respectively. As explained previously in the methodology chapter, section 3-7, regarding the total number of UK mobile users, O2 has the biggest customer base with 25.2% of the UK’s customers in 2008. However, Orange and T-Mobile’s subscribers accounted for 16.0% and 11.2% of the total UK subscribers respectively.

Table 4 - 7: The frequency analysis of sample subscription with UK operators

<table>
<thead>
<tr>
<th>No.</th>
<th>Mobile suppliers</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>O2</td>
<td>125</td>
<td>29.9%</td>
<td>29.9</td>
</tr>
<tr>
<td>2-</td>
<td>Vodafone</td>
<td>75</td>
<td>17.9%</td>
<td>47.8</td>
</tr>
<tr>
<td>3-</td>
<td>3</td>
<td>59</td>
<td>14.1%</td>
<td>62.0</td>
</tr>
<tr>
<td>4-</td>
<td>T-Mobile</td>
<td>47</td>
<td>11.2%</td>
<td>73.2</td>
</tr>
<tr>
<td>5-</td>
<td>Orange</td>
<td>67</td>
<td>16.0%</td>
<td>89.2</td>
</tr>
<tr>
<td>6-</td>
<td>Virgin</td>
<td>17</td>
<td>4.1%</td>
<td>93.3</td>
</tr>
<tr>
<td>7-</td>
<td>Tesco</td>
<td>11</td>
<td>2.6%</td>
<td>95.9</td>
</tr>
<tr>
<td>8-</td>
<td>Mobile world</td>
<td>2</td>
<td>.5%</td>
<td>96.4</td>
</tr>
<tr>
<td>9-</td>
<td>Others</td>
<td>15</td>
<td>3.6%</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

To sum up, the customer description section gives an idea of the main sample characteristics which are gender, age, level of education, level of income, and wireless telecommunication service costs. Notably, many studies have targeted the link between consumers’ demographic characteristics and customer retention behaviour, especially with the adoption of technological products and services such as the mobile phone (Vishwanath and Goldhaber, 2003). For example, Brown et al. (2003) explained the effect of demographic factors on the adoption and retention behaviours in regard to technological product usage, especially in the wireless telecommunication services. Results found that young mobile users were more likely to adopt and use different mobile services than other customer groups. This is in line with this study’s findings within the age and gender contexts. Results illustrated that 85.6% of this study sample is between 20 and 50 years of age. This segment represents the mobile suppliers’ main customer targets; they are seen as an asset of the suppliers and they can contribute substantially to the survival of a business (Teo and Pok, 2003; Constantiou et al., 2006). Leung and Wei (2000) found that young and less-educated women tend to speak longer when they use their mobile phones.
Accordingly, it has been found that customer demographic characteristics (e.g. gender, age, education, and income) have a major role in affecting both purchase and adoption behaviours regarding wireless services (Carroll et al., 2002; Lee et al., 2003; Wilska, 2003; Igarashi et al., 2005; Okazaki, 2006).

The following section presents an idea of some suppliers’ characteristics which are considered essential factors in consumer choice, especially within the retention behaviour context of mobile suppliers, such as network geographical coverage and customer service support units. These elements can provide different value-added customer services that attract and retain customers with respect to their economic evaluation of suppliers (Aydin and Özer, 2005; Haque et al., 2007)

4 - 3. B: Supplier descriptions

In order to take a closer view of the customer-supplier relationship, there is a need to understand customers’ views about certain supplier-related issues which are seen as very important for contract renewals, especially for customers who have experienced these elements previously. This section provides an idea of those mobile suppliers’ attributes that affect customers’ choice, and helps promote an understanding of customer evaluation criteria for suppliers’ factors which customers take into consideration when buying from various mobile suppliers. Table 4 - 8 and Table 4 - 9 addressed the main elements of UK mobile suppliers’ attributes. The aim of studying suppliers’ factors is to find the relative importance of each factor from the subscribers’ perspective and not to compare the relative importance of these factors to each other. If the customer has a positive experience (view) with his/her current mobile supplier-related features, such as communication and after-sales services, then he/she will renew his mobile contract (Gerpott et al., 2001). That is because respondents’ answers were given based on previous consumer experience and knowledge when evaluating operators’ various options. For example, the importance of geographical coverage seems to be the same among all mobile operators in the UK. However, it is not equivalent in terms of network technology and roaming, which differ from one area to another, and the customer alone can evaluate the network coverage based on his/her experience and direct contact with his/her mobile supplier. The mean and frequency scores of a 5-point Likert Scale test have been used to evaluate customers’ opinions of the main UK mobile supplier-related attributes. Respondents were asked to rate their opinions as to whether they strongly agree, agree,
take a neutral position, disagree, or strongly disagree about the main suppliers’ attributes which are as follows: network geographical coverage, voice clarity, aftersales services, customer service departments, billing systems, and suppliers’ brand names and images. The analysis of suppliers’ attributes is guided by the analysis method that has been used by many scholars such as Kim and Yoon (2004) and Birke and Swann (2005) who used the frequency of supplier choice criteria based on the customers’ perspective.

Table 4 - 8: Mobile suppliers’ factors affecting consumer choice

<table>
<thead>
<tr>
<th>Questions</th>
<th>Mobile supplier brand name</th>
<th>Network geographical coverage</th>
<th>Voice clarity</th>
<th>After sale services</th>
<th>Customer service unites</th>
<th>Billing system</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>418</td>
<td>418</td>
<td>418</td>
<td>418</td>
<td>418</td>
<td>418</td>
</tr>
<tr>
<td>Mean</td>
<td>3.1053</td>
<td>4.1746</td>
<td>3.9211</td>
<td>3.7105</td>
<td>3.7129</td>
<td>3.6555</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.1283</td>
<td>.93973</td>
<td>.98477</td>
<td>1.03647</td>
<td>0.99826</td>
<td>0.99687</td>
</tr>
<tr>
<td>Rank</td>
<td>F</td>
<td>A</td>
<td>B</td>
<td>D</td>
<td>C</td>
<td>E</td>
</tr>
</tbody>
</table>

Table 4 - 9: Respondents’ views of suppliers’ elements

<table>
<thead>
<tr>
<th>No.</th>
<th>Categories</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The effect of mobile supplier brand name</td>
<td>51(12.2%)</td>
<td>50(12%)</td>
<td>164(39.2%)</td>
<td>110(26.3%)</td>
<td>43(10.3%)</td>
</tr>
<tr>
<td>2</td>
<td>The effect of network geographical coverage</td>
<td>10(2.4%)</td>
<td>10(2.4%)</td>
<td>64(15.3%)</td>
<td>147(35.2%)</td>
<td>187(44.7%)</td>
</tr>
<tr>
<td>3</td>
<td>The effect of voice clarity</td>
<td>12(2.9%)</td>
<td>16(3.8%)</td>
<td>100(23.9%)</td>
<td>155(37.1%)</td>
<td>135(32.3%)</td>
</tr>
<tr>
<td>4</td>
<td>The effect of customer service units</td>
<td>13(3.1%)</td>
<td>28(6.7%)</td>
<td>123(29.4%)</td>
<td>156(37.3%)</td>
<td>98(23.4%)</td>
</tr>
<tr>
<td>5</td>
<td>The effect of after-sale services</td>
<td>15(3.6%)</td>
<td>28(6.7%)</td>
<td>108(26.5%)</td>
<td>128(33.3%)</td>
<td>108(25.8%)</td>
</tr>
<tr>
<td>6</td>
<td>The effect of suppliers’ billing systems</td>
<td>12(2.9%)</td>
<td>31(7.4%)</td>
<td>139(33.3%)</td>
<td>143(34.2%)</td>
<td>93(22.2%)</td>
</tr>
</tbody>
</table>

4 - 3. B-1: Network geographical coverage

Wireless network geographical coverage differs from one area to another and also from one supplier to another. Some mobile networks have weaker coverage than others and, in certain places, some wireless networks do not work properly, so a customer needs to change his or her calling location to enhance the receiving signal. Areas that are serviced by one supplier’s network are divided into cells (Madden et al., 2004). Cellular system coverage differs from one cell to another (Foreman and Beauvais, 1999). Results demonstrate that mobile network geographical coverage is the main factor affecting participants’ decision on contract renewal. Table 4 - 8 shows the mean network geographical coverage to be 4.175, which indicates that customers strongly highlighted the importance of this element for their supplier choice. Also, Table 4 - 9 shows that around 79.9% of respondents agree on the importance of this element. For example, Ofcom (2009) reported that the 3G maps which it produced in July 2009 revealed that 3G
networks are failing to provide a network coverage for a large part of the UK, especially in Scotland and Wales. Birke and Swann (2005) studied network effect on consumers’ choice of mobile phone operator in the UK. Swann found that network coverage definitely affected consumers’ choice of mobile phone supplier. Mobile network coverage and its related infrastructure equipment have become a matter of concern to mobile suppliers, especially in the provision of different 3G mobile services. This view is confirmed by Knoche et al. (2007) who claimed that, to improve network coverage by using advanced wireless telecommunication technology, worldwide expenditure by mobile suppliers will exceed $150 billion by 2012 and will allow operators to roll out highly developed services to customers, such as Mobile TV.

4 - 3. B-2: Voice clarity

Results show that voice clarity, with a mean of 3.92, is another mobile supplier factor that appears to be important for customer choice. Table 4 - 9 on page 204 shows that about 69.6% of respondents care about voice clarity when choosing from among different operators. According to Seo et al. (2008), geographical coverage and voice clarity are the fundamental quality characteristics of wireless service which affect customer contract renewal. Therefore, mobile suppliers should continuously strive to enhance voice performance and quality infrastructure which would in turn improve supplier base and performance and help to attract customers (Evans, 2007). Customers usually do not ask about voice clarity because they assume that mobile suppliers will provide good voice quality and reasonable coverage. However, the problem of weak mobile signal and/or unclear sound appears later after the customer has made his or her choice.

4 - 3. B-3: Customer service support units

Customer service units are considered one of the main elements that customers take into consideration when choosing from among mobile suppliers, especially when they are about to decide on contract renewal. According to Saccani et al. (2006), these units usually focus on handling customers’ complaints and providing maintenance and delivery. They also play an essential role in conducting market research and collecting customer feedback (Tax et al., 1998; Pugh et al., 2002); this is because serving customers provides experience that will help in making customers feel important (Garrett, 2006). With a mean of 3.713, results show that 60.7% of respondents agreed on the importance of customer service units when choosing from among operators; this is shown in Table 4 - 9 on page
204. During customer-supplier contractual interactions, some customers face a range of wireless telecommunication problems and they contact these units in order to resolve the matter. Also, the majority of mobile contract renewals are usually completed following direct negotiation with these units. Thus, a service firm will never retain loyal customers without having efficient customer services; in this way it will develop a deeper understanding of customer requirements and provide a positive experience to customers (Peppard, 2000; Garrett, 2006)

4 - 3. B-4: Aftersales services

Aftersales services play an essential role in customer retention and contract renewal in the mobile phone sector. The mean score for this element is 3.71 as shown in Table 4 - 8 on page 204. Also, 59.1% of respondents agreed about the importance of these units in their retention choice of mobile suppliers, as illustrated in Table 4 - 9 on page 204. Again, having had a positive experience from both direct and/or indirect interactions with these units, customers are encouraged to make repeat purchases from the same sellers, especially when these units have helped them resolve their difficulties. According to Van Hippel (1976) and Valsecchi et al. (2007), aftersales service units are most advantageously positioned to scan market competitors, sell ready-to-use services, and retain customer records in terms of complaints, inquiries, and problems solved. Also, these units detect consumers’ claims and dissatisfaction because they are frequently in contact with subscribers through online and phone service assistance, and monthly mobile contract invoices; they also design and evaluate the new service options (Hamdouch et al., 2001).

4 - 3. B-5: Suppliers' billing systems

Mobile suppliers usually price their main communication services on a ‘per minute’ (airtime calling) and/or a ‘per message’ service unit basis. Mobile operators normally use multiple pricing schemes based on a variety of telecommunication contents and/or applications provided by mobile suppliers or a third party (Jonason, 2002). Some of the study participants have highlighted the importance of the billing process of mobile service firms because they sometimes notice mistakes in their bills. The units responsible deal with charging data such as duration of the call, amount of data transferred, time of call, and users’ personal and financial identities (Kivi, 2007). In most cases, suppliers add
some cost units to the bills’ items such as adding more minutes or adding costs for unused services. Billing system mean is 3.66; Table 4 - 9 on page 204 shows that about 56.4% of participants highlighted the importance of billing systems and the related problems in the customer-supplier relationship at both the individual episode level and the accumulated episodes level. Meanwhile, about 33.3% of the participants took a neutral view of the billing system, which might reflect inexperience regarding billing problems and mistakes with their service providers.

4 - 3. B-6: Mobile supplier brand name

The last studied factor of mobile supplier support units is the supplier brand name. Many scholars have taken a special interest in studying the effect of brand name on service firm choice (Selnes, 1993; Verma et al., 2008). Thus, it is appropriate to investigate the effect of supplier brand name (e.g. O2) at this stage to assess whether it exerts any influence on repeat purchase behaviour. For example, in a pre-behaviour information search, some consumers clarify products/service or even supplier problems by following a number of procedures such as using their special criteria (self-rules) to judge brand names and uncover brand name features such as price and quality (Brucks et al., 2000). Table 4 - 8 on page 204 indicates that the brand name mean is 3.1, showing that this factor is neutral and its effect relatively low, while about 37% of respondents had some positive views on supplier brand name in the mobile behaviour context, as shown in Table 4 - 9 on page 204.

4 - 3. C: Descriptions of main elements of contracts

The contract’s role in this thesis provides an initial idea about different mobile phone offers’ elements and characteristics from the participants’ point of view. Analysing mobile contracts’ attributes within either post-prepaid or prepaid subscriptions will give some insights into the methods of connecting customers formally with suppliers. These attributes represent a variety of mobile utilities provided to customers within different periods of contractual time. Contracted mobile communication services have many elements that participants can buy and use, either by prepaid or post-paid subscriptions. These elements are presented as a bundle of benefits gained when a customer buys a specific mobile contract or when he or she incurs an average charge (top-up) on a monthly basis. In this way, the cost of each mobile service is covered within the total mobile package price and there is no separate cost for any single service. In the mobile phone
market, there are many essential contract elements that need to be investigated: contract type, longevity and monthly cost, number of minutes or messages units, whether there is a mobile handset with the purchased contract or not, handset types, prices, and brands, handset insurance availability, stop-the-clock service included, free evenings and/or weekend calls, free calls to other subscribers within the same or other networks, and using some of the free minutes to make international calls.

4 - 3. C-1: Contract longevity

<table>
<thead>
<tr>
<th>No.</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>Pay-as-you-go</td>
<td>199</td>
<td>47.6</td>
<td>47.6</td>
</tr>
<tr>
<td>2-</td>
<td>1 Month</td>
<td>18</td>
<td>4.3</td>
<td>51.9</td>
</tr>
<tr>
<td>3-</td>
<td>6 Month</td>
<td>10</td>
<td>2.4</td>
<td>54.3</td>
</tr>
<tr>
<td>4-</td>
<td>12 Month</td>
<td>53</td>
<td>12.7</td>
<td>67.0</td>
</tr>
<tr>
<td>5-</td>
<td>18 Month</td>
<td>125</td>
<td>29.9</td>
<td>96.9</td>
</tr>
<tr>
<td>6-</td>
<td>24 Month</td>
<td>13</td>
<td>3.1</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4 - 10 shows the main subscriber-supplier contractual relationships which include both subscription types and contract longevities. The results show that about half the participants (48%) have used the prepaid subscription method, known as “pay-as-you-go”, while the remainder (52%) have used the post-paid subscription method as shown in the appendix figure 4-3.C-1. The eighteen-month contract category is ranked second at about 30% of the study sample. The twelve-month contract category comes in third place with 12.7%. The last two segments are the one-month contract portion which has to be renewed every month and the six-month contract segment, both of which are less popular in the UK market at 4.3% and 2.4% of the total study sample respectively. Other scholars have obtained relatively similar percentages for prepaid subscriptions in the UK market and in some other countries. As reported by SE-EC (2006), more than half of UK subscribers use prepaid cards (53%) for mobile communication while the contract method with billing in arrears is estimated at 47%. Also, the report mentioned some other countries in which the contract base is widespread, such as Austria (71%), Finland (94%), Malta (94%), and Portugal (88%).

A brief note about prepaid mobile services is needed at this stage. A prepaid service is any fixed mobile service for which a user is required to pay in advance, such as mobile Internet and mobile TV. As claimed by Bakker (2002), around 90% of mobile operators in Europe are offering prepaid services and about 60% of mobile communications were
using such methods in 2000. In addition, Bakker expected a shift from the prepaid voice to prepaid data service in the coming period according to the development of wireless telecommunication technologies. This is confirmed by Kallio et al. (2006) who claimed that the majority of European mobile users (considered the predetermined category) use the prepaid subscription base. Two main problems are still considered a matter for debate among mobile operators in regard to the prepaid category: how to design relevant mobile offers and how to bill customers for advanced telecommunication services with respect to users’ values which differ between individuals in terms of accuracy, convenience, privacy, efficiency, and control (Laukkanen and Kantanen, 2006).

4 - 3. C-2: Mobile communication costs

This part gives an idea of monthly wireless communication costs for the study sample. This helps in giving a detailed view of UK mobile users’ expenditure and how much participants spend each month on such types of services as explained in appendix table 4-3.C-2. Notably, about 83.6% of the participants have a monthly expenditure of less than thirty-one pounds and about 61.8% of them spend less than twenty-one pounds each month. Results indicate that the biggest subscriber group, which accounted for about 42% of the total, spent about ten to twenty pounds monthly and the second biggest group (22%) spent about twenty-one to thirty pounds. Based on preliminary participants’ expenditure categories, initial market segmentation can be carried out according to different customer groups’ financial spending on wireless communication services, which may help operators define the main wireless consumption levels and show them how to satisfy their customers’ needs by planning suitable price plans based on a number of factors. These are: amount that customers are willing to pay each month, services monthly usage estimation and level of benefits offered with different contractual price packages.

4 - 3. C-3: Participants’ acknowledgment of their mobile contracts

While the mobile phone contract represents the formal link that ties customers to their operators, it is necessary to give an idea about subscribers who comprehend their mobile contract and acknowledge its articles when they sign it. This is because the mobile contract is considered a legal and formal written document between two parties and is covered by UK law and legalisation. Thus, it should be read with care by subscribers because it explains the contractual exchange process and designs the relationship shape, while its statements clarify both relationship parties’ rights and obligations. For example,
mobile contracts offer many options which enable any user to terminate his or her relationship with the operator without penalty, such as when the contracted price increases (Grajek and Röller, 2009). Customers should be aware of these options so that they can use them when needed. Results show that about 23% of the sample’s participants have fully explored their contracts, around 50% have not looked at them at all, and about 27% have read just their contracts’ terms and conditions as shown in the appendix table 4-3.C-3.

4 - 3. C-4: Mobile handset price

One of the main elements in the mobile phone contract is the handset. This is because it is the main tool, and has many attributes and features that enable customers to benefit from the use of different wireless telecommunication services such as mobile Internet and mobile TV. The mobile handset is being constantly developed by adding different mobile technologies in order to facilitate the best practices of additional mobile services (Banks and Burge, 2004). The highest mobile handset price is for those which have many features and advanced technologies which provide a wide range of financial, personal, and entertainment services (Karjaluoto, 2006). Most handsets in the UK market are sold by mobile operators themselves or through specific distribution channels controlled mainly by the mobile operators’ supply chain structure (Drucker, 2005). When a customer wants to choose a price plan from among many options, the operator provides many alternative handsets, each of which has a different price. Sometimes a customer chooses a specific price plan because he or she needs a specific handset. Determining which handset to choose from among the alternatives is not an easy mission for some customers. This is because Roche, who led ADI’s centralized worldwide sales function, claimed that “cellular handsets are among the most complex applications because of the wide range of hardware and software technologies they utilize” (Trimble, 2008).

Results indicated that more than 52% of the handsets used by the study sample cost less than £150 and around 26.1% cost less than £50, while only 8.4% of the participants used handsets valued at more than £300, as shown in the appendix table 4-3.C-4. The missing value in this category is high and accounted for 80 out of the 418 sample units, which represents about 19.1% of the total sample. There are various reasons for the high number of missing values. As explained previously, about half of the study participants got their mobile handsets free of charge within the contract packages. Also, some participants
couldn’t remember the market value of their handsets when they bought their contracts. Parts of the sample kept their old mobile handsets for a long time but they didn’t know the market value when they filled in the survey. Another contribution came from participants who bought used mobile handsets from sources other than their current mobile carriers, such as friends or online; they had no idea about purchase prices or recent market prices.

Mitra (2007) and Seo et al. (2008) explained that expensive handsets are usually the more sophisticated ones which have many advanced options and functions. The likelihood of a customer switching is slim if he or she bought an expensive mobile handset. A monetary penalty occurs as a result of buying another handset when switching operator in addition to the fact that every operator uses a different mobile technology controlled by special frequencies and standards. One of the studies that investigated the effect of sophisticated mobile handsets on customer retention behaviour has been undertaken by Seo et al. (2008). Results indicated that sophisticated handsets influenced subscribers’ retention behaviour more than other important factors such as the length of association between the customer and the supplier or service plan complexity. This is because there is an arbitrary switching cost that a customer must pay if he changes his operator (Zauberman, 2003), and a learning cost in that a customer will spend more time and effort, known as “information cost structure”, in learning how to use the new handset, especially if a new technology has been posted (Chambers, 2004).

Operators are in a race to provide the latest mobile handsets that have the most advanced technology through which additional services can be provided. Advanced handsets usually attract specifically targeted customers who have special needs (e.g. mobile TV and games which attract the youth market) (Trisha, 2009). Continuous provision of advanced handsets also gives operators a competitive advantage over their rivals by encouraging the younger generation to purchase and repurchase (Kim and Yoon, 2004; Okazaki et al., 2007). However, according to Slywotzky and Hoban (2007), there has recently been a hiatus in this trend of ‘competing oneself to death’; several mobile operators have decided to reduce the cost of manufacturing handsets. For example, Motorola has agreed to produce and supply six million handsets for less than 40$ each.
4 - 3. C-5: Mobile phones' brand name

The mobile handset is one of the main personal items that the majority of customers choose with care (Leppaniemi and Karjaluoto, 2005). Some customers prefer to have the latest advanced handset with many functions that enable them to engage in business and entertainment activities (Varshney and Vetter, 2002). Thus, mobile manufacturers try to supply the market with the latest mobile technology innovation that has outstanding features. Therefore, handset brand name can add some value in several respects: to the handset itself, to the price plan packages, to the operators, and sometimes to the users.

This section gives an idea of which mobile brands customers prefer to use and why. Also, the handset may give an idea of the value a customer gains when he or she buys a handset with a specific brand name. This is because Levitt (1980, p.3) argued that a product encompasses “a complex cluster of value satisfactions” to buyers. Accordingly, a customer who wishes to buy a mobile phone should evaluate the functional and emotional values or a combination thereof when searching for the best mobile brand option and other benefits he or she could gain from the contract options, such as the number of calltime minutes. Customer evaluation of brand names and features is not easy because some brands can satisfy customers’ functional values and others can satisfy customers’ emotional and symbolic values (Bhat and Reddy, 1998).

Results illustrated that Nokia branded phones were used by 46.4% of the study sample; Samsung and Sony-Ericsson branded phones were close in second and third places with 15.8% and 14.6% of total participants respectively. Motorola phones were used by just 5.1% of users as shown in appendix table 4-3.C-5 and figure 4-3.C-5. From one country to another, the percentage of brand name adoption differs from time to time. Dewenter et al. (2007), who examined the handset prices for twenty-five German operators in one sample between May 1998 and November 2003, found that Nokia was the market leader with a market share of 34%, followed by Motorola, Samsung, LG Electronics, and Sony-Ericsson with 20.3%, 12.5%, 6.5%, and 6.1% respectively. Accordingly, brand name does not just help in identifying the product (Friedman, 1985); there is a set of meanings and symbols embodied by the product that induce customers to pay more for one brand instead of another (Levy, 1978).
4 - 3. C-6: Size of airtime minutes

The airtime calls (minute size) is the main contract element that customers use. Operators usually sell a variety of airtime call plans which give customers different-sized packages of minutes to use each month during different contractual periods. The majority of common plans give customers a limited number of minutes that can be used at any time during the day while other plans differentiate between peak and off-peak times. This section aims to check the average minute size that participants bought within their contracts and not the estimated average duration of customers’ usage of airtime every month. Beyond the free airtime allowances, a customer usually pays a relatively high calling tariff, such as 25 pence per minute. The more minutes a customer buys, the more he/she pays per month. As shown in Figure 4-1, eight categories have been identified in order to give an idea of different contracts’ airtime minute categories.

![Figure 4-1: Number of air-time minutes within sold contracts](image)

Results show that 35.2% of the total sample bought less than two hundred minutes each month. Also, 23% and 17.2% of participants bought between 201 and 400, and 401 and 600 airtime minutes each month respectively. Meanwhile about 8.8% bought more than 1000 minutes each month, as explained in the appendix table 4-3.C-6.

4 - 3. C-7: Size of messages

This section explains both percentages and categories of text messages bought by participants within the monthly bundle of benefits reported by prepaid and post-paid users. Other types of messages such as picture messages and video messages are not usually included within monthly contracts and the customer needs to pay separately for using these types of media messages. Appendix table 4-3.C-7 explains the distribution of
message categories among participants who bought contracts. This part facilitates a comparison of many categories of text messages used according to customers’ predetermined decisions when they bought their contracts, based on their estimation of their average usage of messages each month. Results illustrated that more than half the study sample (52.6%) use less than 100 text messages each month. Meanwhile, about 19% of the participants can use up to 200 text messages and about 16% can use between 200 and 700 messages, as shown in appendix figure 4-3.C-7. The last category, which accounted for 12.4% of the participants, can send more than 700 text messages every month; this segment represents those customers who buy expensive contracts which usually allow a large number of messages to be sent every month. In 2010, mobile suppliers have made the cost of buying text messages very cheap. For example, for just £5 a mobile user can buy unlimited text messages from O2 each month.

4 - 3. C-8: Mobile phone handset availability with the mobile offer

This section provides an idea of the participants who bought a handset with the mobile offer as shown in appendix table 4-3.C-8. Mobile operators usually provide a range of handsets with each offer and a customer has the right to choose from among them. If a customer chooses a cheap handset then he or she will receive more benefits in terms of minutes and messages but if the customer chooses an expensive one with multi-functions and bearing a known brand name then he or she will sacrifice some benefits in the form of minutes and/or messages, or will have to pay an additional cost beyond the contract cost. Some customers don’t ask for a new mobile handset when taking up a new mobile offer because they already have one and they want to keep it, especially when they renew their contract or buy one from another mobile supplier. Results demonstrate that less than half of the participants (accounting for 43.3%) acquired a new handset with their mobile offers and more than half of them had their own handsets.

Some operators use the mobile handset as a tool to attract and retain customers who are fans of the new advanced handsets. Providers who cooperate with other operators continuously develop different types of mobile technology to enable them to provide additional mobile services ahead of their competitors (Farshchian and Rekdal, 2006). For example, according to SJPP (2009), European banks and mobile operators are working hard to entice consumers by providing advanced mobile financial services through which
a subscriber can transfer money between accounts or even abroad in addition to routinely checking his or her account.

4 - 4: Customer-supplier relationship

Relationship marketing is seen by many scholars as an interaction process (Sheth and Parvatiyar, 1995). The aim of the mutual interaction process between customers and suppliers is customer retention, which is intended to secure repeat customer purchasing on a continuous basis. In order to gain a closer view of customer retention, it is necessary to explain certain customer-supplier relationship elements. Some of these elements are as follows: accumulated mobile users’ experience of mobile suppliers, customers’ experience effect, and subscriber switching, upgrading and cancelling behaviour, supported by suitable causes and justifications from the customers’ point of view.

4 - 4. A: Customer-supplier relationship longevity

Participants’ relationship with suppliers has been measured in two dimensions. First, the overall accumulated relationship was calculated based on the number of years since the participant started to use the telecommunication services, whether they are prepaid and/or post-paid customers. This part aims to give an idea of the length of customer-supplier interaction (relationship age), since a participant has to use the mobile communication from an early stage as shown in Table 4 - 11. Results show that, for about 71.8% of the participants, the length of experience of using mobile phone services was more than five years while, for around 28.2% of them, it was less than four years. The average length of the sample’s experience was distributed between seven and eight years. However, only around 9.1% of the sample has more than 12 years and around 6.2% of them has less than 1 year.

<table>
<thead>
<tr>
<th>No.</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percent%</th>
<th>Cumulative Percent%</th>
</tr>
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<td>&lt;1</td>
<td>26</td>
<td>6.2</td>
<td>6.2</td>
</tr>
<tr>
<td>2-</td>
<td>1-2</td>
<td>36</td>
<td>8.6</td>
<td>14.8</td>
</tr>
<tr>
<td>3-</td>
<td>3-4</td>
<td>56</td>
<td>13.4</td>
<td>28.2</td>
</tr>
<tr>
<td>4-</td>
<td>5-6</td>
<td>72</td>
<td>17.2</td>
<td>45.5</td>
</tr>
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<td>5-</td>
<td>7-8</td>
<td>88</td>
<td>21.1</td>
<td>66.5</td>
</tr>
<tr>
<td>6-</td>
<td>9-10</td>
<td>75</td>
<td>17.9</td>
<td>84.4</td>
</tr>
<tr>
<td>7-</td>
<td>11-12</td>
<td>27</td>
<td>6.5</td>
<td>90.9</td>
</tr>
<tr>
<td>8-</td>
<td>&gt;12</td>
<td>38</td>
<td>9.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The second way of measuring actual customer-supplier relationship longevity was calculated by counting the accumulated length, to the number of months, of using mobile
services with the current supplier, whether they are prepaid and/or post-paid customers. This part aims to count mobile participants’ relationship longevity with their last operator; this will allow identification of those participants who switched or retained their supplier within the last three years, as shown in appendix table and figure 4-4.A. Results indicate that the longest duration category was more than 84 months, accounting for about 12.9% of the respondents, and the shortest duration category was less than 12 months, represented by about 29.4% of the same sample. The average length of stay since the participants began their mobile service usage with the new operator was distributed between 25 and 36 months. Notably, around 29.4% of respondents have changed their mobile suppliers within the last year while around 25% have dealt with the same service provider for more than 4 years. Also, around 13% of mobile users have remained with the same operators within the last seven years. This may give an idea of the laggards’ percentage (customers who were reluctant to switch supplier) in the mobile phone sector, which represents one of the fastest-moving sectors. As explained by Rogers (1962), the general percentage of conservative customers is about 16%. The conservative percentage is not in line with other studies’ findings that mobile operators are switching all their customers within a period of 3 to 4 years, with a churn rate of about 38.6% in 2007 and 33.4% in 2005 (Bowes, 2008; Wood, 2008). Based on the previous explanation, mobile suppliers are recommended to give special attention and care to those customers who have had continuous relationships for more than two years (Stone et al., 2000). Relationship longevity is an essential part of the customer-supplier relationship and is one of the customer retention indications (Khalifa, 2004). However, it is necessary to explain additional customer retention indications such as the effect of customer experience as a result of customer-supplier relationship duration and switching behaviour.

Many scholars associate customer relationship longevity with repeat purchasing. That is because the more the customer-supplier relationship duration increases, the more the user accumulates his or her direct contacts with the current suppliers who encourage him or her to make a repeat purchase or switch from another supplier. Thus, there is a need to assess the extent to which a customer relies on his or her accumulated experience to repeat the purchase of wireless communication services.
4 - 4. B: Customer experience

Wireless communication experience is considered one of the main factors that affect customer retention. A subscriber usually accumulates his or her experience based on the learning process through direct or indirect interactions with current or previous operators and mobile service usages, which increase with subscription duration (Seo et al., 2008). Customer experience is used in this section to provide additional material to understand the reasons that cause a customer to switch, cancel, upgrade, and terminate mobile relationships. In a learning process, a customer gains a special knowledge, which usually has a high credibility; this enables him or her to evaluate many operators and choose the best price plan that fits his or her needs. Many scholars have identified a direct link between accumulated customer experience and satisfaction (Hallowell, 1996; Lee et al., 2001). Andreassen (1994, p.20) claimed that “customer satisfaction is the accumulated experience of a customer’s purchase and consumption”, which is affected by both customer expectations and experienced service performance (Johnson et al., 1995). If a subscriber’s satisfaction is high then the probability of retention behaviour will be high. This idea is explained by Guo et al. (2008, p.1153) who defined a subscriber’s satisfaction as a “cumulative evaluation of a firm’s performance derived from customer’s prior experience with the firm”. Customer experience is measured in this part to check to what extent a mobile user relies on his or her accumulated interactions with mobile operators to choose from among a variety of mobile service alternatives. As shown in Table 4 - 12, around 35% of the participants rely heavily on their own experience in choosing mobile contracts and operators while around 65% of them consulted their friends, families, or salespersons to guide their purchases.

<table>
<thead>
<tr>
<th>No.</th>
<th>Experience effect</th>
<th>Frequency</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rely on this experience</td>
<td>146</td>
<td>34.9</td>
</tr>
<tr>
<td>2</td>
<td>Consult other people</td>
<td>272</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>418</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4 - 4. C: Mobile users’ switching behaviour

One of the main business issues presenting a strong challenge to service suppliers is how to reduce customers’ opportunistic switching behaviour (Liu, 2006). In order to understand customer retention behaviour, there is a need to understand customer switching behaviour and why mobile suppliers establish both switching costs and barriers to reduce the likelihood of switching behaviour (Ranaweera and Neely, 2003). The main reasons for switching vary and, in the main, switching costs are designed to increase customer
retention rates by applying different customer relationship marketing activities. Switching cost is defined by Lee et al. (2001, p.2) as “costs that the consumer incurs by changing providers that they would not incur if they stayed with their current provider”. Customer cost is considered one of the main switching barriers, which were defined by Jones et al. (2000, p.261) as “any factor, which makes it more difficult or costly for consumers to change providers”. One of the main elements in studying customers’ switching behaviour is to define what kind of elements cause customers to change their mobile suppliers. This part aims to list the main potential customer-supplier problems which are seen as switching drivers. The reason for defining switching behaviour is to help make an early identification of customers’ problems; this could provide a good treatment tool for retaining customers, by dealing seriously with these problems (Sulikowski, 2008). Also, this part may identify more specific customer needs which might help operators to match their mobile offerings accordingly (Andersson and Markendahl, 2007). Table 4 - 13 lists all the problems that participants face with their mobile operators in the UK market, ranked by frequency and percentage of occurrence. Results show that more than a third of the participants claimed that poor mobile signal, which usually results from bad network coverage, is the main cause of switching. The next-highest frequency of claim concerned the high price of mobile communication plans (offers) which causes customers to switch to cheaper offers. Operator support units were the subject of notable concerns. For example, poor customer services and defective billing systems formed a considerable percentage of claims, accounting for 10% and 7% of the total claims respectively.

<table>
<thead>
<tr>
<th>No.</th>
<th>Claim type</th>
<th>Frequency</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Poor signal – network coverage problem</td>
<td>56</td>
<td>34.0%</td>
</tr>
<tr>
<td>2</td>
<td>Price /cost issue- high rate</td>
<td>24</td>
<td>14.6%</td>
</tr>
<tr>
<td>3</td>
<td>Poor customer service</td>
<td>16</td>
<td>9.80%</td>
</tr>
<tr>
<td>4</td>
<td>Billing systems (wrong bills and overcharged bills)</td>
<td>10</td>
<td>7.00%</td>
</tr>
<tr>
<td>5</td>
<td>Unclear contract</td>
<td>8</td>
<td>4.90%</td>
</tr>
<tr>
<td>6</td>
<td>Payment problems – Top up by using credit card</td>
<td>7</td>
<td>4.30%</td>
</tr>
<tr>
<td>7</td>
<td>Roaming costs issues- calling abroad</td>
<td>7</td>
<td>4.30%</td>
</tr>
<tr>
<td>8</td>
<td>Text messaging issues-expensive</td>
<td>5</td>
<td>3.00%</td>
</tr>
<tr>
<td>9</td>
<td>No help from help desk employees</td>
<td>5</td>
<td>3.00%</td>
</tr>
<tr>
<td>10</td>
<td>Contract termination</td>
<td>4</td>
<td>2.44%</td>
</tr>
<tr>
<td>11</td>
<td>Mobile online shopping</td>
<td>4</td>
<td>2.44%</td>
</tr>
<tr>
<td>12</td>
<td>Advertising via mobile</td>
<td>3</td>
<td>1.80%</td>
</tr>
<tr>
<td>13</td>
<td>Bad handset</td>
<td>2</td>
<td>1.20%</td>
</tr>
<tr>
<td>14</td>
<td>Missing handset</td>
<td>2</td>
<td>1.20%</td>
</tr>
<tr>
<td>15</td>
<td>Some hidden charges apply</td>
<td>2</td>
<td>1.20%</td>
</tr>
<tr>
<td>16</td>
<td>Charging for services not subscribed</td>
<td>2</td>
<td>1.20%</td>
</tr>
<tr>
<td>17</td>
<td>Others</td>
<td>7</td>
<td>3.06%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>164</td>
<td>100%</td>
</tr>
</tbody>
</table>
4 - 4. D: Switching rate

The second switching behaviour issue is aimed at defining the numbers and percentages of participants who switched their mobile suppliers and bought new contracts from other suppliers compared to those who stayed with their operators. With respect to different sample age categories, around 35% of respondents have changed their operators at least once within the last year while about 65% of them have ‘locked into’ their current mobile suppliers, as shown in the appendix table 4-4.D-1. Both percentages are considered critical for UK wireless communication companies without which the mobile market cannot function properly. The churn rate for study participants is 35%, which is in line with the average mobile market churn rate of 38.6% in 2007 compared to 33.4% in 2005, indicating an increase of 5.2% in the last two years (Bowes, 2008; Wood, 2008). While explaining switching behaviour elements, it is essential at this stage to give an idea of mobile switching rates. This part serves to define both numbers and percentages of participants who had left their mobile operators to join rival firms, supported in the following section by a definition of the reasons for switching for each mobile supplier based on direct customer experience. According to Lewis and Grey (2004), switching rate metric is calculated by dividing the number of customers who switched suppliers by the total number of customers in the market in a given period. A simple example can be drawn in this study. As shown in the appendix table 4-4.D-2, operators with the highest number of switched mobile users are: O2, Orange and Vodafone, accounting for 7.7%, 6.7%, and 6.7% respectively. However, these figures are not correct without comparing them with the total participant segments for each supplier. By referring previous figures to the sample’s distribution among the main UK mobile operators in section 4-3.A-6, switching rates have been estimated as percentages of current customers instead of total customers for each operator; it has been found that the switching rates were high for both Orange and T-Mobile, with switching rates of about 43.3% and 42.6% respectively. These rates are relatively higher than the average switching rate in the mobile phone market, which was about 38.6% in 2007 (Wood, 2008).

4 - 4. E: Mobile users’ main switching causes

The next part addresses the main causes of participants’ switching behaviour. This part identifies and categorises the main causes that impel customers to leave their mobile suppliers. Studying customer switching causes is not a new phenomenon. Many scholars
have studied customer retention behaviour by thoroughly investigating switching behaviour drivers and causes (Jones et al., 2000; Lee et al., 2001; Yang et al., 2009). Min and Wan (2009), for example, have identified four main factors affecting the switching behaviour of customers in the Korean mobile market: customer satisfaction, switching cost, alternative attractiveness, and customer loyalty. Table 4 - 14 provides a list of causes expressed by participants which made them switch their operators. Results show that more than a quarter of participants had moved to better mobile offers. This percentage is high, as those customers should basically have received better offers from their existing operators rather than from others. This figure gives a close indication of the churn rate in the UK mobile market, since mobile suppliers lose about 30% of their subscribers every year (Lee et al., 2001). Also, around 15% of subscribers have switched their operators as a result of high-priced calls tariffs. These days, it is easy for customers to compare between operators price plans and tariffs, especially by using different accessible media (e.g. mobile suppliers’ monthly magazines and online websites) which facilitate customers in switching to cheaper plans offered by other mobile suppliers. Network coverage problems in the form of weak signals and poor customer services cause around 14% and 12% of existing customers to switch, respectively. These units should work to support existing customers and increase retention rather than serve as customer defection units.

<table>
<thead>
<tr>
<th>No.</th>
<th>Claim type</th>
<th>Frequency</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Getting better deal</td>
<td>52</td>
<td>27.4%</td>
</tr>
<tr>
<td>2.</td>
<td>Expensive tariffs and moving toward cheaper ones</td>
<td>28</td>
<td>14.7%</td>
</tr>
<tr>
<td>3.</td>
<td>Poor signal – network coverage problem</td>
<td>26</td>
<td>13.7%</td>
</tr>
<tr>
<td>4.</td>
<td>Poor customer service</td>
<td>22</td>
<td>11.6%</td>
</tr>
<tr>
<td>5.</td>
<td>Seeking better handset</td>
<td>18</td>
<td>9.5%</td>
</tr>
<tr>
<td>6.</td>
<td>Getting more airtime minutes and messages</td>
<td>7</td>
<td>3.7%</td>
</tr>
<tr>
<td>7.</td>
<td>Change country of residence</td>
<td>5</td>
<td>2.6%</td>
</tr>
<tr>
<td>8.</td>
<td>Changing from post paid to prepaid</td>
<td>6</td>
<td>3.2%</td>
</tr>
<tr>
<td>9.</td>
<td>End of contract time</td>
<td>4</td>
<td>2.1%</td>
</tr>
<tr>
<td>10.</td>
<td>Get benefits from the network size allowances</td>
<td>5</td>
<td>2.6%</td>
</tr>
<tr>
<td>11.</td>
<td>Bad mobile suppliers</td>
<td>2</td>
<td>1.05%</td>
</tr>
<tr>
<td>12.</td>
<td>Billing system – get wrong bills</td>
<td>2</td>
<td>1.05%</td>
</tr>
<tr>
<td>13.</td>
<td>No help from employees – not friendly</td>
<td>2</td>
<td>1.05%</td>
</tr>
<tr>
<td>14.</td>
<td>Poor mobile shop availability</td>
<td>2</td>
<td>1.05%</td>
</tr>
<tr>
<td>15.</td>
<td>Changing from prepaid to post paid</td>
<td>2</td>
<td>1.05%</td>
</tr>
<tr>
<td>16.</td>
<td>Promotion stimulus</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>17.</td>
<td>Bad cashback schemes</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>18.</td>
<td>Losing mobile handset</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>19.</td>
<td>Over-charging</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>20.</td>
<td>Gift</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>21.</td>
<td>More reputable operator</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>22.</td>
<td>Indifference</td>
<td>1</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

| Total | 190   | 100%  |
One of the more notable switching causes is the search for better handsets which causes around 10% of the participants to switch. Accordingly, the handset is considered one of the most important components to entice some customers to move from one operator to another. This is confirmed by Kallio et al. (2006) who explained that mobile operators race one another to provide mobile handsets with more advanced and faster technology which can provide additional services desired by different customer groups, such as mobile TV which is provided via 3G phones.

4 - 4. F: Mobile contract cancelling and upgrading

Mobile contract cancellation is an issue that has attracted very little interest from scholars within the wireless services purchasing context. This part of the study is designed to check both the numbers and percentages of participants who cancel their mobile contracts within the trial period or later; the main causes of cancelling are shown in the appendix table 4-6.F-1. Results indicate that around 15% of the participants had cancelled their mobile phone contract within the trial period, which is determined by the law to be the first 14 days of the contract. After the trial period has expired, any customer who wants to cancel his or her contract will be liable for the rest of the contracted airtime rental period. Also, after 14 days have elapsed, a consumer becomes locked in by his or her operator and cannot switch operators without paying the contractual switching cost. In this situation, the switching cost becomes real fact. In addition, the main mobile UK operators usually ask for a 30-days notice period from subscribers if they want to cancel their mobile contracts; otherwise, the contract will continue within the same rules and conditions until the subscriber asks to renew the contract or switch to another operator. Taking a quick look at the main mobile contract cancellation reasons, appendix table 4-6.F-2 shows that 15.1% of the participants have cancelled their mobile contract at least once within the last year. The results provide a list of reasons that made the study participants cancel their mobile contracts. Around 28% of the participants cancelled their contracts for high-cost reasons, 17% cancelled to obtain better value-for-money offers, 9.2% cancelled to obtain more calling airtime and text messages from new contracts, 7.7% cancelled for poor customer service reasons, and 6.2% cancelled to obtain more advanced handsets, while the same percentage changed their consumption mode from post-paid to prepaid subscription.

Moreover, one of the key customer retention issues in the mobile contract renewal situation concerns upgrading (Bolton et al., 2008). Upgrading occurs when a customer
renews his commitment to use the same mobile supplier’s services for another contractual period or adds some additional product or service elements to the current contract. Upgrading in some cases brings more benefits for a customer, such as adding more airtime minutes or gaining a monetary discount as a result of increasing the contractual airtime period. As shown in the appendix table 4-6.F-3, about 27% of the sample participants have upgraded their mobile contracts and remained with the same service providers. However, it is not enough to know how many subscribers upgraded their mobile contracts; the main issue is to discover the main causes of upgrading, which may add some insight into the customer retention issue. Knowing about these factors among existing customers might provide a tool to strengthen the customer-supplier relationship and enhance mobile suppliers’ services. To discover which elements the customers are happy with, and to give an idea of how to employ these elements to extend the customer-supplier relationship, Table 4 - 15 gives an idea of the main reasons why subscribers upgrade their contracts. Results show that the main reason for upgrading is to obtain more advanced handsets, which accounted for 30% of the total participants. This confirms that the mobile handset plays an essential role in customer retention, especially for the existing customers who use post-paid mobile communication services.

<table>
<thead>
<tr>
<th>No.</th>
<th>Claim type</th>
<th>Frequency</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Getting better and more advanced handset</td>
<td>43</td>
<td>29.5%</td>
</tr>
<tr>
<td>2.</td>
<td>Getting better deal-more value for money</td>
<td>31</td>
<td>21.0%</td>
</tr>
<tr>
<td>3.</td>
<td>Getting more airtime minutes</td>
<td>20</td>
<td>13.5%</td>
</tr>
<tr>
<td>4.</td>
<td>Getting cheaper contract (discount)</td>
<td>15</td>
<td>10.10%</td>
</tr>
<tr>
<td>5.</td>
<td>Getting more text messages</td>
<td>13</td>
<td>8.8%</td>
</tr>
<tr>
<td>6.</td>
<td>Good customer service</td>
<td>9</td>
<td>6.08%</td>
</tr>
<tr>
<td>7.</td>
<td>Change resistance</td>
<td>8</td>
<td>5.4%</td>
</tr>
<tr>
<td>8.</td>
<td>Getting more and new services</td>
<td>5</td>
<td>3.4%</td>
</tr>
<tr>
<td>9.</td>
<td>Good service provider</td>
<td>4</td>
<td>2.70%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>148</td>
<td>100%</td>
</tr>
</tbody>
</table>

In addition, 21% of the participants have upgraded their contracts because they gained more benefits from their operators by paying the same amount of money every month. Providing more value for money is a vital technique for suppliers to employ to retain customers, especially at the contract renewal negotiation stage. This is because there are no rules for the upgrading process and it depends on the negotiating power of the subscribers. More value for money arrives in different ways, such as acquiring more airtime minutes and text messages units, which attracted 13% and 9% of participants respectively. Some customers are keen to minimize the monthly cost of the contract while enjoying the same amount of benefits. Within the contract upgrading situation, results
show that more than 10% of the participants obtained discounts on the original contract price when upgrading their mobile contracts. Also, good customer service is a factor that encourages 6% of applicants to extend their contracts. Lastly, more than 5% of subscribers have upgraded their contracts because they are unimpressed by rival offers available in the market or they resist changing their mobile suppliers and are satisfied with their current contracts; the upgrading process is a routine activity for them.

To sum up, studying customer switching behaviour plays an essential role in customer retention and gives deep insights into this phenomenon. In some cases, dissatisfied customers are counted as loyal customers although, in reality, their switching costs prevent them from defecting (Gronhaug and Gilly, 1991; Lee et al., 2001) or other exit barriers have the same effect, such as sharing family packages (Jones et al., 2000; Liu, 2006; Xavier and Ypsilanti, 2008). More importantly, while this part provides an idea of the switching behaviour elements which covered customers’ churn, cancellation, and upgrading analysis, there is a need for further investigation of customer retention drivers and contract renewal factors such as those mentioned by Turnbull et al. (2000): providing further reductions in call charges, paying more attention to customer care, enhancing service quality compared to rivals, and minimizing customer confusion by providing limited mobile service options supported by clear guidance.

4 - 5: Data analysis

One of the main steps in any study is to make a good assessment of study items before evaluating their effects on the study phenomenon in hand. Reliability, validity, correlation, and normality are the main assessment tools used in social science to measure the accuracy of data in quantitative research. Before proceeding with the data analysis and interpretation of results, it is necessary to give some conceptual ideas about different measures that will be employed in this study in later steps.

Initially, the description will examine reliability and validity which are considered the tools of an essentially positivist epistemology (Golafshani, 2003). According to Campbell and Stanley (1963), reliability is the function that a scholar should regard as a basic requirement before proceeding with the analysis and interpretation of data. It has been confirmed that reliability is a very necessary target that is seen as a condition for validity (Crocker and Algina, 1986). Reliability is concerned mainly with the consistency of any
Measurement in social science provides many benefits: it allows the establishment of a valid difference between the study participants in terms of a set of predetermined questions, provides a consistent device to make distinctions in gauging differences, and provides the basis for a more accurate assessment of the differences and relationships among the study concepts (Bryman and Bell, 2007). Sekaran (2003) described the benefit of reliability as its capacity to prove the consistency and stability of the measuring tool, rather than to test and make judgements on the findings. On the same theme, validity is a measure that gives the degree of association between the study items and the scale used, rather than the findings. Validity is described by AERA et al. (1985) as the degree to which measurement scores are free from inaccuracy of measurement. Free-from-error measurements mean the degree to which the study concepts are measured by the used scale error-free. Apart from that, there is reliability, which has been taken for granted as a sufficient assessment of validity (Moss, 1994).

Reliability is evaluated by using two measures: Cronbach’s Alpha (α) and item-to-total correlation. Cronbach’s Alpha, which is named after Cronbach (1951) and alpha (α), is a measure which gives an idea of internal consistency by revealing how a set of items has been used to measure some of the constructs of interest by evaluating the items’ proportion of variance compared to common known figures. Cronbach’s alpha will have a high value if the correlations between specific items increase, and vice versa. Some items which have low correlation values should be removed under specific conditions as they might minimize the total association value within the one set of items. This means that low correlation value items are not valid for use. In addition, item-to-total correlation is a technique normally used to measure the correlation of each single item to the total score of a set of items used to study and analyse one study concept. It is used to measure the extent to which a group of items or statements will be valid for measuring one or more concepts. If one or more items are not related to the study concept and have a low effect, they should be removed in order to avoid the unrelated item effect which might create a bias in the used measurement. According to Robinson et al. (1991), any correlation value between 0.50 and 0.60 indicates satisfactory reliability, any value between 0.60 and 0.70 indicates an accepted reliability and any value over 0.70 indicates very good reliability. In the pilot stage, it has been explained how some items were removed because they had a low Cronbach’s alpha – they made a low contribution to explaining their related constructs’ variance, such as the “salespersons’ recommendations” item from the social
construct and the “customer service follow-up and recommendations” item from the physical construct. Table 4 - 16 provides some clarifications about the study factors’ distribution, the number of items in each construct, the number of items in the main questionnaire, and reliability figures for study factors and for subgroup constructs. Results show that the reliability for the independent variables is 94.6%, while the reliability for all independent variables is distributed between 91.3% and 60%. Reliability denotes that those research questions are reliable enough to be used to measure the phenomenon in question on one hand and its variables on the other.

Table 4 - 16: Questionnaire classification of study constructs and items numbers

<table>
<thead>
<tr>
<th>No.</th>
<th>Factors</th>
<th>Items’ number</th>
<th>Questions’ numbers in questionnaire</th>
<th>Reliability-CR Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>All items</td>
<td>50</td>
<td>1-50</td>
<td>CR Alpha = 94.6%</td>
</tr>
<tr>
<td>2</td>
<td>Suppliers’ items</td>
<td>6</td>
<td>S1.8A-F</td>
<td>CR Alpha = 76.3%</td>
</tr>
<tr>
<td>3</td>
<td>UR Construct</td>
<td>11</td>
<td>1-8G+H+1-9</td>
<td>CR Alpha = 83.9%</td>
</tr>
<tr>
<td>4</td>
<td>BS Construct</td>
<td>23</td>
<td>10-32</td>
<td>CR Alpha = 91.3%</td>
</tr>
<tr>
<td>4-A</td>
<td>BS-Physical</td>
<td>9</td>
<td>10-15+19-21</td>
<td>CR Alpha = 82.9%</td>
</tr>
<tr>
<td>4-D</td>
<td>BS-Social</td>
<td>7</td>
<td>22-23+14-18</td>
<td>CR Alpha = 86.1%</td>
</tr>
<tr>
<td>4-F</td>
<td>BS-Temporal</td>
<td>3</td>
<td>26-28</td>
<td>CR Alpha = 70.3%</td>
</tr>
<tr>
<td>4-G</td>
<td>BS-Regulatory</td>
<td>4</td>
<td>29-32</td>
<td>CR Alpha = 83.1%</td>
</tr>
<tr>
<td>5</td>
<td>LH Construct</td>
<td>3</td>
<td>33-35</td>
<td>CR Alpha = 60%</td>
</tr>
<tr>
<td>6</td>
<td>IR Construct</td>
<td>5</td>
<td>36-40</td>
<td>CR Alpha = 80.6%</td>
</tr>
<tr>
<td>7</td>
<td>UP Construct</td>
<td>5</td>
<td>41-45</td>
<td>CR Alpha = 79.1%</td>
</tr>
<tr>
<td>8</td>
<td>IP Construct</td>
<td>5</td>
<td>46-50</td>
<td>CR Alpha = 84.4%</td>
</tr>
</tbody>
</table>

In addition, normality is considered one of the fundamental concepts that need to be checked before analysing data. While the study sample was drawn from the population, it is important to test and compare the sample normal distribution to one of the fundamental social science measurements, which is the population normal distribution. The normal distribution according to Bhisham et al. (2005) is the most widely used probability in applied social science; its normal density function is a bell-shape distribution and it is completely symmetric in its values around the mean. Also, to check normality, four measures were used in this study to measure and assess the spread of data distribution: Mean, Standard Deviation, Skewness, and Kurtosis. Firstly, standard deviation is a
measure of values dispersion around the mean. It is a common measure used to test and appraise the data dispersion by calculating the square root of the variance (Bell and Bryman, 2003). Burns and Bush (2008) indicated that the degree of variability in the studied cases in a shape can be translated into a normal or bell shape. Thus, it is important to assess the standard deviation because it explains some statistical rules for the normal distribution as follows: more than half of all cases fall within plus one and minus one of deviation from the mean (some authors claimed 68% of the observations), while between 90% and 95% of cases fall within two standard deviations, and all observations fall within three standard deviations (Sekaran, 2003; Burns and Bush, 2008). Secondly, according to Sekaran (2003), sample mean has been described as “the average of central tendency that offers a general picture of the data without unnecessarily inundating one with each of the observations in the data set” (p.396). Thirdly, Skewness and Kurtosis are statistical measures that describe the shape and symmetry of the sample distribution according to the normal distribution. These two measures are displayed and explained according to their standard errors. If the sample is normally distributed, then it is symmetric should have a skewness value of zero. Also, positive skewness sample distribution should have a right tail while a distribution with a negative skewness value should have a left tail (Myers and Well, 2003). Meanwhile, Kurtosis is a measure connected directly with describing and measuring the peakedness of a disruption (Johansson, 2000). To explain further, it is a measure that shows the extent to which the study observations are clustered around the mean. If the sample is normally distributed then the kurtosis value will equal zero. Also, positive kurtosis distribution indicates that observations cluster more and have longer tail while negative ones should have observations that cluster less and have shorter tail.

**The analysis of dependent variables**

This part explains the issue of whether existing mobile services users will renew their subscriptions. To do so, it is important to investigate whether participants plan to renew their mobile contracts or not. According to Eccles et al. (2006), customer planned behaviour has been used as a valid proxy measure of behaviour based on behaviour contextual perspective. As claimed by Uzgiris (1990, p.296), “all goals directed systems are intentional” and “the goal-directedness and intentionality are taken as equivalent descriptions”. This means that a consumer knows, according to his/her knowledge, previous experience, collected information and assessment of operators’ options, that the
existing offer is the best alternative that fits his or her needs and accordingly he or she plans to renew the subscription with the same service provider within the same rules or within modified ones (Alvarez and Casielles, 2008).

The dependent variable in this study is designed to achieve two main goals. First, it is designed to check the number and percentages of the study sample that intend to extend their relationships with their mobile suppliers. Customer retention in the mobile phone sector occurs in the following ways: renewing the contract for another contractual period of time, remaining with the same mobile operator as a pay-as-you-go customer, or deciding not to switch operators after the contract has expired - part of this group are considered customers who are resistant to change. Also, customers may have high satisfaction levels as a result of dealing with their operators, making it less likely that they will switch (Damsgaard and Marchegiani, 2004). On the other hand, this part is designed to estimate the number and percentages of participants who plan to switch their operators for different reasons, such as high cost of wireless communication service compared to rival offerings (Shin and Kim, 2007).

<table>
<thead>
<tr>
<th>No.</th>
<th>Options</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>Yes</td>
<td>313</td>
<td>74.9</td>
<td>74.9</td>
</tr>
<tr>
<td>2-</td>
<td>No</td>
<td>105</td>
<td>25.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Results indicate that about 75% of the study sample expressed their intention to renew contracts with their mobile operators and about 25% of them plan to switch to rivals. These percentages give an initial indication of the extent to which participants have a predetermined idea of whether they will switch or retain suppliers without investigating the effects of switching or remaining, such as finding better offers from other suppliers or changing their price plans. Asking the participants directly about renewing their existing mobile service subscription is a simple way of exploring their plans to renew their mobile contracts and use the same services without a need to change their mobile phones, price plans, and communication groups within the same network. The decision to remain or switch relies heavily on customers’ previous judgement according to the accumulation of experience in dealing with the existing supplier and benefits gained. Lin and Wang (2006) found that repeated mobile purchase behaviour is the product of habitual prior usage and future purchase behaviour plans which rely on the rational assessment of perceived value, customer satisfaction and trust. According to Kumar et al. (2003), customers who develop
an intention to build a relationship with a supplier by buying their products and/or services rely on a decision which has been built according to the degree of involvement, expectation, forgiveness, fear of relationship loss, and feedback. This percentage of switching was in line with other studies. For example, according to an online study conducted by Ofcom (2009), results revealed that 28% of consumers reported that they have switched their operators in the past four years.

**The analysis of independent variables**

As explained in the methodology chapter, this thesis has employed the BPM components to investigate customer retention drivers in the mobile phone sector. Independent variables are UR, UI, UP, IP, LH, and BS. To assess the independent variables, many tests need to be used to evaluate independent factors-related data. These measurements are correlation, reliability, frequency, standard deviation, and normality.

The correlation test is used at this stage to explore the relationships between the predictor variables to cover any evidence that the variation in one variable matches the variations in all other variables. Two statistical techniques were used to examine the relationship between the studied elements and correlations: Spearman’s rho and Pearson’s correlation techniques. Spearman’s method is used because the independent variables are continuous and the dependent variable is dichotomous. Based on that, Spearman’s rho is used to measure the correlation among the predictor variables as clarified by Bell and Bryman (2003). The measurement attributes have been ranked in order. Ranked order means that distances between measurement attributes do not have equal meanings. ‘Strongly agree’ which is coded 5 is stronger than ‘agree’ which is coded 4 but the distance between 4 and 5 does not equal the distance between ‘neutral’ which is coded 3 and ‘agree’ which is coded 4. Also, the correlation values in this stage are “best considered a descriptive technique or a screening procedure rather than a hypothesis-testing procedure” (Tabachnick and Fidell, 1989, p.193). The correlation coefficients, in general, have values between -1 and +1. In the correlation Table 4 - 18 on page 229, there is no negative or zero correlation among any two variables which indicates that an increase in one variable value created a decrease in another variable value and vice versa. All coefficients’ values are less than 60% which denotes that the multicollinearity effects among variables are not a matter of interest (Child, 2006). Multicollinearity is described as a case of multiple regression in which the predictor variables are themselves highly correlated.
Table 4 - 18: The correlation matrix among the independent variables

<table>
<thead>
<tr>
<th>Analysis type</th>
<th>Constructs</th>
<th>UR</th>
<th>UP</th>
<th>IR</th>
<th>IP</th>
<th>LH</th>
<th>BS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Correlation Coefficient</td>
<td>.400(**)</td>
<td>.372(**)</td>
<td>.374(**)</td>
<td>.335(**)</td>
<td>.581(**)</td>
</tr>
<tr>
<td>UR</td>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
<td>418</td>
<td>418</td>
<td>418</td>
<td>418</td>
<td>418</td>
</tr>
<tr>
<td>Spearman's rho</td>
<td></td>
<td>Correlation Coefficient</td>
<td>.1000</td>
<td>.307(**)</td>
<td>.394(**)</td>
<td>.391(**)</td>
<td>.435(**)</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>UR</td>
<td></td>
<td></td>
<td>418</td>
<td>418</td>
<td>418</td>
<td>418</td>
<td>418</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>Correlation Coefficient</td>
<td>.372(**)</td>
<td>.307(**)</td>
<td>1.000</td>
<td>.364(**)</td>
<td>.263(**)</td>
</tr>
<tr>
<td>IR</td>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
<td>418</td>
<td>418</td>
<td>418</td>
<td>418</td>
<td>418</td>
</tr>
<tr>
<td>Spearman's rho</td>
<td></td>
<td>Correlation Coefficient</td>
<td>.374(**)</td>
<td>.394(**)</td>
<td>.364(**)</td>
<td>1.000</td>
<td>.297(**)</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>IP</td>
<td></td>
<td></td>
<td>418</td>
<td>418</td>
<td>418</td>
<td>418</td>
<td>418</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>Correlation Coefficient</td>
<td>.335(**)</td>
<td>.391(**)</td>
<td>.263(**)</td>
<td>.297(**)</td>
<td>1.000</td>
</tr>
<tr>
<td>LH</td>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
<td>418</td>
<td>418</td>
<td>418</td>
<td>418</td>
<td>418</td>
</tr>
<tr>
<td>Spearman's rho</td>
<td></td>
<td>Correlation Coefficient</td>
<td>.581(**)</td>
<td>.435(**)</td>
<td>.536(**)</td>
<td>.541(**)</td>
<td>.358(**)</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>BS</td>
<td></td>
<td></td>
<td>418</td>
<td>418</td>
<td>418</td>
<td>418</td>
<td>418</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).

Correlations in this table are distributed between 0.263 and 0.581, which are classified as moderated positive associations because the values come relatively within the moderate level which is between 0.31 and 0.60 (Gerber and Finn, 2005). There is no cause for concern when measuring the multi-correlation coefficient among the independent variables in this study because, according to Germuth (2009), with a high Cronbach's Alpha, there might still be one or more items giving low item-to-total correlations with a value less than 0.30 which might affect the association of concept’s items and need to be removed. Also, the significance of the correlation coefficient is determined by assessing the t-values. All t-values in the correlation table equal zero which indicates that the observed correlation among all factors occurred by chance. The following section gives an idea of the reliability, correlation, and normality for independent factors.

4 - 5. A: Factor 1: Utilitarian reinforcement (UR)

Defining the main items for the UR construct has been explained in the methodology chapter section 3-4. These elements encompass the main mobile communication benefits offered within different suppliers’ mobile plans, such as the number of minutes and text messages, mobile handset availability, and any gifts available when a customer takes up the offer. Reinforcement includes direct benefits that customers buy and consume from different mobile suppliers, which are seen as the main drivers of customer retention.
behaviour. So, eleven items have been used to test the UR construct as explained in Table 4 - 20.

Based on Table 4 - 19, the internal consistency which gives the average correlation of UR items in the survey instrument is \( \alpha = 83.9\% \). Results show that the chosen questions were consistent and valid in eliciting the right responses. The reliability of UR items are successfully accepted while Cronbach’s Alpha \( \alpha \) is more than 80% (Whang et al., 2004; Gerber and Finn, 2005). Nunnally (1978) indicated that 0.70 is the acceptable reliability coefficient but lower values are used in the literature in some cases.

The correlations among the utilitarian variables are shown in Table 4 - 20. The inter-item correlation reliability illustrates that the association values between the majority of UR items are distributed between 0.397 and 0.707 which fall within the acceptable level while they are categorised within the moderated reliability values (Gerber and Finn, 2005). Assessing the UR elements’ association values is important to check whether the studied items are related to each other or not. More association among variables leads to a more precise estimation for the study concepts. Otherwise, weak or non-associated items might produce incorrect analysis and results. Accordingly, the main items that contribute more to the internal consistency are ‘mobile handset type and brand’ and ‘free handset with the mobile contract package’ which have correlation values of 0.707 and 0.686 respectively. However, in the correlation table, there are two variables which are considered relatively low but acceptable compared to other items in the UR set; these are “the number of minutes” and “the number of text messages” items where the association values with
variables total are 0.475 and 0.397 respectfully. Neither item can be removed from the set while both variables are considered among the main UR elements in the mobile phone contract and among the essential utilities required by mobile users. This idea is confirmed by Nunnally and Bernstein (1978) who mentioned some conditions under which a scholar should be cautious when removing one item from analysis according to its low item-to-total correlation value. These are as follows: if the item is removed because it is thought to be unrelated to the traits of the studied concept; if an item has a low item-to-total correlation because of the statistical differences in its distribution compared to other items in the concept set; and if an item’s selection based on its correlation to the total value can lead the scholar to ignore an item spuriously or discriminate an item at extreme values. Moreover, item-to-total correlation is performed to check whether any item is not consistent with the rest of the UR items and not measured by any other scale items. If any item has an item-to-total correlation value of less that 30%, this denotes that this item is not well-discriminated among respondents and it can safely be dropped (Churchill, 1979). Accordingly, all item-total correlation values within the UR construct are more than 30% which indicates that selected items’ performance is good. Also, according to Flynn (1993), in most cases, measuring item-total correlation will be equal to or more than 0.30; within this view, items have true reliability and come within the acceptable level and, although they are not high, they are significant and correlate very well within the scale of all items (Field, 2009). Accordingly, the association among the UR items showed a strong set of direct utility predictors as revealed in the previous correlation table which considered each variable in turn to the total. According to Tse et al. (2004) and Saunders et al. (2000), the majority of item-to-total correlations for UR items are more than 0.5 which means that there is an internal consistency for this construct. Therefore, item-to-total correlations for UR variables are expected to give high overall assessment scores because they identify the correct items according to respondents’ understanding of UR questions.

Both UR mean and standard deviation are explained in the frequency table in the appendix section 4-5.A. The UR histogram with normal curve figure in appendix 4-5.A provides an easy way to read the location and variegation of the UR sample data set. Results show that the UR data set is reasonably normally distributed. Moreover, while the Skewness is -0.527 and Kurtosis is 0.475, this indicates that the data are slightly left tail and clustered relatively highly around the mean. In order to avoid manipulation in the UR histogram
figure, the UR normal probability plots figure in appendix 4-5.A provides a clear picture of the location and the variation of UR sample data set according to the normal line distribution. The UR line probability plot figure confirms that data are normally distributed because the plotted points show a high degree of fit with the normal line. Accordingly, utilitarian reinforcement data have normal distribution as compared to the normal line which has zero mean and one standard deviation.

4 - 5. B: Factor 2: Informational reinforcement (IR)

Defining the main IR construct items has been explained in the methodology chapter section 3-4. The informational reinforcement factor encompasses the main informational benefits that subscribers are willing to gain indirectly from their relational subscription with one of the wireless communication suppliers and their consumption of mobile services, as seen in Table 4 - 22.

<table>
<thead>
<tr>
<th>Table 4 - 21: IR reliability statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>80.6%</td>
</tr>
</tbody>
</table>

Based on Table 4 - 21, the internal consistency which gives the average correlation of IR construct in the survey instrument is ($\alpha = 80.6\%$). Results show that the chosen questions were consistent and valid in eliciting the right responses by using the right index which gave reliable values to measure the IR construct reliability. The reliability of IR items are successfully accepted while their Cronbach's Alpha ($\alpha$) is more than 80% (Whang et al., 2004; Gerber and Finn, 2005). Nunnally (1978), indicated that 0.70 of reliability coefficient is usually an acceptable value in the literature.

<table>
<thead>
<tr>
<th>Table 4 - 22: Informational reinforcement item total correlation statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informational Reinforcement</td>
</tr>
<tr>
<td>Inter-item</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Q.36- Using the allowed minutes for social chatting</td>
</tr>
<tr>
<td>Q.37- Improve relationship and interaction with others</td>
</tr>
<tr>
<td>Q.38- Feel safe and secure by using the mobile phone</td>
</tr>
<tr>
<td>Q.39- Convenient mobile entertainment</td>
</tr>
<tr>
<td>Q.40- Convenient flexibility</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).

Table 4 - 22 shows the correlations among the informational reinforcement items. The IR has a set of high inter-item correlation reliability in which the correlation values are distributed between 0.721 and 0.803. The correlation values are acceptable according to Gerber and Finn (2005) who claimed that all values above the moderated values are distributed from 50% to 60%. Assessing the IR elements’ association values is important
in this step to check whether the studied items are related to one another or not. More association among variables leads to a more precise estimation for the study concepts. Otherwise, weak or non-associated items might produce incorrect analysis and results. The main items that contribute more to the internal consistency are the ‘improving relationship and interaction with others’ item and the ‘feel safe and secure by using the mobile phone’ item which have correlation values of 0.803 and 0.764 respectively. Accordingly, the association among the IR items showed a strong set of indirect utility predictors as revealed in the correlation table which addressed each variable in turn to the total. Nunnally (1978), indicated that 0.70 of reliability coefficient is usually an acceptable value in the literature. Moreover, item-total correlation is performed to check whether any item is inconsistent with the rest of the IR items and is not measured by any other scale items. If any item has an item-total correlation value of less than 30%, this denotes that this item is not discriminated well among respondents and it can safely be dropped (Churchill, 1979). Accordingly, all item-total correlation values for the IR construct are within 0.554 and 0.679 and more than 30%, which indicates that the selected items’ performance is good. Also, according to Flynn (1993), in most cases, measuring the item-total correlation will be equal to or more than 0.30; within this view, items have true reliability and come within the acceptable level. Although they are not high they are significant and correlate very well within the scale of all items (Field, 2009). According to Tse et al. (2004) and Saunders et al. (2000), all item-to-total correlations for IR items are more than 0.5 which means that there is an internal consistency for this construct. Accordingly, item-to-total correlation for the IR variable is expected to give a higher overall assessment score if the correct items have been identified according to respondents’ understanding of IR questions.

Both IR mean and standard deviation are explained in the frequency table in the appendix section 4-5.B. The IR histogram with normal curve figure in appendix section 4-5.B provides an easy way to read the location and variation of the IR sample data set. Results show that IR data set is normally distributed. Moreover, Skewness is -0.471 and the Kurtosis is 1.327, which indicates that the data have a little left tail and are clustered highly around the mean. In order to avoid the manipulation in the IR histogram figure, the IR normal probability plots figure in appendix 4-5.B gives a clear picture of the location and variation of the IR sample data set according to normal line distribution. The IR line probability plots figure confirms that data are normally distributed because the plotted
points show a high degree of fit with the normal line. Accordingly, informational reinforcement data have normal distribution as compared to the normal line which has zero mean and one standard deviation.

4 - 5. C: Factor 3: Utilitarian punishment (UP)

The UP factor in this study encompasses five main elements that had been chosen according to previous literature and focus groups, and tested in the pilot study stage. It encompasses the main direct punishments that subscribers compensate for and are willing to minimize in using and consuming the wireless telecommunication services, starting with the ‘contract monthly price/cost’ item and ending with the ‘time and effort searching for the best mobile contract that suits a customer’ item as seen in Table 4 - 24.

<table>
<thead>
<tr>
<th>Table 4 - 23: UP reliability statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>79.1%</td>
</tr>
</tbody>
</table>

Based on Table 4 - 23, the internal consistency which gives the average correlation of UP items in the survey instrument is ($\alpha = 79.1\%$). Results show that the chosen questions were consistent and valid in eliciting the right responses by using the right index which gives reliable values to measure the UP construct reliability. The reliability of UP items are successfully accepted while their Cronbach's Alpha ($\alpha$) is relatively equal to 80% (Whang et al., 2004; Gerber and Finn, 2005). Nunnally (1978) indicated that 0.70 of reliability coefficient is usually an acceptable value in the literature.

<table>
<thead>
<tr>
<th>Table 4 - 24: Utilitarian punishment item total correlation statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilitarian Punishment</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Q-41- Contract monthly price/cost</td>
</tr>
<tr>
<td>Q-42- The amount of monetary deposit required</td>
</tr>
<tr>
<td>Q-43- Cost of terminating the mobile contract</td>
</tr>
<tr>
<td>Q-44- Cost of upgrading the mobile contract</td>
</tr>
<tr>
<td>Q-45- Time and effort searching for the mobile contract</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).

Table 4 - 24 shows the correlation among the utilitarian punishment items. The UP has a set of highly correlated items in which the correlation values are distributed between 0.658 and 0.808. The correlation values are seen to be acceptable according to Gerber and Finn (2005) who claimed that all values above the moderated values (from 50% to 60%) are accepted. Assessing the UP elements’ association values is important in this step to check whether the studied items are related to each other or not. More association among
variables produces a more precise estimation for the study concepts; otherwise weak or non-associated items might produce incorrect analysis and results. Accordingly, the main items that contribute more to the internal consistency are ‘cost of upgrading the mobile contract’ and ‘cost of terminating the mobile contract’; these have correlation values of 0.808 and 0.771 respectively. Thus, the association among the UP variables showed a strong set of direct punishment predictors as shown in the correlation table which considered each variable in turn to the total. All correlation values are accepted while all come above the moderated levels (Gerber and Finn, 2005). According to Moreover, item-total correlation is performed to check whether any item is inconsistent with the rest of the UP items and not measured by any other scale items. If any item has an item-total correlation value of less than 30%, this denotes that this item is not discriminated well among respondents and it can be safely dropped (Churchill, 1979). Accordingly, all item-total correlation values within the UP construct are within 0.458 and 0.674 and more than 30% which indicates that the selected items performance is good. Also, according to Flynn (1993), in most cases, the item-total correlation will be equal to or more than 0.30; within this view, items have true reliability and come within the acceptable level. Although it is not high, it is significant and correlates very well within the scale of all items (Field, 2009). According to Tse et al. (2004) and Saunders et al. (2000), the majority of item-to-total correlations for UP items are more than 0.5, which means that there is an internal consistency for this construct. Therefore, item-to-total correlation for the UP variable is expected to give a higher overall assessment score if the correct items have been identified according to respondents’ understanding of the UP questions.

Both UP mean and standard deviation are explained in the frequency table in the appendix section 4-5.C. The UP histogram with normal curve figure in appendix section 4-5.C provides an easy way to read the location and variation of the UP sample data set. Results show that the UP data set is normally distributed. Moreover, Skewness is -0.346 and Kurtosis is 0.167, which indicate that the data shape is a little left tail and relatively less clustered around the mean. In order to avoid manipulation in the UP histogram figure, the UP normal probability plots figure in appendix 4-5.C provides a clear picture of the location and variation of the UP sample data set according to the normal line of distribution. The UP line probability plots figure confirms that data are normally distributed because the plotted points show a high degree of fit with the normal line.
Accordingly, utilitarian punishment data are normally distributed as compared to the normal line which has zero mean and one standard deviation.

4 - 5. D: Factor 4: Informational punishment (IP)

The IP factor encompasses five main elements which had been chosen according to previous literature and subscriber focus groups, and tested in the pilot study stage. It encompasses the main indirect punishments that subscribers received from others as negative feedback through using and consuming wireless telecommunication services, starting with the ‘risk in mobile Internet shopping’ item and ending with the ‘low personal and financial data protection’ item as seen in Table 4 - 26.

Table 4 - 25: IP reliability statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>84.4%</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 4 - 25 shows the internal consistency which gives the average correlation of IP items in the survey instrument as (α = 84.4%). Results show that the chosen questions were consistent and valid in eliciting the correct responses by using the right index which gives reliable values to measure the IP construct reliability. The reliability of IP items are successfully accepted while their Cronbach's Alpha (α) is more than 80% (Whang et al., 2004; Gerber and Finn, 2005). That is because, Nunnally (1978) indicated that 0.70 is acceptable reliability coefficient but lower values are used in the literature in some cases.

Table 4 - 26: Informational punishment item total correlation statistics

<table>
<thead>
<tr>
<th>Informational Punishment</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inter-item correlation</td>
</tr>
<tr>
<td>46- Risk in mobile Internet shopping</td>
<td>.660**</td>
</tr>
<tr>
<td>47- Credit assessment check issue by mobile suppliers</td>
<td>.722**</td>
</tr>
<tr>
<td>48- Low authority in the contract items and conditions</td>
<td>.867**</td>
</tr>
<tr>
<td>49- Low financial data protection</td>
<td>.854**</td>
</tr>
<tr>
<td>50- Low personal data protection</td>
<td>.830**</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).

Table 4 - 26 shows the correlation among the informational punishment items. The IP has a set of highly correlated items whose correlation values are distributed between 0.660 and 0.867. The correlation values are acceptable according to Gerber and Finn (2005) who claimed that the first two values come above the moderated level which are distributed from 50% to 60%, and the rest come within the highly satisfactory level, while their correlation values are more than 80% (Whang et al., 2004). Assessing the IP elements’ association values is important in this step to check whether the studied items are related to
each other or not. More association among IP variables produces a more precise estimation for the study concepts; otherwise weak or non-associated items might produce incorrect analysis and results. Accordingly, the main items that contribute more to the internal consistency are the ‘low authority in the contract items and conditions’ item and the ‘low financial and personal data protection’ items which have correlation values of 0.867, 0.854, and 0.830 respectively. Accordingly, the association among the IP items showed a strong set of indirect punishment predictors as shown in the correlation table which considered each variable in turn to the total. Moreover, item-total correlation is performed to check whether any item is inconsistent with the rest of the IP items and not measured by any other scale items. If any item has an item-total correlation value of less that 30%, this denotes that this item is not discriminated well among respondents and it can be safely dropped (Churchill, 1979). Accordingly, all item-total correlation values within the IP construct are distributed between 0.463 and 0.779 and they are more than 30%, which indicates that the selected items’ performance is good. Also, according to Flynn (1993), in most cases, the item-total correlation will be equal to or more than 0.30. Within this view, items have true reliability and come within the acceptable level; although it is not high, it is significant and correlates very well within the scale of all items (Field, 2009). According to Tse et al. (2004) and Saunders et al. (2000), the majority of item-to-total correlations for IP items are more than 0.5 which means that there is an internal consistency for this construct. Accordingly, item-to-total correlation for the IP variable is expected to give a higher overall assessment score if the correct items have been identified according to respondents’ understanding of IP questions.

Both IP mean and standard deviation are explained in the frequency table in the appendix section 4-5.D. The IP histogram with normal curve figure in appendix 4-5.D provides an easy way to read the location and variation of the IP sample data set. Results show that the IP data set is normally distributed. Moreover, the Skewness value is -0.455 and the Kurtosis value is 0.785; this indicates that data are a little left tail and relatively high clustered around the mean. In order to avoid the manipulation in the IP histogram figure, the IP normal probability plots in appendix 4-5.D provide a clear picture of location and variation of the IP sample data set according to the normal line distribution. The IP line probability plots figure confirms that data are normally distributed because the plotted points show a high degree of fit with the normal line. Accordingly, informational
punishment data have a normal distribution as compared to the normal line which has zero mean and normal distribution.

4 - 5. E: Factor 5: Learning history (LH)

This section gives an idea of the reliability, correlation, and normality of the LH construct. This construct encompasses three elements which had been chosen according to previous literature and subscriber focus groups, and tested within the pilot study stage. The LH factor is designed to test the effect of subscribers’ learning history on their choice of mobile supplier. The construct elements begin with the item “the degree to which a subscriber relies on his/her experience to evaluate different mobile phone operators’ offers before making a retention or switching choice” while the second two items are designed to check the effects of bad or good experience on a participant’s decision to renew a subscription or switch to another operator, as seen in Table 4 - 28.

Table 4 - 27: LH reliability statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>60.0%</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 4 - 27 shows that the LH internal consistency which gives the average correlation of LH items in the survey instrument is (α = 60.0%). Results show that the chosen questions were consistent and valid in eliciting the right responses by using the right index which gives reliable values to measure the LH construct reliability. Comparing with what Gerber and Finn (2005) found, the reliability of these items is satisfactory while the value of Cronbach's Alpha (α) falls within the moderated level which is 60% (Whang et al., 2004; Gerber and Finn, 2005). This notion is confirmed by Nunnally (1978) who indicated that 0.70 is acceptable reliability coefficient, although lower values are used in the literature in some cases.

Table 4 - 28: Learning history item total correlation statistics

<table>
<thead>
<tr>
<th>Learning history</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inter-item correlation</td>
</tr>
<tr>
<td>33- I rely on my experience to evaluate and choose among mobile phone contract offers</td>
<td>.657**</td>
</tr>
<tr>
<td>34- My bad experience with my previous mobile supplier makes me switch to another one</td>
<td>.772**</td>
</tr>
<tr>
<td>35- My good experience with my previous mobile supplier makes me renew my contract</td>
<td>.798**</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).

Table 4 - 28 shows the correlation of the learning history construct. The LH has a set of correlated items at an acceptable level in which the correlation values are distributed
between 0.657 and 0.798. The correlations value are seen to be acceptable according to Gerber and Finn (2005) who claimed that an acceptable level is represented by correlation values which are above the moderated values (from 50% to 60%). Assessing the LH elements’ association values is important in this step to check whether the studied items are related to each other or not. More association among LH variables produces a more precise estimation for the study concepts. Otherwise, weak or non-associated items might produce incorrect analysis and results. Accordingly, the main items that contribute highly to the internal consistency are the ‘my good experience with my previous mobile supplier makes me renew my contract’ item and the ‘my bad experience with my previous mobile supplier makes me switch to another one’ item; these have correlation values of 0.798 and 0.772 respectively. Accordingly, the association among LH variables showed a good set of predictors as shown in the correlation table which considered each variable in turn to the total. Moreover, item-total correlation is performed to check whether any item is inconsistent with the rest of the LH items and not measured by any other scale items. If item has an item-total correlation value of less that 30%, this denotes that this item is not discriminated well among respondents and it can be safely dropped (Churchill, 1979). Accordingly, all item-total correlation values within the LH construct are distributed between 0.342 and 0.495, which is more than 30%, indicating that selected items’ performance is good. Also, according to Flynn (1993), in most cases, the item total correlation will be equal to or more than 0.30. Within this view, items have true reliability and come within the acceptable level; although it is not high, it is significant and correlates very well within the scale of all items (Field, 2009). Accordingly, item-to-total correlation for LH items is expected to give a high overall assessment score if the correct items have been identified according to respondents’ understanding of LH questions.

Both LH mean and standard deviation are explained in the frequency appendix table section 4-5.E. The LH histogram with normal curve figure in appendix 4-5.E provides an easy way to read the location and variation of LH sample data set. Results show that the LH data set is normally distributed. Moreover, Skewness value is -0.280 and Kurtosis value is 0.392; the shape illustrates that data are little left tail and moderately clustered around the mean. Moreover, in order to avoid manipulation in the LH histogram figure, the LH normal probability plots appendix in appendix 4-5.E provides a clear picture of the location and variation of LH sample data set according to the normal line distribution. The LH line probability plots figure confirms that data are normally distributed because the
plotted points show a high degree of fit with the normal line. Accordingly, learning history data have normal distribution as compared to the normal line which has zero mean and one normal distribution.

4 - 5. F: Factor 6: Behaviour setting (BS)

This section gives an idea of the reliability, correlation, and normality of BS elements. The BS factor encompasses four elements which had been chosen according to previous literature and subscriber focus groups, and tested in the pilot study stage. This factor is designed to test the effect of behaviour setting elements based on participants’ opinions of mobile suppliers’ offerings. The BS construct’s elements are: physical construct, social construct, temporal construct, and regulatory construct as shown in Table 4.

Table 4-29: BS reliability statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>91.3%</td>
<td>23 items</td>
</tr>
</tbody>
</table>

Table 4 - 29 shows that the BS internal consistency for all BS items in the survey instrument is (α = 91.3%). The high value of internal consistency is a result of the large number of BS items included in the reliability analysis; the more items added to measure the internal consistency, the higher the Cronbach's Alpha value. This notion is explained by Gardner (1995), who stated that the high value usually comes from the large number of items which present some commonality in underlying and measuring the internal consistency for different constructs which share a high common variance. Results show that the chosen questions were consistent and valid to elicit the right responses by using the right index which gives reliable values to measure the BS construct reliability. The reliability of this construct expressed high homogeneity in the set of items while their Cronbach's Alpha (α) is more than 0.90 and falls within an excellent and highly satisfactory level of reliability (Bland and Altman, 1997; Gerber and Finn, 2005).

Table 4-30: BS item total correlation statistics

<table>
<thead>
<tr>
<th>Behaviour Setting</th>
<th>Percentages</th>
<th>Inter-item correlation</th>
<th>Item-to-total correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Physical Factors</td>
<td>.753 **</td>
<td>0.655</td>
<td></td>
</tr>
<tr>
<td>2- Social Factors</td>
<td>.567**</td>
<td>0.580</td>
<td></td>
</tr>
<tr>
<td>3- Temporal Factors</td>
<td>.727**</td>
<td>0.653</td>
<td></td>
</tr>
<tr>
<td>4- Regulatory Factors</td>
<td>.725**</td>
<td>0.624</td>
<td></td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).

Table 4 - 30 shows the correlation of the BS construct. The BS has a set of correlated items of satisfactory level; correlation values are distributed between 0.567 and 0.780.
Correlation values are seen to be acceptable according to Gerber and Finn (2005) who claimed that the values are within and above the moderated values, which are distributed between 50% and 60%.

Assessing the BS elements’ association values is important in this step to check whether the studied items are related to each other or not. More association among BS variables produces a more precise estimation for the study concepts. Otherwise weak or non-associated items might produce incorrect analysis and results. Accordingly, the main items that contribute more to the internal consistency are the ‘physical setting’, ‘temporal setting’ and ‘regulatory setting’ constructs; these have correlation values of 0.753, 0.727, and 0.725 respectively. Moreover, item-total correlation is performed to check whether any item is inconsistent with the rest of the BS items and not measured by any other scale items. If an item had an item-total correlation value of less that 30%, this denotes that this item is not discriminated well among respondents and it can safely be dropped (Churchill, 1979). Accordingly, all item-total correlation values within the BS construct are greater than 30% which indicates that selected items’ performance is good. Also, according to Flynn (1993), in most cases, the item-total correlation will be equal to or more than 0.30; within this view, items have true reliability, come within the acceptable level and correlate very well within the scale of all items (Field, 2009). According to Tse et al. (2004) and Saunders et al. (2000), all item-to-total correlations for BS items are more than 0.5 which means their internal consistency is high for this construct. Accordingly, item-to-total correlation in the BS variable is expected to produce a high overall assessment score if it identifies the correct items according to respondents’ understanding of BS questions.

Both BS mean and standard deviation are explained in the frequency appendix table section 4-5.F. The BS histogram with normal curve figure in appendix 4-5.F provides an easy way to read the location and variation of the BS sample data set. Results show that the BS data set is normally distributed. Moreover, Skewness is -0.745 and Kurtosis is 0.332, indicating that the data are little left tail and clustered moderately around the mean. In order to avoid manipulation in the BS histogram figure, the BS normal probability plots figure in 4-5.F provides a clear picture of the location and variation of the BS sample data set according to the normal line distribution. The BS line probability plots figure confirms that data are normally distributed because the plotted points show a high degree of fit with the normal line. Accordingly, BS data have normal distribution as compared to the normal line which
has zero mean and one standard deviation. More explanation about each BS subgroup is provided in the following sections.

4 - 5. F-1: Behaviour setting - physical setting (PhS).

This section gives an idea of the reliability, correlation, and normality of the first element in behaviour setting which is the PhS. The PhS factor encompasses nine grouped elements which have been chosen according to previous literature and focus group analysis, and tested within the pilot study stage. This construct is designed to test the effect of many factors such as the ‘mobile shop availability’ and ‘mobile shop physical evidence’ elements on mobile users’ retention decisions. The full list of physical setting items is provided in Table 4 - 32.

Table 4 - 31: BS – PhS reliability statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>82.9%</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 4 - 31 shows that the internal consistency, which gives the average correlation reliability of PhS items in the survey instrument, is (α = 82.9%). The reliability for this construct expressed a good level of homogeneity within the measurement. The reliability of PhS items are successfully accepted while their Cronbach's Alpha (α) is more than 80% (Whang et al., 2004; Gerber and Finn, 2005). Results show that the chosen questions were consistent and valid for eliciting the right responses by using the right set of questions which give reliable values to measure the respondents’ opinions about the physical setting construct.

Table 4 - 32: BS – Physical setting item total correlation statistics

<table>
<thead>
<tr>
<th>Behaviour setting – Physical setting</th>
<th>Percentages</th>
<th>Inter-item correlation</th>
<th>Item-to-total correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q-10 Mobile shops availability</td>
<td>0.761**</td>
<td>0.455</td>
<td></td>
</tr>
<tr>
<td>Q-11 Mobile shop’s atmosphere and design</td>
<td>0.764**</td>
<td>0.580</td>
<td></td>
</tr>
<tr>
<td>Q-12 Seeing and trying the actual offering</td>
<td>0.773**</td>
<td>0.457</td>
<td></td>
</tr>
<tr>
<td>Q-13 Mobile supplier’s online shops availability</td>
<td>0.689**</td>
<td>0.521</td>
<td></td>
</tr>
<tr>
<td>Q-24 Mobile contract purchasing via supplier’s website</td>
<td>0.719**</td>
<td>0.496</td>
<td></td>
</tr>
<tr>
<td>Q-25 Mobile contract purchasing process via mobile shop</td>
<td>0.734**</td>
<td>0.520</td>
<td></td>
</tr>
<tr>
<td>Q-19 TV advertisement effects</td>
<td>0.743**</td>
<td>0.652</td>
<td></td>
</tr>
<tr>
<td>Q-20 Monthly magazines</td>
<td>0.715**</td>
<td>0.620</td>
<td></td>
</tr>
<tr>
<td>Q-21 Supplier’s website promotion</td>
<td>0.739**</td>
<td>0.514</td>
<td></td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).

Table 4 - 32 shows the correlation of the physical setting construct. This construct has a set of items of satisfactory and accepted levels of consistency with values distributed between 0.689 and 0.7730. The main items that contribute more to the internal consistency are the
‘seeing and trying the actual product and service inside the mobile shop’ item and the ‘mobile shop’s atmosphere, design, music, colours, and salespersons’ uniform’ item, followed by the ‘mobile shop availability’, and ‘TV advertisements’ items which have correlation values of 0.773, 0.764, 0.761, and 0.743 respectively. Therefore, the association among physical setting elements expresses a good set of predictors as shown in the correlation table which considered each variable in turn to the total. The correlation values are acceptable. All values are above the moderated values (≥ 0.60) (Gerber and Finn, 2005) which means that the internal consistency for this construct is within the acceptable reliability (Saunders and Munro, 2000). Moreover, item-total correlation is performed to check whether any item is inconsistent with the rest of the PhS items and not measured by any other scale items. If item had an item-total correlation value of less that 30%, this denotes that this item is not discriminated well among respondents and it can safely be dropped (Churchill, 1979). Accordingly, all item-total correlation values for the PhS construct are distributed between 0.455 and 0.652 and they are greater than 30%, which indicates that selected item’s performance is good. Also, according to Flynn (1993), in most cases, the item-total correlation will be equal to or more than 0.30. Within this view, items have true reliability and come within the acceptable level; although it is not high, it is significant and correlates very well within the scale of all items (Field, 2009).

Both PhS mean and standard deviation are explained in the frequency appendix table section 4-5.F-1. The PhS histogram with normal curve figure in appendix 4-5.F-1 provides an easy way to perceive location and variation of the sales outlet data set. Results show that the PhS data set is normally distributed. Moreover, the Skewness value is -0.589 and the Kurtosis value is 0.370; the shape indicates that the observations are little left tail and moderately clustered around the mean. In order to avoid manipulation in the PhS histogram figure, the PhS normal probability plots in appendix 4-5.F-1 provide a clear picture of the location and variation of the PhS data set according to the normal line distribution. The shape confirms that data are normally distributed because the plotted points show a high degree of fit with the normal line. Accordingly, physical setting data have normal distribution as compared to the normal line which has zero mean and normal distribution.

4 - 5. F-2: Behaviour setting - social setting

This section gives an idea of the reliability, correlation, and normality for the second behaviour setting element which is the social construct (BS-SF). This construct
encompasses seven elements which have been chosen according to previous literature and focus group discussion, and tested in the pilot study stage. This construct is designed to test the effect of social construct on customer supplier choice by using seven items starting with ‘friends’ recommendations’ and ‘family’s recommendations’ and ending with ‘receiving prompt service from mobile suppliers’ customer services’ as shown in Table 4 - 34.

Table 4 - 33: BS - SF reliability statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>86.1%</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 4 - 34 shows that the internal consistency for the social factor, obtained by calculating the average correlation of all items in the survey instrument, is (α = 86.1%). The reliability for this construct expressed a very good level of homogeneity within the measurement (Gerber and Finn, 2005). Results show that the chosen questions were consistent and valid to elicit the right responses by using the right set of items which gave reliable value to measure the respondents’ opinions of this construct. The reliability of SF items are successfully accepted while their Cronbach's Alpha (α) is more than 80% (Whang et al., 2004; Gerber and Finn, 2005). According to Nunnally (1978), 0.70 is the acceptable reliability coefficient but lower values are used in the literature in some cases.

Table 4 - 34: BS - SF item total correlation statistics

<table>
<thead>
<tr>
<th>Behaviour setting - Social Factors</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inter-item correlation</td>
</tr>
<tr>
<td>Q-22 Friends’ recommendations</td>
<td>0.798**</td>
</tr>
<tr>
<td>Q-23 Family’s recommendations</td>
<td>0.735**</td>
</tr>
<tr>
<td>Q-14 Sales persons training and knowledge</td>
<td>0.752**</td>
</tr>
<tr>
<td>Q-15 Sales person face-to-face communication</td>
<td>0.785**</td>
</tr>
<tr>
<td>Q-16 Friendly behaviour and personal attention</td>
<td>0.808**</td>
</tr>
<tr>
<td>Q-17 Receiving prompt service from mobile suppliers’ employees</td>
<td>0.803**</td>
</tr>
<tr>
<td>Q-18 Receiving prompt service from mobile suppliers’ customer service</td>
<td>0.781**</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).

Table 4 - 34 shows the correlation of the social construct. This construct has twin items expressing an excellent level of inter-item correlations where the values were distributed between 0.803 and 0.735. The main element that contributes more to the internal consistency is the ‘friendly behaviour and personal attention’ item followed by the ‘receiving prompt service from mobile suppliers’ employees’ item, which have correlation values of 0.808 and 0.803 respectively. Therefore, the association among the social construct items expressed a high quality set of predictors as shown in the correlation table which
considered both variables in turn to the total. All items’ total correlations produced high values and they came above the acceptable values ($\geq 0.70$) (Gerber and Finn, 2005) which means that the internal consistency for this construct is relatively high (Saunders and Munro, 2000). Moreover, item-total correlation is performed to check whether any item is inconsistent with the rest of the SF items and not measured by any other scale items. If any item had an item-total correlation value of less that 30%, this denotes that this item is not discriminated well among respondents and it can safely be dropped (Churchill, 1979). Accordingly, all item-total correlation values within the SF construct are distributed between 0.482 and 0.736 and they are greater than 30%, which indicates that selected items’ performance is good. Also, according to Flynn (1993), in most cases, the item-total correlation will be equal to or more than 0.30. Within this view, items have true reliability and come within the acceptable level; although it is not high, it is significant and correlates very well within the scale of all items (Field, 2009).

Both social factor mean and standard deviation are explained in the frequency table in the appendix 4-5.F-2. The social factors histogram with normal curve figure in appendix 4-5.F-2 provides an easy way to note the location and variation of the social data set. Results show that the SF data set is normally distributed. Moreover, with Skewness value of -0.552 and Kurtosis value of 0.491, the shape reveals that observations are tiny left tail and moderately clustered around the mean. In order to avoid manipulation in the SF histogram figure, the SF normal probability plots figure in appendix 4-5.F-2 provides an apparent image of the position and variation of the social construct data set according to the normal line distribution. The shape confirms that data are normally distributed because the plotted points show a high degree of fit with the normal line. Accordingly, social data have normal distribution compared to the normal line which has zero mean and one standard deviation.

4 - 5. F-3: Behaviour Setting - temporal setting

This section gives an idea of the reliability, correlation, and normality of the third behaviour setting element which is the temporal construct (BS-TF). This construct encompasses three elements which have been chosen according to previous literature and focus groups discussions, and tested in the pilot study stage. This construct is designed to test the temporal effect when purchasing, using, and consuming wireless telecommunication products/services, by using three main items: ‘mobile contract airtime
longevity’, ‘offer’s time introduced to the market and the flexibility of upgrading your contract’, and ‘the end of contract’s time’ as shown in Table 4 - 36.

Table 4 - 35: BS - TF reliability statistics

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>70.3%</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 4 - 35 shows the internal consistency for the temporal construct by calculating the average correlation reliability of its related items in the survey instrument, giving a figure of 70.3%. The reliability of these items is acceptable while the value of Cronbach’s Alpha (α) is above the moderated level which is 60% (Whang et al., 2004; Gerber and Finn, 2005). Results show that the chosen questions were consistent and valid to elicit the right responses by using the right set of temporal items which gave reliable values to measure the respondents’ opinions about this construct. Nunnally (1978) indicated that 0.70 is a value within the acceptable reliability coefficient but lower values are used in the literature in some cases.

Table 4 - 36: BS - TF item total correlation statistics

<table>
<thead>
<tr>
<th>Behaviour setting - Temporal</th>
<th>Percentages</th>
<th>Inter-item correlation</th>
<th>Item-to-total correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q-26 Mobile contract airtime longevity</td>
<td>.770**</td>
<td>0.483</td>
<td></td>
</tr>
<tr>
<td>Q-27 Offer’s time introduced to the market and the flexibility of upgrading your contract</td>
<td>.825**</td>
<td>0.583</td>
<td></td>
</tr>
<tr>
<td>Q-28 The end of your contract’s time</td>
<td>.782**</td>
<td>0.495</td>
<td></td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).**

Table 4 - 36 shows the inter-item correlation of the temporal construct. This construct has three items which express a very good level of consistency, where their values are distributed between 0.770 and 0.825. The main element that contributes more to the internal consistency is the ‘offer’s time introduced to the market and the flexibility of upgrading your contract’ item, followed by the ‘the end of contract’s time’ and ‘mobile contract airtime longevity’ items which have correlation values of 0.825, 0.782 and 0.770 respectively. Therefore, the association among the temporal items expresses a high-quality set of predictors as shown in the correlation table which considered both variables in turn to the total. All items’ total correlations produced high percentages of correlations while their values were around the acceptable values (≥ 0.70) (Gerber and Finn, 2005), which means that the internal consistency for this construct is relatively high (Saunders and Munro, 2000). Moreover, item-total correlation is performed to check whether any item is inconsistent with the rest of the TF items and not measured by any other scale items. If any item had an item-total correlation value of less than 30%, this denotes that this item is not
discriminated well among respondents and it can safely be dropped (Churchill, 1979). Accordingly, all item-total correlation values within the TF construct are distributed between 0.483 and 0.583 and they are greater than 30%, which indicates that selected items’ performance is good. Also, according to Flynn (1993), in most cases, the item-total correlation will be equal to or more than 0.30. Within this view, items have true reliability and come within the acceptable level; although it is not high, it is significant and correlates very well within the scale of all items (Field, 2009).

Both TF mean and standard deviation are explained in the frequency appendix table 4-5.F-3. The TF histogram with normal curve figure in appendix 4-5.F-3 provides an easy way to note the location and variation of the temporal data set. Results show that the TF data set is normally distributed. Moreover, with a Skewness value of -0.739 and a Kurtosis value of 1.176, the shape reveals that observations had a relatively long left tail and were relatively highly clustered around the mean. In order to avoid manipulation in the TF histogram figure, the TF normal probability plots in appendix 4-5.F-3 provide an apparent image of the position and variation of the temporal construct data set according to normal line distribution. The shape confirms that data are normally distributed because the plotted points show a high degree of fit with the normal line. Thus, temporal data have normal distribution as compared to the normal line which has zero mean and one standard deviation.

4 - 5. F-4: Behaviour Setting - regulatory setting

This section gives an idea of the reliability, correlation, and normality for the last behaviour setting element which is the regulatory construct (BS-RF). This construct encompasses four elements which have been chosen according to previous literature and focus group discussions, and tested in the pilot study stage. This construct is designed to test the regulatory effect when purchasing and using wireless telecommunication services by using four items: ‘contract's terms and conditions’, ‘the mobile contract termination flexibility’, and ‘the mobile contract termination and upgrading flexibility’ as shown in Table 4 - 38 in the following page.

<table>
<thead>
<tr>
<th>Table 4 - 37: BS - RF reliability statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alpha</td>
</tr>
<tr>
<td>83.1%</td>
</tr>
</tbody>
</table>
Table 4 shows the internal consistency for the regulatory construct items by calculating the average correlation of all items in the survey instrument which is $\alpha = 83.1\%$. The reliability for this construct expresses a very good level of homogeneity within the measurements while the coefficient values are greater than 80% (Whang et al., 2004). Results show that the chosen questions were consistent and valid to elicit the right responses by using the right set of temporal items which gave a relatively high Cronbach’s value.

Table 4 - 38: BS - RF item total correlation statistics

<table>
<thead>
<tr>
<th>Behaviour setting - Regulatory</th>
<th>Percentages</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inter-item correlation</td>
<td>Item-to-total correlations</td>
</tr>
<tr>
<td>Q-29  Contract's terms and conditions</td>
<td>.797**</td>
<td>0.636</td>
</tr>
<tr>
<td>Q-30  The mobile contract termination flexibility</td>
<td>.852**</td>
<td>0.716</td>
</tr>
<tr>
<td>Q-31  The mobile contract upgrading flexibility</td>
<td>.834**</td>
<td>0.691</td>
</tr>
<tr>
<td>Q-32  Rights protection and sanction</td>
<td>.773**</td>
<td>0.595</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).

Table 4 - 38 shows the inter-item correlation of the regulatory construct. This construct has four items which express very good levels of correlations with values distributed between 0.773 and 0.852. The main element that contributes more to the internal consistency is ‘the mobile contract termination’ issue, followed by ‘the mobile contract upgrading’ issue, the ‘contract's terms and conditions’ item, and the ‘rights protection and sanction’ item, which have correlation values of 0.852, 0.834, 0.797, and 0.773 respectively. The association among regulatory items expresses high-quality predictors as shown in the correlation table which considered all variables in turn to the total. All items’ total correlations were high while their values were acceptable (≥ 0.70) (Gerber and Finn, 2005) which means that the internal consistency for this construct is relatively high (Saunders and Munro, 2000). Moreover, item-total correlation is performed to check whether any item is inconsistent with the rest of the RF items and not measured by any other scale items. If any item had an item-total correlation value of less that 30%, this denotes that this item is not discriminated well among respondents and it can safely be dropped (Churchill, 1979). Accordingly, all item-total correlation values within the RF construct are distributed between 0.595 and 0.716 and they are greater than 30%, which indicates that selected items’ performance is good. Following Tse et al. (2004) and Saunders et al. (2000), the majority of item-to-total correlations for RF items are more than 0.5 which means that there is a high internal consistency for this construct. Accordingly, item-to-total correlation for the RF variable is expected to give a higher overall assessment score if it identifies the correct items according to respondents’ understanding of the RF questions.
Both RF mean and standard deviation are explained in the appendix frequency table 4-5.F-4. The RF histogram with normal curve figure in appendix 4-5.F-4 provides an easy way to note the location and the variation of the regulatory data set. Results show that the RF data set is normally distributed. Moreover, the Skewness value is -0.559 and Kurtosis value is 0.663; the shape reveals that the observations had a left tail and are relatively clustered around the mean. In order to avoid manipulation in the RF histogram figure, the normal probability plots figure in appendix 4-5.F-4 provides an apparent image of the position and variation of the regulatory construct data set according to the normal line distribution. The RF line probability plots figure shape confirms that data are normally distributed because the plotted points show a high degree of fit with the normal line. Consequently, regulatory data have normal distribution as compared to the normal line which has zero mean and one standard deviation.

4 - 6: Study framework and propositions

Customer retention relies mainly on the strength of relationship with the supplier. The relationship strength is described by Bove et al. (2000, p.492) as “the extent, degree or magnitude of relationship”. Thus, a customer will choose the highest magnitude option of mobile offer introduced by one of the suppliers. The magnitude of relationship is illustrated by BPM components by encompassing a high level of both utilitarian and informational reinforcements gained by a customer when he or she engages in a relationship with one of the mobile suppliers, and benefits from using and consuming wireless telecommunication services. The retention behaviour occurs when a consumer repeats his or her purchase from the same supplier based on his/her learning history which interacts with other behaviour setting stimuli. Within the mobile contracting behaviour setting, the mobile contract is designed in a way that formalises the mode of interaction between customer and supplier. Thus, retention behaviour occurs when both parties agree to renew the customer contract with the same or modified rules and conditions which define both utilities and punishment, protected by law. In order to explain how customer retention occurs and assess the relationship strength between subscribers and suppliers (strength means the degree of magnitude of relationship) (Bove and Johnson, 2001), Figure 4-2 in the following page shows the interpretive BPM framework that summarises the main pre-behaviour and post-behaviour drivers.
These drivers have been translated by the main study constructs that were used to investigate customer retention from a behavioural perspective. These constructs have been used as independent factors that affect the retention choice. Each driver is presented by one proposition as follows:

1. A subscriber’s retention behaviour is a function of behaviour setting. Accordingly, the greater the effect of behaviour setting elements, the greater the possibility of customer retention.

2. A subscriber’s retention behaviour is a function of learning history. Accordingly, the greater the effect of positive learning history with the service provider, the greater the possibility of customer retention.

3. A subscriber’s retention behaviour is a function of utilitarian reinforcement. Accordingly, the greater the amount of utilitarian reinforcement received by the customer, the greater the possibility of customer retention.

4. A subscriber’s retention behaviour is a function of informational reinforcement. Accordingly, the greater the amount of informational reinforcement received by the customer, the greater the possibility of customer retention.

5. A subscriber’s retention behaviour is a function of utilitarian punishment. Accordingly, the smaller the amount of utilitarian punishment compensated by the customer, the greater the possibility of customer retention.

6. A subscriber’s retention behaviour is a function of informational punishment. Accordingly, the smaller the amount of informational punishment received by the customer, the greater the possibility of customer retention.

Before starting the analysis process, it is necessary to give a brief description of the dependent variable and how it will be employed in the analysis in later stages. Mobile subscribers’ retention behaviour as a dependent variable is used to check whether they have reached a predetermined decision to renew with or switch their mobile operators.
The sample participants’ possibility of repeat purchasing is used as a dependent variable that needs to be studied with respect to the two pre-behaviour and four post-behaviour predictors that affect subscribers in the retention situation. According to actual customer behaviour, current customer-supplier relationship, and mutual interaction, the repeat purchase question aims to check whether a customer is planning to renew his or her mobile service subscription or contract with his/her current mobile supplier or not. Based on different contextual and relational factors, a customer reaches a decision to renew with or switch his/her current mobile supplier when he or she compares, within the retention circumstances, what the current supplier is providing with what other mobile suppliers are offering in price plans containing a variety of reinforcements and punishments. Within this context, a customer’s pre-determined decision is described by many scholars within the same context as the best signal of future behaviour (Grandon and Mykytyn, 2004). Customers’ planned behaviour based on environmental contextual factors and other factors including learning history, benefit gained, and punishment incurred, is divided into two elements: a subscriber who is planning to renew his/her mobile subscription with the same service provider, which is coded as ‘1’ and a subscriber who plans to switch his/her current operator, which is coded as ‘0’. The measure of retention options in this variable has just two options: ‘yes’ or ‘no’. That is because, within the contract renewal situation, there is no third option available for customers. A customer renews his/her contract within the same rules or within modified ones, or switches his/her mobile supplier. According to Douglas and Wind (1971), the type of measure will affect the accuracy of measuring retention probability and relationship magnitude. For example, if a three-scale point is used in this question (‘yes’, ‘no’, and ‘I’m not sure’) responses will be distributed between three categories. Accordingly, the accuracy of measuring the variances and correlations will not be sufficient to predict behaviour, and then the behaviour constructs will not be sufficient to predict retention. On the other hand, using a more complex measure will not necessarily provide better repeat purchase prediction results. This idea is confirmed by Gregson (1994) who claimed that “accuracy is not a feature of the measurement system – but of the results” (p.18). Godin et al. (2008) claimed that there are many factors that affect the accuracy of measuring customer retention behaviour strength which in turn affects the efficacy of behaviour studies. These include: 1) Sample size: according to Rashidian et al. (2006), a lower behaviour prediction was observed when using a small sample size. 2) Good and highly planned behaviour - behaviour prediction values rely on the type and the quality of the study construct; a good set of factors employed (which have
a high reliability) will explain a high proportion of plan behaviour variance and will give a high explanatory power (Valois and Godin, 1991). 3) Measurement accuracy reflects the accuracy of both model design and data collection methods. When a scholar uses a clear, tested measure that has well-designed statements, results accuracy will usually be highly significant because the responses elicited give a clear picture of repeat purchase-related elements such as planned behaviour, intention explained and behaviour predicted (Armitage and Conner, 2001).

Established or planned behaviour based on contextual retention circumstances has been used as a predictor of buying and re-buying in different behaviour settings by many scholars (Söderlund et al., 2001; Söderlund and O’hman, 2005). The BPM in this stage is employed to predict retention behaviour based on participants’ verbal behaviour expressing their opinions and attitudes toward the behaviour act rather than the object, as explained by Fishbein (1967). Also, a customer can buy a wireless communication service from any supplier; the issue is not to measure the service itself but to measure which supplier the act will target. This idea is confirmed by Ajzen and Fishbein (1970) who empirically confirmed the utility of measuring planned behaviour as predictors and by Johnson et al. (1995) and Ouellette and Wood (1998) who claimed that intended behaviour measures are useful to assess the actual purchases from the aggregate level viewpoint. On the same theme, Ajzen (1991) and Wicker (1969) have explained that not all types of attitude measures can be used to study behaviour, but planned purchase and intention may effectively be used as a good predictor of buying behaviour especially when dealing with the same supplier (Morwitz et al., 2007). The relationship between retention and contract renewal is based on the assumption that a consumer carrying out and expressing his/her decision to re-buy will be influenced by interactions with his/her environment and mainly with his/her current supplier, both of which are connected to and affected by his/her actual and subsequent service consumption that has accumulated through relationships within his/her learning history.

The following step in the analysis is concerned with answering the following question: To what level can the BPM model be used to predict subscribers’ retention behaviour? As explained previously, retention behaviour relies on customer-supplier relationship strength. Relationship strength within the retention theme translates the overall relationship aspects which are related to customer-supplier relationship magnitude. In
other words, will a supplier relationship be good enough and of sufficient magnitude to predict customer retention? At this stage, and before answering this question, it is necessary to give a brief overview of the statistical method that will be used in: A) testing the used theoretical framework, B) predicting customer retention behaviour, and C) testing the study proposition. The regression analysis technique is used to investigate and test the relationship between the independent variables and the dependent variable. Two main regression measures had been used to achieve previous objectives: 1) The Logistic Regression (LR) measure which is used to show the extent to which the BPM can be used to give a good description of customer retention choice and explain the retention probability; 2) The Multiple Logistic Regression (MLR) measure which is used to test the main BPM constructs’ effect on customer retention behaviour drivers. Further explanation of these measures and the reasons for using them should be provided at this stage to show why such measurements are suitable.

4 - 7: Regression analysis

It has already been mentioned that regression is used to analyse study factors in situations where the aim is to predict one variable on the basis of several independent factors. As Brace et al. (2003, p.210) claimed, “having more than one predictor variable is useful when predicting human behaviour” especially when using a statistical method such as multiple regression to test theories or models about which variables are affecting behaviour. This part has been built on using the BPM to study customer retention. Six independent factors have been determined: BS, LH, UR, UP, IR, and IP; there is also one dependent factor which measures customer planning behaviour and decision to switch or retain mobile suppliers. These factors were used to explain the extent to which customer retention will be measured, predicted, and explained. However, which types of regression measurements should be used? To use any of the regression analysis methods such as Multiple Regression (MR) or Binary Regression (BR) would require at least five times as many participants as predictor variables. Beck et al. (2004) and Brace et al. (2003) explained that the ratio of 10:1 is more acceptable, while others thought that the ratio should be 40:1. However, for a suitable application of MR, it is required that the minimum ratio of valid cases to all independent variables be at least 10 to 1. In fact, the ratio of valid cases in this study is more than the required minimum, at 70:1. Also, in the process of using regression analysis, there are different ways in which a scholar can check the relative contribution of each independent variable to the relationship with the dependent
variable such as forward, backward, simultaneous, hierarchical, and stepwise selection. Therefore, in the regression analysis process, there are multiple selections by which all variables have been entered into the model in a specific order that reflects the theoretical considerations with respect to the previous studies and findings. Moreover, with respect to the nature of the dependent variable, which has two dichotomous options, and independent variables with a continuous scale nature, the study applied the Logistic Regression measure to predict the level to which the applied theoretical model (BPM) will be sufficient to explain repeat purchase behaviour variance, and the Multinomial Logistic Regression measure to test retention driver propositions. Before explaining the main regression measures, it is helpful to interpret the regression equation.

4 - 8: Regression equation

Development of the regression equation will be as follows:

\[ R = \text{dependent variable (retention choice)} \]
\[ X = \text{independent variable (The BPM elements)} \]

Assumed regression equation \( \mu = \beta + \beta X \)

Sample regression equation \( R = a + b1X \) (Greek and English alphabet to distinguish between population parameters and sample statistics) \( n = \) number of observations

The following regression model can be derived from the BPM variables to explain subscribers' retention behaviour:

\[ R = a + b1\text{UR} + b2\text{UP} + b3\text{IR} + b4\text{IP} + b5\text{BS} + b6\text{LH} + e \]

\( R \) = Retention (choice): the value of dependent variable, what is being predicted or explained
\( \text{UR} \) = Utilitarian Reinforcement
\( \text{UP} \) = Utilitarian Punishment
\( \text{IR} \) = Informational Reinforcement
\( \text{IP} \) = Informational Punishment
\( \text{BS} \) = Behaviour Setting
\( \text{LH} \) = Learning History
\( \text{E} \) = Error
\( A \) = is a constant, equaling the value of R when the value of X=0
\( E \) = e is the error term, the error in predicting the value of Y, giving the value of X
\( b \) (1-6) = Beta, the coefficient of independent variables which represents the slopes of the regression line. Every Beta value explains how much Y changes for each one unit change in X.

According to the regression equation, a customer choice of the same service provider (retention) comes as a function of BPM element effects. Retention is based on the relationship magnitude. Relationship magnitude means that retention is a result of the
acceptable level of behaviour consequences that attract the customer to repeat his/her purchase from his/her existing supplier continuously. Behaviour consequences will determine retention in that the same supplier should provide more benefits or minimize punishments to persuade current service users to renew the mutual relationship. Also, retention relies on the level of stimuli received and evaluated by customers according to the behaviour setting elements that interact with their learning history to signal operators’ consequences. Thus, customer choice in this study is measured by explaining customer retention behaviour which should give a high percentage of retention behaviour variance explained by the BPM components. This view is interpreted by the relationship magnitude to denote retention; this differs from other researchers’ point of view which tends to study customer retention from the customer-supplier relationship length perspective, or from a frequency or recency of communication perspective (Peelen et al., 1989; Cronin et al., 2000).

4 - 9: Testing the study model

After analysing and assessing the normality, reliability, and correlation for all study variables, it is necessary to assess the extent to which the study model (BPM) and its related components are valid for predicting customer choice behaviour. The first step in analysing any model construct is to find the best way of supporting and properly explaining the relationship between the predictor variable(s) and the dependent variable(s) (Hosmer et al., 1991). Table 4 - 39 describes all parameters for which the study model fit is calculated. ‘Intercept only’ describes whether the model does not control for any of the variables. ‘Final’ describes a model that includes all variables which maximize the likelihood of calculation output. 2 Log-Likelihood describes whether all independent variable regression coefficients in the model equal zero in a nested variable within one model. The presence of a relationship between the dependent variable and a combination of independent variables is based on the statistical significance of the final model which is expressed in Table 4 - 39 in the following page. The idea behind interpreting this model is that the independent variables have a significant statistical proof that they affect the dependent variable(s) (e.g. retention behaviour).
Table 4 - 39: Model Fitting Information

<table>
<thead>
<tr>
<th>Model</th>
<th>Model Fitting Criteria</th>
<th>Likelihood Ratio Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AIC</td>
<td>BIC</td>
</tr>
<tr>
<td>Intercept Only</td>
<td>473.208</td>
<td>477.243</td>
</tr>
<tr>
<td>Final</td>
<td>585.105</td>
<td>1283.244</td>
</tr>
</tbody>
</table>

In cross-validation analysis, the relationship between the independent variables and the dependent variable was statistically significant. The probability for the model chi-square is (23.103) which, testing the overall relationship, is $p = 0.002$. Thus, according to the model fitting information, the significance of the test is less than 0.05, showing that the model fits the data adequately. Also, according to the overall goodness-of-fit statistics, Table 4 - 40 shows that the model is consistent with the data used. The Pearson and Deviance statistics have chi-square distributions of (381.15) and (239.1) respectively, with displayed degrees of freedom of 243. Pearson Chi-Square is significant while its $p$ value is <0.05.

Table 4 - 40: Goodness-of-fit

<table>
<thead>
<tr>
<th></th>
<th>Chi-Square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson</td>
<td>381.148</td>
<td>243</td>
<td>.000</td>
</tr>
<tr>
<td>Deviance</td>
<td>239.105</td>
<td>243</td>
<td>.559</td>
</tr>
</tbody>
</table>

In linear regression, the Pseudo R-square statistic measures the proportion of the variation in the response that is explained by the model. The R-square cannot be exactly computed for multinomial logistic regression models, so approximations are computed instead. Larger pseudo R-square statistics indicate that more of the variation is explained by the model; to a maximum of 1 in Table 4 - 41 the model is useful and good in predicting retention.

Table 4 - 41: Pseudo R-Square

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cox and Snell</td>
<td>.426</td>
</tr>
<tr>
<td>Nagelkerke</td>
<td>.630</td>
</tr>
<tr>
<td>McFadden</td>
<td>.493</td>
</tr>
</tbody>
</table>
4 - 9. A: Logistic Regression Analysis

Logistic Regression measure is used in this part of the thesis to assess and evaluate the extent to which the BPM explains the variance in customer retention. Also, the model will help in providing a clear view of retention behaviour which explains why a customer renews his/her purchase of mobile services from the same service provider based on relationship consequences magnitude, or switches to another mobile supplier who provides more benefits or fewer punishments. Based on that, the BPM will be assessed for its value in predicting event outcomes based on its components which are used in the regression equation to account for the probability of retention. Using the LR model is important as it predicts the extent to which changes in some of the variable(s)’ attributes or values might increase or decrease the probability of event outcomes. LR is used by many scholars as a useful technique to analyse many purchase actions such as product usage after purchase, repurchase consequences such as satisfaction or trust levels, and future switching behaviour intention. For example, Lemon et al. (2002) used LR to investigate expected future use and overall satisfaction, and Bolton et al. (2000) used LR to study the effect of price and re-patronage intentions on customer retention. Also, Chandon and Wansink (2002) used LR in developing a model that explained how product salience and convenience influence post-purchase incidence and quantity. Meanwhile, Shin and Kim (2008) used LR to study the effects of demographic factors on customer switching and intention behaviour in the mobile phone sector. The popularity of using LR adds many advantages to the analysis, as explained by Akinci et al. (2007): First, the LR does not assume a linear relationship between the independent variables and the dependent variables; second, it is valuable when the dependent variable is binary or dichotomous, not unbounded, and the independent variables are continuous, categorical variables, or both; third, the LR method can be used to analyse two or more ranges of choices and distributional assumptions, especially those which predict discrete outcomes which may or may not occur within or without categorical classification. Therefore, the LR method can be used intensively in different social studies in general and in marketing studies in most cases (Bolton et al., 2000; Kiernan et al., 2001). That is because LR can provide more accurate and useful statistical models than other alternative research techniques such as Ordinary Least Square measure which is usually built on strict or reasonable assumptions such as linearity of relationship and lack of multicollinearity.
among independent variables (Leik, 1976; Hosmer et al., 1991; Shepherd, 1997; Hair et al., 1998; Heine et al., 2002).

Table 4 - 42: Cases processing summary

<table>
<thead>
<tr>
<th>Unweighted Cases(A)</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected Cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Included in Analysis</td>
<td>418</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing Cases</td>
<td>0</td>
<td>.0</td>
</tr>
<tr>
<td>Total</td>
<td>418</td>
<td>100.0</td>
</tr>
<tr>
<td>Unselected Cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>418</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A- If weight is in effect, see classification table for the total number of cases.

Table 4 - 42 summarises the total number of cases included in this stage of analysis. 418 cases were used without any missing values. The coding process for the dependent variable is as follows: a subscriber who renewed his/her mobile subscription and planned to retain his/her supplier is coded as ‘1’ while a subscriber who planned to switch is coded as ‘0’.

Table 4 - 43: Classification table by using the cut value of 50% probability

<table>
<thead>
<tr>
<th>Observed</th>
<th>Predicted</th>
<th>The possibility of renewing the mobile telecommunication service subscription</th>
<th>Percentage Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>313</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>No</td>
<td>105</td>
<td>0</td>
<td>.0</td>
</tr>
<tr>
<td>Overall Percentage</td>
<td></td>
<td></td>
<td>74.9</td>
</tr>
</tbody>
</table>

The classification Table 4 - 43 shows that the overall percentage of participants (The actual group membership) who repeat purchase from their current mobile service providers was about 75% (313/418) of the total sample. This percentage is clearly identified when the participants were directly asked about switching from or renewing with the current mobile service provider. In this table, the regression data analysis used the probability input of 50% for customers who remain with their mobile suppliers and 50% for customers who switch operators.

Table 4 - 44: LR analysis and retention probability

<table>
<thead>
<tr>
<th>Observed</th>
<th>Predicted</th>
<th>Percent Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>299</td>
<td>14</td>
</tr>
<tr>
<td>No</td>
<td>38</td>
<td>67</td>
</tr>
<tr>
<td>Overall Percentage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a - Constant is included in the model. b - The cut value is 0.50
By looking at the overall explanation percentages of retention behaviour percentages, the classification Table 4 shows that the model predicts 87.6% of the effect of independent variables (UR, UI, UP, IP, BS, and LH) on the dependent variable (retention behaviour). Accordingly, the criterion for model classification accuracy is highly acceptable as it gives a high level of explanation of retention variance explained by the BPM components’ use and analysis. About 313 out of 418 subscribers expressed their retention behaviour in this study, representing around 75% of the total subscribers. However, suppliers cannot rely on this generic percentage to predict retention without assessing the effect of a variety of factors that control subscribers in the retention behaviour setting. This model is able to predict correctly that around 95.5% of the sample will repeat their purchase behaviour (renew their contracts with the same mobile operator) and 63.8% of the sample will switch to competitors. The idea of high retention probability is illustrated by many scholars (Gwinner et al., 1998; Marcus, 1998; Hennig-Thurau et al., 2002; Reinartz and Kumar, 2003) who claimed that high purchase frequency and behaviour retention occur as a result of relationship benefits and consequences. Comparing with other studies’ outcomes (Bolton, 1998; Bolton and Lemon, 1999; Gerpott et al., 2001; Mittal and Kamakura, 2001), it has been illustrated that, if the model explained more than 75% of customer retention variance, then it is relatively very good at producing a high explanatory power. However, the BPM is able to predict an excellent percentage of repetition choice variance which denotes that a high probability of repeat purchase is measured and the relationship is attractive enough to guarantee that 88% of customers will continue buying from the same operators. That is because good behaviour prediction usually relies on both type and quality of study constructs, and the theory in hand. This indicates that the BPM is an excellent model for explaining how retention behaviour occurs in the retention behaviour situation and in applied behavioural science. This idea is confirmed by Douglas and Wind (1971) who claimed that the strength of relationship between retention and planned behaviour (e.g. established decision or intention) relies on many factors which make it vary according to the following factors: a) type of purchase target object (special product-special mobile network); b) the novelty of the choice object; c) the type of measure which will be used to assess the behaviour and intention relationship; and d) the time gap between the actual behaviour and planned behaviour measurements.
The next part is designed to investigate the main factors that affect mobile users’ retention behaviour. From the BPM elements, which factors have a greater influence on a subscriber’s decision to continue buying from the same operator? These factors considered the magnetised elements that prevent a subscriber from switching to another operator. To test the study propositions, the Multinomial Logistic Regression (MLR) measure is used. A brief explanation of this measure is given below, supported by suitable justifications.

4 - 9. B: The multinomial logistic regression

To study customer retention drivers, the relationships between multiple independent predictors and a categorical dependent variable were analysed using Multinomial Logistic Regression. As confirmed by Fader et al. (1992), many scholars in the marketing arena have turned to the Multinomial Logistic Regression (MLR) technique in studying different behavioural and psychological phenomena, especially those involving multiple alternatives such as brand choice behaviour (Paap and Franses, 2000; Erdem et al., 2004), variety-seeking behaviour (Lattin, 1987; Ybarra and Suman, 2006), promotion responsiveness (Ortemeyer et al., 1991; Ortemeyer, 1991), and households’ purchasing behaviour (Allenby and Lenk, 1994).

MLR is used in this stage to test the study’s propositions for the following reasons. First, Multinomial Logistic Regression is used to analyse relationships between a non-metric dependent variable (the dependent variable is a dichotomy which separates the cases into two mutually contradictory or exclusive groups) and metric or continuous independent variables (the independent variables of any type). It is appropriate to use the MLR when the criterion variable is categorised on a continuous scale and even in the case where the independent variables are not normally distributed (Brace et al., 2003; Foster et al., 2006). Second, it is preferable to use this technique when the case of dependent variable can be divided into two parts or more without any ranking; otherwise the Ordinal Logistic Regression (OLR) is preferred. In other words, continuous dependent variable is not applicable in this case. Therefore, the dependent variable has divided the study participants into two groups; the first group comprises the subscribers who plan to renew their mobile services subscription from the same mobile supplier and their code is 1, while the second group comprises those subscribers who plan not to renew their mobile services subscription from the same service provider, and their code is 0. Third, when the
dependent variable classifies the people or sample into two groups, the MLR provides what is required to predict group membership within each of the studied factors. Accordingly, the model helps suppliers to predict whether a customer is likely to renew or switch his/her mobile contract. In addition, the model helps in providing the stepwise functionality to find the best predictors (independent variables) that will affect retention from several studied predictors (Hedeker, 2003). Fourth, the MLR is used to predict the percentages of variance in the criterion variable explained by the independent variables. Moreover, it ranks the relative importance of independent variables and the interaction effect in every class of effect. Fifth, while human behaviour should be measured and explained in a nested way within the behaviour setting elements, learning history, and potential estimated reinforcement and punishment, the MLR provides additional data to explain consumer behaviour in any case where more independent variables add to the behaviour situation and are expressed in the model equation. Finally, the main benefits of using the MLR test are that it can handle categorical independent variables and compute the probability that a case will belong to a particular category which, in this study, are renewal or switching categories (Brace et al., 2003). In most statistical tests, p-values are calculated for the study propositions to check whether the probabilities distribution of data is within the interval confidence and to check whether the obtained outcomes do not severely distort the observed results under the assumptions that the propositions are true. Scholars normally use probability measure at a significance level of 5%. If p-value is less than the significance level, the results are considered statistically significant (e.g. p<0.05). Statistical results of customer retention drivers’ effect is determined according to the statistical significance values of the Chi-Square as shown in Table 4 - 45. Based on that, the study propositions were tested as follows:

Table 4 - 45: Propositions Likelihood Ratio Test for the retention behaviour drivers

<table>
<thead>
<tr>
<th>No.</th>
<th>Effect</th>
<th>Model Fitting Criteria</th>
<th>Likelihood Ratio Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Behaviour retention drivers</td>
<td>AIC of Reduced Model</td>
<td>BIC of Reduced Model</td>
</tr>
<tr>
<td>1-</td>
<td>Intercept(s)</td>
<td>585.105</td>
<td>1283.244</td>
</tr>
<tr>
<td>2-</td>
<td>BS</td>
<td>571.155</td>
<td>1015.058</td>
</tr>
<tr>
<td>3-</td>
<td>LH</td>
<td>573.449</td>
<td>1227.197</td>
</tr>
<tr>
<td>4-</td>
<td>UR</td>
<td>590.690</td>
<td>1131.444</td>
</tr>
<tr>
<td>5-</td>
<td>IR</td>
<td>583.821</td>
<td>1201.250</td>
</tr>
<tr>
<td>6-</td>
<td>UP</td>
<td>570.430</td>
<td>1195.929</td>
</tr>
<tr>
<td>7-</td>
<td>IP</td>
<td>577.805</td>
<td>1199.270</td>
</tr>
</tbody>
</table>

1. A subscriber’s retention behaviour is a function of behaviour setting. Accordingly, the greater the effect of behaviour setting elements, the greater the possibility of customer retention behaviour.
For the relationship between the behavioural setting and customer retention behaviour, Table 4 - 45 shows that the probability of the behavioural setting Chi-Square statistic (112) is $p=0.000$, below the level of significance of 0.05. The proposition that expressed the relationship between the behavioural setting and customer retention is supported while there is a statistically significant value that explains the relationship. The behaviour setting effects occur as a result of management efforts to design a more appropriate interaction environment for targeting customers who respond to environment functions and stimuli (Aubert-Gamet, 1997). Meanwhile, the suppliers’ main job is to sell benefits and services to customers who have been stimulated by the behaviour setting environment (Vashisht, 2005). Thus, managers would be advised to design positive features for different predetermined buying environment settings because this would affect behaviour performance and output (Al-Tuwajri et al., 2004).

2. A subscriber’s retention behaviour is a function of learning history. Accordingly, the greater the effect of positive learning history with the service provider, the greater the possibility of customer retention.

To check the relationship between learning history and customer retention behavior, Table 4 - 45 shows that the probability of the mobile users’ learning history Chi-Square statistic (10.35) is $p=0.048$, less than the level of significance of 0.05. The proposition that expressed the relationship between learning history and customer retention is supported as there is a statistically significant value to explain this relationship. Results show that, if a customer has a high degree of satisfactory learning history from dealing with a supplier, he or she will prefer to make repeat purchases from the same service supplier despite being tempted by another supplier who may provide more utilitarian units or fewer punishments as a result of using mobile services. Customers’ experience usually leads them to buy or re-buy from a specific supplier because they expect to receive a satisfactory level of services that meet or exceed their expectations (Rust et al., 1999). When this is not the case, service firms should have the experience to know how to amend consumers’ unhappy experiences and negative attitudes accumulated through using different mobile services/products during the contracted period and change them to positive ones, because mobile users rely heavily on their learning history to make repeat purchases or renew contracts with the same supplier.
3. A subscriber’s retention behaviour is a function of utilitarian reinforcement. Accordingly, the greater the amount of utilitarian reinforcement received by a customer, the greater the possibility of customer retention.

To check the relationship between utilitarian reinforcement and customer retention behaviour, the propositions Table 4 - 45 on page 261 shows that the probability of utilitarian reinforcement Chi-Square statistic (83.6) is p=0.000, less than the level of significance of 0.05. The proposition that expressed the relationship between utilitarian reinforcement and customer retention is supported as there is a statistically significant value that explains this relationship. The idea of using utilitarian reinforcement as a tool to affect consumer behaviour and drive retention in future purchasing has been widely used by mobile operators, especially with young customers who view mobile services as a utilitarian and/or a hedonic tool (McClatchey, 2006). Positive rewards are not only considered the best signals to attract and drive consumers’ retention behaviour; they are also used by operators to guide and mediate consumer behaviour (Schultz, 2006). Suppliers should carefully consider the value of mobile phone services/products provided to customers, especially when a section of them rely heavily on hedonic behaviour rather than utilitarian behaviour in relation to mobile phone and supplier choice (Petruzeellis, 2007).

4. A subscriber’s retention behaviour is a function of informational reinforcement. Accordingly, the greater the amount of informational reinforcement received by the customer, the greater the possibility of customer retention.

To check the relationship between informational reinforcement and customer retention behaviour, the propositions Table 4 - 45 on page 261 shows that the probability of the informational reinforcement Chi-Square statistic (38.7) is p=0.007, less than the level of significance of 0.05. The proposition that expressed the relationship between informational reinforcement and customer retention is supported while there is a statistically significant value that explains the relationship. The function of informational reinforcement and positive feedback will signal customer behaviour and sometimes it guides or mediates a consumer’s learning process to renew his/her wireless communication services (Schultz, 2006). Within the mobile phone services, the hedonic value dimension is significantly important for customers not only because it boosts their positive and sensorial experiences but also because it could mitigate the negative effect that mobile technology can sometimes provoke (Petruzeellis, 2007).
5. A subscriber’s retention behaviour is a function of utilitarian punishment. Accordingly, the smaller the amount of utilitarian punishment received by the customer, the greater the possibility of customer retention.

To check the relationship between utilitarian punishment and customer retention behaviour, the propositions Table 4 - 45 on page 261 shows that the probability of the utilitarian punishment Chi-Square statistic (21.33) is p=0.263, more than the level of significance of 0.05. The proposition that expressed the relationship between utilitarian punishment and customer retention is not supported as there is no statistically significant value that explains this relationship. Therefore, utilitarian punishment does not show any effect on retention behaviour. Rejecting this proposition in this way may be justified by two explanations: low-priced and high-priced offers switching. Minimizing the amount of utilitarian punishment that the current customer endures does not mean that this customer will renew his/her service subscription in future, especially when he/she is not satisfied with the types and levels of service provided. Low-priced items are not always a sufficient tool to attract new or existing customers. Low-priced items always attract those price-sensitive customers who usually balk and refuse to buy at a higher price (Klock, 2001). Also, some customers might switch from their current suppliers to buy high-priced items provided by other suppliers for various reasons such as a well-known brand name, and a new and better quality of services/products from the new providers. Justifications for both high- and low-priced options are supported and explained by McGoldrick et al. (2000, p.320) who claimed that ‘the higher-priced brand can always attract new customers through judicious discounting whereas the lower-priced brand cannot’.

6. A subscriber’s retention behaviour is a function of informational punishment. Accordingly, the smaller the amount of informational punishment received by the customer, the greater the possibility of customer retention.

To check the relationship between informational punishment and customer retention behaviour, the propositions Table 4 - 45 on page 261 shows that the probability of the informational punishment Chi-Square statistic (30.7) is p=0.044, lower than the level of significance of 0.05. The proposition that expressed the relationship between informational punishment and customer retention is supported as there is a statistically significant value that explains the relationship. The smaller the amount of negative consequences and disapproving feedback received from other individuals such as friends or family members for mobile services/products use and consumption, the more the possibility of a customer repeating his/her future purchase behaviour. Also, the result may
demonstrate that a customer might receive destructive feedback from others regarding his/her use of wireless telecommunication services but he/she continues to use them and makes repeat purchases for many reasons, such as lack of suitable alternatives, high utilitarian punishments to benefit from the same amount of reinforcement, habitual buying, financial incentives, and customer legacy and diffusion (Baloglu, 2002; Lichtenstein and Williamson, 2006; Verkasalo, 2009). Informational punishment alone in most cases is not sufficient to create or explain the switching behaviour. This idea is explained by Fernandez (2009) who illustrated that positive feedback attracts other customers in most cases but negative feedback is not sufficient to prevent a specific behaviour, such as online shopping, from being conducted.

To sum up, results show that the main relationship marketing factors that affect the continuation of the customer-supplier relationship and drive customer retention are divided into two categories: The pre-behaviour factors which are behaviour setting elements that interact with consumers’ learning history; and the post-behaviour factors which are utilitarian reinforcement, informational reinforcement and informational punishment. However, the results showed no statistically significant values to support the utilitarian punishment factor. A brief justification for the utilitarian punishment proposition has been illustrated previously with respect to the data collected and the analysis outcomes in hand. Accordingly, using BPM to study customer retention and explain its drivers is a highly efficient and acceptable technique for the wireless communication services. The suitability of the BPM model for use in the retention behaviour situation is based on its ability to illustrate the actual retention behaviour and justified future purchase behaviour. This idea accords with Fishbein (1971), who claimed that the more explicit the measure of planned behaviour is to the behaviour that is to be predicted, the more privileged the future purchase decision-behaviour association will be. Based on that, while the marketing exchange process has shifted from transaction to relationship marketing (Foss and Stone, 2001), Rowley (2005) accordingly confirmed that a stable customer base is the core business asset nowadays. From a behavioural perspective, mobile suppliers should pay attention to all the behavioural elements that drive customer retention; this will give a good explanation of how operators can maintain and strengthen relationships with existing customers. However, testing the study framework and providing a brief assessment of its propositional components will not provide a sufficiently clear view of actual customer retention behaviour. Thus, it is
necessary to provide further explanation of how customer retention factors draw their effects. The following part discusses qualitatively how customer retention behaviour can be driven, by providing another type of investigation and analysis based on using the BPM as the main interpretative framework to explain more about behaviour drivers and how they impose their effects, positively or negatively.

4 - 10: Customer retention drivers

The consumer is usually not sure how much he/she will use a service in the future (e.g. mobile phones or credit cards), but nevertheless, he/she will frequently renew subscriptions to these services. The main factors that drive the consumer/supplier relationship and customer retention have been determined and explained briefly in the previous stage. Understanding how consumers respond to a supplier’s offering of reinforcement and utilities in the contractual behaviour setting will define customer retention behaviour determinants (Beckett et al., 2000; Choi et al., 2006; Pearlman, 2007). This part aims to provide a new explanation for consumer retention from a behavioural perspective and to define the main factors that affect retention behaviour using a qualitative methodology. This part has employed the BPM to explain consumer behaviour and how retention can be predicted based on the antecedents and consequences of learning contingencies in the mobile phone sector. A qualitative research design has been applied to elicit the required data and achieve the study purposes. Three focus groups of mobile phone users were conducted, recorded, transcribed, coded and analysed via three main steps illustrated by Shapiro and Markoff (1994). Firstly, code categories were created and defined. Secondly, the text was converted by theme into symbols defined by the code. Finally, subsets of themes and symbols were grouped together to define the main factors and their frequencies. Focus groups were used for several reasons: they are a convenient method for interviewing a number of people who are familiar with mobile phone usage and contracts (Calder, 1977). Also, the method is considered an excellent technique for collecting data when specific opinions are important (Garee and Schori, 1996) and when the language and conceptualisation used to describe particular terms or ideas is of interest (Basch, 1987).

Three focus groups of potential users of mobile phone services in the UK were conducted during November 2008 and January 2009 in County Durham, UK. Each focus group comprised 5 to 7 participants with a variety of experiences of UK mobile phone operators
and services. Group discussions were guided by the researcher, using a predetermined set of questions, and lasted for between 90 and 120 minutes. Focus group questions were designed by reviewing the consumer behaviour literature with respect to different BPM themes. Questions were reviewed and revised by two independent scholars to ensure their appropriateness for this study. The methodology of coding and analysing the focus group discussions is guided and used by many scholars such as (Belk, 1974; Belk, 1975; Nicholson et al., 2002). For instance, the statement “It is good to have a place, an outlet, a person you can talk to about different kinds of mobile offers” was coded as (physical-place+, physical-employee+) according to the positive influence of mobile shop availability and of the customer-employee interaction. The statement “It is useless to have a mobile phone shop” was coded as (physical-place-) due to the negative influence of mobile shop availability. All texts were transcribed following the same method to accurately capture all positive and negative effects upon all BPM elements. For more explanation about the methodology that was employed in this stage, it will be helpful to consult section 3-4 in the methodology chapter.

Analysis and discussion

The result of the coding process is explained in the 2 x 12 contingency Table 4 - 46 on page 268 which reveals significant differences in the frequency counts of participants’ positive and negative behaviour incidents experienced through their interactions with mobile suppliers and being in relationships with them. The contingency table was analysed by the Pearson Chi-Square goodness-of-fit test. The contingency table Chi-Square initially tests whether the row classification factor and the column classification factor are not independent. As guided and applied by many scholars, the test calculates the studied factors’ counted frequency to compare observed and expected frequencies (counts) for each cell (factor) then summing their differences (Everitt, 1992; Beasley and Schumacker, 1995; Bell and Bryman, 2003; Agresti, 2007). According to Beasley and Schumacker (1995), the test represents the sum of squares of the differences between observed and expected frequencies for each cell, and each squared difference is divided by the corresponding expected frequency for all study elements. The participants’ total number of behaviour incidents was counted at N=1342, which had been taken into consideration in the analysis process and categorised according to the main BPM components. The Chi-square test for all study constructs is ($\chi^2 = 291.773, p<.001, df=11$) which is highly significant while $p<0.001$; thus there is a good correlation among
variables that gives significant differences between the counted values and the expected ones. Results show that the distribution of both positive and negative incidents is not similar across the BPM themes. In this case, the chi-squared test of significance is a useful technique for decoding the contingency table contents in this study. A significant result for this measure means that it is worth using the cells of a contingency table because it has discovered some real effects and can be interpreted.

Table 4 - 46: Contingency table of frequency summary of participants' views

<table>
<thead>
<tr>
<th>Case</th>
<th>Expected and counted values</th>
<th>Incident</th>
<th>Balance between positive and negative values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>BS</td>
<td>Count</td>
<td>378</td>
<td>246</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>240.3</td>
<td>89.6</td>
</tr>
<tr>
<td></td>
<td>Balance between counted and expected values</td>
<td>+137.7</td>
<td>+156.4</td>
</tr>
<tr>
<td>LH</td>
<td>Count</td>
<td>66</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>42.0</td>
<td>15.3</td>
</tr>
<tr>
<td></td>
<td>Balance between counted and expected values</td>
<td>+24</td>
<td>+26.7</td>
</tr>
<tr>
<td>UR</td>
<td>Count</td>
<td>289</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>183.7</td>
<td>24.4</td>
</tr>
<tr>
<td></td>
<td>Balance between counted and expected values</td>
<td>+105.3</td>
<td>+42.6</td>
</tr>
<tr>
<td>UP</td>
<td>Count</td>
<td>48</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>30.5</td>
<td>18.9</td>
</tr>
<tr>
<td></td>
<td>Balance between counted and expected values</td>
<td>+17.5</td>
<td>+33.1</td>
</tr>
<tr>
<td>IR</td>
<td>Count</td>
<td>48</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>30.5</td>
<td>10.6</td>
</tr>
<tr>
<td></td>
<td>Balance between counted and expected values</td>
<td>+17.5</td>
<td>+18.4</td>
</tr>
<tr>
<td>IP</td>
<td>Count</td>
<td>24</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>15.3</td>
<td>19.3</td>
</tr>
<tr>
<td></td>
<td>Balance between counted and expected values</td>
<td>+8.7</td>
<td>+33.7</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>853</td>
<td>489</td>
</tr>
</tbody>
</table>

Chi-square value under "Asymp. Sig" is 0.00 and less than 0.00 - P<0.001, df. = 11, N of Valid Cases = 1342.0

The frequency table analysis results show that the main factor affecting consumer behaviour is utilitarian reinforcement (UR) – the count of 222 positive instances was around 105, higher than expected. From the participants’ perspective, positive and negative utilitarian reinforcements were both important, with 289 and 67 repetitions respectively. Statistically, results show that utilitarian reinforcement has a positive effect on consumer retention behaviour. This is because consumers tend to maximize the direct benefits gained from purchased items from the same suppliers. This notion is approved by Duk et al. (2002), who mention that the basic consumer behaviour premise is that demand patterns result from choice behaviour, where consumers choose a product to maximize their utility. The main mobile contract elements highlighted by the participants were number of minutes, number of messages and the mobile handset. Evaluating mobile price bundles took account of five dimensions, articulated by one of the participants as follows:
“When I went to the mobile supplier’s outlet, the main things that I considered were: number of minutes, number of messages, cost, contract length and handset type; I worked with those five dimensions”

Mobile firms usually provide different utilitarian reinforcements (e.g. phone types and features) between 18-month contracts and 12-month contracts. Horvath and Sajitos (2002) studied the role of mobile design on buyer decision process and consumer response. They explained that consumer relation to product form is dependent on their personal characteristics, surrounding products, utilities, experience, enjoyment of use and the contribution to the fulfilment of the object’s purpose. Therefore, suppliers should increase the quality and quantity of utilitarian reinforcements delivered to both existing and potential new subscribers to satisfy their needs and encourage their retention behaviour (Ferguson and Hlavinka, 2006). This was confirmed by one of the participants, who mentioned that “I do not think that there is a need to change my supplier because everything I need is available in my current mobile contract”. Within this theme, operators need to introduce new offerings (a variety of mobile products/services) that maximize a customer’s value faster and at a lower cost than competitors (Leng et al., 2008). According to Boyfield (2009), the total annual revenues of the UK mobile telephone market increased from £200 million to £1600 million as a result of providing a range of product and service choices, ranging from ringtone downloads to travel alerts. In addition, within the telecom sector, mobile operators in the UK are generating the majority of telecom revenue. It has been determined by Ofcom that the total mobile telecom revenue that was generated in both data service and mobile voice was £15.1 billion in 2007. Utilitarian benefit types and processes vary from one supplier to another; the main utility is the handset which is the principal tool in the contract that the customer relies on to benefit from other mobile services such as Mobile Internet. It is claimed by Verheugen (the EC Vice-President in charge of Enterprise and Industry) that “In the European Union market alone, there are about 185 million new mobile phones a year” (Foresman, 2009). This idea was explained by one of the managers who offered different mobile services for both business and consumer segments:

“The biggest influence on the purchasing behaviours of our business customers is around convergent technologies and clients will only change supplier or stay loyal if they are offered realistic offers. Consumer level purchase decisions tend to be based on contract pricing and new device availability”
Moreover, contingency Table 4 - 46 on page 268 shows that the second element positively affecting mobile subscribers and retention choice is the behaviour setting dimension (BS), which is mainly controlled or affected by mobile suppliers and their management activities. There is a balance of 132 positive mentions of BS, 138 more than expected. Positive and negative behaviour setting elements are counted at 378 and 246 repetitions respectively. To further explain the effect of the behaviour setting elements and to find which elements are important to consumers, the 2 x 8 contingency Table 4 - 46 shows the frequency of the main behaviour setting incidents that are expressed by participants regarding their interaction with the mobile suppliers’ setting context; they include: physical setting effect, social setting effect, temporal setting effect, and regulatory setting effect. The total number of participants’ behaviour setting incidents was counted at N=624 which has been taken into consideration in the analysis process and categorised according to the main behaviour setting components. The Chi-square test for all study constructs is ($\chi^2 = 53.66, p<.001, df=7$) which is highly significant while $p<0.001$; thus there is a good correlation among variables that gives significant differences between the counted values and the expected ones. That means that all cells in the contingency table are sufficiently reliable for interpretation.

### Table 4 - 47: Behaviour setting factors: Contingency table of frequency counts where the participants reported positive and negative behaviour incidents

<table>
<thead>
<tr>
<th>Case</th>
<th>Expected and counted values</th>
<th>Incident</th>
<th>Balance between positive and negative values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>Physical</td>
<td></td>
<td>148</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>89.7</td>
<td>36.3</td>
</tr>
<tr>
<td></td>
<td>Balance between counted and expected values</td>
<td>+58.3</td>
<td>+55.7</td>
</tr>
<tr>
<td>Social</td>
<td></td>
<td>159</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>96.3</td>
<td>34.7</td>
</tr>
<tr>
<td></td>
<td>Balance between counted and expected values</td>
<td>+62.7</td>
<td>+53.3</td>
</tr>
<tr>
<td>Temporal</td>
<td></td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>9.1</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td>Balance between counted and expected values</td>
<td>+5.9</td>
<td>+7.9</td>
</tr>
<tr>
<td>Regulatory</td>
<td></td>
<td>53</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>20.9</td>
<td>33.9</td>
</tr>
<tr>
<td></td>
<td>Balance between counted and expected values</td>
<td>+32.1</td>
<td>+22.1</td>
</tr>
<tr>
<td>Total</td>
<td>624</td>
<td>378.0</td>
<td>246.0</td>
</tr>
</tbody>
</table>

Chi-square value under “Asymp. Sig” is 0.00 and less than 0.00 - P<0.001, df. = 7, N of Valid Cases = 624
The behaviour setting contingency table shows that Chi-square values have a positive statistical effect on consumer retention behaviour. Explaining the importance of behaviour setting dimensions is critical because it explicates the recognition of situational variables that can substantially enhance the ability to explain and understand consumer behavioural acts (Belk, 1975; Belk, 1975). Thus, organizations usually try to attract and retain consumers by managing different marketing relationship activities that form the marketing mix (Kivetz and Simonson, 2002). Therefore, marketing activities directly or indirectly influence consumer retention behaviour by affecting consumer experience (Henkel et al., 2007; Hume et al., 2007) or by generating shifts in belief and attitude (Schouten et al., 2007) and controlling the situation setting in which the relationship behaviour may appear (Bhate, 2005). The behaviour setting contingency table gives an idea of which of the behaviour setting elements has a greater effect on customer retention behaviour. Results show that the main factor is the social setting which gives a balance of +71 incidents.

Suppliers’ employees have a great influence on consumer purchasing and on usage of contracted wireless telecommunication services. This is because employees can affect consumer behaviour directly through face-to-face communication (Greene et al., 1994), friendly behaviour perceived by customers (Hicks et al., 1996) and prompt service both in store and on telephone helplines (Potter-Brotman, 1994). As mentioned by one participant: “My first contact was with the salesman. His behaviour and how he convinced me was more important than what they actually offered me”.

The physical setting was found to have an essential role in consumer behaviour choice with a balance of +56 incidents. Thus, the physical behaviour setting is considered one of the main elements that managers approach with care (Berry and Parasuraman, 1991). It is categorised by Kotler (1973) as “atmospherics as a marketing tool”. That is because it provides tangibles cues to assess products’ and services’ features, value, and quality, especially for customers with no experience (Lewis and Mitchell, 1990). Also, behaviour setting cues can facilitate customer decisions and purchasing behaviour (Chen et al., 2005). According to Bitner (1992), physical support has recently gained keen attention. Mobile suppliers’ physical settings include many elements such as number of suppliers’ sales outlets, structure, design, distribution, type (physical and virtual), and behaviour evidences - ‘the atmospheric part’. One good example of a physical setting element is to increase the importance of using online shops to sell to customers directly. This notion is confirmed by (TNC, 2009) which claimed that “Mobile phone websites was the fastest
growing sector online with a 58 percent increase in Unique UK Visitors from 7.7 million in July 2008 to 12.2 million in July 2009”. The importance of online shops is highlighted by one of the managers who participated in the interviews: “we need to improve our internet shops compared to our sales outlets, compared with competitors; we are behind in online shops”. Also, managers highlighted their concerns in regard to designing and planning pleasant and leisurely physical setting resources and facilities to fit with suppliers’ relationship strategies which focus on keeping customers (Wakefield and Blodgett, 1996; Mittal and Lassar, 1998). Therefore, within the retail level, suppliers should exert much time and effort in allocating budgets and planning carefully how to design sales outlets, seeking out convenient outlet locations, and opening new outlets close to busy shopping centres in order to enhance the consumer purchasing and retention situation (McKinnon, 1989; Howard, 1992; Pura, 2005; Varley, 2006; Grant and Fernie, 2008). For example, Vodafone UK (2008) had the following strategy:

“It plans to open a further 50 stores over the coming financial year, taking the total to 400, as part of its continued commitment to improve customer service and drive revenue ... the expansion plans build on Vodafone’s announcement in March that it would be recruiting over 300 more retail employees to ensure customers get the help and advice they need to buy and use Vodafone’s products and services”.

The negative influence of physical setting factors are counted at 246 cases. The majority of negative claims concerned mobile stores that were unable to upgrade contracts or resolve consumers’ issues directly. Therefore, consumers usually call customer service units because they do not receive prompt service from retail store personnel. This may be due to limited resources such as number of employees, employees’ knowledge and training, time available per customer, working space and time. The negative incidents were confirmed by one participant, saying “the mobile shop availability is useless, totally useless from my own experience, because whenever you ask about anything, either a phone or contract details, you end up calling the supplier itself and speaking to one of the customer service staff”. To advertise mobile offerings to customers and stimulate them through both physical and virtual outlets, suppliers’ advertising expenditure differ from one year to the next. It has been reported that the aggregate advertising expenditures of the main UK mobile operators including Orange Plc, O2 UK, Hutchison 3G UK Ltd, Virgin Mobile Telecoms Ltd, T Mobile Network, and Vodafone Ltd. was over £235 million in 2008 while it was around £248 and £261 million in 2007 and 2006 respectively (Boyfield, 2009).
Interestingly, the balance of regulatory factors was counted at -3. Regulatory factors include the following: how suppliers control consumer purchasing and usage behaviour via contract terms; both contracted parties’ rights and sanctions; and the mobile contract’s termination and upgrading flexibility conditions (Srivastava, 2006; Lioba and Jens, 2007). The mobile phone contract represents the formal design of the contractual relationship between two parties. A valid contract is described as “a contract that is legal and that meets all of the legal requirements of law” (Motiwala, 2008, p.101). Many participants mentioned negative attitudes towards the contract or part of it in different ways. For example,

“the mobile contract is always in favour of the company and you have no other choice, and there is no way that you can change it, you have to accept it”, “if you want the offer, you should accept the terms and conditions” and “based on my experience, none of us read that contract because it has a lot of terms and conditions”.

The temporal setting was found to have a low positive effect on consumer choice, with a count of +2. Mobile services are measured mainly by airtime call minutes and message units. Thus, the contracts have been organised to be delivered within bundles of benefits introduced to the market with a variety of airtime call limits. The main streams of mobile phone airtime are divided into two types: the prepaid method (Pay-as-you-go) and post-paid method (e.g. 12- and 18-month contracts). Results prove that the major temporal contract theme is the 12-month contract. The majority of mobile suppliers offer flat rate pricing deals which have a bundle of temporal benefits (Sessions, 2008). The main benefit is the airtime call size. Many temporal elements have attracted managers’ interest, including the number of minutes a mobile package should offer to satisfy targeted customers. They also consider variation in airtime size within each price plan, how and when to introduce mobile offers to the markets, how to amend monthly call plans, and battery talktime and standby limits.

Based on previous explanations of the effect of behaviour setting elements, results show that all behaviour setting elements affect consumer behaviour positively and inspire them to make repeat purchases, apart from the regulatory element. As explained by Pierce and Cheney (2004), the behaviour of an organism always comprises a series of actions that are expressed mainly according to environmental effect. Individual actions result from a sequence of specific stimuli influences that emerge from many sources available in the behaviour situation and controlled by supplier marketing management.
Learning history, with 24 incidents, is another pre-behaviour element to positively affect consumer retention. Positive and negative learning history episodes gained 66 and 42 repetitions in importance, respectively. Results showed that learning history has a positive statistical influence on consumer retention behaviour. This notion is confirmed by many authors (Constantinides, 2004; Manchanda et al., 2005; Clemons and Gao, 2008). Hoch and Young-Won (1986) highlight the positive effect of learning history on consumer retention behaviour: as a consumer learns from product experience, he/she has evidence about product quality. Therefore, the majority of consumers repeat the same purchase behaviour from the same provider based on previous experiences (Javalgi and Moberg, 1997; Bigné et al., 2001). Consumers with no previous experience rely on other information sources, such as friends and family recommendations (Leek and Chansawatkit, 2006; Jiaqin et al., 2007), especially with regard to handsets, services, and tariffs (Tomeh, 1970). One participant said “I can’t say that I have enough good experience to shop around for the best deals”. This view is confirmed by Romaniuk (2004), who argued that past behaviour is the simplest and most accurate measure of future behaviour at both brand and individual level. Accumulated interaction between customer and supplier is essential to develop both experience and relationship performance. The most important issue regarding experience from the customers’ perspective is how to use it wisely in evaluating options and establishing which of them will produce most benefits and fewest punishments in the future (Foxall, 2007). According to Pawan (2009), using experience wisely means “developing the ability to take information from those circumstances and translate it to something that benefits the company and its people”.

The fourth factor affecting consumers’ contractual repetition behaviour is informational reinforcement (IR), which averaged 19 positive incidents. There were 48 positive and 29 negative statements concerning IR. Results supported the idea that subscribers were still interested in receiving positive feedback from others. Many participants highlighted the importance of informational reinforcement in using and consuming wireless telecommunication services, such as social chatting, interaction with others and improving personal relationships. This notion is supported by other scholars (Steven et al., 1996; Castells et al., 2004; Belov, 2005). One participant mentioned that “mobile services give me more chance to communicate with others, socialise more and chat more. They let me have more friends” while another user said “it keeps me in touch with others”.
Accordingly, some suppliers offer group mobile communication services (e.g. mobile community) for a specific cost per month, such as family packages. Demestichas et al. (2009) investigated mobile community services that express the importance of communicating with others and sharing information through mobile phones. According to wireless communication usage and consumption, the majority of subscribers still care about other individuals’ feedback and considered their opinions of operators important when evaluating different operators’ mobile offers. That might be the case where subscribers still considered the mobile phone a personal product because it has personal data such as photographs, videos, and musics (Clarke et al., 2002; Coughlin, 2008).

The last two factors that affect customer retention behaviour negatively are utilitarian and informational punishments, with the incident count averaging -4 and -29 respectively. According to the participants, the main utilitarian punishments that influence consumer behaviour directly are monthly contract cost, amount of deposit required and the cost of terminating and upgrading contracts. One participant claimed that “contract termination is not easy because if you want to switch, you need to pay all the cost of getting that contract”. Monthly cost was important: one participant said “I never asked for a new handset, I always asked to reduce the cost” and another stated “I care about reducing the monthly cost”. The direct punishment that gained most subscriber interest was the monthly contract price that a customer has to pay until the end of the contracted period. Price plays an essential role that may affect consumer/supplier relationships and behaviour retention (Reibstein, 2002; Sanzo et al., 2003). For suppliers, price is a vital marketing mix dimension because it generates revenue for the business (Shipley, 1983; Vyasulu, 1998). Also, price strategy and decision determine product and service attributes and perception of quality (Zeithaml et al., 1988; Ulaga and Chacour, 2001). For consumers, price influences buyers’ perception of the product or service offered and of its value (Chang and Wildt, 1994). Rust and Oliver (1994, p.142) argue that “relationship pricing is the appropriate form of pricing which respects the long-term contract between service provider and customer.” Contract price is very important because it has so many effects. Careful consideration of how to price mobile phone services and contracts is essential and crucial. That is because high-priced mobile offerings will make users switch suppliers. For example, Aydin and Özer (2005) explained that the telecommunication firms are losing between 2 and 4 per cent of their existing customers every month, causing millions of pounds’ worth of lost sales and profits.
According to the analysis of participant discussions, informational punishment factors that affect retention behaviour encompass many elements: payment and credit assessment by the supplier (Clark, 2008), the risks associated with mobile shopping (Mahmoud and Yu, 2006; Wu and Wang, 2006) and poor financial and personal data protection (Clarke et al., 2002). One mobile subscriber said “we normally face a credit check problem”. However, another mobile user claimed that the credit check is just a routine procedure because “if you pass the credit check that does not mean that you will pay the bills”. Participants also disagreed about data security; one felt that their behaviour was constrained: “When you call and pass personal and financial details that is not really secure; when you text a message that is also not totally secure”. However, others were less concerned. Overall, both behaviour punishment constructs (IP) and (UP) were found to affect consumer behaviour negatively; this may increase the risk of relationship termination and minimize the probability of repeat purchasing in the long run (Solvang, 2008). Accordingly, behaviour and relational punishment analysis gave other insights into behaviour consequences in that consumers generally try to minimize the amount or levels of punishment that have to be endured to receive and utilise a required level of reinforcement. Mobile users’ feedback, especially the negative sort, is one of the major concerns for suppliers because it affects the general supplier image and reputation. For example, Carter (2005) investigated customer satisfaction feedback from 2,200 customers according to brand image, service cost, and customer service. It was found that T-Mobile of Great Britain has been ranked the worst mobile phone supplier for reliability and customer service for both contracted and pay-as-you-go customers. Meanwhile, Virgin Mobile, which used the T-Mobile network, came top of the pre-paid section, and Vodafone and Orange came top of the contract market.

In conclusion, results show that utilitarian and informational reinforcement, behaviour setting and learning history affect consumer repetition behaviour positively while both utilitarian and informational punishment affects repetition behaviour negatively, the same as the regulatory setting. Accordingly, behaviour reinforcement consequences are considered the main contract renewal drivers affecting choice of mobile supplier. This is also in line with what the operant analysis of marketing proposed: consumer behaviour and choice depend on the economic relationship exchange and consumption process that is powered by utilitarian and informational reinforcements provided by the firm.
Summary

This chapter investigated the factors that motivate individuals to make repeat purchases from mobile suppliers by explaining retention behaviour in both contractual and non-contractual mobile service subscriptions. It applies the BPM, which provides a clear explanation of retention behaviour, antecedents and consequences. Retention behaviour was tested quantitatively and qualitatively from the mobile subscribers’ behavioural perspective. The BPM was found to be eligible for application in the mobile services retention context to provide a high and satisfactory level of explanation of retention behaviour variance, accounting for 88%. Six factors were considered: behaviour setting, learning history (both pre-behaviour stimuli factors), utilitarian reinforcement, informational reinforcement, utilitarian punishment and informational punishment (all post-behaviour consequence factors). After providing a brief description of the main customer-supplier relationship elements including customers, suppliers, mutual relationship, and mobile contract elements, results showed that utilitarian reinforcement, informational reinforcement, informational punishment, learning history and behaviour setting factors drive customer retention. However, there was no statistical evidence to show that utilitarian punishment drives customers’ future purchases. Qualitatively, both utilitarian and informational punishments were found to influence repeat patronage behaviour negatively while utilitarian and informational reinforcement, learning history and behaviour setting elements influence repeat patronage behaviour positively. According to analysis outcomes, suppliers should pay special attention to their relationship utilities by focusing on maximizing both utilitarian and informational reinforcement and minimizing both utilitarian and informational punishment to increase future purchase repetition. All of these factors can be influenced by the behaviour setting that interacts with consumers’ learning history; both of these play an essential role in signalling consumer behaviour and relational consequences. Utilitarian punishment has no statistical effect on customer retention because a customer may switch to a more expensive mobile offer or to a cheaper one, depending on their priorities.

The following chapter gives a brief summary of this thesis by synopsizing the main sample descriptive results and the main findings of customer retention drivers which explain how behaviour retention takes place. It also mentions the limitations of this study and the main future research venues that have been identified and highlighted within the thesis, in addition to highlighting many contributions to the knowledge and some management applications.
Chapter Five: Conclusion
Introduction

This study has been carried out in the UK mobile phone sector in order to provide a clear picture, from a behavioural perspective, of how service customers can be retained. The thesis is planned and conducted within five chapters. The first chapter gives an introduction to the research gap and highlights the problem of customer retention in the mobile phone sector. In addition, the chapter explains the need for such a study by highlighting the challenge faced by mobile phone operators in terms of high customer defection rates, especially by their younger customers. After giving a brief background to the customer relationship and how it links to customer retention, the work then extensively explained how service firms used to maintain their customer relationships in order to retain these individuals. The chapter closes with a definition of the research contribution supported by a summary of the research question and objectives to be unearthed throughout the work. These are accompanied by a plan which outlines the structure of the study. The second chapter gives a brief overview of the consumer repeat purchase behaviour literature as an operant activity. Referring to the behaviourists’ perspective, understanding consumer behaviour is based on organism-environment interaction prospects. This is reasoned as being due to the fact that a customer brings an inherent particular behaviour according to his/her observations and through interactions with different external objectives. The chapter thoroughly discusses the theoretical framework in detail and explains how it can be employed to study customer retention behaviour as an operant activity in the mobile phone sector. The thesis applies the BPM which considers an interpretive framework derived from behaviourism. It is built as an extension of Skinner’s three-term contingency model, which is used as the basic theoretical and analytic unit of the BPM. The BPM is used as a skeleton theoretical framework for research and application purposes rather than for testing the theory. The chapter ends with a further clarification of the six propositions to be investigated after providing evidence of the considerable literature available regarding their roots in behaviour analysis literature. The propositions are supported by appropriate justifications from relationship marketing prospects.

Chapter three presents the research methodology and data collection methods which were designed to allow for the collection of proper data that satisfy the research objectives. The data employed have been sourced from study targets of mobile telephone users alongside the managers who work for the main mobile phone suppliers. The sample was collected by using
different qualitative and quantitative methods of content analysis techniques, focus groups, interviews and questionnaires. Because the study is primarily targeting consumer behaviour and examining how the relationship between mobile user and mobile supplier can be extended, data sources and methods were varied. The chapter provides an in-depth discussion of each data collection method, supported by suitable justifications of why and how each method was to be used. The methodology chapter ends with a preliminary quantitative test for the study framework and its inferred propositional constructs with a sample of the target population, within the pilot study stage. Chapter four presents the empirical work for this thesis; this begins with a detailed descriptive analysis of the main study elements, directly involving with the customer-supplier relationship including demographic descriptions of the customer sample, mobile phone service suppliers’ main attributes, and main mobile contracts’ attributes and elements. In essence, the empirical section is designed to test the customer retention behaviour drivers which are guided by the conceptual framework to examine many predetermined sets of study propositions quantitatively and qualitatively. Study constructs’ conceptual definitions, data collection and analysis findings were interpreted in light of the framework. This final chapter summarising the thesis is divided into four main parts. The first part provides a detailed review of the main data analysis findings which encompass descriptions of contract attributes, supplier attributes and customer-supplier-related elements. It ends with a brief assessment of the study propositions supported by rational clarifications. The second part outlines the main research limitations, and the third part identifies some aspects that may prove attractive for future research projects. The chapter concludes by highlighting some issues that have been viewed as valuable for practical managerial applications.

5 - 1: Main findings

A thorough investigation of the main mobile phone contract elements was conducted in this thesis to give an idea of a variety of utilitarian reinforcements that are essential for a deeper understanding of customer’s choices; this explains how suppliers maintain relationships with their customers to ensure they retain them, by administrating and selling these essential benefits. It was found that suppliers have to give a brief description of the main elements of the contracts because each has different terms and conditions defining the basics of mobile phone use as well as the service procedures. Also, contracts have various terms and conditions that regulate the relationship between the subscribers and operators regarding the
process of upgrading, renewing and terminating the services. The essential part of a contract is its regulation items which, as described by Baldwin and Cave (1999), relate to activities that restrict behaviour and/or prevent the occurrence of certain undesirable actions. Results show that around 48% of the study sample has used prepaid wireless telecommunication services. This percentage is relatively acceptable. However, some scholars such as Bakker (2002) and Laukkanen and Kantanen (2006) have reported that customers start to switch from post-paid service subscription bases to prepaid service subscription bases which in turn prevents service firms from developing long-term relationships with their customers, leaving open the question of how these firms can retain them in the long term. However, twelve- and eighteen-month contract categories account for 30% and 13% of the study participants respectively. Contract subscription percentages are relatively small if compared with other European and non-European countries, as reported by the European Commission roaming report (2006), in which the sample base is widespread in countries such as Malta (94%), Finland (94%), Portugal (88%) and Austria (71%). Bakker (2002) illustrates that the notable shift from the prepaid voice to prepaid data service in the following years occurred according to the development of wireless telecommunication technologies. Thus, the problem of how to transfer current mobile users from prepaid subscriptions to post-paid subscriptions is one of the service suppliers’ main concerns because it affects the composition of a good customer base. Having the competitive advantages of a reasonable customer base enables mobile operators to secure reasonable cash flows in order to survive in the competitive world (Ofek and Sarvary, 2001; Laukkanen and Kantanen, 2006). Also, it is found that about 62% of customers spend less than £21, and about 42% spend between £10 and £20, each month on wireless telecommunication services. Based on this evidence, service firms should take care when designing special mobile offerings to satisfy this segment, which apparently buys contracts with great regard to their economic situation and income, as supported by Gerpott (2009).

In addition, one of the notable findings regarding the elements of mobile offerings is that the mobile phone handset is the main contract element. Some customers prefer highly advanced technology handsets while others are used to more affordable and economical ones. Some scholars highlight this notion. Seo et al. (2008) indicate that sophisticated handsets influence subscribers’ retention behaviour more than other relationship factors, such as the length of the customer-supplier relationship or the mobile price plan itself, which has a mixture of benefits. Thus, the provision of advanced mobile handsets continuously gives some wireless
service operators a competitive advantage over their rivals and encourages their current customers to make repeat purchases (Kim and Yoon, 2004; Okazaki et al., 2007). The Nokia brand name was relatively highly used by around 46.5% of study participants compared to other handset brands, such as Samsung which accounts for 15.8%. This indicates that this brand name is highly appreciated by service users because it provides more functional and emotional benefits than other brands. High-quality brands usually encourage customers to buy these products more because they embody a set of meanings and symbols in addition to their functional values (Friedman, 1985). This result is in line with other scholars’ findings, such as Dewenter et al. (2007); when they analysed the German mobile phone market using a dataset comprising 302 different handsets from 25 manufacturers over the period May 1998 to November 2003, they found that Nokia was the market leader with a market share of 34%. Moreover, regarding the amount of airtime calls and text messaging benefits, results show that around 59% of the total sample bought less than four hundred minutes each month and around 53% bought less than 100 text messages each month. The results provide a relatively logical justification for suppliers to segment the telecommunication market and provide a variety of utilitarian reinforcement and punishment within different reasonable mobile price plans to satisfy customers’ needs based on the amount of wireless telecommunication services they use. Also, such results are of value to service firms in terms of designing their marketing strategies based on the amount and level of benefits used by customers and based on the target customer’s preferred structure and perceived wireless service values (Hwang et al., 2004; Kleijnen et al., 2004; Kim et al., 2006).

Customer retention is the ultimate goal of the customer-supplier relationship. Relationship marketing between two parties is seen as a set of continuous interactions that need to be stimulated and motivated if they are to continue. That is largely because both the consumer’s and the organization’s behaviours are bilaterally contingent upon one another. The behaviours of the two parties act as discriminative stimuli for one another. Thus, there is a need to highlight some issues regarding the main supplier elements. The thesis has studied many of the suppliers’ attributes that are directly linked to customers’ interactions which in turn affect the customers’ behaviour and retention. The notable elements were the effects on customer choice of both the mobile network geographical coverage and voice clarity. This notion is mentioned by many other scholars such as Swann (2005) and Seo et al. (2008) who denote that both geographical coverage and voice clarity are the fundamental quality characteristics of a wireless service that still affects both the customer’s choice and retention.
behaviour. Both elements still represent the main concerns when customers plan to buy a mobile offer and choose from among operators. It has been recommended by many scholars, such as Knoche et al. (2007) and Evans (2007), that suppliers focus on the mobile network technology and infrastructure to improve service firms’ technological assets which in turn will enable them to provide various wireless services with high-quality delivery and performance. Also, the results expressed that aftersales services and customer service units affect customer relationship continuation. Customers interact continuously with different service units that provide many services before, during and after the purchase has taken place. Thus, the positive image left by the service support units, following interaction with the customers, will enhance the likelihood of future repeat purchasing.

According to the customer-supplier mutual relationship data analysis outcomes, there are many elements that need to be addressed. Results illustrate that mobile users have a relatively good experience of various wireless telecommunication services provided by mobile operators. That might be a consequence of customer-supplier interaction over a lengthy period. The results indicate that about 72% of study participants have been using a mobile phone service for more than five years. Also, about 35% of respondents have changed their operators at least once within the last year while about 65% of them are ‘locked into’ their mobile suppliers. The main causes of customer switching behaviour are categorized thus: poor signal and network coverage, obtaining better deals include more wireless telecommunication benefits, high costs or expensive tariffs, poor customer services and seeking better and more advanced handsets.

The behaviour setting elements are studied in this thesis by using both qualitative and quantitative methods. The findings show that the behaviour setting element is one of the main pre-behaviour retention drivers. As illustrated previously, the behaviour setting was categorised into four elements according to the BPM: physical setting, social setting, temporal setting and regulatory setting. The findings showed that the social setting is the main factor affecting consumer choices, especially when a customer has a lack of experience of the purchased object. Participants illustrated that building social bonds with service firms’ representatives is important and is seen as one of the most important functional techniques for retaining customers. Marketers and sales people are essential to the retention process because the majority of customers repeat their purchase behaviour out of loyalty to the service firm; this loyalty is kindled by the endeavours of the human resources personnel and
the effects of interpersonal relationships with employees (Rundle-Thiele, 2005). The strength of interpersonal relationship refers to the high degree of attention, respect and special treatment that have been given to existing customers. The relationship strength illustrated the issue of the relationship magnitude which in turn inspires customers to repeat their purchasing behaviour (Phillips et al., 2004; De Cannièreme et al., 2010). Thus, the social factors are essential for customers; however, some service managers underestimate the importance of social elements in establishing and extending suppliers’ relationships with customers. Ivatury and Pickens (2006, cited Duncombe and Boateng, 2009) have studied low-income subscribers in South Africa and found that utility and social factors were very important in determining usage patterns, more so than many other factors such as technical considerations. The second behaviour setting that influences consumer choice is the physical setting. Physical settings include many elements in this study. The main factors contributing to an explanation of retention behaviour variance are the seeing and trying of the actual purchased object inside the mobile outlet, the shop’s atmospheric elements, and the availability of mobile shops, which includes both physical and virtual outlets. Service firms usually pay special attention to designing customer-supplier interactions within the physical environment. For example, service firms plan both physical and virtual (online) sales outlets, and various service centre numbers and locations are provided in a way that satisfies customers’ needs (Bhatia, 2008). This view is confirmed by many scholars, such as Itami and Roehl (1991) and Moliner et al. (2007), who advise that special care be taken in designing the customer-supplier transaction environment, in a way that not only attracts new customers and satisfies current customers but also reflects the relationship quality and suppliers’ brand name and image. In addition, the temporal behaviour setting is found to have little influence on customers’ choice. The main temporal elements found essential for creating possible stimuli for customers include when to introduce the mobile offer to the market, consumer flexibility regarding termination and upgrading of the contract, and the relationship longevity. However, the study participants’ opinions indicated that the regulatory behaviour setting was found to have a negative influence on their choice. The main studied elements that were found to be critical for customer retention were flexibility in regard to contract termination and upgrading, compulsory contract terms and conditions, and rights protection and sanctions. To summarise, the behaviour setting elements were found to be essential because operators communicate a selection of stimuli to customers in the marketplace. Each behaviour setting element plays a critical role in delivering and contributing to the specific
types of discriminative stimuli aimed at the consumer in a repeat-purchase context, which signal behavioural consequences when interacting with the customer’s learning history.

While the social setting is essential for the relationship’s continuation, the building of strong social bonds relies on establishing a high degree of interaction between customers and suppliers. These continuous interactions are seen as a process that enhances and accumulates the customer’s learning and knowledge. If positive experiences are established, the possibility of customer retention will be greatly increased. This opinion is expressed by learning history findings. Learning history is found to be one of the main pre-behaviour retention drivers. Customers’ learning history has many elements. The main elements that were found essential for repeat purchase behaviour are as follows: first, having a good experience with current mobile suppliers makes a subscriber renew his/her contract; second, having a bad experience with the current mobile supplier makes a customer switch to a rival supplier. This means that, if the learning process takes place during satisfactory and organised customer-supplier interactions during the contractual relationship, a customer will make repeat purchases continuously with respect to the post-behaviour consequences, especially in the case of a first-time buyer. This notion is highlighted by Inman and Zeelenberg (2002) who illustrate that the high probability of repeat purchase behaviour will not follow a negative experience but will rather follow a positive experience. Learning history findings add an additional future research possibility to the existing literature; some scholars, such as Richins (1983), reported that the effect of customers’ positive/negative experience on repeat patronage behaviour has rarely been directly investigated. Briefly, when a subscriber has a positive experience with the existing operator, retention is achieved mainly through the subscriber’s direct experience function. This case is similar to Uncles et al. (2003, p.297), who write that “through trial and error, a brand that provides a satisfactory experience is chosen”.

Utilitarian reinforcement is found to be the main customer post-behaviour driver. Quantitatively, the results show that the utilitarian reinforcement stimulates customer retention behaviour and supplier choice positively. In other words, the more positive and satisfactory the consequences gained by customers through owning, using and consuming wireless telecommunication products/services, the higher the repeat behaviour possibility will be. A mixture of eleven types of wireless telecommunication-related services and products that represent the main utilitarian reinforcement in the mobile phone market have
been determined and analysed. The main post-behaviour consequences that contribute most to customer retention are the mobile phone handset type and brand and the handset bought within the mobile contract offer. The results reconfirm that the main mobile contract component that encourages customers to become involved in long-term relationships with suppliers is a highly-rated, branded and advanced mobile handset device. This outcome is confirmed by other researchers’ findings indirectly (Lee et al., 2001; Varshney and Vetter, 2002; Ho and Kwok, 2003). Attracting new customers and extending or even terminating contractual and non-contractual relationships with current customers depends on the amount and type of utilitarian reinforcement consequences that will be gained when a consumer evaluates suppliers before deciding to enter into a long-term relationship with one of them (Buchanan and Gillies, 1990; Sweeney and Webb, 2007; Ulaga et al., 2008).

Regarding the indirect and intangible benefits received by consumers, informational reinforcement is also found to be one of the main customer behaviour drivers. The main informational reinforcement that was found to stimulate customers into buying mobile service offerings is the positive hedonic values that are received through using mobile products and services in terms of improving relationships and interactions with others, in addition to allowing for social chatting. Additional benefits found to be essential in the process of choosing a supplier are factors such as positive feedback from others and feeling safe and secure when using a mobile service. The functionality effect of utilitarian reinforcement is significant as it enhances customers’ positive sensorial feelings which encourage them to favour relationships with one particular supplier over its rivals because it satisfactorily meets hedonic needs. This notion is confirmed by other scholars who highlight the effect of sensorial and hedonic benefits on supplier choice and the renewal of wireless communication services (Castells et al., 2004; Schultz, 2006). Indeed, some scholars go beyond the enrichments of informational reinforcement and illustrate that mobile phone choice depends on the hedonic aspects of the consumption of wireless services/products rather than the utilitarian ones (Petruzzellis, 2010). This is predominantly because the purchase and repeat purchase of a specific brand, supplier and mobile offer is based on the value that emanates from a mix of emotional and hedonic benefits that are attributable to customers’ self-reinforcement and emotional satisfaction. For that reason, some service firms encourage their customers to complain about any unsatisfactory purchased object or any related items; this in turn has a positive effect on the customer’s repeat purchasing behaviour as reported by Cho et al. (2002). Thus, according to wireless communication usage and
consumption, the majority of subscribers still care about other individuals’ feedback and consider their opinions about operators important when evaluating different operators’ offers. That might be observed from the fact that some subscribers still consider the mobile phone a personal product because it includes personal data and personal service applications such as photographs, ring tones, video, and music (Clarke et al., 2002; Coughlin, 2008).

While consumer behaviour is manipulated by its consequences, both utilitarian and informational punishment effects need to be highlighted. Quantitatively, it has been found that informational punishment influences consumer choices and drives customers’ repeat purchase behaviour. However, no statistically significant value has been found that explains the effect of utilitarian punishment on a customer’s patronage behaviour, unlike the informational punishment. This means that a customer may switch mobile phone suppliers even if the current supplier reduces the amount of utilitarian punishment incurred through using a specific mobile contract. Two reasons may contribute to the absence of the effect of utilitarian punishment on participants’ repeat purchase choice: Firstly, a consumer might change his/her current supplier even if he/she has had the background of a positive experience with the provider. That is because another attractive wireless service offer may stimulate him more and may be seen as having better elements and attributes. In this way, a customer may switch to another offer even if it is more expensive than the old one because more positive relationship consequences will be gained in the long term from the new supplier than from the current provider. Accordingly, in building long-term relationships with customers, suppliers need to ensure mutual benefits, collaboration, communication, good customer services and satisfactory services. Otherwise, customers will respond to other competitors’ stimuli; these may signal more expensive offers but they may also provide relationships with better utilitarian contractual consequences. This view is expressed by Thomas and Housden (2002) who claim that it becomes easier to attract a loyal customer from other suppliers. Thus, it will be a waste of time and money for suppliers to work on creating customer loyalty with initiatives such as loyalty schemes (Rowley, 2005) aimed at preventing a customer from being attracted by another supplier. For that reason, Zineldin (1998) focuses on the importance of creating, enhancing and sustaining strategic relationships between collaborators (i.e. customers, suppliers, subcontractors and other partners). Secondly, if a supplier minimizes the amount of punishment experienced by a current customer it does not necessarily mean that he or she will extend the contractual relationship. A customer may switch because of an unsatisfactory learning history with the
current supplier. Qualitatively, the results show that both utilitarian and informational punishment influence consumer choices negatively. That means that, as the effect of behaviour punishment is reduced, the possibility of repeat behaviour decreases in most cases. Punishment reduction such as price reduction may affect the quality and value of the purchased object (Zeithaml, 1988) or the seller’s image and brand name (Grewal et al., 1998) which in turn minimizes the chances of a specific behaviour being repeated. This opinion is translated by the concept of operant behaviour which denotes that “an individual tends to repeat behaviour that is followed by favourable consequences (reinforcement) and tends not to repeat behaviour that is followed by unfavourable consequences” (Bharijoo, 2009, p.51).

A customer usually tries to minimize the effect of punishment and/or negative incentives that might be faced when he/she plans to buy a product/service. For example, a specific product price reduction may be preferable for a particular group of customers, and should indicate an increase in the purchase behaviour for that product. However, price reductions (utilitarian punishment minimization) will affect other product-related elements such as low quality or low value as perceived by customers. In the mobile phone sector, there are many types of utilitarian punishment such as monthly contract costs, the cost of upgrading or cancelling the mobile as well as any monetary value in the form of a deposit that may be required from suppliers alongside time and effort spent searching for better alternatives. Moreover, many informational punishment elements were studied, such as negative feedback from others, in addition to risk and fear from unfavourable outcomes that might occur from online mobile shopping and credit assessment, in terms of psychologically-related issues such as distress, stress and relationship regret. As a result, both utilitarian and informational punishment were influenced consumer’s behaviour negatively, which in turn not only increases the risk of relationship termination and the minimization of repeat purchase probability in the long term but also reduces the consumer’s tendency to become loyal (Sheth and Parvatiyar, 1995; Solvang, 2008).

To recap, by reviewing the main customer retention behavioural drivers through application of the BPM and summarising the main related propositional analysis outcomes, the findings can be condensed to show that both utilitarian and informational reinforcement affect consumer choices positively, as addressed by Foxall (1988) who explained that a consumer’s behaviour consists of economic purchase and consumption activities that are reinforced via utilitarian and informational reinforcement which reduce the aversive outcomes through a number of options. In this way, positive consequences of consumer behaviour are considered
the main contract renewal drivers and mobile supplier choice indicators. This is also in line with the propositions of the operant analysis of marketing which suggests that consumer behaviour and choice depends on the economic relationship exchange and consumption process that is powered by utilitarian and informational reinforcement as provided by the firm.

5 - 2: Limitations of the research

Customer retention is based on the study of many factors that have been explained previously from a behaviour perspective, both qualitatively and quantitatively. However, there are many limitations, and it will be beneficial to report and explain them, thus helping future researchers who may study the same or similar phenomena using comparable data collection methods.

The first issue highlighted is the fact that not a great deal of previous literature has taken into consideration an analysis of consumer retention behaviour within different contractual contexts in different service sectors, especially in the wireless telecommunication sector. The majority of studies have been carried out in non-contractual settings. This in turn affects the value of previous literature as these additional considerations may give additional insights into retention behaviour-related factors which will lead to better and more precise interpretation. The second issue was that the thesis studied customer retention with no discrimination between the study sample participants according to many factors such as relationship longevity, customer profitability and contract availability. This may run contrary to the views of some scholars who prefer to study customer retention behaviour only among those who have potential for suppliers. This notion is illustrated by Ahmad and Buttle (2001) who claim that not all customers prefer to have long-term relationships. Similarly, according to Buckinx and Van den Poel (2005), some customers do not deserve to be taken into consideration when establishing long-term relationships. Thus, profitable customers who tend to have long-term contractual relationships with suppliers may have different opinions and responses in terms of customer retention from those who are not very interested in having contractual relationships or long-term ones. Also, another limitation can be added to this study that is related to use the convience sampling strategy. That is because convenience sampling is considered a non-probability sampling method by which the study units are selected because it is convenient to select them without regard to the representation of the targeted population. As it is impossible to study the entire population, the researcher used
this type of sampling because it is inexpensive, easy, fast, and study subjects are voluntarily available. In order to assess the representation issue in this thesis, the researcher used many measurements such as normal distribution, mean, standard deviation, skewness, and kurtosis to evaluate to what level the chosen sample represents the entire population.

The third issue is that there was limited information available about mobile phone users in the UK market. Having the chance to review full records for participants’ relationships history with different mobile suppliers would add more actual figures, such as real customer life cycle, mutual interactions history and previous claims which affect a customer’s future purchasing. A full sample of this nature would increase the possibility of collecting data from customers from different geographical areas in the UK so that every mobile user had an equal chance of being involved in the study, instead of the researcher having to rely only on data collection from customers in the Northeast of England. This could affect the selection process of sample members and the data type collected. Additionally, the quality of the work may be influenced and this might increase the chance of providing better retention analysis and evaluation. Also, some difficulties were faced during the distribution and collection of the study questionnaires, as the author undertook this personally. Extensive follow-up techniques were used to contact the majority of sample participants personally or using other media techniques (e.g. email, mobile phone calls and text messages), up to four times in most cases, to remind these contributors about participating in the study survey.

The fourth study limitation is that there was limited access to employees and managers who work for UK mobile suppliers; hence, only a few of them agreed to take part in this study. A limited number of interviews may give a brief summary of what suppliers’ managers do to attract new customers into long-term relationships and what they do to extend the existing contracts. Interviewing large numbers of managers may give a fuller picture of the suppliers’ relationship practices and interactions with customers. Additionally, having access to mobile users’ records from their suppliers’ databases would facilitate a study of the customer retention phenomenon by giving an idea of the previous and actual relationship interactions of customers with operators; this would show their purchasing histories, claims and many other incidents such as contract upgrading or cancellation. Also, having suppliers’ opinions of customer retention issues would add valuable benefits to studying customer retention from both relational parties’ point of view rather than relying on what customers usually report when responding to different data collection methods, such as surveys. In addition, mobile
managers were very busy and travelled a lot. Accordingly, the majority of contacted managers refused to take part in this study and only a few of them preferred to carry out the interviews by telephone rather than by other data collection methods such as face-to-face interviews. Face-to-face interviews, for example, may add tangible values, such as facial expression and body language, to the suppliers’ perspectives on mutual relationships and what they do to retain customers. Moreover, some difficulties were experienced in finding those managers who may potentially have been good representative units to be contacted and interviewed. The main difficulties were as follows: finding a full list of managers who work for UK mobile operators and suppliers, finding the correct addresses and proper personal or work contact details and, finally, following up these managers, not just to make appointments but merely to contact them; these were difficult issues.

5 - 3: Prospects for the future research

There are many prospects for future research elicited from this thesis. The thesis has added important value to the consumer behaviour and consumer retention literature, especially within the individual level of mobile user behaviour analysis. The analysis and illumination of mobile contracts was one of the main contributions of this body of work, especially as it dealt with one of the most changeable businesses of the present era. However, many issues have been highlighted for future research. These issues presented themselves as research windows found during the literature review stage and also while conducting the empirical work. These venues can be summarised as follows:

Initially, customer retention is an interaction process which continues in the long term between customer and suppliers. Thus, to understand how this relationship evolves in the long run and to understand how it lasts within the dynamic contexts, relationship marketing should be studied from the perspectives of both parties who are involved in its continuous exchange processes, as its main driving forces (Hougaard and Bjerre, 2003). This thesis looks at relationship renewal drivers in the long term by investigating customer and supplier interactions and by applying one of the suitable frameworks such as the Marketing Firm Theory (Foxall, 1998). The importance of studying supplier behaviour lies in the fact that marketing management activities usually shape the marketing firm by which consumer behaviour stimuli and consequences are manipulated. Therefore, there is a need to take a look at the other side of the relationship by analysing suppliers’ behaviour in order to gain an idea of their plans for their customers in the marketplace. Foxall (1998) claimed that, in
order to understand what the marketing firm does in the marketplace, the nature and scope of its marketing management should be explained along with its relationship with the target markets, in addition to explaining how the behaviours of customers in total affect the organization’s behaviour. This idea is confirmed by many scholars who claim that the relationship topic should be studied from both parties’ perspectives according to the same study objectives (Holt, 1999; Lindgreen and Pels, 2002; Amant and Still, 2007). This view is recognised by Ritter (2007, p.198) who clarifies that:

“Relationships are by definition influenced by at least two actors. As such, an analysis of one actor’s opinion is insufficient for understanding a relationship. The same analysis should be made by-or at least for-the partner”

Moreover, by reviewing the majority of customer-supplier studies and delving into the consumer behaviour literature, it has been found that contracts have not attracted much interest from scholars. The dearth of contract studies has become apparent in many research areas, such as the customer-supplier contractual relationship, the effect of the contract on the mutual customer-supplier relationship and its continuation, as well as studies on customer awareness of mobile contracts’ statements, terms and conditions. Also, there is a need to study how suppliers can manage to renew their relationships with customers and extend the contractual relationships within the individual base of customer analysis. The principal known investigated research areas are customer retention and switching behaviour, both of which have been under scholars’ and practitioners’ spotlights for some time. However, additional research areas need further investigation, such as contract upgrading behaviour, and consumers’ cancellation and extension of contract behaviour. Also, there is a need to study the effects of the contract as a loyalty tool and as one of switching barriers. Within this context, one of the future research gaps can be summarised in the following question: what is the impact of contractual relationship duration on customer retention and loyalty?

What’s more, this would present a good opportunity for scholars to study the customer life cycle within the contractual behaviour context. This would help identify different customer-supplier relationship stages, based not just on mutual interaction duration but on customer involvement, communication and investment. That would help to provide special guidance to the supplier in segmenting their current customers and maintaining their relationships whilst also indicating how to move customers from one stage to another and treating them properly within different life cycle stages classification. Such classification is needed to manage different customer retention-related issues such as those mentioned by Zeithaml et al. (2001),
who claim that customer profitability can be increased and managed. Highly profitable customers can be pampered appropriately while customers of average profitability can be cultivated to yield higher profitability. However, unprofitable customers can either be made more profitable or simply weeded out.

This thesis gives a preliminary opportunity to appraise the adoption of the BPM as a tool to provide a better understanding of customer retention behaviour. Through this, additional research venues are identified for investigation, such as customer distortion in the mobile phone sector, especially in contractual behaviour contexts, and the comparatively insignificant effect of temporal setting and negative effect of regulatory setting on customer repeat purchase behaviour. Additionally, the thesis has highlighted potential research opportunities where the regulatory behaviour setting needs more attention from scholars. This opportunity is highlighted by other scholars such as Thomas and Lloyd (2006) who recommend some future research areas concerning further understanding of the effect of formalisation and contracting process on the contractual relationship, the effect of a contract on relationship outcomes and the effect of negotiations in the design of contracts on both contractual relationship and the parties involved.

In addition, results obtained from this study denote that informational reinforcement is one of the retention drivers that influence consumers’ behaviour positively. However, by reviewing the consumer behaviour and relationship marketing literature, it has been noted that informational reinforcement has not attracted much attention from scholars. Meanwhile, Dinsmoor (1983) explained that informational stimuli may be sufficient on their own to maintain consumer behaviour and influence organizations to amend their plans and actions, so scholars and practitioners should pay close attention to this aspect, especially when the plan is to retain a contractual customer over the long term. Also, there are many relationship concepts embedded within retention behaviour, and informational reinforcement needs more investigation in terms of, for example, psychological contract and relationship regret.

5 - 4: Contribution to the knowledge

There are many issues that seem valuable to the knowledge brought and discussed by this thesis. These issues can be summarised as follow:

The thesis targets one of today’s main business sectors which has been described as vulnerable, changeable, and dynamic. This sector has witnessed a high customer attrition rate
which has increased more than 30% annually. In most cases, managers are unable to address the causes behind this loss or how to deal with it. Thus, the thesis shows service firms how to establish, maintain and manage beneficial long-term relationships with customers, especially in such a sector. The majority of previous customer retention studies have targeted the customer-supplier relationship from the supplier side, focusing mainly on the economic aspect of joint relationship such as profit gained when keeping and caring for current customers compared with the cost of attracting new customers. One of the main benefits of this work is that it studies the customer side of the mutual relationship and focuses more on customers’ relational benefits which fuel mutual relationship renewal. Few studies have addressed the customer side, thus this study gives a new interpretation of customer-supplier interaction based on mutual contingency of interchangeable beneficial objects through the exchange process.

Moreover, the majority of previous studies have addressed the mutual customer-supplier relationship from a variety of angles especially the economic perspective. However, this study provides a new explanation of customer retention from the behavioural perspective. Explaining behavioural repetition motivators was one of the main themes in this work especially when both pre-behaviour and post-behaviour drivers were taken into consideration to explain how behaviour itself occurs. From the behavioural perspective, this thesis provides a theoretical approach supported by an empirical approach to provide a clear and justifiable interpretation of how customer retention can be approached within individual level of analysis. Providing an operant analysis of how an individual interacts simultaneously with the external environment and chooses from among predetermined options within the contractual behaviour setting was a value added also. Stimuli-response-consequence relationship has been explained within a new behaviour setting that lacked a deep analysis of why an individual repeats the purchase action from the same service provider. Relying on the radical behaviour philosophy to explain social repletion phenomenon was an additional contribution to the knowledge. That is because the previous studies lacked a solid and justifiable theoretical background that had been systematically tested rooted in the radical behaviour philosophy to interpret customer operant retention behaviour. In addition, using the BPM which has been built on Skinnerian three-term contingency model provided a good opportunity to appraise to what level the BPM usage can be extended in relationship marketing to understand customer retention behaviour and stance for its drivers.
The methodology of studying the customer-supplier relationship and specifically customer retention was one of the main contributions in this study. It employed the content analysis technique to analyse different UK mobile operators’ contracts, managers’ interviews, and subscriber focus groups to stand for the main factors used by the study survey to test the possibility of using the BPM and defining its propositional elements. Then the outcomes of quantitative analysis were used to provide a reasonable justification of behaviour retention from the operant perspective supported by contingency tables analysis techniques for both behaviour consequences determinants and behaviour setting factors.

Individual contracting behaviour situations has gained little attention from both researchers and practitioners. Thus using mobile phone contracts to be analysed and used is considered one of the main contributions of this body of work. That is because additional elements need to be taken into consideration when tackling the contractual behaviour situation, such as regulatory setting, temporal, setting, and social setting.

5 - 5: Research applications

This thesis applies the BPM to study the customer retention phenomenon in service firms. The model provides many valuable benefits for managerial and theoretical uses and has three different perspectives: the dimensions of the theoretical model, the application of the used model and the results of these applications.

The BPM structure and the relationship among its components are used to give a clear idea of repeat purchase behaviour as an interpreted tool of the operant consumer behaviour paradigm. The applied framework has different pre-behaviour and post-behaviour elements and, by using a part or a mix of these elements, managers can analyse current customers’ purchasing behaviour and ascertain how to retain them by designing effective management plans. Based on that, supplier plans should ensure the best combinations of sequential purchasing behaviour that benefit and satisfy customers’ needs, which in turn informs and stimulates them to become involved in long-term relationships. Also, the framework enables managers to determine which behaviour elements have the greatest impact on customer retention behaviour and how they should plan to improve particular customer retention elements to control and maintain a specific behaviour which they hope their customers will repeat. From another point of view, the model can help suppliers not only to control and manipulate consumer behaviour settings and consequences, but also to influence consumers’ experience and to enrich their learning history through positive long-term satisfactory
interactions for both parties. In addition, the model can also be used to provide different levels of analysis guided by its construction, which enables the search for different behaviour consequences based on behaviour setting constructs and scope. Thus, the model can help firms to discover how to satisfy each group of customers and how to differentiate and target their offerings. This idea is clarified by Kotler, (1999, p.105) who writes that “all companies are struggling to differentiate their offering from product and services to attract the desired customers because the smart marketers don’t sell products; they sell benefit packages”. In the mobile phone sector, which is described as the most changeable industry and has the highest degree of competition, technological changes have shifted competition from price and core services to value-added services. Thus, service providers should differentiate their offerings as a result of competition shifting and enhance the service quality, which affects customers’ trust, satisfaction and actions. Relational consequences and other related elements such as perceived service quality, corporate image and customer switching costs are seen by many scholars such as Aydın and Özer (2005) as one of the main customer loyalty antecedents.

The resulting data reveal that using the BPM model to study actual behaviour and repeat purchase behaviour is highly acceptable. The results provide satisfactory implications for this model which explains approximately 88% of customer retention behaviour. Based on that statistic, the model is seen as a satisfactory analytical framework that could be applied in different behaviour contexts; it not only show how actual behaviour takes place, but can also be applied to show how to retain customers and minimize their turnover. Even from the methodological approach, the BPM can be used as an effective marketing tool to study both customer and managerial behaviour quantitatively and qualitatively. Based on that fact, different operant behaviour phenomena can be interpreted and explained using the BPM, such as switching behaviour and repeat purchase behaviour as interaction processes of an individual with the environmental context. One of the main issues in this thesis is to give an idea of how to retain customers in the contractual behaviour context. Foxall (1999, p.219) describes how to connect both relationship parties in the long term: “economic exchange usually involves the parties’ entering into an implicit or explicit contract to obtain or be recompensed for giving up goods under specific terms”. Thus, the BPM provides acceptable techniques for suppliers to use the relationship marketing paradigm concepts instead of the marketing mix to affect consumers’ behaviour setting, and allow for the development of
long-term relationships based on mutual longitudinal consequences rather than dealing with them afresh in every transaction (Foxall, 1998).

Concluding remarks

Customer retention is the main goal of those who practise relationship marketing. To provide a clear picture of customer retention, this thesis gives a theoretical and empirical proof of consumer operant retention behaviour in the mobile phone sector. The operant consumer behaviour paradigm is translated by the BPM, which provides a suitable analytical framework for an understanding of how the customer-environment interaction takes place. The operant paradigm has been built on the idea that an individual performs only those behaviours previously reinforced, and discusses the notion of predicting and controlling behaviour through manipulation of the environment (Delprato and Midgley, 1992). Accordingly, purchase behaviour occurs under the effect of stimuli and consequences received from operators in the marketplace. Consumer behaviour in the mobile phone purchasing setting is controlled by the actions of marketing management which provides a variety of mobile communication offers that are signalled by behaviour setting stimuli and denote behaviour consequences clearly. A customer is willing to engage in a long-term relationship if he/she expects to maximize his/her benefits and minimizing the negative outcomes through the contractual relationship undertaken. These advantages cannot be achieved without such a mutual relationship. As has been explained previously, mobile users’ repeat purchasing occurs as a result of an evaluation process of different suppliers’ offerings; the process ends with a decision that denotes, from the customer’s point of view, the best mobile offer which maximizes the relationship benefits and consequently its values. In the long term, subscribers, when renewing their contracts, are looking for the best operators who can serve them properly and satisfy their contractual promises. This is usually achieved by relying on certain attributes such as a satisfactory brand name, reliable service units and a reliable network that offers a strong signal.

To conclude, the choice a mobile user makes is directed towards the maximization of informational (indirect) reinforcement as well as utilitarian (direct) reinforcement, with the minimization of aversive outcomes (Foxall, 1998a). Thus, a customer is usually willing to repeat his purchase of the wireless communication service if his current mobile supplier maximizes his repeat purchase benefits as supported by satisfactory treatments learned by experience; otherwise a customer will switch to another, more promising offer. Thus,
customers should be encouraged and rewarded in order to invoke repeat purchasing, loyalty, and sharing their ideas to improve and innovate service offerings and practices (Jain and Jain, 2005; Ivanauskiene and Auruskeviciene, 2009).
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Appendices
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07776275515  
Muhammad.al-shurideh@durham.ac.uk

11th November 2008

Subject: Request to participate in a focus group discussion about the Mobile Telephone Industry

Hello,

My name is Muhammad Alshurideh; I’m a doctoral researcher from Durham Business School (DBS). My research aims to investigate the relationship interaction between supplier and customer in the mobile phone industry and its effect on customer retention. My study has two parts: supplier side and customer side.

As part of my research about the subscribers’ side, I’m conducting focus group discussions about the mobile phone industry in the UK. The discussion does not need deep experience – you just need to express your knowledge and behaviour about how, why, and when you buy your mobile contract from your mobile suppliers. I would ask whether you would like to participate in one of the three focus groups - that will be great. Your participation is a chance for both of us to share the experience in one of the research methods. Our discussions will last between one hour and one and a half hours. Two focus groups will be conducted in the Durham Business School and one in Ustinov College – Keenan House. If you would like to participate and help in this important study, please reply and write down your contact details to make the process of contacting you and organising the venue and other matters easier.

Please reply to this email/letter by choosing one of the session places.

Old Elvet session ….  
Business School session............  
My mobile is .................  
My email is ....................

Regards  
Muhammad Alshurideh  
PhD- Marketing
Focus group procedures:

Focus group subject: Measuring firm-customer relationship.
Functioning: Questionnaire items developments.
Time required: 2 Hours.
Focus group participants: 5-7 members

First group: Mobile users in Durham University- Durham Business School Nov/2008.

Introduction – (20) minutes

1- Welcome subscribers and introduce myself.
2- Ask participants to introduce themselves to one another, and illustrate what kind of contracts they have, mobiles they use, and suppliers they are dealing with.
3- Give an idea about the research objectives and study theme.
4- Explain the rationale behind conducting the focus group.
5- Illustrate the reasons why participants were chosen.
6- Give an idea about research ethics and confidentiality. Remind the participants that their sensitive personal data and contact details will not be used in any analysis or given to anyone else.
7- Explain general discussion roles and procedures.
8- Respond to participants’ questions and explanations.
9- Distribute a short questionnaire – Demographic characteristics – (10) minutes
10- Collect some demographic and statistical data about participants by using a simple questionnaire that contains the following:
   • Gender
   • Age group
   • Income
   • Educational level.
   • Mobile contract dimensions.
   • Subscriber-customer relationship elements.
   • Mobile characteristics and attributes.
   • Special problems in using mobile operators’ services.

11- Start the discussion by using a number of key questions that guide the semi-structured focus group discussion.

Closing (5 minutes) – Summarise and thank the participants.
Appendix 3

Focus group Questionnaire

1- Name: .................................................................

2- Contact details:
   Mobile: ............................................................
   Email: ..............................................................

3- Gender:
   Male   Female

4- Age group:
   < 15 years old   15-20
   21-30   31-40
   41-60   > 60

5- Educational level:
   PhD   DBA
   MBA   Master
   Bachelor degree   Diploma Certificate
   High school   Others………………

6- Occupation (If you are a student now, please mention the previous one)………………

7- Monthly income… …………………

8- Nationality …………………

9- Which type of mobile telecommunication service are you currently using?
   Prepaid (Pay-as-you-go)   Monthly contract

10- Who is your mobile phone service supplier?
   O2   Vodafone
   3   T-Mobile
   Orange   Virgin
   Others, please specify………………

11- How long have you used a mobile phone telecommunication service approximately (Years)?
   Less than one year   1-2
   3-4   5-6
   7-8   9-10
   11-12   13-14
12- How long have you been using services from the current mobile telecommunication operator? (Months)

<table>
<thead>
<tr>
<th>Pay-as-you-go</th>
<th>Less than 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 - 24</td>
<td>25 - 36</td>
</tr>
<tr>
<td>37 - 48</td>
<td>49 - 60</td>
</tr>
<tr>
<td>61-72</td>
<td>73 +</td>
</tr>
</tbody>
</table>

13- Can you write down your price plan’s main dimensions (Contract dimensions) that are included free in your contract (If available)? Please mention NV (Not available) if not applicable.

<table>
<thead>
<tr>
<th>Contract length</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract cost monthly</td>
<td></td>
</tr>
<tr>
<td>Free Minutes/ Month</td>
<td></td>
</tr>
<tr>
<td>Free Messages/Month</td>
<td></td>
</tr>
<tr>
<td>Free Mobile Handset cost</td>
<td></td>
</tr>
<tr>
<td>Browsing email/Video...etc</td>
<td></td>
</tr>
<tr>
<td>Handset insurance</td>
<td></td>
</tr>
<tr>
<td>Free weekends</td>
<td></td>
</tr>
<tr>
<td>Free nights starting at 8:00 PM</td>
<td></td>
</tr>
<tr>
<td>Area of coverage</td>
<td></td>
</tr>
<tr>
<td>Voice clarity</td>
<td></td>
</tr>
<tr>
<td>Others...</td>
<td></td>
</tr>
<tr>
<td>Others...</td>
<td></td>
</tr>
</tbody>
</table>

14- What brand of mobile phone are you using now? (you can tick more than one option)

<table>
<thead>
<tr>
<th>Nokia</th>
<th>Sony Ericsson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorola</td>
<td>LG</td>
</tr>
<tr>
<td>Samsung</td>
<td>Siemens</td>
</tr>
<tr>
<td>Apple</td>
<td>Philips</td>
</tr>
<tr>
<td>Sigma</td>
<td>Ericsson</td>
</tr>
<tr>
<td>O2</td>
<td>HP</td>
</tr>
<tr>
<td>Panasonic</td>
<td>Blackberry</td>
</tr>
<tr>
<td>Others ………………</td>
<td>I’m not sure</td>
</tr>
</tbody>
</table>

15- What types of problems have you experienced in dealing with your mobile supplier?

A-………………………………………………………………………………
B-………………………………………………………………………………
C-………………………………………………………………………………
D-………………………………………………………………………………
F-………………………………………………………………………………
## Focus group key questions

<table>
<thead>
<tr>
<th>Q. No</th>
<th>Key questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1- Behaviour setting key questions</strong></td>
<td></td>
</tr>
<tr>
<td>1- Physical:</td>
<td>Can you explain how the number, distribution, and location of mobile suppliers’ shops affect your decision when buying a mobile phone contract?</td>
</tr>
<tr>
<td>2- Physical:</td>
<td>How do suppliers’ promotional activities and campaigns affect your supplier choice?</td>
</tr>
<tr>
<td>3- Physical:</td>
<td>How do the purchasing processes (e.g. Internet or direct purchase from an outlet) affect your purchase of a contract?</td>
</tr>
<tr>
<td>4- Physical evidence:</td>
<td>To what extent do the supplier’s store atmosphere, design, colour, and environment affect the purchase of your contract?</td>
</tr>
<tr>
<td>5- Social:</td>
<td>To what extent do you feel that the supplier’s employees affect your contract/supplier choice?</td>
</tr>
<tr>
<td>6- Social:</td>
<td>Who or what influences your decision to purchase your contract?</td>
</tr>
<tr>
<td>7- Regulatory:</td>
<td>Can you explain how contract (longevity) duration affects your contract buying?</td>
</tr>
<tr>
<td>8- Regulatory:</td>
<td>Do you read your contract? How do you translate its conditions and terms from your perspective?</td>
</tr>
<tr>
<td>9- Technology:</td>
<td>Does the network coverage affect your choice of operator? Can you explain how?</td>
</tr>
<tr>
<td>10- Technology:</td>
<td>Does the voice clarity affect your choice of operator? Can you explain how?</td>
</tr>
<tr>
<td>11- Temporal:</td>
<td>What is the best time for you to buy a mobile contract? Explain how contract length can affect your choice of mobile contract and supplier.</td>
</tr>
<tr>
<td><strong>2- Learning history key questions</strong></td>
<td></td>
</tr>
<tr>
<td>1-</td>
<td>Have you changed or terminated your mobile contract before? Yes/no-why?</td>
</tr>
<tr>
<td>2-</td>
<td>How do you evaluate your experience with your previous or existing supplier?</td>
</tr>
<tr>
<td>3-</td>
<td>What types of problems have you experienced in dealing with your mobile supplier?</td>
</tr>
<tr>
<td>4-</td>
<td>How have your previous experiences affected your existing contract purchasing and operator choice?</td>
</tr>
<tr>
<td>5-</td>
<td>How do you evaluate the network service quality?</td>
</tr>
<tr>
<td>6-</td>
<td>Does your mobile supplier support the promised services?</td>
</tr>
<tr>
<td>7-</td>
<td>Based on your direct experience with mobile suppliers, are you planning to renew or switch your mobile supplier? Why?</td>
</tr>
<tr>
<td><strong>3- Behaviour situation key questions</strong></td>
<td></td>
</tr>
<tr>
<td>1-</td>
<td>Do you consider yourself a……….user of hand phone? Heavy, medium, low user</td>
</tr>
<tr>
<td>2-</td>
<td>What are the main topics/subject matters of your mobile communication?</td>
</tr>
<tr>
<td>3-</td>
<td>If your mobile phone contract period has finished, are you keen to renew your lease with the same mobile operator or not? Why?</td>
</tr>
<tr>
<td>4-</td>
<td>What are your reasons for using a mobile phone?</td>
</tr>
<tr>
<td><strong>4- Utilitarian reinforcement key questions</strong></td>
<td></td>
</tr>
<tr>
<td>1-</td>
<td>When you bought your contract, which package from the operator’s menu gained your interest? Why?</td>
</tr>
<tr>
<td>2-</td>
<td>When you purchase your contract, what are the main mobile supplier attributes that attract you?</td>
</tr>
<tr>
<td>3-</td>
<td>Can you mention what mobile supplier services you find beneficial?</td>
</tr>
<tr>
<td>4-</td>
<td>Which contract elements gain your interests?</td>
</tr>
<tr>
<td>5-</td>
<td>What are the main factors that encourage you to buy your contract?</td>
</tr>
<tr>
<td>6-</td>
<td>What are the main contract features that gain your interest?</td>
</tr>
<tr>
<td>7-</td>
<td>Which mobile attributes gain your interest?</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>8-</td>
<td>What benefits provided by the service provider interested you?</td>
</tr>
<tr>
<td>9-</td>
<td>When you decide to purchase a new contract, what do you look for?</td>
</tr>
<tr>
<td>10-</td>
<td>How easy is it for you to switch your network operator or contract? (Upgrade or downgrade contract)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5- Informational reinforcement key questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
</tr>
<tr>
<td>2-</td>
</tr>
<tr>
<td>3-</td>
</tr>
<tr>
<td>4-</td>
</tr>
<tr>
<td>5-</td>
</tr>
<tr>
<td>6-</td>
</tr>
<tr>
<td>7-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6- Utilitarian Punishment key questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
</tr>
<tr>
<td>2-</td>
</tr>
<tr>
<td>3-</td>
</tr>
<tr>
<td>4-</td>
</tr>
<tr>
<td>5-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7- Informational Punishment key questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
</tr>
<tr>
<td>2-</td>
</tr>
<tr>
<td>3-</td>
</tr>
<tr>
<td>4-</td>
</tr>
<tr>
<td>5-</td>
</tr>
<tr>
<td>6-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8- General questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
</tr>
<tr>
<td>2-</td>
</tr>
</tbody>
</table>
### Appendix 5

**Mangers’ contacting list**

<table>
<thead>
<tr>
<th>No.</th>
<th>Organisations’ names</th>
<th>Number of contacted managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>Aggregated Teleco LTD</td>
<td>1</td>
</tr>
<tr>
<td>2-</td>
<td>Analysis Mason group</td>
<td>1</td>
</tr>
<tr>
<td>3-</td>
<td>Bell Consulting Ltd</td>
<td>1</td>
</tr>
<tr>
<td>4-</td>
<td>BT</td>
<td>2</td>
</tr>
<tr>
<td>5-</td>
<td>Cable &amp; Wireless</td>
<td>2</td>
</tr>
<tr>
<td>6-</td>
<td>Cambridge Broadband LTD</td>
<td>2</td>
</tr>
<tr>
<td>7-</td>
<td>Candwell Communications</td>
<td>1</td>
</tr>
<tr>
<td>8-</td>
<td>Cellhire Plc</td>
<td>1</td>
</tr>
<tr>
<td>9-</td>
<td>Dolphin Telecommunications</td>
<td>1</td>
</tr>
<tr>
<td>10-</td>
<td>Ericsson Ltd</td>
<td>2</td>
</tr>
<tr>
<td>11-</td>
<td>Far East One</td>
<td>1</td>
</tr>
<tr>
<td>12-</td>
<td>France Telecom</td>
<td>1</td>
</tr>
<tr>
<td>13-</td>
<td>Huawei</td>
<td>1</td>
</tr>
<tr>
<td>14-</td>
<td>Krone Communications Ltd</td>
<td>1</td>
</tr>
<tr>
<td>15-</td>
<td>Lucent Technologies</td>
<td>1</td>
</tr>
<tr>
<td>16-</td>
<td>Misc Companies (those which have obscure links to telecoms or are not telecoms companies)</td>
<td>11</td>
</tr>
<tr>
<td>17-</td>
<td>Motorola</td>
<td>2</td>
</tr>
<tr>
<td>18-</td>
<td>Nokia</td>
<td>2</td>
</tr>
<tr>
<td>19-</td>
<td>Nortel networks</td>
<td>2</td>
</tr>
<tr>
<td>20-</td>
<td>NTE Ltd</td>
<td>2</td>
</tr>
<tr>
<td>21-</td>
<td>NYnet Ltd</td>
<td>1</td>
</tr>
<tr>
<td>22-</td>
<td>OFCOM</td>
<td>1</td>
</tr>
<tr>
<td>23-</td>
<td>Orange</td>
<td>7</td>
</tr>
<tr>
<td>24-</td>
<td>OFFTEL</td>
<td>1</td>
</tr>
<tr>
<td>25-</td>
<td>O2 UK Ltd</td>
<td>4</td>
</tr>
<tr>
<td>26-</td>
<td>Peoples Telepho Company</td>
<td>2</td>
</tr>
<tr>
<td>27-</td>
<td>Siemens Business Services</td>
<td>1</td>
</tr>
<tr>
<td>28-</td>
<td>Text2View Ltd</td>
<td>1</td>
</tr>
<tr>
<td>29-</td>
<td>The Answering Service Ltd</td>
<td>1</td>
</tr>
<tr>
<td>30-</td>
<td>Touchbase UK Ltd</td>
<td>1</td>
</tr>
<tr>
<td>31-</td>
<td>Vodaphone</td>
<td>6</td>
</tr>
<tr>
<td>32-</td>
<td>Waldon Telecom</td>
<td>1</td>
</tr>
<tr>
<td>33-</td>
<td>3G UK Ltd</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>87</strong></td>
</tr>
</tbody>
</table>
Muhammad Alshurideh
Flat, 3.17 Keenan House,
Old Dryburn Way
Durham, DH1 5BN
07776275515
Muhammad.al-shurideh@durham.ac.uk
18th November 2008

Subject: Request to interview you about the Mobile Telephone Industry

Dear alumni,

My name is Muhammad Alshurideh and I am a PhD student at the Durham Business School. I’m contacting you based on your details available via the Alumni Office / Agora Network.

My area of concentration is marketing and I am conducting Doctoral research into customer retention in the UK mobile telephone industry. Specifically, my thesis’ objective will be to develop ways of measuring firm-customer relationship strength and determining the effect this has on customer retention.

It would be very much appreciated if you would consider granting me an opportunity to meet and talk with you for about 30 minutes at your own convenience as I would very much like to find out more about your own field of expertise and gain further insights into mobile communication services.

I would be grateful if you would contact me at the above address to arrange a suitable time. However, if this is not possible, perhaps you would be kind enough to put me in contact with others within your organisation who may be able to assist me.

Naturally, any contact between us would be strictly confidential and information collected used purely for my academic studies. If you have any queries regarding this matter, please feel free to contact my supervisor, Dr Nicholson, on mike.nicholson@durham.ac.uk

I do hope you can assist me with this matter and I look forward to hearing from you.

Sincerely,
Muhammad Alshurideh

Durham Business School, Durham University, Mill Hill Lane, Durham City, DH1 3LB
Tel: +44 (0)191 334 5200
Fax: +44 (0)191 334 5201
Appendix 7

Mobile suppliers interview questions

<table>
<thead>
<tr>
<th>Q. No</th>
<th>Dimensions</th>
<th>Key questions</th>
</tr>
</thead>
</table>
| 1     | Supplier promotion             | Promotional activities choice and promotional agent  
  ▪ How do you design and choose your promotional activities and campaigns to best affect customers’ choice?  
  ▪ Which promotional mix methods are most commonly used by you or your promotional agents to introduce your offerings to customers? |
| 2     | Supplier communication         | Communication methods used by suppliers such as Face-to-Face communication, Frequency of Telephone or written communications, and Information Sharing  
  ▪ Which communication methods do you normally use most to contact your customers and how do you evaluate their feedback? |
| 3     | Distribution                   | Suppliers’ shops allocation and distribution  
  Can you explain to me how you choose the locations of your shops or points of customer contacts and sales outlets? |
| 4     | Employees                      | Employees’ selection process and training  
  ▪ To what extent do you feel that a supplier’s employees should be carefully selected and highly trained to affect a customer’s contract/supplier choice? |
| 5     | Physical evidence              | Stores’ atmosphere and internal environment  
  ▪ To what extent do you exert efforts to enhance your stores’ atmosphere, design, colour, and other internal environment elements which affect your customers? |
| 6     | Process                        | Internet sales links and sales outlets  
  ▪ How you design your purchasing processes via both Internet websites and direct sales outlets? |

2- Learning history key questions

<table>
<thead>
<tr>
<th>Q. No</th>
<th>Dimensions</th>
<th>Key questions</th>
</tr>
</thead>
</table>
| 1     | Common participants problems   | Frequent customer problems  
  ▪ What are the main types of frequent problems that you experience in dealing with your target customer? |
| 2     | Retention procedures           | Suppliers’ efforts to extend relationships with customers  
  ▪ Based on your direct experience, what does your firm usually do to make customers plan to renew their contracts? |
| 3     | Experience usage               | Experience usage to enhance offerings  
  ▪ How do you think that employees’ and managers’ experiences in your firm enhance the organisations’ offerings of products and services? |
| 4     | Customers’ requirements         | Main customer requirements  
  ▪ Based on your direct experience, what are the main products and services required by customers? |

3- Behaviour situation key questions

<table>
<thead>
<tr>
<th>Q. No</th>
<th>Dimensions</th>
<th>Key questions</th>
</tr>
</thead>
</table>
| 1     | Characteristics of the suppliers | Firm size and customers size  
  ▪ Do you think that your firm’s size and financial situation affect your work?  
  ▪ How are you monitoring your customer churn rate and what are you doing to minimize this rate?  
  ▪ How do you analyse customer purchasing and switching behaviour? |
| 2     | Differentiating                | What distinguishes your organization (e.g.O2) from other players in the marketplace? |
| 3     | Firm offerings                 | Product and service quality  
  ▪ How do you keep an eye on enhancing your offerings gradually to gain customers’ interest with respect to the competitors’ offerings? |
| 4     | Technology level               | Network coverage and voice clarity  
  ▪ Can you explain how network coverage affects customers’ choice of mobile operator? |
Can you explain how voice clarity or network quality affects suppliers’ choice in the market?

### 4- Utilitarian reinforcement key questions

<table>
<thead>
<tr>
<th>Q. No</th>
<th>Dimensions</th>
<th>Key questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>Benefits provided</td>
<td>Supplier’s services: What are the main services provided by your organization?</td>
</tr>
</tbody>
</table>
| 2-    | Benefits provided | Enhancing service offerings  
• How do you enhance the services offered to your customer?  
• What is the essence of the organization’s (e.g. O2) franchise offering? |
| 3-    | Benefits provided | Supplier’s products: What are the main products provided by your organization? |
| 4-    | Benefits provided | Offers:  
• How do you design your offers?  
• What are the main contract specifications and dimensions that your operators rely on and provide? Such as:  
1- Contract specification:  
2- Contract dimensions (Calling plan):  
3- Mobile characteristics:  
4- Calling Airtime:  
5- Messaging:  
6- Others: |
| 5-    | Others | Differentiate offerings?  
• How do you usually distinguish your organization’s offerings (e.g. Nokia, Siemens) from other players in the marketplace? |

### 5- Informational reinforcements

<table>
<thead>
<tr>
<th>Q. No</th>
<th>Dimensions</th>
<th>Key questions</th>
</tr>
</thead>
</table>
| 1-    | Brand name and image | Measuring and enhancing suppliers’ brand name and image.  
1- What are the procedures by which you measure, enhance, and expand brand name and image positions in consumers’ minds?  
2- How do you see the brand expanding over the coming years? |
| 2-    | Feedback | Evaluating customer feedback.  
How do suppliers measure and assess customers’ reactions and feedback? |
| 3-    | Satisfaction and attitudes | Measuring customer satisfaction and attitudes  
How does your firm assess customers’ satisfaction and attitudes towards the firm and its offerings? |

### 6- Utilitarian punishment

<table>
<thead>
<tr>
<th>Q. No</th>
<th>Dimensions</th>
<th>Key questions</th>
</tr>
</thead>
</table>
| 1-    | Switching behaviour | Exploring switching reasons.  
1- Can you explain to me why some of your customers switch to competitors?  
2- What are the main causes of switching behaviour in mobile service industries? |
| 2-    | Switching barriers and cost | Finding the role of switching barriers and costs.  
What are the main purposes and roles of switching costs and barriers? |
| 3-    | Churn rate | Churn rate.  
Can you explain the churn rate in the mobile sector in general and for your operator if available? |
| 4-    | Communication | Customer communication obstacles.  
What are the main obstacles to achieving high levels of communication with your customers? |
| 5-    | High Growing sectors | What are the fastest-growing products in the mobile industry that minimize and shorten the supplier-customer relationship? |

### 7- Informational punishment

<table>
<thead>
<tr>
<th>Q. No</th>
<th>Dimensions</th>
<th>Key questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>Negative feedback</td>
<td>What types of negative feedback does your organization get from customers or competitors?</td>
</tr>
<tr>
<td>2-</td>
<td>Customer claims and problems</td>
<td>Do your customers have any complaints regarding your products and services?</td>
</tr>
</tbody>
</table>
Appendix 8

Questionnaire

My name is M. Alshurideh. I am a PhD student at the University of Durham. This research is being conducted to study consumer behaviour towards mobile phone contract services. This study is purely for academic research purposes. Please answer the questions based upon your personal experience. It takes about 10 minutes. Your frank answer to each of the questions below will be greatly appreciated. Thank you very much for your time and effort.

Section 1:

1- Who is your current mobile phone service supplier?
   - O2
   - Vodafone
   - Virgin
   - T-Mobile
   - Orange
   - Tesco
   - Mobile world
   - Other, please specify…

2- If you have ever had problems with your current mobile phone supplier, please list them below.
   A. ……………………………………………………
   B. ……………………………………………………

3- Have you switched your mobile service provider before?
   - Yes
   - No, Please move to question 6

4- Who is your previous mobile phone service supplier?……………………………………

5- What caused you to change your previous mobile phone service provider?
   A. ……………………………………………………
   B. …………………………………………………

6- Did your previous experience affect your choice of current contract and mobile service provider?
   - Yes
   - No

7- If you are renewing your mobile telecommunication service, are you keen to renew it with the same mobile service provider?
   - Yes
   - No

8- To what extent do you think the following items affect your choice of mobile phone supplier?

<table>
<thead>
<tr>
<th>Items</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Mobile supplier brand name and image</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Network geographical coverage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Voice clarity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Aftersales services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Customer services departments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Suppliers billing system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Number of free minutes given by the supplier</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. Number of free text messages given by the supplier</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 2:

9- How long is your mobile contract?
   - Pay-as-you-go
   - 1 month
   - 6 months
   - 12 months
   - 18 months
   - 24 months
10. What is your mobile contract cost/price per month? If you are a Pay-As-You Go customer, how much do you spend on the mobile telecommunication service approximately every month? (£)

- <10
- 10-20
- 21-30
- 31-40
- 41-50
- 51-60
- 61-70
- >70

11. Have you read your mobile phone contract?
- Yes
- No
- Just the terms and conditions part

12. Have you cancelled any of your previous mobile contracts before?
- Yes
- No, please move to question 14

13. What were the main reasons for cancelling your mobile contract?
   A. ……………………………………………… B:…………………………………………

14. Did you upgrade your mobile contracts before?
- Yes
- No, please move to question 16

15. What were the main reasons for upgrading your mobile contract?
   A. ……………………………………………… B:……………………………………

16. What is the price of your mobile phone handset? (£)

- Less than 50
- 50-100
- 101-150
- 151-200
- 201-250
- 251-300
- 301-350
- 351-400
- 401-450
- >451
- I do not remember

17. What brand of mobile phone handset are you currently using?
   - Nokia
   - SonyEricsson
   - Motorola
   - LG
   - Samsung
   - Siemens
   - Apple
   - Philips
   - Ericsson
   - Panasonic
   - Other, please specify ………………………………. 

18. Please indicate which features are included (Free) in your monthly contract or your Pay-as-you-go agreement. Simply write NI for items that are not included.

<table>
<thead>
<tr>
<th>Subscription type</th>
<th>Monthly contact</th>
<th>Pay-as-you-go</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of minutes allowed</td>
<td>Included</td>
<td>Not Included</td>
</tr>
<tr>
<td>Number of text messages allowed</td>
<td>Included</td>
<td>Not Included</td>
</tr>
<tr>
<td>Please tick where applicable below</td>
<td>Included</td>
<td>Not Included</td>
</tr>
<tr>
<td>Free mobile handset</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free mobile handset insurance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stop the clock service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free evening calls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free weekend calls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free calling to other subscribers in the same mobile network</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free landline calls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free UK voice mail calls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free itemized online billing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free mobile Internet and webmail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using some of the free minutes to make international calls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Section 3:

For each of the following statements, please indicate the extent to which you either agree or disagree with the statements that influenced your choice of mobile phone contract and supplier. Please mark only **ONE** response per statement.

<table>
<thead>
<tr>
<th>No.</th>
<th>Items</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Group calling discount or allowances E.g. family pack</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>The possibility of using the allowed minutes to make international calls</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>3.</td>
<td>Number of free Skype minutes allowed</td>
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<td>4.</td>
<td>Free weekends and evening calling</td>
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<td>5.</td>
<td>Free handset with the mobile contract package</td>
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<tr>
<td>6.</td>
<td>Mobile handset type and brand</td>
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<td>7.</td>
<td>Mobile handset features-e.g. Cameras</td>
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<td>8.</td>
<td>Mobile broadband offers</td>
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<td>9.</td>
<td>Free gift attached to the mobile contract offer</td>
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<td>Mobile shops availability</td>
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<td>11.</td>
<td>Mobile shop’s atmosphere, design, music, colours, and sales persons’ uniform</td>
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<td>12.</td>
<td>Seeing and trying the actual product and service inside the mobile shop</td>
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<td>Mobile supplier’s online shops availability</td>
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<td>Sales persons training and knowledge</td>
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<td>Sales person face-to-face communication</td>
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<td>Friendly behaviour and personal attention</td>
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<td>Receiving prompt service from the mobile suppliers’ employees</td>
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<td>Offer’s time introduced to the market and the flexibility of upgrading your contract</td>
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<td>The end of your contract’s time</td>
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<td>The mobile contract termination flexibility</td>
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<td>The mobile contract upgrading flexibility</td>
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<td>Rights protection and sanction</td>
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<td>I rely on my experience to evaluate and choose among mobile phone contract offers</td>
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<td>34.</td>
<td>My bad experience with my previous mobile supplier makes me switch to another one</td>
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<td>35.</td>
<td>My good experience with my previous mobile supplier makes me renew my contract</td>
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<td>36.</td>
<td>Using the allowed minutes for social chatting</td>
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<td>37.</td>
<td>Improve relationship and interaction with others</td>
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<td>38.</td>
<td>Feel safe and secure in using the mobile phone</td>
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<td>39.</td>
<td>Convenient mobile entertainment</td>
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<td>Convenient flexibility</td>
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<td>41.</td>
<td>Contract monthly price/cost</td>
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<td>42.</td>
<td>The amount of monetary deposit required</td>
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<td>Cost of terminating the mobile contract</td>
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<td>44.</td>
<td>Cost of upgrading the mobile contract</td>
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<td>45.</td>
<td>Time and effort searching for the best mobile contract that suits you</td>
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<td>46.</td>
<td>Risk in mobile Internet shopping</td>
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<td>47.</td>
<td>Credit assessment check issue by mobile suppliers</td>
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</tr>
</tbody>
</table>
Section 4:

1. What is your gender?
   - [ ] Male
   - [ ] Female

2. What is your age? (Years)
   - <20
   - 20-30
   - 31-40
   - 41-50
   - 51-60
   - >60

3. What is your highest level of education?
   - Not educated
   - School level
   - Graduate level
   - Post-graduate level

4. What is your occupation? .................................................................

5. What is your average yearly income? (£)
   - <10,000
   - 10,001-20,000
   - 20,001-30,000
   - 30,001-40,000
   - 40,001-50,000
   - 50,001-60,000
   - >60,000

6. How long have you used mobile phone services? (Combined years)
   - Less than one year
   - 1-2
   - 3-4
   - 5-6
   - 7-8
   - 9-10
   - 11-12
   - >12

7. How long have you been using your current mobile service provider? (Months)
   - Less than 12
   - 12-24
   - 25-36
   - 37-48
   - 49-60
   - 61-72
   - 73-84
   - >84

8. Who pays for your use of mobile services?
   - [ ] Me
   - [ ] Employer
   - [ ] Parents
   - [ ] Others- please specify.......................................................
### Appendix 9

**Contract – Initial Factors**

#### Contract – Initial Factors summarisation

<table>
<thead>
<tr>
<th>1- Utilitarian reinforcement factors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Different types of reinforcements offered by the supplier within one price plan</strong></td>
<td></td>
</tr>
<tr>
<td>1- Free minutes</td>
<td><strong>Calling time can be used to:</strong></td>
</tr>
<tr>
<td>2- Free messages</td>
<td>Call to the same network (Free)</td>
</tr>
<tr>
<td>3- Free handset</td>
<td>Call to other networks (Free)</td>
</tr>
<tr>
<td>4- Free services</td>
<td>Call to land line (local calls) (Free)</td>
</tr>
<tr>
<td></td>
<td>Call to voicemail (Not free)</td>
</tr>
<tr>
<td></td>
<td>National calls (Not free)</td>
</tr>
<tr>
<td></td>
<td>Calls to other lines (e.g.08) (Not free)</td>
</tr>
<tr>
<td><strong>Messages</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Text messages (Free)</td>
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<tr>
<td></td>
<td>Picture messages (Not free)</td>
</tr>
<tr>
<td></td>
<td>Video messages (Not free)</td>
</tr>
<tr>
<td><strong>Data services</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data usage (Not free)</td>
</tr>
<tr>
<td></td>
<td>Web browsing (Not free)</td>
</tr>
<tr>
<td></td>
<td>Data roaming (Not free)</td>
</tr>
<tr>
<td><strong>Mobile Handsets</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Different Handset types and brands (Free)</td>
</tr>
<tr>
<td></td>
<td>Handset number (Free)</td>
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<tr>
<td><strong>Entertainments</strong></td>
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</tr>
<tr>
<td></td>
<td>Cameras (Free included with the handset)</td>
</tr>
<tr>
<td></td>
<td>Downloadable content (e.g. music &amp; tunes) (Not free)</td>
</tr>
<tr>
<td></td>
<td>Games (Free included with the handset)</td>
</tr>
<tr>
<td></td>
<td>Multimedia players and radio (Free included with the handset)</td>
</tr>
<tr>
<td><strong>Services</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Voicemail</td>
</tr>
<tr>
<td></td>
<td>Browse the internet on your mobile</td>
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<tr>
<td></td>
<td>Itemized Billing</td>
</tr>
<tr>
<td></td>
<td>International traveller serves</td>
</tr>
</tbody>
</table>

#### 2- Informational reinforcement factors (Feedback from using different goods and services provided by contract)

- Social chatting
- Courtesy
- Reliability
- Attention
- Assurance
- Enjoyment
- Confidence and self-reliance
- Convenience and flexibility
- Social status and prestige
- Increase the intensity and widen the scope of your interaction
- Efficient time use

#### 3- Aversive consequences

- Contract price (Cost per month)
- Low authority
- A deposit (May be required in specific circumstances)
- Low data protection and security

#### 4- Behaviour setting factors

- **Physical factors**
  - Online purchasing points, easy and quick to use
<table>
<thead>
<tr>
<th>B- Social factors</th>
<th>Sales outlet purchasing points availability and internal climate (lights, music, atmosphere…etc)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Personal treatment</td>
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<tr>
<td></td>
<td>Personal friendship</td>
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<td></td>
<td>Intimacy and respect</td>
</tr>
<tr>
<td></td>
<td>Sales workers’ trust and commitment</td>
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<tr>
<td></td>
<td>Shared values and beliefs with service workers</td>
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<tr>
<td>C- Temporal Factors</td>
<td>Different air time rental usage types (4 options: pay as you go, 12, 18 and 24 months)</td>
</tr>
<tr>
<td></td>
<td>Switching between different contract types</td>
</tr>
<tr>
<td>D- Regulatory factors</td>
<td>Service flexibility</td>
</tr>
<tr>
<td></td>
<td>Parties protection and safety</td>
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<td></td>
<td>Rights protection and sanction</td>
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<td></td>
<td>Organize service use and termination</td>
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</table>
### Factors derived from contracts content analysis

**Reinforcements that the supplier offered free in the mobile contract**

#### Utilitarian reinforcement items (UR)

<table>
<thead>
<tr>
<th>A- Calling airtime-minutes</th>
<th>Free air time size</th>
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<tr>
<td></td>
<td>Minutes rate after the free limit</td>
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<td></td>
<td>Calling time within the daytime</td>
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<td>Calling discount to specific numbers or groups</td>
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<td></td>
<td>International calling availability</td>
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<td></td>
<td>International calling rate</td>
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<table>
<thead>
<tr>
<th>B- Free Messaging</th>
<th>Free messages amount</th>
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<td>Message’s rate after the free limit</td>
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<td>International messaging availability</td>
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<tr>
<td></td>
<td>International messaging rate</td>
</tr>
<tr>
<td></td>
<td>Messaging services: Sport &amp; weather</td>
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</table>

<table>
<thead>
<tr>
<th>C- Free handset</th>
<th>Price</th>
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<tbody>
<tr>
<td></td>
<td>Type</td>
</tr>
<tr>
<td></td>
<td>Brand</td>
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</table>

|                      | Features & attributes: memory, constructed camera, Radio Accessories |

<table>
<thead>
<tr>
<th>D- Free services</th>
<th>Types</th>
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<tbody>
<tr>
<td></td>
<td>Period</td>
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<td>Price</td>
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<td>Price after the allowance period</td>
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<table>
<thead>
<tr>
<th>E- Special offers</th>
<th>Availability</th>
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<td></td>
<td>Type</td>
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<td></td>
<td>Time</td>
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<tr>
<th>F- Supplier items</th>
<th>Brand and image</th>
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<td></td>
<td>Network coverage</td>
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<td>Voice clarity</td>
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<td>Supplier’s services:</td>
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<td>Supplier’s shop allocation and distribution</td>
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<td>Supplier promotion</td>
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#### Utilitarian Punishment (UP)

<table>
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<th>Contract price (Cost per month)</th>
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<td>A deposit (May be required in specific circumstances)</td>
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#### Informational Reinforcements (IR)

<table>
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<th>Social status &amp; prestige</th>
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<td>Social chatting</td>
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<td>Enjoyment</td>
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<tr>
<td>Courtesy &amp; attention</td>
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<tr>
<td>Confidence and self-reliance</td>
</tr>
<tr>
<td>Convenience and flexibility</td>
</tr>
</tbody>
</table>

#### Informational Punishment (IP)

| Low data protection (e.g. calling content) |
| Low personnel data security (e.g. credit check) |
| Low authority |
| Low responsibility |

#### Behaviour setting factors (BS)

<table>
<thead>
<tr>
<th>A- Physical factors</th>
<th>Online purchasing points, easy and quick to use</th>
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<tbody>
<tr>
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<td>C- <strong>Temporal Factors</strong></td>
<td>Different air time rental usage types (4 options: pay as you go, 12, 18, and 24 months)</td>
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<tr>
<td>D- <strong>Regulatory factors</strong></td>
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<td>Service flexibility</td>
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<td>Parties’ protection and safety</td>
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<td>Rights protection and sanction</td>
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<td>Organize service usage and termination</td>
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Chapter – Four
Data analysis and discussion appendices

4 - 3: Contract elements’ descriptions

Appendix 4 - 3. C-1: Contract Longevity

Appendix 4 - 3. C-2: Mobile Communication cost month (£)

<table>
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<td>175</td>
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Appendix 4 - 3. C-3: Participants’ acknowledgment of their mobile contract

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<td>2</td>
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<td>Reading terms and conditions</td>
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</table>
Appendix 4 - 3. C-4: Mobile handset price categories (£)

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<th>Categories</th>
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<th>Percent</th>
<th>Cumulative Percent</th>
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<tbody>
<tr>
<td>1-</td>
<td>&lt; 50.0</td>
<td>109</td>
<td>26.1</td>
<td>26.1</td>
</tr>
<tr>
<td>2-</td>
<td>50 - 100</td>
<td>71</td>
<td>17.0</td>
<td>43.1</td>
</tr>
<tr>
<td>3-</td>
<td>101 - 150</td>
<td>39</td>
<td>9.3</td>
<td>52.4</td>
</tr>
<tr>
<td>4-</td>
<td>151 - 200</td>
<td>49</td>
<td>11.7</td>
<td>64.1</td>
</tr>
<tr>
<td>5-</td>
<td>201 - 250</td>
<td>17</td>
<td>4.1</td>
<td>68.2</td>
</tr>
<tr>
<td>6-</td>
<td>251 - 300</td>
<td>18</td>
<td>4.3</td>
<td>72.5</td>
</tr>
<tr>
<td>7-</td>
<td>301 - 350</td>
<td>8</td>
<td>1.9</td>
<td>74.4</td>
</tr>
<tr>
<td>8-</td>
<td>351 - 400</td>
<td>12</td>
<td>2.9</td>
<td>77.3</td>
</tr>
<tr>
<td>9-</td>
<td>&gt; 401 - 450</td>
<td>6</td>
<td>1.4</td>
<td>78.7</td>
</tr>
<tr>
<td>10-</td>
<td>&gt; 451</td>
<td>9</td>
<td>2.2</td>
<td>80.9</td>
</tr>
<tr>
<td>11-</td>
<td>Missing value</td>
<td>80</td>
<td>19.1</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Appendix 4 - 3. C-5: Mobile phones’ brand name categories

<table>
<thead>
<tr>
<th>No.</th>
<th>Brands</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
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</thead>
<tbody>
<tr>
<td>1-</td>
<td>Nokia</td>
<td>194</td>
<td>46.4</td>
<td>46.4</td>
</tr>
<tr>
<td>2-</td>
<td>Sony Ericsson</td>
<td>61</td>
<td>14.6</td>
<td>61.0</td>
</tr>
<tr>
<td>3-</td>
<td>Motorola</td>
<td>34</td>
<td>8.1</td>
<td>69.1</td>
</tr>
<tr>
<td>4-</td>
<td>LG</td>
<td>14</td>
<td>3.3</td>
<td>72.5</td>
</tr>
<tr>
<td>5-</td>
<td>Samsung</td>
<td>66</td>
<td>15.8</td>
<td>88.3</td>
</tr>
<tr>
<td>6-</td>
<td>Siemens</td>
<td>2</td>
<td>.5</td>
<td>88.8</td>
</tr>
<tr>
<td>7-</td>
<td>Apple</td>
<td>10</td>
<td>2.4</td>
<td>91.1</td>
</tr>
<tr>
<td>8-</td>
<td>Ericsson</td>
<td>9</td>
<td>2.2</td>
<td>93.3</td>
</tr>
<tr>
<td>9-</td>
<td>Others</td>
<td>27</td>
<td>6.5</td>
<td>99.8</td>
</tr>
<tr>
<td>10-</td>
<td>Missing</td>
<td>1</td>
<td>0.2</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
### Appendix 4 - C-6: Contract elements - Size of minutes/month

<table>
<thead>
<tr>
<th>No.</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt; 200.0</td>
<td>147</td>
<td>35.2</td>
<td>35.2</td>
</tr>
<tr>
<td>2</td>
<td>201 - 400</td>
<td>96</td>
<td>23.0</td>
<td>58.1</td>
</tr>
<tr>
<td>3</td>
<td>401 - 600</td>
<td>72</td>
<td>17.2</td>
<td>75.4</td>
</tr>
<tr>
<td>4</td>
<td>601 - 800</td>
<td>41</td>
<td>9.8</td>
<td>85.2</td>
</tr>
<tr>
<td>5</td>
<td>801 - 1000</td>
<td>25</td>
<td>6.0</td>
<td>91.1</td>
</tr>
<tr>
<td>6</td>
<td>1001 - 1200</td>
<td>21</td>
<td>5.0</td>
<td>96.2</td>
</tr>
<tr>
<td>7</td>
<td>1201 - 1400</td>
<td>8</td>
<td>1.9</td>
<td>98.1</td>
</tr>
<tr>
<td>8</td>
<td>&gt; 1400</td>
<td>8</td>
<td>1.9</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

### Appendix 4 - C-7: Contract elements - Size of messages/month

<table>
<thead>
<tr>
<th>No.</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt; 100.0</td>
<td>220</td>
<td>52.6</td>
<td>52.6</td>
</tr>
<tr>
<td>2</td>
<td>101 - 200</td>
<td>79</td>
<td>18.9</td>
<td>71.5</td>
</tr>
<tr>
<td>3</td>
<td>201 - 300</td>
<td>27</td>
<td>6.5</td>
<td>78.0</td>
</tr>
<tr>
<td>4</td>
<td>301 - 400</td>
<td>14</td>
<td>3.3</td>
<td>81.3</td>
</tr>
<tr>
<td>5</td>
<td>401 - 500</td>
<td>19</td>
<td>4.5</td>
<td>85.9</td>
</tr>
<tr>
<td>6</td>
<td>501 - 600</td>
<td>4</td>
<td>1.0</td>
<td>86.8</td>
</tr>
<tr>
<td>7</td>
<td>601 - 700</td>
<td>3</td>
<td>.7</td>
<td>87.6</td>
</tr>
<tr>
<td>8</td>
<td>&gt; 700</td>
<td>52</td>
<td>12.4</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

#### Number of text messages allowed every month

![Number of text messages allowed every month](image)

### Appendix 4 - C-8: Contract elements – Free mobile included with the mobile offer

<table>
<thead>
<tr>
<th>No.</th>
<th>Choice</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Available</td>
<td>181</td>
<td>43.3</td>
<td>43.3</td>
</tr>
<tr>
<td>2</td>
<td>Not available</td>
<td>237</td>
<td>56.7</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Appendix 4 - A: Accumulated customer-supplier relationship longevity with current operator (Month)

<table>
<thead>
<tr>
<th>No.</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>&lt;12</td>
<td>123</td>
<td>29.4</td>
<td>29.4</td>
</tr>
<tr>
<td>2-</td>
<td>12-24</td>
<td>89</td>
<td>21.3</td>
<td>50.7</td>
</tr>
<tr>
<td>3-</td>
<td>25-36</td>
<td>64</td>
<td>15.3</td>
<td>66.0</td>
</tr>
<tr>
<td>4-</td>
<td>37-48</td>
<td>38</td>
<td>9.1</td>
<td>75.1</td>
</tr>
<tr>
<td>5-</td>
<td>49-60</td>
<td>20</td>
<td>4.8</td>
<td>79.9</td>
</tr>
<tr>
<td>6-</td>
<td>61-72</td>
<td>23</td>
<td>5.5</td>
<td>85.4</td>
</tr>
<tr>
<td>7-</td>
<td>73-84</td>
<td>7</td>
<td>1.7</td>
<td>87.1</td>
</tr>
<tr>
<td>8-</td>
<td>&gt;84</td>
<td>54</td>
<td>12.9</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Appendix 4-6.D-1: The participants who switch their operators

<table>
<thead>
<tr>
<th>No.</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>Yes</td>
<td>146</td>
<td>34.9</td>
<td>34.9</td>
</tr>
<tr>
<td>2-</td>
<td>No</td>
<td>272</td>
<td>65.1</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Appendix 4-4.D-2: The participants’ previous mobile operators whom they have left

<table>
<thead>
<tr>
<th>No.</th>
<th>Suppliers</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>O2</td>
<td>32</td>
<td>7.7</td>
<td>21.8</td>
</tr>
<tr>
<td>2-</td>
<td>Vodafone</td>
<td>28</td>
<td>6.7</td>
<td>40.8</td>
</tr>
<tr>
<td>3-</td>
<td>3</td>
<td>16</td>
<td>3.8</td>
<td>51.7</td>
</tr>
<tr>
<td>4-</td>
<td>T-Mobile</td>
<td>20</td>
<td>4.8</td>
<td>65.3</td>
</tr>
<tr>
<td>5-</td>
<td>Orange</td>
<td>29</td>
<td>6.9</td>
<td>85.0</td>
</tr>
<tr>
<td>6-</td>
<td>Virgin</td>
<td>11</td>
<td>2.6</td>
<td>92.5</td>
</tr>
<tr>
<td>7-</td>
<td>Tesco</td>
<td>4</td>
<td>1.0</td>
<td>95.2</td>
</tr>
<tr>
<td>8-</td>
<td>Mobile world</td>
<td>5</td>
<td>1.2</td>
<td>98.6</td>
</tr>
<tr>
<td>9-</td>
<td>Others</td>
<td>2</td>
<td>.5</td>
<td>100.0</td>
</tr>
<tr>
<td>10-</td>
<td>Total</td>
<td>147</td>
<td>35.2</td>
<td>35.2</td>
</tr>
<tr>
<td>11-</td>
<td>Don’t switch</td>
<td>271</td>
<td>64.8</td>
<td>64.8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4 - 4: Customer-Supplier relationship-2

Appendix 4-6.F-1: Participants who cancelled their mobile contracts

<table>
<thead>
<tr>
<th>No.</th>
<th>Choice</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
<td>63</td>
<td>15.1</td>
<td>15.1</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>355</td>
<td>84.9</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Appendix 4-6.F-2: A list of causes that encourage participants to cancel their mobile contracts

<table>
<thead>
<tr>
<th>No.</th>
<th>Claim type</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Expensive offer and move to cheaper ones</td>
<td>18</td>
<td>27.7%</td>
</tr>
<tr>
<td>2</td>
<td>Better offer-better value for money</td>
<td>11</td>
<td>17.0%</td>
</tr>
<tr>
<td>3</td>
<td>Getting more airtime minutes and messages</td>
<td>6</td>
<td>9.20%</td>
</tr>
<tr>
<td>4</td>
<td>Poor customer service</td>
<td>5</td>
<td>7.70%</td>
</tr>
<tr>
<td>5</td>
<td>Seeking better handset</td>
<td>4</td>
<td>6.20%</td>
</tr>
<tr>
<td>6</td>
<td>Changing from post-paid to prepaid</td>
<td>4</td>
<td>6.20%</td>
</tr>
<tr>
<td>7</td>
<td>Poor signal – network coverage problem</td>
<td>3</td>
<td>4.60%</td>
</tr>
<tr>
<td>8</td>
<td>Billing system – get wrong bills</td>
<td>3</td>
<td>4.60%</td>
</tr>
<tr>
<td>9</td>
<td>Change country of residence</td>
<td>3</td>
<td>4.60%</td>
</tr>
<tr>
<td>10</td>
<td>Better offers which have international calls deals</td>
<td>3</td>
<td>4.60%</td>
</tr>
<tr>
<td>11</td>
<td>End of contract time</td>
<td>2</td>
<td>3.00%</td>
</tr>
<tr>
<td>12</td>
<td>Bad cashback schemes</td>
<td>2</td>
<td>3.00%</td>
</tr>
<tr>
<td>13</td>
<td>More reputable operator</td>
<td>1</td>
<td>1.50%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>65</td>
<td>100%</td>
</tr>
</tbody>
</table>

Appendix 4-6.F-3: Participants who upgrade their mobile contracts

<table>
<thead>
<tr>
<th>No.</th>
<th>Choice</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
<td>113</td>
<td>27.0</td>
<td>27.0</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>305</td>
<td>73.0</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>418</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4 - 5: Data Analysis - The analysis of independent variables

Appendix 4 - 5. A: Factor 1: Utilitarian Reinforcements frequency table (UR)

<table>
<thead>
<tr>
<th>UR frequency</th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Valid</td>
<td>418</td>
</tr>
<tr>
<td>Mean</td>
<td>3.4408</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Mean</td>
<td>.03342</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>3.4948(a)</td>
<td></td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.68335</td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>.467</td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>-.527</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>.119</td>
<td></td>
</tr>
<tr>
<td>Kurtosis</td>
<td>.475</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Kurtosis</td>
<td>.238</td>
<td></td>
</tr>
</tbody>
</table>

a - Calculated from grouped data.
b - Percentiles are calculated from grouped data.

The mean of the UR variables is 3.441 and the standard deviation is 0.683. This explains that the characteristic property of the utilitarian reinforcements’ normal distribution is more than 68% of UR cases, falling within a range of ±1 standard deviation from the mean.

Normal probability plots of UR

Histogram with normal curve of UR

Appendix 4 - 5. B: Factor 2: Informational Reinforcements (IR) frequency table

<table>
<thead>
<tr>
<th>IR frequency</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
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<td>N</td>
<td>418</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.3033</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Mean</td>
<td>.03541</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>3.4000</td>
<td></td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.72399</td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>.524</td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>-.471</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>.119</td>
<td></td>
</tr>
<tr>
<td>Kurtosis</td>
<td>1.327</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Kurtosis</td>
<td>.238</td>
<td></td>
</tr>
</tbody>
</table>

a - Calculated from grouped data.
b - Percentiles are calculated from grouped data.

The mean of the IR variable is 3.3 and the standard deviation is 0.724. This shows that the characteristic property of the informational reinforcements’ normal distribution is more than 72% and all of its cases fall within a range of ±1 standard deviation from the mean.
Appendix 4 - 5. C: Factor 3: Utilitarian Punishment (UP) frequency table

<table>
<thead>
<tr>
<th>UP frequency</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Valid</td>
<td>418</td>
</tr>
<tr>
<td>Mean</td>
<td>3.5378</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Mean</td>
<td>.03530</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>3.6000</td>
<td></td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.72168</td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>.521</td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>-.346</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>.119</td>
<td></td>
</tr>
<tr>
<td>Kurtosis</td>
<td>.167</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Kurtosis</td>
<td>.238</td>
<td></td>
</tr>
</tbody>
</table>

The mean of the UP variables is 3.54 and the standard deviation is 0.722. This explains that the characteristic property of the utilitarian punishment normal distribution is that 72% of all its cases fall within a range of ±1 standard deviation from the mean.

- Calculated from grouped data.
- Percentiles are calculated from grouped data.

Observed values

1.0
0.8
0.6
0.4
0.2
0.0
0 2 4 6 8 10

Expected values

0 0.1 0.2 0.3 0.4 0.5 0.6

Normal probability plots of UP

Normal probability plots of IR

Histogram with normal curve of IR

Histogram with normal curve of UP
Appendix 4 - 5. D: Factor 4: Informational Punishment (IP) frequency table

<table>
<thead>
<tr>
<th>IP frequency</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>418</td>
</tr>
<tr>
<td>Mean</td>
<td>3.0622</td>
</tr>
<tr>
<td>Std. Error of Mean</td>
<td>.03840</td>
</tr>
<tr>
<td>Median</td>
<td>3.0000</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.78509</td>
</tr>
<tr>
<td>Variance</td>
<td>.616</td>
</tr>
<tr>
<td>Skewness</td>
<td>-.455</td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>.119</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>.785</td>
</tr>
<tr>
<td>Std. Error of Kurtosis</td>
<td>.238</td>
</tr>
</tbody>
</table>

The mean of the IP variables is 3.06 and the standard deviation is 0.785. This illustrates that the characteristic property of the informational punishment normal distribution is that 78.5% of all its cases fall within a range of ±1 standard deviation from the mean.

| a - Calculated from grouped data. |
| b - Percentiles are calculated from grouped data. |

Appendix 4 - 5. E: Factor 5: Learning History (LH) frequency table

<table>
<thead>
<tr>
<th>LH frequency</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>418</td>
</tr>
<tr>
<td>Mean</td>
<td>3.5439</td>
</tr>
<tr>
<td>Std. Error of Mean</td>
<td>.03808</td>
</tr>
<tr>
<td>Median</td>
<td>3.6667</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.77862</td>
</tr>
<tr>
<td>Variance</td>
<td>.606</td>
</tr>
<tr>
<td>Skewness</td>
<td>-.280</td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>.119</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>.392</td>
</tr>
<tr>
<td>Std. Error of Kurtosis</td>
<td>.238</td>
</tr>
</tbody>
</table>

The mean for LH variables is 3.544 and the standard deviation is 0.779. This shows that the characteristic property of the LH normal distribution is that about 77.9% of all of its responses fall within a range of ±1 standard deviation from the mean.

| a - Calculated from grouped data. |
| b - Percentiles are calculated from grouped data. |
Appendix 4 - 5. F: Factor 6: Behaviour setting (BS) frequency table

<table>
<thead>
<tr>
<th>BS Frequency</th>
<th>N Valid</th>
<th>418</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.2898</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Mean</td>
<td>.02869</td>
<td></td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.58660</td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>.344</td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.745</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>.119</td>
<td></td>
</tr>
<tr>
<td>Kurtosis</td>
<td>.333</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Kurtosis</td>
<td>.238</td>
<td></td>
</tr>
</tbody>
</table>

a - Calculated from grouped data.
b - Percentiles are calculated from grouped data.

The mean of the BS variable is about 3.29 and the standard deviation of 0.59. This explains that the characteristic property of the BS normal distribution is that about 59% of all of its cases fall within a range of ±1 standard deviation from the mean.
Appendix 4 - 5. F-1: Behaviour setting - Physical factors (PhS) frequency table

<table>
<thead>
<tr>
<th>BS – physical factors frequency</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>418</td>
</tr>
<tr>
<td>Mean</td>
<td>3.1256</td>
</tr>
<tr>
<td>Std. Error of Mean</td>
<td>.03789</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.77472</td>
</tr>
<tr>
<td>Variance</td>
<td>.600</td>
</tr>
<tr>
<td>Skewness</td>
<td>-.589</td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>.119</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>.370</td>
</tr>
<tr>
<td>Std. Error of Kurtosis</td>
<td>.238</td>
</tr>
</tbody>
</table>

The mean of physical construct is 3.126 and standard deviation is 0.775. This explains that more than 77% of the sample observations fall within a range of ±1 standard deviation from the mean which confirms that the sales outlet construct data set is normally distributed.

- Calculated from grouped data.
- Percentiles are calculated from grouped data.

Normal probability plots of BS-PhS

Histogram with normal curve of BS- PhS

Appendix 4 - 5. F-2: Behaviour setting - Social factors (BS – SF) frequency table

<table>
<thead>
<tr>
<th>SF - Social factors frequency</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>418</td>
</tr>
<tr>
<td>Mean</td>
<td>3.4940</td>
</tr>
<tr>
<td>Std. Error of Mean</td>
<td>.04290</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.87701</td>
</tr>
<tr>
<td>Variance</td>
<td>.769</td>
</tr>
<tr>
<td>Skewness</td>
<td>-.552</td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>.119</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>.491</td>
</tr>
<tr>
<td>Std. Error of Kurtosis</td>
<td>.238</td>
</tr>
</tbody>
</table>

The mean for social construct is about 3.5 and the standard deviation is 0.877. Results show that around 88% of sample observations fall within a range of ±1 standard deviation from the mean which confirms that the social construct data set is normally distributed.

- Calculated from grouped data.
- Percentiles are calculated from grouped data.
Appendix 4 - 7. F-3: Behaviour Setting - Temporal factor (BS – TF) frequency table

<table>
<thead>
<tr>
<th>BS - Temporal factors frequency</th>
<th>N</th>
<th>Valid</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>418</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.3868</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Mean</td>
<td>.03784</td>
<td></td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.77364</td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>.599</td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>-.739</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>.119</td>
<td></td>
</tr>
<tr>
<td>Kurtosis</td>
<td>1.176</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Kurtosis</td>
<td>.238</td>
<td></td>
</tr>
</tbody>
</table>

The mean for temporal construct is about 3.39 and the standard deviation is 0.774. Results show that more than 77% of sample cases fall within a range of ±1 standard deviation from the mean which confirmed that the temporal construct data set is normally distributed.

a - Calculated from grouped data.
b - Percentiles are calculated from grouped data.

Normal probability plots of BS-SF
Histogram with normal curve of BS-SF

Normal probability plots of BS-TF
Histogram with normal curve of BS-TF
Appendix 4 - 5. F-4: Behaviour Setting - Regulatory factor (BS – RF) frequency table

<table>
<thead>
<tr>
<th>BS - Regulatory frequency</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Valid 418</td>
</tr>
<tr>
<td>Mean</td>
<td>3.4653</td>
</tr>
<tr>
<td>Std. Error of Mean</td>
<td>.03934</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.80429</td>
</tr>
<tr>
<td>Variance</td>
<td>.647</td>
</tr>
<tr>
<td>Skewness</td>
<td>-.559</td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>.119</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>.663</td>
</tr>
<tr>
<td>Std. Error of Kurtosis</td>
<td>.238</td>
</tr>
</tbody>
</table>

The mean of regulatory construct is about 3.5 and the standard deviation is about 0.8043. Results show that more than 80% of sample cases fall within a range of ±1 standard deviation from the mean which confirmed that the regulatory construct data set is normally distributed.

a - Calculated from grouped data.
b - Percentiles are calculated from grouped data.

Normal probability plots of BS-R

Histogram with normal curve of BS-R