The relationship between switching costs, customer satisfaction and loyalty in the Norwegian mobile market

By

Fredrik Karlsen



Master's Thesis in Marine Business Management (30 stp)

Department of Social and Marketing Studies Norwegian College of Fishery Science University of Tromsø

May 2008

Acknowledgements

This master's thesis marks the end of my six years as a student. It has been an informative and interesting time in my life, and given a solid foundation for meeting the challenges in general business. Even so, I have to say that it fells good to be graduated.

I especially would like to thank my supervisor, Nina Prebensen, Department of Social and Marketing, and Gunnvald Pedersen, psychologist at Telenor, who encouraged me, supported me, and gave guidance from the very beginning up to the end.

I also give thanks to my family and friends for all the support during this work.

Trondheim, May 2008

Fredrik Karlsen

Abstract

Few studies in marketing have examined the role of switching costs in regards of both customer satisfaction and loyalty. The presence of switching costs can mean that some seemingly loyal customers are actually dissatisfied but do not defect because of high switching costs. Thus, it is believed that the level of switching costs moderates the link between satisfaction and loyalty. This work seeks to capture consumer attitudes and see how attitude is explained by the three aspects, in example how attitude towards buying and recommending services from an operator is affected by switching costs which exist in the market, and the purpose is to examine the role of switching costs towards customer satisfaction and loyalty, in addition to identify critical dimensions to switching costs by using an empirical example based on the mobile market in Norway.

The results indicate that in the relationship between SC, CS and L, mobile operators should still focus primarily on customer satisfaction, as it is believed that the effect of switching costs only apply when satisfaction is low. As for the dimensions of switching costs, the most crucial dimensions identified suggest that in order to use SC's as means of retaining customers and increasing loyalty, operators should increase awareness of complex features and services, and when attracting new customers prefer the ones with limited experience.

Key words: Mobile market, Customer Satisfaction, Loyalty, Switching Costs, attitude

Table of Contents

stract.	
	roduction
1.1 T	opic and approach to the problem
	he Norwegian mobile market.
	\v- \v-g-\v \v \
0 The	eoretical background
2.1 T	he Key Constructs
2.1.1	Customer Satisfaction
2.1.2	Loyalty
2.1.3	Switching Costs
2.2 P	erceived Switching Costs in the Norwegian mobile market
2.3 R	elationships between Key Constructs
2.3.1	Customer Satisfaction and Loyalty
2.3.2	Switching Costs and Customer Satisfaction
2.3.3	Switching Costs and Loyalty
2.4 D	imensions of Switching Costs
	he Causal Model
0 Me	thod
	ample and demographics
3.2 Q	uestionnaire and construct measurement
3.2.1	Measuring Customer Satisfaction
3.2.2	Measuring Loyalty
3.2.3	Measuring Switching Costs
3.2.4	Dimensions of Switching Costs
.0 Ana	alysis and results
4.1 A	nalysis of Causal links
4.1.1	The Causal Model
4.1.2	Dimensions of Switching Costs
4.1.3	Hypotheses
4.2 R	esults
4.2.1	The Causal Model
4.2.2	Dimensions of Switching Costs
.0 Dis	cussion and Conclusion
5.1 D	iscussion
	Implications
5.1.1	1
5.1.1 5.1.2	Limitations and future research

List of figure	
Figure 1: Dimensions of Switching Costs	26
Figure 2: The Causal Model	27
Figure 3: Standardized solution of the empirical causal model	36
Figure 4: Standardized solution of the dimensions to SC model	38
List of table	
Table 1: Different typologies of Switching Costs	15
Table 2: Demographics	28
Table 3: Estimated loadings for the total set of measurement items	32
Table 4: Switching Cost dimension construct measures	33
Table 5: The results of SEM	40
List of appendix	
Appendix 1: Interview guide	51

1.0 Introduction

As only a few studies in marketing have examined the role of switching costs in regards of both customer satisfaction and loyalty, the purposes of this work are: to examine the role of switching costs towards customer satisfaction and loyalty; and to identify dimensions to switching costs by using an empirical example based on the mobile market in Norway. In this chapter the topic and approach to the problem is outlined and described. Then the background of the telecommunications industry in Norway is presented, with a focus on competition and existing and emerging trends. With a basis in this, the research questions have emerged.

1.1 Topic and approach to the problem

This work will investigate the relationship between switching costs (SC), customer satisfaction (CS) and loyalty (L) in the Norwegian mobile market. In explaining the link between customer satisfaction and loyalty, switching costs play an important role and provide useful insight. For example, the presence of switching costs can mean that some seemingly loyal customers are actually dissatisfied but do not defect because of high switching costs. Thus, the level of switching costs moderates the link between satisfaction and loyalty. This work seeks to capture consumer attitudes and see how attitude is explained by the three aspects, in example how attitude towards buying and recommending services from an operator is affected by switching costs which exist in the market. There are vast amounts of studies which have analyzed satisfaction and loyalty amongst consumers and how these in turn affect each other, but few have focused on the role of SC in this context. Implementing SC's will further give new knowledge and determine how such costs affects the consumer's perception of satisfaction and loyalty towards a specific mobile operator or services. By further adding underlying dimensions to the SC-term, it is possible to see if the different dimensions are likely to be related to certain consequences in ways that are both theoretically and practically important, thus implying the use of different strategies to effectively manage different SC dimensions as part of an operators overall retention program.

The main question to be investigated is:

How does switching costs affect customer satisfaction and loyalty in the Norwegian mobile market, and what underlying dimensions to switching cost are most crucial?

Although there are several articles analyzing switching behavior in mobile telecommunications, none (to the author's knowledge) has analyzed the Norwegian market, which in turn would benefit from such a study because of its nature of complexity and the growing need to predict how SC's affect the customers' switching intentions. The theoretical framework built up around CS and L must therefore incorporate SC's to redefine in this context and answer such questions as "how does SC interact with CS and L in the Norwegian mobile market?". This type of question is important because the mobile operator would benefit from the increase in customer knowledge, hence having the opportunity to shift strategy in order to retain customers and preventing customer churn.

Previous research has shown a variety of effects regarding SC's effect on CS and L, and there seems to be no given conceptualization to how SC works. As a result, this study will adopt a number of underlying dimensions of SC's as proposed by Burnham, Fres & Mahajan (2003) to identify the most influential relations.

Switching Costs are described as factors that act as constraints preventing customers from freely switching to other service providers (Ahn, Han & Lee, 2006), and are believed to be a crucial determinant to a firms ability to retain customers and achieve competitive advantage (Hess & Ricart, 2003). Customer satisfaction is known as the customers evaluation of a firm, based on all encounters and experiences (Kim, Park & Jeong, 2004), and is described as a key differentiator in competitive markets such as mobile markets and has increasingly become a key element of business strategy (Gitman & McDaniel, 2000). Customer loyalty can be said to describe the tendency of a customer to choose one business or product over another for a particular need¹. As a result of these descriptions, it is believed that SC can affect and determine customer attitude towards a brand or product, hence affecting any satisfaction and loyalty a consumer might perceive.

¹ http://www.jimnovo.com/Customer-Loyalty-more.htm

To investigate this assertion in regards of the Norwegian mobile market, two models are presented. First, the key constructs which make up the causal model, namely CS, L and SC, are presented and discussed. Then, the dimensions of SC as proposed by Burnham et al., (2003) are presented, followed by a discussion on the relationship between the key constructs, and the proposal of four key propositions. This will hopefully yield accurate depiction of the perceptions and attitude in the market, and further provide recommendations and offer valuable insights for future research

In order to outline the importance of SC's and better understand the complexity of the mobile industry in Norway, a short description of the market with a focus on the important aspects, trends, competition and technology evolvement is presented.

1.2 The Norwegian Mobile Market

Since the 1990's, the telecommunications sector has become a dynamic key area for the economic development of industrialized nations. This is the result of enormous technical progress as well as of the increased number of network operators and the intense competition that has developed. These factors in turn, are a consequence of the removal of monopoly rights (which is the strongest form of SC), which were mainly enjoyed by the state owned company Telenor, the largest operator of public telecommunication networks in the Norwegian market (Gerpott, Rams, Schindler, 2001). Saturation of the market, the general deregulation of the telecommunications industry and the increasing number of wireless service providers drive competition, and the retention battle is further fueled by the elimination of switching barriers, making it easy for the consumer to switch operators.

In the mobile market there are several reasons for the high competition, and the fact that new entrants are able to achieve significant market shares. First of all, it is far easier to build competing infrastructure for mobile than for fixed line telephony. This has allowed new entrants to develop independently of already existing firms. Second, the market has grown rapidly in pursuant to the entry of new competitors, which have allowed entrants to gain market share without actually conquering the competitions customers. A market grows with the increase of both mobile usage and customers, and capturing these trends and further create high SC's gives a competitive advantage – by shaping the mind and perception of customers firms can potentially increase retention. Finally, constant development of new technology and

shorter customer equipment lifetime provide additional incentives and occasions for customers to switch mobile operators.

These facts are interesting because the complexity of the mobile market (a wide range of operators, several service attributes and diversified price structure) in the end influences the consumer attitude. First, there are many competing firms to choose from. This means the consumer might face difficulty in dividing the different competitors and what they stand for from each other. As most operators offer a similar range of services, one would think the consumers to base their choice on "the whole package", in other words the benefits given by the operator to the customer as opposed to what other operators offer.

Second, the range of services exceeds just "calling" with the mobile phone. Numerous options such as e-mail, voicemail, WI-Fi and ring tone-downloads exist, making it more difficult for the average consumer to both understand and learn how to use these services.

Third, the price structure amongst operators is very varied. With so many types of subscriptions to choose from, the consumers are faced with a high effort in order to differentialize the offers and get a good outline of the market.

As these aspects indicate, the consumers are faced with numerous options and need to access a lot of information in order to differ between the existing operators, their offers and what gives most value for money, which in turn might affect their attitude. As a result of this, the importance of understanding SC's and how they affect consumer attitude is crucial.

2.0 Theoretical background

In this chapter the main theoretical concepts of which this study is built upon is presented. The first part of the chapter presents the key constructs to be investigated, then the links between the key constructs are discussed, and finally a number of hypotheses based on previous research are presented in order to test the effects.

2.1 The Key Constructs

In the Norwegian mobile market, a mobile operator is defined as a telephone company providing services for mobile phone subscribers, so when building the key constructs in the models, both the services offered by the operator and the perception of the operator it self is included, as a mobile operator is no more than a set of services offered to a consumer, implying that a mobile operator and the services a mobile operator offers is perceived as equal.

2.1.1 Customer Satisfaction

Overall satisfaction refers to the customer evaluation of a specific brand, based on all encounters and experiences (Kim et al., 2004), and can be viewed as a function of all previous transaction specific satisfaction (Fornell, Anderson & Johnson, 1995). Oliver (1997) considered that customer satisfaction means customer reaction to the state of fulfillment and customer judgment of the fulfilled state, and as a pleasant past purchasing experience from a product or service given the anti purchase expectancy of the customer. The present work employs the Oliver (1997) definition of customer satisfaction.

There are several benefits a company gains from achieving a high customer satisfaction level. Benefits such as increase of customer loyalty, reduced customer churn, a lowered customer price sensitivity, reduction of costs associated with failed marketing, new customer creation, reduced operator costs due to customer number increase, improvement of effectiveness of advertising and enhanced business reputation are mentioned by Fornell (1992).

Customer satisfaction is also seen as the customers own perception of the quality and expectations of service (Zeithaml & Bitner, 1996), and individual characteristics or overall functionality of the services obtained. With the degree of fulfillment of satisfaction for the

customer, CS is higher or lower with respect to the extent to what the customer actually is provided with exceeds or falls short of what the customer expected (Gerpott et al., 2001). This is very essential in the mobile industry where operators are service providers, and are usually evaluated upon their range of service. Therefore, Kim et al. (2004) argue that consumers would most likely perceive satisfaction based on what they receive from the operator, which in turn is based on the quality of what is received (price, cover, attributes etc.).

2.1.2 Loyalty

Turel & Serenko (2004:3) described loyalty in the mobile service context as "a favorable attitude towards a specific service provider that leads to a combination of repurchase likelihood of additional services from the same provider and tolerance to price increases". Kim et al. (2004) used this as a basis in their study of switching barriers on loyalty in the Korean mobile market, and proposed two components in the loyalty construct. They were repurchasing likelihood, and price tolerance. The repurchase component is described as the probability of choosing the same provider when acquiring a new service and the price component is described as the probability of staying with a provider when prices increase or competition decreases prices.

Oliver (1997:392) defines loyalty as a "deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future" His work describes a detailed framework of loyalty that presents loyalty as consisting of four distinct, sequentional phases, where consumers can become "loyal" at each attitudinal phase relating to different elements of the attitude development structure. First, cognitive loyalty refers to the existence of beliefs that a brand or service is preferable to others. Second, affective loyalty reflects a favorable attitude or liking based on satisfied usage. It tends to procure free word of mouth advertising, which in turn can have an effect on switching behavior amongst potential customers. Third, conative loyalty constitutes the development of behavioral intentions characterized by a deeper level of commitment. Finally, action loyalty relates to the conversion of intentions to action, accompanied by a willingness to overcome impediments to such action. It combines the customer's professed likelihood to repurchase from the same supplier in the future, and the likelihood to purchase a company's products or services at various price points (price tolerance). Hence, frameworks of loyalty usually incorporate and integrate both behavioral and attitudinal components. Oliver's (1997) affective- and action loyalty view is therefore

adopted in this work, and the loyalty construct is presented as a temporal construct to include attitude and repurchase intention, consistent with the work of Kim et al. (2004).

1) Attitude (affective loyalty)

Loyalty becomes important to a company when it results in purchase behavior. This generates for a company in direct and tangible returns which attitudinal loyalty on its own does not. This is due to the fact that attitudinal loyalty can be more of a commitment or a trust, which do not essentially have to result in any purchase. The customer might have a positive attitude towards a company or a brand, but at the same time they also could have an even more positive attitude towards another company or another brand.

2) Repurchase Intention (action loyalty)

Repurchase intention consist of the customer's perceptions of continuity expectations such as upholding a existing relationship (Ellinger, Daugherty, & Plair, 1999; Kumar et al., 1996) and the customer's willingness to recommend the company or service provider to others, such as friends and family. The purpose is to reflect the customer's intended action and identify intended repurchase of the product/service. Commitment exists only when the relationship is considered important, when a committed partner wants the relationship to continue indefinitely, and when the partner is prepared to work at preserving it. Indications of relationship commitment include sharing of confidential information, intentions to allocate future investments in the relationship, and level of assets and/or resources already committed to the relationship (Ellinger et al., 1999).

The significance of customer loyalty is that it closely relates to the company's continued survival, and to strong future growth. Hence, for a company to maintain a stable profit level when reaching saturation point, the market is mature, and competition is fierce, a defensive strategy which strives to retain existing customers is more important than an aggressive one, which expands the size of the overall market by inducing potential customers (Kim et al., 2004; Fornell, 1992; Ahmad & Buttle, 2002).

In the case of the Norwegian mobile market, customer loyalty is particularly significant, given the rising customer churn rate as the market matures.

2.1.3 Switching Costs

Although having different typologies related to it, SC is commonly agreed to be a highly effective means of explaining human buying behaviour (Lin & Chou, 2004). As the definition of SC is quite broad, this work finds the definition as made by Caruna (2003:257) where switching costs are seen upon as: "one time costs facing the buyer of switching from one supplier's products to another" to be a fitting description. This view is also shared by Burnham et al., 2003.

Further, Klemperer (1987) presented a notable typology which includes three different SC: learning costs, artificial or contractual costs and transaction costs. Learning costs are defined as the effort needed by the customer to reach the same level of reassurance or facility with a new product as they had for an old one. Artificial or contractual costs are created by deliberate actions of firms, like frequent flyer programs, and repair-purchase discounts. Transaction costs occur when starting a new relationship with a provider and occasionally include the costs necessary to terminate a relationship (ibid).

Burnham et al. (2003) summarized all varieties of SC and offered a modified typology. They proposed three SC: procedural, financial and relational switching costs (Lin & Chou, 2004). Furthermore, other studies provided different classifications. Table 2 summarize examples of notable studies on switching costs.

Name	Year	Typology
Paul Klemperer	1987 1995	Learning costs Artificial or contractual costs Transaction costs
Tore Nilssen	1992	Exogenous switching costs Endogenous switching costs
Mark Colgate and Bodo Lang	2001	Switching costs Relationship investment Availability and attractiveness of alternatives Service recovery
Michael A. Jones, David L. Mothersbaugh and Sharon E. Beatty	2002	Perceived switching costs Interpersonal relationship Attractiveness of alternatives
Thomas A. Burnham, Judy K. Frels and Vijay Mahajan	2003	Procedural switching costs Financial switching costs Relational switching costs

Table 1: Different typologies of Switching Cost (Lin &Chou, 2004:7)

As these typologies indicate, SC can arise for several reasons, and provide a solid basis for subsequent studies. In order to determine which SC's are best suited to the Norwegian mobile market, an analysis of the market is presented below.

2.2 Perceived Switching Costs in the Norwegian mobile market

To effectively manage SC's, operators must distinguish and understand the various types or costs that customers perceive (Yanamandram & White, 2006). SC usually works in two opposite directions, either as a negative or positive effect on the consumer's perception towards any given brand or product, depending on the amount of costs the consumer perceives. If a consumer has a poor impression of a brand, in example pays too much, the service is perceived complex. If there are better alternatives, this might affect the satisfaction and loyalty the consumer has towards the specific brand in a negative way, which in turn might trigger the consumer to switch. As a result, many companies strive to keep the costs of switching high for their customers. By using incentives such as loyalty programs, advertising and offering bonus attributes associated with a product, the company potentially builds high SC, hence "attracting" the customer into repurchasing and preventing retention. In addition, the time spent learning how to use a new service, levels of effort put into it, the complexity and amount of expenses in regards of switching to a new service provider are to many consumers seen as costs, which in turn prevent them from switching

In the Norwegian mobile market, several SC's exist, but even so, the overall SC's are presumed low. For example, partial regional standardization (e.g. GSM) allows customers to switch service providers while keeping a previous mobile handset.

For the existing operators the cost of acquiring a new customer can substantially exceed the cost of retaining an existing customer (Ahn et al 2006; Siber, 1997), hence by increasing SC's the operators intend to prevent any customers from switching. By building "walls" around the customers, the difficulty or hassle of switching becomes so great that many customers find the process of changing supplier to be too much of a burden. To the operator advantage, this increases retention, but on the other hand this could result in negative attitude amongst existing customers where loyalty is more of a "forced" state. When a consumer stays, is he/she then loyal by choice, or is he/she loyal by force as an effect of the high SC's? Interestingly, this questions the use of loyalty in analysis of the Norwegian mobile market, as

consumers are affected by the mobile operators' strategy for building high SC to prevent switching.

Many firms that don't have the possibility or do not want to build high SC for their customers, try to use positive incentives and motivation to increase loyalty. Mobile operators have a tendency to focus heavily on price strategies, thus not building SC, but instead reducing the actual cost of customers in changing providers. This is a result of the increased competition in the market, and has exerted two opposing effects on prices: tougher competition between operators to obtain economies of scale, which increases downward pressure on prices, and diminished possibilities to actually obtain economies of scale. This increases the level to which prices can actually fall. In the dynamic Norwegian market price has therefore become a key area in which the operators focus. By reducing prices, this is perceived to attract new customers.

As an example, Netcom introduced a new pricing model in 1996, where business customers were charged 50% less for calls to other Netcom subscribers. The idea was to pass on costadvantages from bypassing Telenor in the newly deregulated transmission market. Netcom thought that this would benefit the firm because of stronger ties between the customers and the company, essentially creating a lock-in². By increasing the customers' perception of quality, value and expectations, Netcom hoped to increase CS, and eventually increase L. The new price model would also (hopefully) increase switching behaviour amongst competitors' customer, especially price sensitive customers. In the long run Netcom hoped to build loyalty amongst their new customers. Shortly after, Telenor answered and cut the price of calling within their own network³. Since Netcom is much smaller than Telenor, the winner of this pricing strategy was Telenor. This example gives an important aspect of how SC works. It's difficult to understand why a consumer might want to switch because of the many underlying factors. In this case price just wasn't enough. This amplifies the importance of knowing your customers, how they act, think and behave, in order to stay profitable.

When a consumer switches a service provider, there is a great deal of learning, time and effort needed to acquire and adapt to the new procedures and routines. In addition, there is a lot of hassle perceived with switching. For instance, Number Portability is a procedure which takes

⁻

², ³ http://www.konkurransetilsynet.no/iKnowBase/Content/416052/COMPETITION AND WELFARE.PDF

time, as the operators have to exchange information. When switching, the consumer also has to receive a new SIM-card which is operational only with the new operator. This usually takes time, and the customer could potentially be without a mobile phone during this process.

Contractual arrangements have a tendency to eliminate freedom of choice in a buying situation, and describe arrangements between a buyer and seller that ensure that all orders are placed with a particular service provider for some mutual agreed period of time. In the Norwegian market the use of such arrangements is very common, and consumers sign contracts "locking" themselves to a specific operator for a period of time (often 12 months or more). If a customer switches when under a contractual agreement, he/she is most likely to have expenses both towards the old and new operator as a result of the previous contractual agreement.

To sum up, this work identifies SC's in the form of effort, time, bother, complexity, increase of expenses and difficulty when a consumer faces the choice of switching operators in the Norwegian mobile market. In comparison to table 1, the SC's identified in the market are all included as procedural-, and financial costs in Burnham et al., (2003) typology, and as learning -, artificial or contractual- and transaction costs in Klemperer (1987)'s typology. However, as this work uses Burnham et al. (2003)'s study as a predecessor to identify dimensions to SC, their procedural and financial costs are adopted. These in turn consist of economic costs, evaluation costs, learning costs and set-up costs (procedural) and benefit loss costs and monetary loss costs (financial).

2.3 Relationships between Key Constructs

2.3.1 Customer Satisfaction and Loyalty

Satisfaction is shown to be positively related to loyalty, and Fornell and Wernerfelt (1987) found that when a customer experiences an increase of satisfaction, this would increase L. This is consistent with several other studies conducted on the satisfaction-loyalty relationship, where satisfaction is considered to be a key antecedent of customer loyalty, which in turn influences firms' profitability (Bodet, 2007; Anderson et al., 1994; Heskett et al., 1994; Rust & Zahorik, 1993). Further, Gerpott et al. (2001) found in their study of the German mobile telecommunications market that L is highly dependent of CS, where CS is described as the fulfilment of benefits of the range of services.

This leads to the following hypothesis:

H1: There is a positive association between CS and L for a particular provider of mobile services

Interestingly, the telecommunications industries have tended to perform poorly in previous studies of satisfaction⁴. This could be explained by the nature of this industry, where contractual agreements have the effect of "locking in" customers. The operators make the customer dependent on the services, hence being unable to switch without the risk of a perceived loss or cost if switching. In this way, operators can force a customer into being loyal, which in turn could lead to misinterpretation of the customer as satisfied, as a satisfied customers is not necessarily loyal (Yanamandram & White, 2006; Rowley and Dawes, 2000), and dissatisfied customers do not always switch (Yanamandram & White, 2006; Day, 1984; Hirschman, 1970). This is known to be true in service industries such as mobile markets (Fornell, 1992; Singh, 1990). However, consumers tend to react differently to dissatisfaction. Some consumers do not take action at all, while others may complain or switch brands or suppliers (Yanamandram & White, 2006; Richins, 1987). As a result of this, the association between CS and L could therefore be presumed low in mobile markets, in contrast to other industries such as retailing, where Dabholkar & Thorpe (1994) found that store satisfaction had a very positive influence on loyalty (Ruyter, Wetzels & Bloemer, 1997).

19

http://www.theacsi.org/index.php?option=com_content&task=view&id=147&Itemid=155&i=Wireless+Telephone+Service

In addition, it appears that CS cannot always guarantee loyalty, as evidence found by Oliver (1999) show that satisfied customers also tend to defect (Balabanis, Reynolds & Simintiras, 2006).

2.3.2 Switching Costs and Customer Satisfaction

If the supplier chosen by the consumer is perceived better than the other available alternatives, the consumer may stay with the supplier. That is, there is a positive motivation to stay with the supplier. This could be said to be a part of the product offered, especially if it is a service. It can be expected that customers stay with suppliers because of such positive relationships, meaning there is high CS. However, the effect of SC on satisfaction classifies SC as an obstacle and not a motivation, thus influencing customers in a negative way, which in turn could lowers satisfaction and loyalty in the long run. Even so, customers experiencing a high level of satisfaction are likely to remain with their existing providers and maintain their subscription even if SC's exist; hence the SC's perceived could actually work as positive influences on the consumers' satisfaction. The satisfaction will increase as the customer feels that the current operator is better than the other available, even with the existence of SC's. As a result, this work suggests that SC could positively affect CS, hence increase overall satisfaction. As a result of this, the following hypothesis is suggested:

H2 a: Switching Costs (procedural & financial) in the mobile market positively effects satisfaction

However, there is evidence in consumer literature that the costs associated with switching a service provider outweigh the negative effects of the dissatisfaction that customers experience, which results in dissatisfied customers continuing to repeat purchase services (Yanamandram & White 2006; Colgate & Lang, 2001; Panther & Farquhar, 2004). A dissatisfied customer do not have to switch to a new operator, as switching costs make changing difficult or costly (Balabanis et al., 2006; Jones et al., 2000; Jones & Sasser, 1995). In addition, other research states that customer satisfaction, while positively influencing customer loyalty, is not always a sufficient condition, and in some cases, fails to produce the expected effect. Hence, these researchers suggest that it is necessary to analyse other potentially influential factors. It is in this context that the concept of the switching barrier was proposed (Yanamandram & White, 2006; Jones, Mothersbaugh, & Betty, 2002).

Further, it has been demonstrated that switching costs play the role of an adjustment variable in the interrelationship between customer satisfaction and customer loyalty. In other words, when the level of customer satisfaction is identical, the level of customer loyalty varies depending on the magnitude of the switching costs (Yanamandram & White, 2006; e.g., Colgate & Lang, 2001; Jones et al., 2002; Lee & Cunningham, 2001). Interestingly, Balabanis et al., (2006) stated that CS must fall below a certain level for the customers for them to be affected by the existence of switching costs. This implies that switching costs will only have an effect on CS if their level of satisfaction is low, and if CS is high, the effect of SC is non existing, or very low.

As a result of the forgoing arguments one can state that SC do not necessary positively correlate with CS, as even if a customer is dissatisfied, he/she might continue to purchase services and be presumed as a loyal customer. Therefore, SC's might have a negative effect on CS. As a result of this, the following hypothesis is suggested:

H2 b: Switching Costs (procedural & financial) in the mobile market negatively effects satisfaction

2.3.3 Switching Costs and Loyalty

In a relationship between a customer and a supplier Hirschman (1970) made a distinction between "having to be" and "wanting to be" in that relationship, where "having to be" can be seen as a negative reason to stay in a relationship or to remain a customer, while "wanting to be" in a relationship as a positive reason to stay. High SC tends to lock customers to suppliers, thus classifying SC as negative switching barriers. For example, contractual agreements between customer and supplier make it difficult for the customer to switch due to contract-breakage compensation to the supplier. Investments in the supplier by the customer (how much time, money and effort invested in the relationship) is also considered as SC, since it tends to lock the customer to the supplier, especially if the customer has made physical investments in equipment. Investment can be referred to the extent to which the customer invests with the provider. When customers invest further, they will have a stronger affiliation with the provider. The possibility for such a loss makes investments an impetus for SC (Lin & Chou, 2004; Jackson, 1985). In the mobile phone market, customer investment can be further defined as the extent to which customers use the functions of mobile phones. For example,

when the customer utilizes many functions like voice mail, loyalty points or reduced prices, those services may not be transferred across providers (Klemperer, 1987).

Fornell (1992) mentions the effect of financial, social and psychological risk. These risks can occur in a comparison of what you get from the current supplier and the probability that you will get the same utility from other suppliers. Thus, if one perceives high risks in a change of supplier it is more likely that one stays loyal.

As the forgoing arguments state, SC have a dual effect on loyalty. In one way, the customers might be forced to stay loyal as effect of high SC's; in another way customers are loyal by choice as an effect of low SC's. In other words, either way leads to an increase in measurable loyalty, even if the state of loyalty is a forced one. This leads to the following hypothesis:

H3: Switching Costs (procedural & financial) in the mobile market has a positive effect on loyalty

Additionally, this study will test the definition proposed by Caruna (2004) and Burnham et al., (2003) that SC are the onetime costs that customers associate with the process of switching from one provider to another, and adopt Burnham et al.(2003)'s dimensions to further investigate the SC construct.

2.4 Dimensions of Switching Costs

In order to identify the dimensions of SC, six groups of antecedents to SC proposed by Burnham et al. (2003) will be tested: *complexity, provider heterogeneity, breadth of service use, modifications, alternative experience and switching experience.* Separating the various SC dimensions should be beneficial for two reasons. First, the different dimensions are likely to be differentially related to certain consequences in ways that are both theoretically and practically important. Second, different strategies are likely to be necessary to effectively manage different SC dimensions as part of a company's overall retention programme (Yanamandram & White, 2006; Jones, Mothersbaugh and Beatty, 2002). Testing the dimensions will show the explanatory power and effect of these dimensions on the SC term. In addition, a hypothesis suggesting that the dimensions apply to the Norwegian market is proposed:

- **H4:** The SC construct will turn out to have a meaningful substructure that conforms to Burnham et al's dimensions also when tested on Norwegian mobile subscribers.
- 1) Complexity refers to the degree to which a customer perceives a product or service to be complicated to understand or use (Burnham et al., 2003; Rogers, 1995). When a product or service has a variety of functions or is difficult to understand, it is simply viewed as complicated. In the mobile phone market, when a mobile phone provides numerous functions like payment package, ring tone downloading, email, and message services, customers will most likely think switching costs are high. Additionally, when products or services are perceived as more complex, customers rely more on the relationship with the brand and people to guarantee that they receive a quality product or service and to simplify their choices (Burnham et al., 2003; Sheth and Parvatiyar, 1995). Customers occasionally buy a new mobile phone of the same brand because they trust it and know how to use it. Thus, complexity causes higher switching costs for consumers in the mobile market. In the Norwegian mobile market, this could be explained by the extensive product offerings which exist, where operators offer a considerable number of diverse services which the consumers have to use time and effort in learning. In addition, when considering switching providers, the risk of having to learn how to use new complex features might be too high, thus leaving the customer to perceiving the SC too much of a burden. Further, in the complexity of the mobile market pricing structures are so complex that consumers might have difficulty comprehending with them. This, in addition to the risk of loosing previously made down-payments, start up fees and investments in operator-specific assets/attributes increases SC for the consumer. For these reasons the complexity dimension should be a crucial part of perceived SC in the Norwegian mobile market, and the following hypothesis is suggested:
- **H4_1:** Perceived Complexity within the mobile market will be positively associated with SC
- 2) Provider heterogeneity is defined as the extent to which the providers in a market are viewed as different or not substitutable. Provider heterogeneity refers to the extent to which knowledge concerning a provider is applicable to another one (Burnham et al, 2003; Schmalensee 1982). A lack of standardization implied by heterogeneity implies that skills learned for use with one provider may not be applicable with another. In the mobile market, diverse functions are important components for winning customers. When a service markedly differs from others, customers could think that they have higher switching costs if they

switch. Due to the fact that skills learned for use with one operator not easily could be applicable with another, consumers in the Norwegian mobile market might experience higher switching costs. For example, the two largest players in the mobile market (Telenor & Netcom) do not differ too much in what types of services they offer, hence they are substitutable. When operators are seen as heterogeneous, consumers are more likely to perceive strong bonds of identification with them. Since such bonds must be broken when one switches operator, this increases SC. If an operator uses incentive towards the customers, these are lost for the customer if/when he/she switch operator. For these reasons, heterogeneity in the market should be an important predecessor to SC, and the following hypothesis is suggested:

- **H4_2:** Heterogeneity within the mobile market will be positively associated with SC
- 3) Breadth of service use of a provider is defined as the extent to which consumer employs a variety of product types, features, and functions offered by a provider (Burnham et al., 2003; Ram & Jung 1990). The prospect of switching multiple services increases the economic risk associated with switching operator not only one service is at risk of failure, but multiple, often independent or linked services are placed in jeopardy at once. According to Blattberg & Deighton (1996), when considering switching providers, consumers who use more products are likely to perceive greater economic risk due to the multiple changes being made at once (Burnham et al., 2003). In addition, customers often need to evaluate or compare alternative providers on a greater number of attributes (ibid). In addition, customers need to set up greater number of new products or features with a new provider (ibid), as a new relationship has to be built up. Finally, the customer needs to invest in learning how to use greater number of new products or features (Burnham et al., 2003; Schmalensee, 1982).

In addition to the costs described above, there is often a very real financial cost associated with switching from one provider to another. The greater the breadth of services used, the more likely the customer has accumulated financial benefits. As a result of this, the breadth of use of a consumer will increase SC parallel with the number of services the consumer uses, which leads to the following hypothesis:

H4_3: Breadth of service use within the mobile market will be positively associated with SC

- 4) Modification of a product is defined as the extent to which the consumer has adapted the products or service offered so that it better serves individual needs (Burnham et al., 2003). Mobile operators often offer aspects of their products and services that can be modified by consumers. For example, customers can build and personalize long personal calling programs such as "fri familie". Consumers face great set-up SC as they invest efforts in modifications and increase the number of process that would need to be replicated upon switching by the same logic, learning costs would also increase. Modification is found to often require greater communication with the operator, and the personal interaction and the resultant matching between the consumers needs and the products and services provided may lead to higher personal and brand identification with the provider (Burnham et al., 2003; McCracken, 1986), thus creating higher SC. As a result, the higher degree of modification, the higher the SC's, which leads to the following hypothesis:
- **H4_4:** Modification within the mobile market will be positively associated with SC
- 5) Alternative experience is defined as the extent to which the consumer has previously employed the products, features and functions of competing service providers (Burnham et al., 2003). Any experience with alternative operators' will lead to increased expertise within the market. This expertise reduces the economic risk associated with switching by reducing the uncertainty associated with using a different service provider. Greater expertise is also associated with more well developed mental structures (Burnham et al., 2003; Alba & Hutchinson 1987) that assist the consumer in encoding and retrieving the information needed to evaluate the products offered by competing providers, thus decreasing any procedural costs. Finally, well developed mental structures also facilitate new learning (ibid). Thus, consumers with greater prior experience with alternative providers are likely to perceive lower learning costs even when they must learn new skills or scripts. As Norway has a long history of advanced mobile technology, consistent function upgrades and innovative services, many customers have previous experience with a numerous of products. This implies good experience with various services attributes. Customers might even buy services from two separate operators, making them experienced in the alternatives in the market. As a result, SC will decrease as alternative experience increases, which lead to the following hypothesis:
- **H4_5:** Alternative experience within the mobile market will be negatively associated with SC

6) Switching experience is defined by Burnham et al. (2003) as the extent to which the customer has switched between providers in the past. Increased switching reduces switching costs by increasing the customer's familiarity with the process of both switching and learning to use new providers (Burnham et al., 2003; Nilssen, 1992). People are affected by past experiences. When accustomed to something, individuals are inclined to accept it as the conventional thing. Customers with experiences of switching new mobile providers could easily accept a new one and consider the switching costs as not very high. As switching experience increases, this will decrease SC's, which leads to the following hypothesis:

H4_6: Switching experience within the mobile market will be negatively associated with SC

Hypotheses H4 – H4_6 are suggested in consistent with the study performed by Burnham et al (2003), in order to investigate whether the dimensions of SC provide an accurate description of what affects SC.

It is also important to point out that the dimensions to SC are measured as regarded to switching attitude. In example, when investigating how product complexity works towards SC, the consumer is asked to consider how difficult it is to understand the services available. High difficulty implies a complex product or service, which in turn could procure switching behavior. This will give an indicator of how well product complexity affects switching attitude and how crucial complexity within the mobile market is when looking at SC's. Figure 1 gives an overview of the dimensions to SC as suggested:

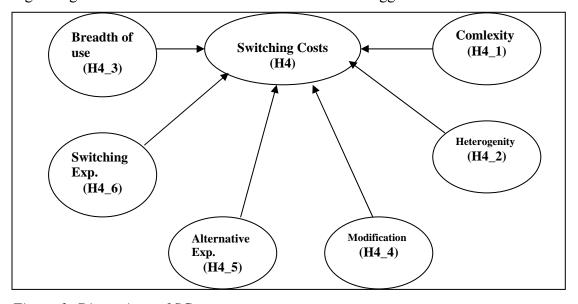


Figure 1: Dimensions of SC

The SC construct itself is consistent with the construct used in the causal model, where time and effort, how complicated it is to switch, expenses in regards of money and how much bother it is to switch, together make up the construct.

2.5 The Causal Model

The main purpose of this work is to measure the effect of switching costs on the satisfaction and loyalty constructs as experienced by the consumers and gauges the anticipated consumption experience. In order to do this, switching costs must be added to the established theoretical framework together with customer satisfaction and loyalty.

Figure 2 gives an overview of the causal model, and the relationships between the main constructs in the present work. With the previous research as a basis, the constructs have been defined, and the relationships between them discussed in order to generate hypothesis.

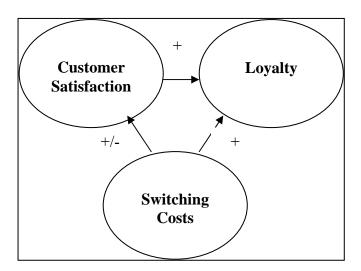


Figure 2: The causal model

The +/- signs hypothesize if the "impacts" between the constructs are negative (-) or positive (+). By following the theoretical arguments of Homburg and Bruhn (1998), where the constructs of customer retention, CS and L are distinguished as casual links (Gerpott et al., 2001), this work adopts this view and further see CS, L and SC as separate of each other. As the model shows, CS is a direct determining factor to L, and SC is presumed to have an effect on both CS and L.

3.0 Method

A questionnaire aimed at measuring the three main constructs CS, SC and L together with dimensions of SC was constructed. The sample, questionnaire and properties of the measurement model are described in the following.

3.1 Sample and demographics

The sample was drawn from a web panel provided by Norsk Gallupp AS (NG, 2008). This panel consisted of about 50000 Norwegians and was controlled with regards to deviances from the normal population. Only mobile phone users that paid their own bill were included in the sample (498 respondents were excluded as they did not pay their own mobile bills). 2800 were invited to participate, of these 1004 filled out the questionnaire and fulfilled the sampling criteria (36%).Of the 1004 respondents 518 were females and 486 were males. The statistical bureau (SSB, 2008) recruited the participants and conducted the study. The participants did not get any reward for their participation. Table 2 outlines the study's descriptive statistics.

Gender (n=1004)	%	%*
Male	48,4	49,5
Female	51,6	50,5
Age (n=1004)		
15-29	24,4	19
30-44	27,7	21,8
45-59	26,3	19,6
60+	21,6	20,5
Place of living in		
Norway (n=1004)		
Oslo/Akershus	21,9	
Indre Østland	13,2	
Sørkysten	17	
Vestlandet	22	
Midt-Norge	15,2	
Nord-Norge	10,6	
Mobile phone usage		
area		
Work	3,8	
Personal use	95,7	
Emergency	0,4	
Other	0,1	

Table 2: Demographics (* is taken from Statistisk sentralbyrå)

Table 2 further demonstrates that almost all respondents use mobile phones mainly for personal communications. This was expected, as it is important to underline that in the survey, any respondent which had mobile phone expenses paid for by his/her employer to be excluded from the survey. Only 3.8 % of the respondents which participated used their mobile phone for work related tasks. In addition, the groupings of age show that the respondents are evenly distributed.

The majority of respondents had only one mobile phone (63.2 %), but as many as 30.1 % had two phones. Nokia and Sony-Erickson were the two dominating handset brands. The remaining used various other handset brands (e.g., Samsung, Htc, and Siemens). 96.2 % reported that this was not their first mobile phone, hence implying that the consumers in the mobile market have a relatively good knowledge and experience of mobile handsets. Further analysis demonstrates that a respondent in average talked for 14 minutes per day over the mobile phone, sent an average of 6 text-messages (SMS) per day and spent NOK 316 per month. Thus, the monthly average revenue per user (ARPU) of the obtained data set is identical to the average ARPU in the Norwegian population (NA24, 2007). This further confirms the accuracy of the obtained data sample.

While the sample is drawn from a web population, and thus not representative for the population as a whole, the descriptive statistics concerning demographics and usage suggests that the sample is not seriously skewed.

3.2 Questionnaire and construct measurement

The questionnaire items were taken from previous studies. This was done not just to validate the results, but also to get reliable questions to use in the data analysis.

However, the questions were translated from English into Norwegian by the author. The translation was checked by two researchers at Telenor R&I. All items were answered by using a 7 point Likert scale, where respondents specified their level of agreement to the statements about all the constructs in the model (1-agree, 7-disagree). The use of a high number of scale

29

⁵ This part of the descriptive statistics comes from the mobile phone usage – part of the survey. These self-reported numbers were averaged.

⁶ http://arkiv.na24.no/NewsItem.asp?ItemID=33937&Title=Telenor+er+dyrest+i+Norge

categories and multiple questions per construct is expected to give valid data. All final questions were asked in random order.

3.2.1 Measuring customer satisfaction

The following items (questions) were used to measure customer satisfaction:

- 1. I am satisfied with my current mobile operator (Julander & Söderlund, 2003; Shin & Kim, 2007)
- 2. My current operator meets all the requirements that I see reasonable (Julander & Söderlund, 2003; Shin & Kim, 2007)
- 3. My mobile operator satisfies my need (Julander & Söderlund, 2003; Shin & Kim, 2007)
- 4. What I get from my mobile operator falls short of what I expect from this type of operator (Turel & Serenko, 2006)

After conducting a factor- and reliability analysis on the questions using SPSS 16.0 for Windows, question 4 was eliminated due to low factor and alpha value The Alpha coefficient for the CS construct was 89

3.2.2 Measuring customer loyalty

The following items (questions) were used to measure customer loyalty:

- 1. I will continue using this mobile operator (Telenor Loyalty study; Ayidin, Øzers & Arasil, 2005)
- 2. I recommend this mobile operator to people (Telenor Loyalty study; Aydin et al., 2005)
- 3. I encourage friends who plan to switch mobile operator to choose the one I use (Telenor Loyalty study; Aydin et al., 2005)
- 4. If I had to do it over again, I would make the same choice of operator (Bodet, 2007)
- 5. I intend to continue to be customer of this operator (Julander & Söderlund, 2003)
- 6. Next time I shall need services of the supplier I will buy it from him/her (Julander & Söderlund, 2003)

7. The probability that I will renew my contract with current operator is very high (Bodet, 2007)

After the factor- and reliability analysis, question 3 was eliminated due to low factor and alpha value. The Alpha coefficient for the loyalty construct was .91.

3.2.3 Measuring switching costs

The following items (questions) were used to measure SC:

- 1. It would take a lot of effort changing supplier (Shin & Kim, 2007)
- 2. It would take a lot of time changing supplier (Shin & Kim, 2007)
- 3. It is complicated for me to switch supplier (Shin & Kim, 2007)
- 4. There are hassle procedures to switch service provider (Shin & Kim, 2007)
- 5. It would take a lot of time gathering information about other suppliers (Shin & Kim, 2007)
- 6. Changing operator would increase expenses for me (Jones, Mothersbaugh & Beatty, 2000)

The Alpha coefficient for the SC construct was .86.

An exploratory factor analysis (EFA) was conducted on the constructs with principal component and varimax rotation. The different measures extracted show that the data is good for factoring. Further, the Kaiser-Meyer-Olkin measure is 0,965, which is superb. This implies that the correlations are compact and reliable. Bartlett's measure is highly significant (p<0.001).

The analysis shows that the data consist of three components. These are named accordingly to the dimensions they measure, which are L, CS and SC. The three constructs are shown in table 3, and exhibit good unidimensionality, reliability and validity; all factor loadings exceed 0.5, R² values is greater than 0.4 for 13 of 15 items, the critical ratio of every measurement item exceed 1.96 (values varied between 15,84 and 37,63) (Yanamandram & White; Anderson & Gerbing, 1988). In addition, the correlation between factors were lower than 0.80.

			Factor	Coefficient
Scale/item	Mean	Std.dev.	Loading	α
Overall Satisfaction				
I am satisfied with my current mobile operator	2,29	1,386	0.90	
2. My current mobile operator meets all the requirements that I see reasonable	2,74	1,474	0.85	0.89
3 .My mobile operator satisfies my needs	2,26	1,371	0.82	
Loyalty				
1. I will continue using this mobile operator if I am to buy a new mobile phone	2,57	1,646	0.89	
2. I will continue using this mobile operator	2,38	1,580	0.88	
3. If I had to do it over again, I would make the same choice of mobile operator	2,58	1,673	0.87	
4. Next time I shall need services of an operator I will buy it from my current	2,79	1,669	0.77	0.91
5. The probability that I will renew my contract with current provider is very high	2,53	1,717	0.75	
6. I recommend this service provider to people	3,28	1,885	0.71	
Switching Costs				
1. It would take a lot of effort changing supplier	4,78	1,853	0.85	
2. It would take a lot of time changing supplier	3,74	1,856	0.83	
3. There are hassle procedures to switch service provider	4,39	1,980	0.79	0.86
4. It is complicated for me to switch supplier	5,09	1,809	0.79	
5. It would take a lot of time gathering information about other suppliers	3,74	1,856	0.52	
6. Changing operator would increase expenses for me	4,52	1,938	0.50	

Table 3: Estimated loadings for the total set of measurement items

3.2.4 Dimensions of switching cost

The dimensions of SC in this work as shown in figure 1 form a formative measurement model, which means that there is no need for inter-item correlation between the variables. This is due to the fact that the different dimensions in the model affects the SC construct independently of each other.

To measure the dimensions of SC as proposed by Burnham et al., (2003), a replication of the questions they used in their study were adopted. The questions were measured where respondents specified their level of agreement to what extent, on the basis of their perceptions, they agreed or disagreed on the following questions:

	Factor	Coefficient
Scale/item	Loading	α
Complexity		
I would have to know a lot to take full advantage of the options/programs offered by service providers	0.56	
2. The offerings in this industry are difficult to understand	0.70	0.68 (.70)
3. This service is complicated in nature	0.68	
Heterogeneity		
1. The quality of service varies a lot between different service providers in this industry	0.56	
2. I could be using a competing service provider and not notice much difference	0.54	0.51(.72)
3. Different service providers in this industry offer very different programs/features	0.41	
4. It really doesn't matter what service provider I use, they are all pretty much the same	0.53	
Breadth of use		
1. I use the service offered by my provider in many different ways	0.78	
2. I have used a variety of my service providers services	0.75	0.80(.87)
3. I currently use different features that are offered by my service provider	0.73	
Modifications		
1. My service is personalized in some way	0.88	
2. I set up my service to use it as I want to	0.56	0.80(.92)
3. I have put effort into adapting my service to meet my needs	0.73	
Alternative Experience		
1. I have tried the service offered by other service providers	0.75	
2. I am familiar with the quality of service that other service providers offer	0.55	0.66(.74)
3. My experience with other service providers is limited	0.58	
Switching Experience		
1. I have switched between service providers a lot	0.73	
2. I occasionally try other service providers	0.70	0.73(.65)
3. How many competing service providers have you tried the last two years?	0.64	

Table 4: Switching Cost dimension construct measures

Burnham et al., (2003) found that the scales in table 4 demonstrated good reliability (coefficient alphas ranging from .65 to .92), as well as convergent and discriminant validity. Their alpha values are seen in parenthesis.

However, in order to investigate the measurement properties of the items in the questionnaire in this work, a factor analysis was performed. This is a multivariate statistical method which can describe the underlying relationship between the variables, thus clustering them into different factors. This will give different components, and identifies their "dimension" to se if they respond to the same construct/item.

After conducting the principal component analysis of the items used in the survey (in Norwegian), reliability was significantly increased for the complexity dimension by elimination of the question: "A salesperson selling this kind of service needs to know a lot to do a good job". In addition, as seen in figure 3, the coefficient alphas in this work ranged from a low .51 to .80, which is lower (=worse) than the result achieved in the Burnham et al., (2003) study.

The results from table 4 further show that factor loadings are significantly lower for this work than that of Burnham et al., (2003), thus questioning the explanatory power and the use of the dimensions in this work.

In conclusion, the six constructs in table 4 exhibit acceptable unidimensionality, reliability and validity; factor loadings exceed 0.5 for all items but one, R² values is greater than 0.4 for 17 of 24 items, the critical ratio of every measurement item exceed 1.96 (values varied between 5,38 and 16,75) (Yanamandram & White; Anderson & Gerbing, 1988). Further, the correlation between factors were lower than 0.80.

4.0 Analysis and results

This chapter presents data, which has been collected through the questionnaire. It also presents the analysis, which has been done using the data, the proposed hypothesis, and finally the results of hypothesis testing.

4.1 Analysis of causal links

In order to test the models and hypotheses put forward, structural equation modeling (SEM) was found to be well suited. The purpose is to simultaneously test the impacts of the constructs in the two models to see how far the model corresponds to the empirical data. Hence, testing the basic model designed to capture the indicator-based latent variables addressed in the works cause-effect hypotheses. The SEM is intended to reflect the cause-effect relationships between the variables, and the approach involves positing a model, typically represented by a graph, computing a covariance matrix for the variables in the model as a function of unknown parameters, and then estimating these parameters from the observed covariance matrix of actual data, usually by means of maximum likelihood.

The present work employed a confirmatory causal analysis test of the system of causal relationships defined by hypothesis **H1 – H3**, and the relationships defined by hypotheses **H4 – H4_6** using SEM with AMOS 16.0 for Windows.

4.1.1 The causal model

The first objective of this work was to examine the role of switching costs towards customer satisfaction and loyalty. Figure 3 gives details of the SEM model calculated in accordance with the 3 effect assumptions. The figure shows two types of variables, latent and manifest variables. Both the manifest variables and the latent variables are observed. Some of the latent variables are error terms, for instance, the score for q29_35 consists partly of the CS construct and partly of an item unique error (e3). Both CS and e3 are latent variables estimated. The error term cs_e is called a residual error. This is not an error variance, but a residual; it shows what is left when one tries to explain this latent variable, which here is represented by SC. Further, the SC construct is exogenous (independent) and the L and CS constructs are

endogenous (dependent). The results seen in figure 3 are all standardized values, and a maximum likelihood method was used.

The arrows pointing from latent constructs to the measurement variables reveal the factor loading of the indicator on the construct.

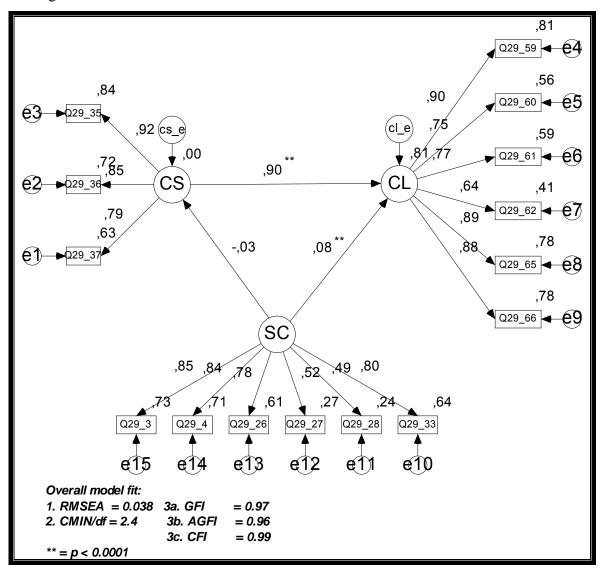


Figure 3: Standardized solution of the empirical causal model

Common test criteria for an overall model are the following (Homburg & Baumgartner, 1995:165-172 in Gerpott et al., 2001):

- 1. a root mean squared error of approximation (RMSEA) that should not be above 0.05;
- 2. a ratio of χ^2 model-fit statistics by degrees of freedom that should not exceed 2.5;
- 3. goodness of fit indices, and particularly (a) the goodness of fit index (GFI), (b) the adjusted goodness of fit index (AGFI), and (c) the comparative fit index (CFI), each of

which has to exceed a threshold value of 0.9 if a model is to be classified as fitting the data well.

As can be seen from figure 3, all three quality criteria for the model are below the highest recommended value, or above the minimum suggested values. This means that the model in figure 3 can be classified as fitting the data well.

The quality of the model is further classified as acceptable if: (a) the squared multiple correlation for each endogenous variable (to be explained) – in other words, for CS and CL in the model – is ≥ 0.4 (Gerpott et al., 2001), and (b) each factor reliability must be ≥ 0.5 (Yanamandram & White, 2006) and (c) the average factor variance explained must be ≥ 0.5 (Gerpott et al., 2003). The model in figure 3 meets requirement (a) for all indicators and (b) for 14 of 15 indicators (the exception is variable Q29_28), and requirement (c) for all indicators.

Overall, the quality of the model can be said to be satisfactory.

A critical aspect in the theoretical reasoning is the separation of /ability to separate CS and L. Therefore, in spite of the good fit of the data with the causal model shown in figure 3, a test of how much better an alternative model in which these two variables or their indicators were combined to form a new construct was done in order to see how this affected the data. This alternative model was compared against the model in figure 3. The RMSEA value increased from 0.038 to 0.067 and the χ^2 /df ratio increased from 2.4 to 5.5 in the revised model making it worse than the original, hence confirming that it is both possible and necessary to retain the proposed separation of the constructs L and CS. This finding is supported in the work of Gerpott et al. (2001), who also found the separation of L and CS to give a model that better fit the data.

4.1.2 Dimensions of Switching Costs

The second objective was to identify dimensions to switching costs by using an empirical example based on the mobile market in Norway. Figure 4 gives details of the SEM model calculated in accordance with the 6 dimensions suggested. The arrows pointing from latent constructs to the measurement variables reveal the factor loading of the indicator on the

construct, as in figure 3. In addition, the arrows pointing between the dimensions of SC show how much each dimension correlates with another dimension.

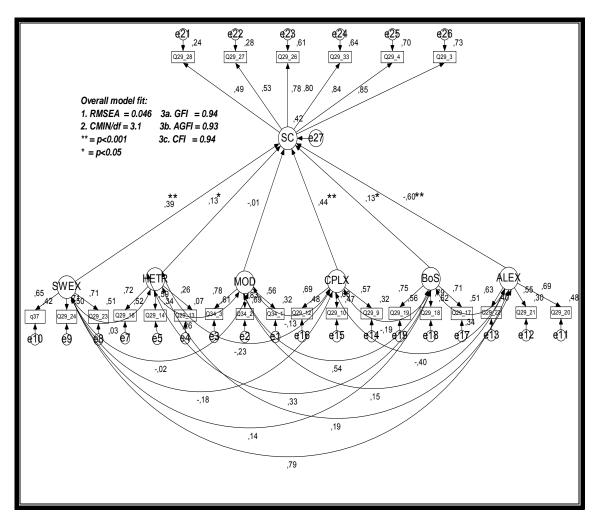


Figure 4: Standardized solution of the dimensions to SC's model

As can be seen from figure 4, the first and third quality criteria for a SEM analysis are fulfilled. The RMSEA has a value of 0.046, which do not exceed the value of 0.05. The GFI, AGFI and CFI fit are above the minimum suggested values, however a value of at least 0.95 is required to judge the models fit as "good" (Yanamandram & White, 2006; Holmes-Smith, Coote and Cunningham, 2004). The second criteria are not fulfilled, as the χ^2 /df ratio is 3.1, which exceed the value of 2.5. As a result of the poor model fit, the model residuals and the modification indices suggested in AMOS 16.0 for Windows were inspected for large discrepancies or obvious misfits. No obvious and large discrepancies were found. Thus, it was concluded that the relative low model fit was due to a generally weak measurement model.

However, even though the model has a poor fit, it is accepted as most of the quality criteria's are above critical values.

Overall, both the causal model and dimensions to switching costs are accepted as models which fit the data, hence allowing the hypotheses to be discussed.

4.1.3 Hypotheses

In table 5, the results with SEM shows that for the causal model, the relationship between customer satisfaction and loyalty (**H1**) and the relationship between switching costs and loyalty (**H3**) were supported, while no relationship between switching costs and customer satisfaction (**H2**) was found. This is due to the fact that no significant beta was found to support this hypothesis.

As for the SC model suggested by Burnham et al., (2003), this was replicated in this study, and the SC construct has a meaningful substructure that conforms to the dimensions also when tested on Norwegian mobile subscribers (**H4**).

Complexity (**H4_1**) within the mobile market and alternative experience (**H4_5**) are identified and supported, as significant betas with correct signs were found.

Heterogeneity (**H4_2**) within the market and a breadth of service use (**H4_3**) are also identified as dimensions to SC and supported as significant betas with correct signs were found. For switching experience (**H4_6**), no negative effect towards SC's is found, hence leading the hypothesis to be rejected.

The modification dimension (**H4_4**) is also rejected, as no significant beta with correct sign was found.

Hypotheses	Estimates	S.E	Result
Causal modell			
H1 (CS>L)	0,901**	0,041	Accepted
H2 (SC>CS)	-0,034	0,024	Rejected
H3 (SC>L)	0,08**	0,017	Accepted
Dimensions of SC			
H4	-	-	Accepted
H4_1 (Cplx>SC	0,43**	0,058	Accepted
H4_2 (Hetr>SC)	0,125*	0,118	Accepted
H4_3 (BoS>SC)	0,129*	0,036	Accepted
H4_4 (Mod>SC)	-0,008	0,047	Rejected
H4_5 (AltE>SC)	-0.604**	0,08	Accepted
H4_6 (SwE>SC)	0,389**	0,098	Rejected
*p<0.05; **p<0.001			

Table 5: The results of SEM

4.2 Results

4.2.1 The causal model

As can be seen from both table 5 and figure 3, the causal link postulated in **H1** is in line with the empirical observations. Thus, an increase in satisfaction by one standard deviation leads to a highly significant increase in loyalty by 0,901 standard deviations. Nevertheless, although there is no doubt that satisfaction with a mobile operator has an outstanding influence on loyalty to a mobile operator, the satisfaction variable cannot completely explain the loyalty variance as the analysis gave evidence for separation of the CS and L constructs.

H2 (a) and (b) is however rejected, as the relationship between SC and CS is not significant. This finding is consistent with the study of Patterson & Smith (2003) where they concluded that there were no significant interaction effects between satisfaction and switching costs. In addition, they further stated in coherence with Jones et al. (2000) that satisfaction play a lesser role when exit-barriers are high and a greater role when they are low. The survey shows that the overall CS is high, and the perceived SC (financial and procedural) is low in the Norwegian market, hence acting in accordance with this statement.

The hypotheses suggest that there is either a negative **or** positive connection between SC and CS. However, if there is both a negative **and** a positive connection between the constructs, this would imply the possibility of a "zero-connection", where the positive and negative connection level each other out. In other words, the effect of switching costs on satisfaction will only show when there is low satisfaction and high SC in the market. When CS decreases,

customers might start considering the propensity to switch, thus becoming more aware of the switching costs they face.

H3 is significant, where an increase in SC leads to a significant, but small increase in L by 0.08 standard deviations. Thus, when SC are perceived by the customer, this will increase the loyalty the customer has towards the operator, but this could be both false and true loyalty, as false loyalty groups may exist, including defectors, mercenaries and hostages (Yang & Peterson, 2004; Jones & Sasser, 1995). Interestingly, Yang & Peterson (2004) found a direct positive effect of SC on L, however this effects was insignificant. The finding in this work is therefore inconsistent with previous findings on the SC – loyalty link (e.g. Yang & Peterson, 2004; Fornell, 1992; Lee et al., 2001).

4.2.2 Dimensions of Switching Costs

For the dimensions of SC, **H4** is accepted as the model quality is found to be satisfactory. Thus, the SC construct has a meaningful substructure that conforms to Burnham et al's dimensions when tested on Norwegian mobile subscribers. This further allows the evaluation of hypotheses **H4_1** to **H4_6**:

For **H4_1** the results provide support for the relationship proposed between complexity and SC. An increase in complexity within the mobile market by one standard deviation leads to a highly significant increase in SC (procedural and financial) by 0,43 standard deviations.

For **H4_2** the results provide support for the relationship proposed between heterogeneity and SC. An increase in heterogeneity within the mobile market by one standard deviation leads to a significant increase in SC (procedural and financial) by 0.125 standard deviations.

For **H4_3** the results provide support for the relationship proposed between breadth of service and SC. An increase in breadth of service within the mobile market by one standard deviation leads to a significant increase in SC (procedural and financial) by 0.129 standard deviations.

For **H4_4** the results provide no support for the relationship proposed between modification within the mobile market and SC, as no significant beta was found. The reason for this rejection could be a result of weak measurement of the "modification" construct.

Modifications are defined as the extent to which the consumer has adapted the product or services offered so that it better serves individual needs. In a developed market such as the Norwegian mobile market, modification of the services may be becoming alike due to technology convergence. Therefore, the service offering should be outstanding and different enough so that customers are willing to modificate their services.

For **H4_5** the results provide support for the relationship proposed between alternative experience and SC. An increase in alternative experience within the mobile market by one standard deviation leads to a significant decrease in SC (procedural and financial) by -0.601 standard deviations.

For **H4_6** the results provide no support for the negative relationship proposed between switching experience and SC. However, an increase in switching experience within the mobile market by one standard deviation leads to a significant increase in SC (procedural and financial) by 0.389 standard deviations. The reason for this rejection could be a result of weak measurement of the "switching experience" construct.

According to the results from the dimensions of SC's model, complexity, heterogeneity, breadth of service use and alternative experience are the dimensions which stand out, and significantly affect switching costs. This finding corresponds to previous literature (e.g. Burnham et al., 2003, Lin & Chou, 2004). Interestingly, when looking at the correlations between the dimensions, one can see that complexity and alternative experience negatively correlate and that switching experience and alternative experience are positively correlated. The results of this work further imply that switching costs appear to be an appropriate concept to analyze customers' attitudes in the Norwegian mobile phone market.

5.0 Discussion and Conclusion

This chapter presents a discussion with implications and limitations, and the final conclusion of the work as a result of the analysis and results.

5.1 Discussion

The primary purpose of this work was to investigate how switching costs affect customer satisfaction and loyalty in the Norwegian mobile market, and what underlying dimensions to switching costs were most crucial.

The results support the importance of satisfaction in the loyalty process. Customer satisfaction has been shown to be a reliable antecedent of loyalty in the Norwegian mobile market consistent with previous research in service contexts (i.e. Patterson & Smith, 2003; Bolton, 1998; Mittal & Kamakure, 2001; Patterson et al., 1997) thus reflecting the importance it is accorded as a construct in the loyalty literature (Patterson & Smith, 2003). Consistent with this prior research, CS should remain a primary strategic focus of service providers due to its strong impact on loyalty, where CS and L are significant, and non existing impact with SC, where CS and SC are found to be insignificant when CS is high.

The practical implication of SC may, however not be as straightforward. One possible explanation may be that firms should build up various costs as a strategy to retain existing customers if lack of satisfaction with the core service offerings appears. Such recommendations identified by using Burnham et al. (2003)'s typology are increased focus on attracting customers with limited experience and increasing the general complexity perception. Such a strategy could however be more fitting for firms who generally satisfy their customers but want some sort of insurance against defection if their customers experience occasional but probably unavoidable service failure (Jones, M & B; Tax, Brown & Chandrashekaran, 1998). However, creating SC instead of satisfaction could fail in the long run, particularly if dissatisfaction is lasting rather than temporary, and if the nature of SC's is such that customers feel entrapped. There is always the possibility that dissatisfied customers remain due to high SC, but instead engage in company focused sabotage such as negative word of mouth.

5.1.1 Implications

Surprisingly, this work indicates that switching costs do not impose a significant effect on customer satisfaction. It did however find a significant effect of switching costs on loyalty. The lack of significant effect for SC on CS may be explained, at least in part, by the conflicting roles of SC on the one hand, and satisfaction on the other. These two sets of variables may act at cross purposes to one another, eventually creating a "zero-connection". Jones, Mothersbaugh & Beatty (2000) found that the significant interactions of switching barriers in their study only emerged as consumers became less satisfied with the core services offered, which led them to conclude that only when satisfaction falls below a certain level do consumers even begin to consider or be affected by the existence of switching barriers.

SC's are essentially negative components – elements that mobile operator customers could perceive as obstructions to effective use of mobile services. In fact, some research provides evidence that SC reduces CS (Yang & Peterson, 2004; Hauser et al., 1994). On the one hand, CS potentially contributes positively to loyalty, and this contribution is provided through dimensions of which customers perceive satisfaction (in example customer services and attributes). The opposing forces created by different motivations of SC and CS could lead to the lack of significant interaction. This view is supported by Yang & Peterson (2004). Further explanation may lie in the nature of the mobile market and the characteristics of mobile customers. A high degree of marketing and easy access to information for the consumer has made it relatively easy to identify competitive operators and to compare them. Furthermore, because the study shows most mobile customers are relatively well-educated and have been using mobile phones and services for years, they may be able to handle many of the hassles involving the issues related to switching costs. Thus, the overall effect of SC on CS diminishes and appears not to be significant.

In addition, Yang & Peterson (2004) found that when satisfaction is above average, customers' chance of finding a better service from another provider is likely to be low. Therefore, increase of SC's will reduce their net utility from the switching action, which in turn prevents them from switching. On the contrary, when satisfaction is below average, customers tend to consider that their losses are higher, thus implying that a loss weights more than a gain. As a result, customers potentially overestimate the losses resulting from the existing operator. Under this situation, the SC, no matter how high, is less important compared to the potential loss, which in turn makes the effect of SC insignificant (ibid).

The significant interaction between SC and loyalty provide understanding of the interplay between the two constructs. However, as the impact is small, this may partly be the result of that in some instances, even when customers are satisfied, some customers have an innate propensity to switch as a way of fulfilling their need for stimulation (Patterson & Smith, 2003; Steenkamp & Baumgartner, 1992), but may avoid doing so because of the costs associated. In other words, SC's act as disincentives to discontinuing a relationship. Another reason for SC to have a small effect on loyalty may be the result of the high degree of satisfaction in the mobile market, which as stated above, weakens the effect of SC's. SC's for mobile customers are perceived low as a result of high satisfaction at the present moment, but at a state of dissatisfaction the effect of SC would probably have a higher degree of influence.

By using Burnham et al., (2003)'s typology this work studied six dimensions of SC. An examination of the differential impacts shows that each dimension does not necessarily have the same effect or explanation towards SC's. The dimensions which stand out are complexity, alternative experience and switching experience. SC's may be best managed by increasing the consumers' perception of product and service complexity, thus increasing SC's. One tactic is to make customers aware of the varied features of the service offered. This could be done by adding inserts along the monthly bill, sending customer e-mails or conducting follow up calls to customers describing new services and additional features of the service already offered, along with description how to use these new offers.

As expected, SC's are in general lower for consumers with alternative experience. The mobile operators in the market should therefore try to attract customers with limited experience, and not target avid switchers who have vast experience and are more likely to switch again in the future.

Managers must start by recognising the multidimensionality of SC. The objective should be to determine how best to create SC that foster loyalty and lower churn rates, but SC's must be managed carefully; when possible they should be reduced for potential customers, but for existing customers they be made high enough to discourage switching but not so high that they are perceived as burdensome (Burnham et al., 2003)

5.1.2 Limitations and future research

This work is subject to several caveats. First, there are tremendous controversies over the definitions of SC, CS and loyalty. Although established measures from other studies were adopted and verified, other measurement versions may yield different results. For instance, loyalty satisfaction and switching costs all may consist of multiple dimensions (Burnham et al., 2003, Lin & Chou, 2004, Yang & Peterson, 2004; Dick & Basu, 1994; Jones, Mothersbaugh & Betty, 2002; Oliver, 1999; Sweeney & Soutar, 2001; Woodruff, 1997). Thus, further studies may be needed as a means of adopting multiple dimensional measures to verify the results.

Second, the samples were drawn from a web panel of 50000 respondents, which exclude any respondents which do not have access to a computer, and further imply the respondent of having a better understanding of technology. This, in turn, might effect the perception of the mobile market as complex and overrepresented by "expert" users.

Third, the mobile industries are known to have low switching costs (Kim et al., 2004). In other industries such as legal services, management consulting and medical services, SC are higher and may play a greater role (Yang & Peterson, 2004)

Fourth, this work measured different dimensions of SC by the use of Burnham et al. (2003)'s typology, however because of the complicated nature of SC, future studies are needed to further explore the dimensions of SC in the setting of mobile markets. SC may influence CS and loyalty through other costs and dimensions than those suggested here.

Fifth, the measures were collected at a single point in time. Studies in services have consistently shown behavioural intentions do not always equate to actual behaviour (Patterson & Smith, 2003). As such, the results may be inflated by the capture of intentions rather than actual behaviour. Further studies examining SC, CS and loyalty in the Norwegian mobile market might therefore consider a longitudinal study to overcome this weakness and capture actual behaviour. In addition, as the findings indicate no significant direct interaction between CS and SC, future studies should also look at the moderating effect of SC on the CS- L link.

Finally, the average level of satisfaction was quite high in this work, indicating that highly dissatisfied customers may have been underrepresented. Unfortunately, this limitation may be difficult to overcome as dissatisfaction often leads to defection, meaning the survey responses may reflect perceptions of a new service provider in some instances

5.2 Conclusion

The results, evoked from a Web-based survey of mobile operator customers, indicate that in the relationship between switching costs, customer satisfaction and loyalty, mobile operators should still focus primarily on customer satisfaction, as it is believed that the effect of switching costs only apply when satisfaction is low. As for the dimensions of switching costs, the most crucial dimensions identified suggest that in order to use SC's as means of retaining customers and increasing loyalty, operators should increase awareness of complex features and services towards existing customers, and when attracting new customers focus primarily on the ones with limited previous experience.

6.0 References:

Ahn, J. H., Han, S-P., & Lee, Y-S. (2006). Customer churn analysis: Churn determinants and mediation effects of partial defection in the Korean mobile telecommunications service industry. *Telecommunications Policy*, 30, 552-568.

Aydin, S., Özer, G. and Arasil, Ö. (2005). Customer loyalty and the effect of switching cost as a moderator variable: A case in the Turkish mobile phone market. *Market Intellinence & Planning*, 23, 89 – 103.

Balabanis, G., Reynolds, N., & Simintras, A. (2004). Bases of e-store loyalty: Percieved switching barriers and satisfaction. *Journal of Business Research*, 59, 214-224.

Bodet, G. (2007). Customer satisfaction and loyalty in service: Two concepts, four constructs, several relationships. *Journal of Retailing and Consumer Services*.

Burnham, T. A., Frels J. K., & Mahajan, V. (2003). Consumer Switching Costs: A Typology, Antecedents, and Consequences. *Journal of the Academy of Marketing Science*, 109-126.

Caruna, A. (2003). The impact of switching costs on consumer loyalty: A study among corporate customers of mobile telephony. *Journal of Targeting, measurement and Analysis for Marketing*. 12, 256-268.

Ellinger, E. E., Daugherty, P. J., & Plair, Q. J. (1999). Customer satisfaction and loyalty in supply chain: the role of communication. *Transportation Research Part E: Logistics and Transportation Review*, 35, 121-134.

Fornell, C., Anderson, E. W., & Johnson, M. D. (1995). Rational and adoptive performance Expectations in a customer satisfaction framework. *The Journal of Consumer Research*, 21, 695-707.

Fornell, C., & Wernerfelt, B. (1987). Defensive marketing strategy by customer complaint management: A theoretical analysis. *Journal of Marketing Research*, 24, 337-346.

Fornell, C. (1992). A national customer satisfaction barometer: The Swedish experiment. *Journal of Marketing*, 56, 6-12.

Gerpott, T. J., Rams, W., & Schindler, A. (2001). Customer retention, loyalty, and satisfaction in the German mobile cellular telecommunications market. *Telecommunications Policy*, 25, 249-269.

Gitman, L. & McDaniel, C. (2000). The Future of Business. Wadsworth Publishing Company

Hess, M. & Ricart, J.E. (2002). Managing Customer Switching Costs: A framework for competition in the networked environment. *Management Research*.

Hirschman, A. O. (1970). *Exit, voice and loyalty – Responses to decline in firms, organizations and states.* Cambridge, MA: Harvard University Press.

Jones, M.A., Mothersbaugh, D.L, & Beatty, S.E. (2000). Switching Barriers and Repurchase Intention in services. *Journal of Retailing*, 76, 259-274.

Julander, C-R., & Söderlund, M. (2003). Effects of switching barriers on satisfaction, repurchase intention and attitudinal loyalty. *Working Paper Series in Business Administration*. NO. 2003:1.

Kim, M. K., Park, M. C., & Jeong, D. H. (2004). The effects of customer satisfaction and switching barrier on customer loyalty in Korean mobile telecommunications services. *Telecommunications Policy*, 28, 145-159.

Kim, H. S., & Yoon, C. H. (2004). Determinants of subscriber churn and customer loyalty in the Korean mobile telephony market. *Telecommunications Policy*, 28, 751-765.

Klemperer, P. (1987). Markets with Consumer Switching Costs. *The Quarterly Journal of Economics*, 102, 375-394.

Lin, A., & Chou, C. (2004). Antecedents and consequences of customer switching costs for the mobile phone market.

Oliver, R. L. (1997). *Satisfaction: a behavioural perspective on the customer*. Boston: Irwin McGraw-Hill.

Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63, 33-44.

Patterson, P. G. & Smith, T. (2003). A cross-cultural study of switching barriers and propensity to stay with service providers. *Journal of Retailing*, 79, 107-120.

Ruyter, K., Wetzels, M., & Bloemer, J. (1997), "On the relationship between perceived service quality, service loyalty and switching costs". *International Journal of Service Industry Management*, 9, pp. 436-453

Shin, D-H. & Kim, W-Y. (2007). Forecasting customer switching intention in mobile service: An exploratory study of predictive factors in mobile number portability. *Technological Forecasting & Social Change* (2007)

Turell, O., & Serenko, A. (2006). Satisfaction with mobile services in Canada: An empirical investigation. *Telecommunications Policy*, 30, 314-331.

Yanamandram, V & White, L (2006). Exploring the Switching Costs-Behavioural Loyalty relationship amongst Dissatisfied Customers in the B2B services sector. *Academy of Marketing Conference* 2006 (AM2006) Middlesex University, London.

Zeithaml, V. & Bitner, M. (1996). Services Marketing. McGraw-Hill International Editions

Internet and other Sources:

- 1. http://www.jimnovo.com/Customer-Loyalty-more.htm
- 2. http://www.theacsi.org/index.php?option=com_content&task=view&id=147&Itemid=155&i=Wireless+Telephone+Service
- 3. http://arkiv.na24.no/NewsItem.asp?ItemID=33937&Title=Telenor+er+dyrest+i+Norg
- 4. http://www.konkurransetilsynet.no/iKnowBase/Content/416052/COMPETITION_AN
 http://www.konkurransetilsynet.no/iKnowBase/Content/416052/COMPETITION_AN
 http://www.konkurransetilsynet.no/iKnowBase/Content/416052/COMPETITION_AN

Appendix I: Interview guide

Telenor Research:

q7 - Betaler du alle utgiftene (altså kostnader i forbindelse med å ringe + avgiften) i forbindelse med mobiltelefonen selv, eller er det andre som betaler enten noen av eller alle kostnadene?

[$Field\ width=1$]

Betaler du alle utgiftene (altså kostnader i forbindelse med å ringe + avgiften) i forbindelse med mobiltelefonen selv, eller er det andre som betaler enten noen av eller alle kostnadene?

- O Jeg betaler alle kostnader med egne penger
- Andre i husholdningen betaler noen av kostnadene
- Andre i husholdningen betaler alle kostnadene (for example a "familie subscription")
- Arbeidsgiver betaler noen av kostnadene
- Arbeidsgiver betaler alle kostnadene
- O Annet

i 93

Da er du dessverre ikke i målgruppen for denne undersøkelsen og vi beklager.

q1 - Hvor mange telefoner bruker du?

[Open Text ◆ Numeric ◆ Columns=2]

Hvor mange telefoner bruker du?

Noter antall telefoner:

q2 - Hva er telefonens merke?

[Open Text ◆ Columns=20]

Hva er telefonens merke?

Modell:

q3 - Hvem er din nåværende mobiloperatør? Dersom du har flere tenk på den du har ditt hovedabonnement hos.

 $[Field\ width=2]$

O Chess
O NetCom
O Tele2 O Telenor
O Sense
O Ventelo
O Talkmore AS
O Mobilfabrikken
O Mobyson O Annet - noter :
O Vet ikke
q4 - Når kjøpte du/mottok du denne telefonen?
[Open Text • Numeric • Total Digits=3 • Columns=3]
Når kjøpte du/mottok du denne telefonen?
Noter antall måneder siden :
g5 - Når ble du kunde hos denne mobiloperatøren?
[Not required]
Når ble du kunde hos denne mobiloperatøren?
År Mnd.
Noter antall år og måneder siden :
q6 - Er dette din første mobiltelefon?
q6 - Er dette din første mobiltelefon? $[Field\ width=I]$
[Field width=I]
[Field width=1] Er dette din første mobiltelefon?
[Field width=1] Er dette din første mobiltelefon? O Ja
[Field width=1] Er dette din første mobiltelefon? O Ja O Nei q8 - Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du
[Field width=1] Er dette din første mobiltelefon? Ja Nei q8 - Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei)
[Field width=1] Er dette din første mobiltelefon? Ja Nei q8 - Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) [Field width=1] Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din
[Field width=1] Er dette din første mobiltelefon? Ja Nei q8 - Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) [Field width=1] Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) Ja Nei Sende og motta SMS
[Field width=1] Er dette din første mobiltelefon? Ja Nei q8 - Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) [Field width=1] Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) Ja Nei Sende og motta SMS Sende en MMS (multimediamelding) med lyd, bilde eller tekst O O
[Field width=1] Er dette din første mobiltelefon? Ja Nei q8 - Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) [Field width=1] Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) Sende og motta SMS Sende en MMS (multimediamelding) med lyd, bilde eller tekst Sette opp telefonen for tjenester som MMS og WAP på egenhånd Sette opp telefonen for tjenester som MMS og WAP på egenhånd O O Sette opp telefonen for tjenester som MMS og WAP på egenhånd O O O O O O O O O O O O O
[Field width=1] Er dette din første mobiltelefon? Ja Nei q8 - Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) [Field width=1] Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) Ja Nei Sende og motta SMS Sende en MMS (multimediamelding) med lyd, bilde eller tekst O O
[Field width=1] Er dette din første mobiltelefon? Ja Nei q8 - Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) [Field width=1] Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) Sende og motta SMS Sende en MMS (multimediamelding) med lyd, bilde eller tekst Sette opp telefonen for tjenester som MMS og WAP på egenhånd Sette opp telefonen for tjenester som MMS og WAP på egenhånd O O Sette opp telefonen for tjenester som MMS og WAP på egenhånd O O O O O O O O O O O O O
[Field width=1] Er dette din første mobiltelefon? Ja Nei q8 - Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) [Field width=1] Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) Sende og motta SMS Sende og motta SMS Sende en MMS (multimediamelding) med lyd, bilde eller tekst Sette opp telefonen for tjenester som MMS og WAP på egenhånd Sette opp telefonen slik at du kan sende og motta e-post O Sette opp telefonen slik at du kan sende og motta e-post O O
[Field width=1] Er dette din første mobiltelefon? Ja Nei QB - Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) [Field width=1] Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) Ja Nei Sende og motta SMS O O Sende en MMS (multimediamelding) med lyd, bilde eller tekst O O Sette opp telefonen for tjenester som MMS og WAP på egenhånd O Sette opp telefonen slik at du kan sende og motta e-post O O Q9 - Hva er det du primært bruker din mobiltelefon til?
Field width=I] Er dette din første mobiltelefon? ☐ Ja ☐ Nei ☐ Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) [Field width=I] Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) ☐ Ja Nei ☐ Sende og motta SMS ☐ Gende en MMS (multimediamelding) med lyd, bilde eller tekst ☐ Gette opp telefonen for tjenester som MMS og WAP på egenhånd ☐ Gette opp telefonen slik at du kan sende og motta e-post
Er dette din første mobiltelefon? ☐ Ja ☐ Nei ☐ Nei ☐ Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) [Field width=1] Nå er vi interessert i hvor fortrolig du er med å bruke din mobiltelefon. Vet du hvordan du gjør følgende på din telefon? (Ja/Nei) ☐ Ja Nei ☐ Sende og motta SMS ☐ ☐ ☐ ☐ Sende en MMS (multimediamelding) med lyd, bilde eller tekst ☐ ☐ ☐ ☐ Sette opp telefonen för tjenester som MMS og WAP på egenhånd ☐ ☐ ☐ ☐ Sette opp telefonen slik at du kan sende og motta e-post ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

\mathbf{O}	Annet

q10 - Hvor ofte bruker du mobiltelefonen til å :

 $[Field\ width=1]$

Hvor ofte bruker du mobiltelefonen til å :

Noter antall samtaler :

	Flere ganger		Flere ganger	En gang i		
	daglig	Daglig	per uke	måneden	Sjelden	Aldri
Ta bilder	•	0	•	•	O	O
Høre på radio	0	0	O	0	O	O
Laste ned og høre på musikk	0	0	O	•	O	O
Spille spill	•	0	O	•	O	C
Laste ned spill	•	0	O	•	O	C
Sjekke, sende eller motta epost	•	0	O	•	O	O
Se på TV	•	0	0	•	O	O
Videotelefoni	•	0	0	•	O	O
Lese nyheter	•	0	O	•	O	O
Synkronisere kalender med PC	•	0	O	•	O	O
Sende lynmeldinger (IM)	•	0	O	•	O	C
Som modem for PC	•	0	O	•	O	C
Å gå inn på Internett	•	0	O	•	O	C
Å søke etter innhold og tjenester på Internett (Google, etc.)	•	•	0	O	•	O
Få utført banktjenester	0	0	0	0	O	O
Laste ned ringetoner/logoer/bilder	0	0	O	0	O	O
Delta på forum, blogger eller brukergrupper	•	0	0	0	O	C
Gå inn på sosiale nettverkssteder som MySpace og Facebook	•	0	0	0	•	O
Handle/betale, f.eks. billetter	0	O	O	O	O	O

neldinger)

Hvor mange ganger brukte du mobiltelefon i går for å ringe til andre, enten i jobb eller privat sammenheng?

q11 - Hvor ofte bruker du vanligvis mobiltelefonen til å ringe med? (NB!! ikke tekstmeldinge
[Field width=1]
Hvor ofte bruker du vanligvis mobiltelefonen til å ringe med? (NB!! ikke tekstmeldinger)
 Mer enn 10 ganger per dag 6-10 ganger per dag 2-5 ganger per dag Minst 1 gang om dagen 3-6 ganger i uka 1-2 ganger i uka Sjeldnere Aldri
${\tt q12}$ - Hvor mange ganger brukte du mobiltelefon i går for å ringe til andre, enten i jobb eller privat sammenheng?
[Open Text • Numeric • Total Digits=3 • Columns=3]

q13 - Hvor ofte bruker du vanligvis mobiltelefonen for a sende eller motta tekstmeldinger?
$[Field\ width=1]$
Hvor ofte bruker du vanligvis mobiltelefonen for å sende eller motta tekstmeldinger?
 ○ Mer enn 10 ganger per dag ○ 6-10 ganger per dag ○ 2-5 ganger per dag ○ Minst 1 gang om dagen ○ 3-6 ganger i uka ○ 1-2 ganger i uka ○ Sjeldnere ○ Aldri
q14 - Hvor mange tekstmeldinger sendte du i går, enten i jobb eller privat sammenheng?
[Open Text ◆ Numeric ◆ Total Digits=3 ◆ Columns=3]
Hvor mange tekstmeldinger sendte du i går, enten i jobb eller privat sammenheng?
Noter antall tekstmeldinger :
q15 - Hvor mye tid bruker du i gjennomsnitt per dag på å prate i mobiltelefonen? [Open Text • Numeric • Total Digits=4 • Columns=3] Hvor mye tid bruker du i gjennomsnitt per dag på å prate i mobiltelefonen? Noter antall minutter:
q16 - Hva er dine månedlige kostnader i forbindelse med mobilbruk? (telefonregningen) [Open Text • Numeric • Total Digits=5 • Columns=5] Hva er dine månedlige kostnader i forbindelse med mobilbruk? (telefonregningen) Gjennomsnittlig kostnad per måned i kroner:
47. Han die bandantant allen ab annamant0
q17 - Har du kontantort eller abonnement? [Field width=1]
Har du kontantort eller abonnement?
O Kontantkort med forhåndsbetaling O Abonnement med etterskuddsbetaling
q18 - Hvilket utsagn er du mest enig i, velg ett av de to utsagnene under :
$[Field\ width=1]$
Hvilket utsagn er du mest enig i, velg ett av de to utsagnene under :
O Mobiltelefonen er til å ringe og eventulet sende sms med -alt annet er uinteressant. O Mobiltelefonen er en spennede del av den teknologiske utvikling. Jeg tar gjerne i bruk nye tjenester på mobilen.
q19 - Alt i alt hvordan var dine forventninger til kvaliteten på mobiltjenestene?
[Field width=1]

Nå ønsker vi å undersøke hvilke forventninger du hadde til din nåværende operatør FØR du ble kunde. Alt i alt, hvordan var dine forventninger til kvaliteten på mobiltjenestene?

54

O 1 - Veldig høy O 2 O 3							
Q 4Q 5Q 6Q 7 - Veldig lav							
q20 - I hvor stor grad forventet du at mobiltjenestene	ville dekke	e de l	beho	vene	du h	adde	<u> </u>
[Field width=1]							
Forventninger til din operatør FØR du ble kunde :I hvor stor g behovene du hadde?	grad forvente	t du a	t mob	oiltjen	estene	ville	dekke de
 1 - Veldig stor grad 2 3 4 5 6 7 - Veldig liten grad 							
q21 - Hva var dine forventniger til påliteligheten til di	sse mobiltj	enes	tene	?			
[Field width=1]							
Forventninger til din operatør FØR du ble kunde :Hva var dir mobiltjenestene?	e forventnige	er til p	ålitel	ighete	en til o	disse	
 ○ 1 - Veldig høy ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 - Veldig lav 							
q24 - Nå ønsker vi å undersøke hvordan du faktisk o opplevelse som kunde.	pplever din	nåva	æren	de o	perat	ør - a	altså din
[Field width=1]							
Nå ønsker vi å undersøke hvordan du faktisk opplever din nå	værende oper	atør -	altså	din o	ppleve	else so	om kunde.
The section and single section is a section of the	Veldig høy1	2	3	4	5	6	Veldig lav7
Hva er din vurdering av mobiltjenestenes pålitelighet? Hvordan vil du vurdere kvaliteten på mobiltjenestene du	O	C	0	C	O	C	O
mottar gitt den prisen du betaler?	•	0	0	0	0	0	0
Hvordan vil du vurdere prisen på mobiltjenstene gitt den kvaliteten de har?	•	O	O	O	O	O	O
q22 - Alt i alt, hvordan vil du vurdere kvaliteten på m	obiltjeneste	n?					
[Field width=1]							
Alt i alt, hvordan vil du vurdere kvaliteten på mobiltjenesten?							
○ 1 - Veldig høy○ 2○ 3○ 4							

Q 5
Q 6
O 7 - Veldig lav
q23 - I hvor stor grad dekker mobiltjenestene dine personlige behov?
$[Field\ width=1]$
I hvor stor grad dekker mobiltjenestene dine personlige behov?
 1 - Veldig stor grad 2 3 4 5 6 7 - Veldig liten grad
q25 - Alt i alt, hvor fornøyd er du med mobiltjenestene (alt tatt i betraktning)?
[Field width=1]
Alt i alt, hvor fornøyd er du med mobiltjenestene (alt tatt i betraktning)?
 ○ 1 - Veldig fornøyd ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 - Veldig missfornøyd
$_{\rm q26}$ - Sett i lys av dine forventninger, føler du at mobiltjenestene er bedre eller dårligere enn det du forventet?
$[Field\ width=I]$
Sett i lys av dine forventninger, føler du at mobiltjenestene er bedre eller dårligere enn det du forventet?
 O 1 - Over forventning O 2 O 3 O 4 O 5 O 6 O 7 - Under forventning
q27 - Tenkt deg de ideelle mobiltjenester. Hvor nær er de mobiltjenesten du har fra din operatør dette idealet?
$[Field\ width=I]$
Tenkt deg de ideelle mobiltjenester. Hvor nær er de mobiltjenesten du har fra din operatør dette idealet?
 1 - Veldig nær 2 3 4 5 6 7 - Langt ifra

q28 - Hvis du skal kjøpe ny mobiltelefon, hvor sannsynlig er det du velger din nåværende operatør?

[Field width=1]	
-----------------	--

Hvis du skal kjøpe	nv mobiltelefon	hvor sanns	vnlig er det	t du velger	din nåværen	de operatør?
iivis aa skai kjope	illy illociticition.	, ii v Oi buillib	y ming or act	t au veigei	ann na varen	ac operator.

1 - Veldig sannsynlig
 2
 3
 4
 5
 6

O 7 - Veldig usannsynlig

q29 - Under kommer en rekke utsagn om din mobiloperatør.

[Randomized answerlist ◆ Field width=1]

Under kommer en rekke utsagn om din mobiloperatør. Marker hvor enig du er i utsagnet på en skala fra 1 til 7.

1 betyr helt enig - 7 betyr helt uenig

	Helt enig1	2	3	4	5	6	Helt uenig7
Mitt personlige forhold til min nåværende operatør vil forsvinne dersom jeg bytter operatør.	•	0	O	0	O	0	•
Jeg er ikke sikker på om andre mobiloperatører vil gi bedre service	O	0	O	0	O	0	0
Det vil kreve mye innsats å bytte operatør	O	O	0	0	0	0	O
Det vil kreve mye tid å bytte operatør	O	O	0	O	O	O	O
Det er få andre operatører som er realistiske alternativ for meg	O	O	O	O	0	O	O
Jeg er usikker på om andre operatører kan gi samme service som min nåværende	•	0	O	0	O	0	•
Jeg er ikke sikker på om faktureringen fra en ny mobiloperatør vil være bedre for meg	•	0	0	0	0	0	•
For å bytte til en ny mobiloperatør burde jeg sammenlikne alle mobiloperatører på grunnlag av tjenester, pris osv	O	O	O	0	0	0	•
Jeg trenger mye kunnskap til å fullt kunne utnytte tilbudene fra mobiloperatører	•	0	0	0	0	0	•
Det som tilbys i telekommunikasjonsbransjen er vanskelig å forstå seg på	0	O	O	O	O	O	O
En selger som selger denne type tjenester må ha mye kunnskap for å gjøre en god jobb	O	0	O	O	O	O	O
Mobiltjenester er kompliserte	O	O	O	O	O	O	O
Kvaliteten på tjeneste varierer mye fra mobiloperatør til mobiloperatør	•	O	O	0	O	O	0
Jeg kunne brukt en annen mobiloperatør uten å merke mye forskjell	•	O	O	0	O	0	•
Forskjellige mobiloperatører tillbyr veldig forskjellige tjenester/program	•	O	O	O	O	O	O
Det spiller ingen rolle hvilken mobiloperatør jeg bruker, de er alle for det meste like	C	O	C	C	C	C	C
Jeg benytter meg av tilleggstjenester som tillbys av min mobiloperatør	O	O	C	O	C	O	C
Jeg bruker tjenestene min mobiloperatør tilbyr på mange ulike måter	O	O	O	0	O	O	C
Jeg har brukt flere av min mobiloperatørs tjenester	O	O	O	O	O	C	O
Jeg har prøvd tjenestene hos andre mobiloperatører	C	O	0	0	0	O	O
Jeg er kjent med kvaliteten på tjenestene hos andre mobiloperatører	O	O	O	O	0	O	•

	Helt						Helt
To be have a set of sine and a decoration and the	enig1	2	3	4	5	6	uenig7
Jeg har begrenset erfaring med andre mobiloperatører	O	O	O	0	O	O	<u>O</u>
Jeg har ofte byttet mobiloperatør	O	0	O	0	O	O	<u>O</u>
Av og til prøver jeg andre mobiloperatører	O	O	O	0	O	O	<u>O</u>
Det er vanskelig for meg å bruke andre operatører.	<u>O</u>	O	O	0	O	O	<u>C</u>
Det er komplisert for meg å bytte operatør	O	O	O	O	O	C	<u>C</u>
Det tar mye tid å innhente informasjon om andre operatører	O	O	O	O	O	O	<u>C</u>
Å bytte mobiloperatør medfører ekstrautgifter for meg	O	O	0	0	O	C	0
Jeg har tenkt å bytte operatør	O	O	0	0	O	C	<u>C</u>
Neste gang trenger jeg tjenester fra en annen operatør	C	O	O	O	O	O	O
Jeg vil ikke fortsette å motta tjenester fra min nåværende operatør	C	O	O	O	O	О	O
Jeg føler meg låst til min operatør	O	O	O	O	O	O	O
Det er mye bryderi med bytte av operatør	0	O	0	0	0	O	O
For å kunne bytte operatør må jeg bryte kontrakten med min nåværende operatør	O	0	O	0	O	0	O
Jeg er tilfreds med min nåværende operatør	C	O	O	O	O	O	<u>O</u>
Min nåværende operatør møter alle mine forventninger	0	O	0	O	0	O	O
Min mobiloperatør tilfredstiller mine behov	0	O	0	Ō	0	O	<u> </u>
Det jeg får fra min mobiloperatør er dårligere enn det jeg forventer fra en mobiloperatør	•	0	0	0	0	0	0
Min nåværende mobiloperatør gir tilfredstillende service	•	O	0	O	O	0	O
De tjenester jeg mottar fra min nåværende operatør er verdifulle	0	0	0	0	0	0	
Min mobiloperatør gir meg den kvalitet på tjenestene som jeg	0	0	0	0	0	0	0
trenger Min mobile parators lundacerries or god							$\overline{}$
Min mobiloperatørs kundeservice er god Kvaliteten på kampanjene til min mobiloperatør (reklame på tv,	C	O	O	0	0	O	O
aviser osv) er god	0	0	0	O	0	O	O
Min nåværende mobiloperatør har god dekning	O	O	O	O	O	O	O
Min nåværende mobiloperatør har gode tilbud	O	O	O	O	O	O	O
Nettet til min mobiloperatør er stabilt	O	O	C	O	C	O	O
Den informasjonen jeg får fra min mobiloperatør dekker mine behov	•	O	O	O	O	O	O
Det jeg får fra min mobiloperatør stemmer overens med det	\sim						\sim
mobilopertøren reklamerer for	0	0	0	0	0	O	0
Jeg mener prisen på mobiltjenestene er rimelig/fornuftig	O	O	O	O	O	O	O
Jeg mener at månedsprisen for mobiltjenesten er rimelig/fornuftig	•	O	0	O	0	C	O
Jeg mener at eventuelle servicegebyr og andre kostnader forbundet med min mobilbruk er rimelig/fornuftig	O	O	C	O	C	C	C
Kostnader hos andre operatører er høyere	O	O	O	O	O	O	O
Om jeg må bytte operatør, er det andre gode operatører å velge imellom	O	0	0	0	0	O	O
Jeg vil sannsynligvis bli fornøyd med mobiltjenestene hos en			\sim		\sim		
annen operatør	•	0	O	O	O	0	•
Sammenliknet med min nåværende operatør, er det andre operatører jeg sannsynligvis vil være like eller mer fornøyd	0	0	O	0	O	0	0
Sammeliknet med min nåværende operatør, er det ikke mange	•	0	0	0	0	0	O
andre operatører jeg ville være fornøyd med Jeg er usikker på om andre operatører kan gi samme service	•	0	0	0	0	0	<u> </u>
som den jeg har)		•	•	•		
Om jeg skulle velge en annen operatør så vet jeg ikke hvem jeg skulle velge	•	O	O	O	O	O	O

	Helt enig1	2	3	4	5	6	Helt uenig7
Jeg ønsker å fortsette å bruke min mobiloperatør	O	0	O	O	O	O	O
Neste gang jeg trenger produkter/tjenester fra en mobiloperatør vil jeg benytte min nåværende	0	O	O	O	0	0	0
Sannsynligheten for at jeg fornyer abonnementet med min nåværende mobiloperatør er veldig høy	0	O	O	O	0	0	O
Jeg anbefaler denne mobiloperatøren til andre personer	0	0	0	0	0	0	O
Jeg oppfordrer venner som tenker på å bytte mobiloperatør til å bruke den jeg har	0	O	O	O	0	0	•
Selv om de andre mobiloperatørene er billigere, så vil jeg fortsette å bruke min nåværende operatør	0	O	0	0	0	0	O
Dersom jeg skulle kjøpe ny mobil telefon ville jeg foretrekke å ha den mobiloperatøren jeg har nå.	0	O	O	O	0	0	O
Om jeg måtte velge om igjen, så ville jeg gjort samme valg av mobiloperatør	0	O	0	0	0	0	O
Jeg har tillit til mobiloperatøren min	0	0	0	0	0	0	0
Jeg stoler på at mobiloperatøren min ikke lurer meg	0	0	0	0	0	O	O
Jeg stoler på fakturasystemet til mobiloperatøren min	0	O	O	O	O	O	O

$_{ m q34}$ - Her er noen flere utsagn om din mobiloperatør. Marker hvor enig du er i utsagnet på en skala fra 1 til 7.

[Field width=1]

Her er noen flere utsagn om din mobiloperatør. Marker hvor enig du er i utsagnet på en skala fra 1 til 7.

1 betyr helt enig - 7 betyr helt uenig

	Helt enig1	2	3	4	5	6	Helt uenig7
Mine mobilttjenester er tilpasset meg på en eller annen måte	O	O	0	O	0	O	O
Jeg setter opp tjenestene for å bruke dem slik som jeg vil	O	O	O	O	O	O	O
Jeg har gjort en innsats for å tilpasse mine tjenester til mine behov	0	O	O	O	O	O	0

q37 - Hvor mange konkurrerende mobiloperatører har du prøvd i løpet av de siste to år?

[$Field\ width=1$]

Hvor mange konkurrerende	e mobiloperatører har	du prøvd i løpet av	de siste to år?
--------------------------	-----------------------	---------------------	-----------------

O	0
O	1
O	2
O	3
O	4 eller flere

q45 - Har du klaget til din mobiloperatør, dvs ringt, skrevet brev eller epost og påpekt ting du synes er urimelig eller dårlig?

[$Field\ width=1$]

Har du klaget til din mobiloperatør, dvs ringt, skrevet brev eller epost og påpekt ting du synes er urimelig eller dårlig?

0	1 - Ja, ofte
\mathbf{O}	2
\mathbf{O}	3
\mathbf{O}	4
O	5

O 6	- Nei, aldri								
q46 -	· Hvor mange ganger har du kalget på den	ne måten i	løpe	t av d	et sis	ste år	et?		
[Ope	en Text • Numeric • Total Digits=3 • Columns=3	·]							
Hvoi	r mange ganger har du kalget på denne måten i løp	et av det sis	te året	t?					
Note	r antall :								
q47 -	· Her er noen flere utsagn. Marker hvor eni	g du er i u	tsagr	net på	en s	kala f	ra 1 t	il 7.	
•	[d width=1]	•	J	•					
_	er noen flere utsagn. Marker hvor enig du er i utsa	gnet på en s	kala fi	a 1 til	7.				
			Ja,	I	1				Nei
**	1 1 1 1		ofte1	2	3	4	5	6	aldri
	du noen gang hatt lyst til å klage på mobiltjenester ar fra din operatør?	ne du	O	O	O	O	O	O	O
	du noen gang hørt andre klage over mobiltjenester	ne fra din	O	C	O	O	O	O	0
	du noen gang klaget på din mobiloperatør til andro	e?	0	0	O	O	O	0	C
Min mobiloperatør er innovativ og fremtidsrettet Min mobiloperatør spiller en viktig rolle i samfunnet Min mobiloperatør har et positivt image Min mobiloperatør har et positivt image Mommentar - Har du synspunkter eller kommentarer til undersøkelsen du nå har better spiller kommentarer til undersøkelsen du nå har better kommentarer til undersøkelse					О О	cvart?)		
[Not	required]								
Har	du synspunkter eller kommentarer til undersøkelse	en du nå har	besva	rt?					
	l eteSurveyScri pt a for at du deltok i undersøkelsen!								
CONDI TI ON	f('screenedOut') == '1'								
	true	false							
NO	Question statusscreened()	Question	n ()						

ScreenedOutSurveyScri pt

Da er du dessverre ikke i målgruppen for denne undersøkelsen og vi beklager.