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The effect of switching barriers on customer engagement: an application to the mobile phone services

Abstract:

The goal of this research work is to investigate the relationship between switching barriers and customers’ commitment. It is considered that different types of switching barriers have an opposite influence on the commitment of clients: it can be either a destructive effect or a beneficial effect on the long-term relationship between partners. We have distinguished between two types of switching barrier, negative and positive, depending on the customers’ motivation to maintain the relationship. The results indicate that negative switching barriers weaken the affective commitment while positive switching barriers enhance it. Therefore, contrary to current practice in the mobile phone services sector, application of positive switching barriers is an effective strategy for building a long term customer relationship.

Key-words: switching barriers, engagement, mobile telecommunication services

L’influence des barrières au changement sur l’engagement du client : une application aux services de la téléphonie mobile

Résumé :

L’objectif de cette communication est d’examiner les relations entre les barrières au changement et l’engagement du client. La problématique est fondée sur l’idée que les différents types de barrières au changement ont une influence opposée sur l’engagement du client : elles peuvent avoir aussi bien un effet destructeur qu’un effet bénéfique sur la relation à long terme entre partenaires. Nous avons séparé les différents types de barrières en deux groupes : négatifs et positifs, en fonction de la motivation du client à maintenir ou non la relation. Les résultats de l’étude empirique montrent que les barrières au changement positives renforcent l’engagement affectif ce qui permet d’assurer une relation basée sur les attitudes positives. Contrairement à la pratique actuelle dans le secteur des services de la téléphonie mobile, l’application des barrières au changement positives s’avère être une stratégie plus efficace pour obtenir un engagement du client à long terme.

Mots-clés : barrières au changement, engagement, services des télécommunications mobiles
Introduction

The concept of switching barriers appeared and was taken into consideration rather late in marketing literature. Its origin goes back to the 80s, in the field of the industrial economy, related to the influence of switching costs on the market. There are several reasons for this late emergency, the most important of which is the transition from a seller’s market towards a buyer’s market. In a saturated market context, leading to intense competition, companies are obliged to take care of their clientele to be able to increase their competitiveness and ensure their profitability (Klemperer 1987). For that purpose, the existence of switching barriers (SB) seems to be relevant. According to the activity sectors, we can identify several factors of influence such as the differentiation of the product, the existence of loyalty programs, the ownership of the technology, etc. which entail variable effects. These factors often play a determining role in the customer loyalty development process (Fornell 1992). Switching costs represents significant advantages for companies, such as price increase, improvement in profitability and risk reduction (Narayandas 1998).

Interest in the concept increased recently and the research regarding this subject has continued to increase since the early 90s. SB facilitates the development of a long-term relationship (Fornell 1992). Within the defensive marketing framework, their building appears as an effective strategy for companies to retain their clientele. Currently, the acquisition cost of a new customer continues to grow and so this strategy is being used even more frequently. One main challenge for companies is to avoid the departure of the customers considered as profit generators and to keep them for as long as possible (Reichheld & al. 2000). The use of SB has numerous advantages for companies, but the consequences are often negative for the customers: price increase, limitation of choice, acceptance of extended deadlines, etc.
However, there are some beneficial exceptions such as preferential treatment for traditional customers or the advantages offered to reward their loyalty. The following question then arises: could we tip the balance to a positive direction for customers and promote the creation of beneficial switching barriers? How will this strategy influence the affective commitment of customers and the longevity of the relationship?

**Conceptual framework**

In their theoretical model, Morgan & Hunt (1994) are the first authors to explore the relation between SB and loyalty mediated by commitment. Since then, there is relatively little experimental research that takes up this idea. Recently, based on the work of Pritchard & al. (1999), Thatcher & George (2004) studied this link in the e-commerce context. Their results are surprising because SB explain a large part of the variance of the commitment, but not for all types of barrier. Based upon this idea, our approach consists in studying the relationship between various types of SB and the commitment in a relational perspective. Compared to the satisfaction widely investigated this link is little studied in the literature though it should deserve more attention. The influence of SB is more important for services than for goods (Gremler & Brown 1996). For that reason, our research is focused on services, namely, we have chosen the mobile telecommunications services domain as our field of study.

*The central role of the commitment in the relation*

Commitment to the relationship is defined by Moorman & al. (1993, p. 316) as “an enduring desire to maintain a valued relationship”. It appears as a "stabilizer” of purchasing behavior, a kind of preliminary guarantee of the relationship continuity (N’Goala 2003). In
agreement with this definition, Morgan & Hunt (1994, p. 23) described the relational commitment as “the committed party believes the relationship is worth working on to ensure that it endures indefinitely”. In the case of the mutual commitment the probability that one of the partners ends the relation in a near future decreases considerably.

The conceptualization of the relationship commitment directs to a multidimensional construct, more often a three-component model (Macintosh & Lockshin 1997; Meyer & Allen 1997). We distinguish between three forms of commitment: a behavioral form, as the investment in the relation, an attitudinal form, as the emotional attachment and a normative form, as the adjustment in the standards. These three components of the commitment, which we call the calculative commitment, the affective commitment and the normative commitment respectively, reflect individuals’ various psychological states according to the nature of the relationship. The distinction between them is made according to their motivation to maintain the relationship with their partner (Meyer & Allen 1997).

Calculative commitment is defined by Allen & Meyer (1990) as the perceived costs associated with leaving the organization. Commitment is based on their perception concerning the relationship benefits (Kumar & al. 1994). According to Kanter (1968) this form of commitment that has a strong cognitive component appears when the profit in staying in the relationship is higher than the cost of leaving the relationship. As a general rule, the higher the importance of the personal investments, the stronger the calculative commitment becomes (Kanter 1968). Beyond the evaluation of any benefits, the continuity of the relationship also depends on the number, the availability, the quality and on the attractiveness of the alternative relationships with competitors (Grundlach & al. 1995). Individuals estimate a relationship by comparing the best of the alternatives with what they are receiving in their current relationship.
Affective commitment is based on the free volitional choice of the customers to maintain the relationship by desire (Pritchard & al. 1999), for the reason that they want to stay in the relationship. More specifically, it represents the identification and the implication of the customer in the relationship, the emotional attachment developed during the relation (Meyer & Allen 1997). According to Wetzel & al. (1998), this form of commitment reflects an “emotional state” of the partners regarding the relationship. The notion of attachment is defined as a sustainable emotional predisposition of customers, a psychological link between the partners. So, customers’ attachment considered as an antecedent of commitment (Lacœuilhe 2000).

The trust of the customer in his service provider constitutes a central element of the affective commitment (Geyskens & al. 1996). “The more the customer believes that its supplier is interested in its welfare and that the supplier will not take any unexpected actions which negatively impacts the customer, the higher the level of affective commitment of the customer in the relationship”, Wetzel & al.(1998, p. 417). Affective commitment is determined by the social links between the customer and his service provider (Gilliland & Bello 2002). The more significant these social links, the more the customer’s affective commitment increases. On the other hand, the existence of a dependency which is not shared in the relationship negatively affects the customer’s affective commitment (Kumar & al. 1995). This form of commitment does not arise from the customer’s evaluation of services attributes. It represents a holistic judgment of the customer according to the strength of its attachment. Consequently, when this attachment is important, the intention of the customer to change service provider is weaker.

Normative commitment is often described in literature as the internalization of social norms by individuals. According to Jaros & al. (1993, p. 955) it represents "the degree to which an individual is psychologically attached to an employing organization through
internalization of its goals, values and missions”. This form of commitment is different from the affective commitment because it reflects a kind of moral obligation. It is also different from calculative commitment, because it does not essentially take into account the costs associated with the relationship. In his research work carried out in the French wired telephony sector, Frisou (2000) demonstrated the importance of the commitment in the development of a long-time relationship. In the present study we focus on the calculative and affective commitment of the customer by taking into account the behavioral and attitudinal approaches of the commitment.

**A multidimensional approach to switching barriers**

We define the switching barrier concept as a multidimensional concept, following the orientation of the recent research into this issue. In spite of the disparities between authors, it emerges that most of them identify the following three main aspects of SB: the economic aspect, the functional aspect and the relational aspect. We were essentially inspired by the theoretical classification of Guiltinan (1989) as well as that of Burnham & al. (2003) tested on wired telephony services. They seem to be the most complete and the closest to our field of application.

Economic aspect of SB (1): includes all financial charges connected to the process of switching from one provider to another. These financial losses, which appear with each switch to a new service provider, are not reclaimable for the customer. We distinguish two components of monetary losses: the transaction costs and the loss economical advantages.

Functional aspect of SB (2): involves the expenditure of efforts and time dedicated to the service provider change. It represents all SB related to the establishment of the switching
process. This switching barrier category includes three components: the risk perception, the cognitive efforts and the loss of functional advantages.

Relational aspect of SB (3): represents the customer’s attitude to the relationship and so depends on their motivation (economic or psychological) to build and maintain it (Bendapudi & Berry 1997; Gwinner & al.1998). Our categorization includes two components: the loss of relational advantages and the loss of relationship investment.

**The negative and positive switching barriers (NSB vs. PSB)**

Customers’ motivation to maintain the relationship with their service provider can have two origins: either they have to continue a relationship because of constraints or they want to stay in a relationship because of dedication. There is a great difference between these two reasons for continuing the relationship (Julander & Söderlund 2003).

In the first case, the relationship between customers and their service provider is a “constraint-based relationship” (Bendapudi & Berry 1997), which can be imposed on the customers in a formal or informal way. The relationship is maintained according to the customer’s evaluation of the switching alternatives. This evaluation compares the exit costs and the difference between the profits hoped-for at the competing providers and the profit from the current situation. If this evaluation is positive, the customer is in a position of weak economic dependence that facilitates the change. In the opposite case, the customer is in a situation of dependence and is more or less forced to maintain the relationship. Its decision to continue or end the current relationship with his service provider is determined by the degree of perceived dependence: the more significant this dependence, the more the customer is obliged to stay.
In the second case, consisting of a “dedication-based relationship” the continuity of the relationship is actively desired by customers (Stanley & Markman 1992). Customers maintain the relationship because they wish it, without being limited by constraints in their choice. This second category supposes the existence of an emotional link between customers and their service provider (Bendapudi & Berry 1997). Customers are less receptive to the competing offers and less inclined to search for alternatives. The availability of attractive alternatives on the market (Henning-Thurau & al. 2000) has no influence on this type of relationship.

The following table is a summary of our typology of customer perception of switching barriers:

<< Insert Table 1 >>

Contrary to the classification of Julander & Söderlund (2003), the risk perception barriers are in the negative switching barrier (NSB) category. This type of barrier can cause a feeling of detention in the relationship and does not allow the development of positive attitudes. In the mobile telephony sector, because of the market oligopoly structure, the lack of attractive alternatives (Vázquez-Carrasco & Foxall 2006) increases the risk of switching. Consequently, the risk perception barriers do not have a positive influence on the customer’s attitude to his current service provider.

In the positive switching barrier (PSB) category we can find the economic performance barriers, the functioning performance barriers and the relational performance barriers. These barriers have the following origins: rewards customer loyalty with special offers, (e.g., gifts, discounts); ease of functioning (e.g., satisfaction of the specific needs); interpersonal links (e.g., familiarity, attention, friendship or affinity). Their common point is that they contribute to increase the customer’s positive attitudes towards their service provider and strengthen the relationship. They make an active contribution to developing the customer’s commitment (Julander & Söderlund 2003).
**Research model**

To answer the question as to whether these various types of switching barrier influence the customer’s commitment in the same way, we examine the relation between the various types of SB and the commitment.

According to several researchers (Bansal & al. 2004; Fornell 1992; Jones & al. 2000; Ping 1993; Sharma & Patterson 2000), the perception of SB is a determining variable of the calculative commitment. In particular, SB influence significantly the propensity of customers to stay or to leave their service provider. When the costs, the effort and the time necessary for the switching increase, switching behavior becomes less likely. Therefore, we suppose that the perception of NSB strengthens (Bansal & al. 2004) and the perception of PSB weakens the calculative commitment.

<< Insert Figure 1 >>

As the customer’s motivation has two opposite sources, considering the results of Julander & Söderlund (2003), we suppose that it involves different consequences on the affective commitment. PSB strengthen the affective commitment of customers. On the contrary, NSB weaken the customer’s affective commitment.

Finally, concerning the relationship between the two forms of commitment, we consider that customer’s affective commitment is primary for the development and maintenance of the relationship (Fullerton 2003; Bansal & al. 2004). A psychological link established between customers and their service provider implies a long-lasting relationship intention and the affective commitment has a central role in comparison to the calculative commitment (Bloemer & Odenkerken-Schröder 2003). On the other hand, the calculative commitment
impact negatively the affective commitment (Mayer & Herscovitch 2001; Frisou 2000). From these results, we suppose that the affective commitment can have a negative effect on the calculative commitment.

**Empirical study**

Our empirical study had two objectives: on one hand to elaborate the measurement scales and on the other hand to test our conceptual model.

The procedure recommended by Churchill (1979) was followed for the development of measurement scales. In the exploratory phase, after the pre-test questionnaire, two on-line surveys (N1=404 and N2=402) were set up based on a consumer panel specific to mobile telephony service consumers. In the confirmatory phase, concerning the final validation of our measuring scales, a new on-line survey (N3=262) was carried out.

To test our conceptual model, the establishment of a validation sample by the fourth on-line survey (N4=980) was necessary. As regards the demographic characteristic of the sample, it reflects the national statistics of customers of the three main mobile phone operators in France. The following criteria were retained to create a representative sample of the French mobile phone service user population: mobile phone operator, age, gender, geographical situation and size of the agglomeration.

**Scale development**

In the exploratory phase, numerous items were generated on the basis of existing scales in the marketing literature (Burnham & al. 2003; Jones & al. 2000; N’Goala 2003; Fullerton
To obtain these textual data, two different methods were used: i) two focus groups bringing together mobile phone operator customers (12 people per group); ii) a netnographic study, with the collection of customers’ opinion expressed on the Internet in newsgroups relating to mobile phone services. The existing scales were adapted to the French context. A semantic clarity test was also carried out before the pre-test questionnaire. In our questionnaire a seven point Likert rating scale was used. After the measuring scales were purified (See Appendix A), a measuring model of commitment consisting of two dimensions and eight items was obtained. For the switching barrier measuring model, a measuring scale for the NSB composed of three dimensions and nine items and a measuring scale for the PSB composed of three dimensions and ten items were obtained.

To validate our measuring model, a confirmatory factor analysis (CFA) was realized using a Structural Equation Modeling package through AMOS version 5.0. In all of our measuring scales the coefficient alpha have a satisfactory value ($\alpha > 0.7$) except for the calculative commitment ($\alpha = 0.63$). The adjustment indexes are satisfactory, with each one above the recommended value of 0.9. The value of the RMSEA index is also below the suggested cutoff value of 0.08. Finally, to verify the good adjustment of the theoretical model to the empirical data, the adjustment of each construct and its indicators was examined in two stages: the significance of the factorial contributions$^1$ in the first stage and the reliability of internal consistency and the convergent validity of every construct in the second. We obtained satisfactory reliability and validity indicators. The value of the Jöreskog’s $\rho$ index is greater than the recommended threshold of 0.7 for all of our measuring scales. Results also supported the convergent and discriminant validity of our measuring model.

$^1$ Contributions’ significance $\neq 0$
**Results**

Two saturated models (M1 and M2) were built to test our hypotheses, both with five latent variables. In these models, three dependent variables were included both for positive switching barriers (BREL, BEAV, BFAF) and negative switching barriers (BFC, BETR, BFR) and two independent variables which are the affective commitment (EAFF) and the calculative commitment (ECAL). A covariance structure analysis was conducted on our two partial models:

<< Insert Table 2 >>

In our first model (M1), the three relationships relative to the affective commitment were statistically strongly significant and they had a positive estimated value. It supports our first hypothesis, that PSB have a positive influence on the affective commitment.

Among the three relationships of this partial model concerning the calculative commitment, two relationships were statistically not significant and so only one was statistically strongly significant. For this relation, a negative estimated value was obtained. This result confirms our second hypothesis.

The three relationships relative to the affective commitment of our second partial model (M2) were statistically strongly significant. Concerning the estimated value of these relations, an interesting result was obtained: risk perception switching act in conversely to how we had previously supposed. They have a positive effect on the affective commitment. Consequently, our third hypothesis is partially validated.

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The three relationships of this second partial model relative to the calculative commitment were statistically strongly significant. A negative relationship was found between the risk perception barriers and the calculative commitment. In fact, the more these barriers are important, the less customers make a commitment by interest, inversely to our preliminary suppositions. On the other hand, in accordance with our expectations, two other relationships are positives; this allows us the partial validation of our fourth hypothesis.

To test the relationship between the affective commitment and the calculative commitment, a partial model in the form of a saturated model was built with two latent variables. This partial model includes one dependant variable which is the affective commitment. The independent variable is the calculative commitment. Further to this analysis, the following results were obtained:

<< Insert Table 3 >>

The studied relationship was statistically significant. A negative link was observed between the affective commitment and the calculative commitment. Thereby, the stronger the customers’ affective commitment toward their service provider, the less the calculated interest of their commitment plays an important part.

**Discussion and conclusion**

The objective of our study was to explore the link between the various types of switching barrier and customer commitment. As was supposed, the influence of SB on customer commitment can be both beneficial and enhance the level of commitment or, on the contrary, decrease it, depending on the type of switching barrier.
Our results confirm that NSB and PSB have a significant effect on the affective commitment. Contrary to our expectations, risk perception switching barriers act conversely with regard to the other types of NSB. These risk perception barriers have a positive effect on the affective commitment. It shows that contrary to our preliminary proposal, the perception of the risk can bring a beneficial effect for the relationship, even if it originates from the lack of availability of attractive alternatives. The affective commitment presumes a certain level of identification with the partner and the implication of the customer in the relationship (Meyer & al. 1990). Similarly to loyalty (Caruana 2004), the existence of high level risk can contribute to increase the level of the affective commitment of customers via their investment in the relationship.

As regards the calculative commitment, it is related to opportunist behavior by customers (Kumar & al. 1994), determined by customers’ evaluation of the profits in staying in the relationship or in searching for alternatives. As the risk level increases, the customer’s advantage in searching for alternatives decreases. Indeed, the risk perception barriers have a negative effect on the calculative commitment as the available alternatives are less attractive. On the other hand, our hypothesis that PSB have a negative influence on the calculative commitment is only partially confirmed. Our results are not significant for the relational performance barriers and for the economic performance barriers. For the functional performance barriers the result was significant but with low estimated value. This result shows us that even if PSB strengthen the customer’s attitudes it does not restrict their opportunist behavior. PSB globally strengthen the customer's commitment by increasing the affective commitment. In conclusion, the results clearly show that using PSB a beneficial effect on strengthening the relationship between customers and their suppliers.

On a strategic level, the development of NSB, a very common strategy at present in the mobile phone service industry, is doubtful. It is based on the losses (the costs, the effort and
the time) connected to the break in the relationship which prevents the customer from leaving. The use of these barriers is meant to strengthen the commitment but most of the time they are perceived in a negative way by destroying customers’ positive attitudes. As the churn rate is particularly high in this service industry, one can wonder whether this strategy is really efficient in maintaining the continuity of the relationship.

The use of PSB is a much less wide-spread strategy at present. According to our results, these barriers strengthen the affective commitment but contrary to our suppositions, they do not weaken customers’ calculative commitment. In every case, using them increases the longevity of the relationship. They represent an effective strategy for the development of customer loyalty but their implementation requires a specific investment from companies in the relationship with their clientele. This relationship can be based on the opportunist behavior of customers (economic profits of the relationship) and/or on their dedication (psychological and social benefits of the relationship). Companies must develop their immaterial and tangible reward system. The proper operation of these systems strengthens customers’ commitment and increases their trust thanks to their satisfaction.

- On an economic level, the development of the tangible reward system contributes to the construction and the structuring of the relationship and represents an important obstacle to the relationship being broken.

- On a functional level, the development of the immaterial reward system is essential to increase the relationship quality. In a relatively homogeneous market, it appears to be a good way of differentiation of a company with regard to its competitors.

- On a relational level, the increase in relational performance allows to know better the customers and to establish a privileged relationship.
Altogether, the development of the NSB entails customers’ repurchase behavior by strengthening the calculative commitment for a limited period. The efficiency of this strategy depends on the companies’ ability to maintain the customer departure constraints. On the other hand, the use of PSB that increase not only the calculative commitment but also the affective commitment, allows the companies to insure the true loyalty of their clientele. Their efficiency depends on the relationship quality that is determined by the strength of customers’ affective commitment.

Within the framework of this study, we focused only on the interaction between the concepts of switching barriers and commitment without taking account of the influences and the interactions with other concepts which enable a long-term customer relationship to be maintained. Nevertheless, the switching barrier effect seems to us to be much more complex on the customer’s behavior. We suppose that except for commitment, there are several concepts that interact with the switching barrier concept, such as the satisfaction and the customers’ trust. Taking into consideration the interaction of these concepts may also modify the relationship between switching barriers and commitment by introducing new issues. For example, an interesting question still remains to be studied: do switching barriers work in the same way at various levels of satisfaction and/or trust? In addition, we can compare the degree of influence that these concepts have and see the differences between the various types of switching barriers.
Bibliography


### Tables and figures

<table>
<thead>
<tr>
<th>Economic aspect</th>
<th>Negative switching barriers</th>
<th>Positive switching barriers</th>
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<tr>
<td></td>
<td>Transactional barriers: all financial costs connected to the switching process (e.g., costs of the relationship contractual linkage, technical installation costs)</td>
<td>Economic performance barriers: all costs relative to the loss of economic benefits for staying with current service provider (e.g., price reduction, reception of free gifts)</td>
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<td>Functional aspect</td>
<td>Cognitive barriers: the efforts and time dedicated to the switching process (e.g., information search and exchange, evaluation and comparison of alternatives)</td>
<td>Functional performance barriers: the loss of customers practice in the service using (e.g., customer routine of using the service functions, knowledge of the specific services)</td>
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<td>Relational aspect</td>
<td>Risk perception barriers: customer evaluation of the perceived risk associated to the switching process (e.g., social risk, psychological risk)</td>
<td>Relational performance Barriers: the loss of the psychological and the social benefits of the relationship (e.g., special treatment, membership in a customer community)</td>
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*Table 1: Typology of customer perception of switching barriers*
<table>
<thead>
<tr>
<th>Model</th>
<th>Relations</th>
<th>Estimated value</th>
<th>T test value</th>
<th>Significance</th>
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<td>0.2535</td>
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<td></td>
<td>BEAV $\rightarrow$ EAFF</td>
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<td>9.6758</td>
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<td>0.1448</td>
<td>4.0640</td>
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<td></td>
<td>BREL $\rightarrow$ ECAL</td>
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<td>BEAV $\rightarrow$ ECAL</td>
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<td>BFAF $\rightarrow$ ECAL</td>
<td>-0.0117</td>
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<td>$M_2$</td>
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<td>-0.1569</td>
<td>-3.6713</td>
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<td></td>
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<td>-0.2733</td>
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<td>BFR $\rightarrow$ EAFF</td>
<td>0.5336</td>
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<td>BFC $\rightarrow$ ECAL</td>
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<td>4.2933</td>
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<td>0.2207</td>
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<td>BFR $\rightarrow$ ECAL</td>
<td>-0.4354</td>
<td>-6.5269</td>
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NS: Non Significant; ***: Significant in 1%


Table 2: Value and significance of partial models
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***: Significant in 1%

*Table 3: Value and significance of the partial model of commitment*
Figure 1: Research hypothesis

H1: Relational performance barriers, economic performance barriers and functional performance barriers are negatively associated with affective commitment.

H2: Relational performance barriers, economic performance barriers and functional performance barriers are positively associated with calculative commitment.

H3: Transactional barriers, cognitive barriers and risk perception barriers are negatively associated with affective commitment.

H4: Transactional barriers, cognitive barriers and risk perception barriers are positively associated with calculative commitment.

H5: Affective commitment is negatively associated with calculative commitment.
Appendixes

<table>
<thead>
<tr>
<th>Code</th>
<th>Item</th>
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<tr>
<td><strong>Affective Commitment</strong></td>
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<td></td>
</tr>
<tr>
<td>EAFF1</td>
<td>I am proud to say to the people around me that I am a customer of my mobile phone service provider</td>
<td></td>
</tr>
<tr>
<td>EAFF3</td>
<td>I am particularly attached to my mobile phone service provider</td>
<td></td>
</tr>
<tr>
<td>EAFF4</td>
<td>I would be pleased to remain a customer of my mobile phone service provider for many years</td>
<td>0.9004</td>
</tr>
<tr>
<td>EAFF6</td>
<td>I find that the customers of my service provider form a population which, in some way, I feel part of</td>
<td></td>
</tr>
<tr>
<td>EAFF7</td>
<td>As a customer, I have the feeling that I share common points with the other customers of my mobile phone service provider</td>
<td></td>
</tr>
<tr>
<td><strong>Calculative Commitment</strong></td>
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<tr>
<td>ECAL1</td>
<td>At the moment, I am remaining a customer of my mobile phone service provider rather by necessity than by choice</td>
<td>0.6271</td>
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<tr>
<td>ECAL2</td>
<td>My contract binds me to my mobile phone service provider, so it would be difficult for me to leave it overnight even if I wanted to.</td>
<td></td>
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<tr>
<td>ECAL4</td>
<td>Being committed for a certain duration is the only possible reason why I would not change service provider for the moment</td>
<td></td>
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<tr>
<td><strong>Positive switching barriers</strong></td>
<td></td>
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<tr>
<td>BREL1</td>
<td>I have a special relationship with certain agents of my mobile phone service provider</td>
<td>0.8983</td>
</tr>
<tr>
<td>BREL2</td>
<td>I am used to dealing with my service provider</td>
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<tr>
<td>BREL4</td>
<td>All in all, I have been very involved in creating and keeping a relationship with my service provider</td>
<td></td>
</tr>
<tr>
<td>BREL5</td>
<td>It would be difficult for me to break the relationship with my service provider and to start again with another one</td>
<td></td>
</tr>
<tr>
<td>BFAF1</td>
<td>By changing, I would lose my habits of using the services.</td>
<td></td>
</tr>
<tr>
<td>BFAF2</td>
<td>If I changed mobile phone service provider, I would have to get into other habits</td>
<td>0.8456</td>
</tr>
<tr>
<td>BFAF3</td>
<td>It would take me time to learn how to correctly use the services offered by another service provider</td>
<td></td>
</tr>
<tr>
<td>BEAV1</td>
<td>I am enjoying a loyalty program and interesting benefits with my present service provider</td>
<td>0.8420</td>
</tr>
<tr>
<td>BEAV3</td>
<td>I am attached to the advantages that I have acquired since I was a customer.</td>
<td></td>
</tr>
<tr>
<td>BEAV4</td>
<td>My mobile phone service provider proposes me interesting offers which correspond to my needs</td>
<td></td>
</tr>
<tr>
<td><strong>Negative switching barriers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BFC1</td>
<td>It takes too much time and effort to find information on mobile telephony offers</td>
<td>0.8959</td>
</tr>
<tr>
<td>BFC4</td>
<td>I find it difficult to evaluate mobile telephony offers even if the necessary information is at my disposal</td>
<td></td>
</tr>
<tr>
<td>BFC5</td>
<td>It is difficult to compare the offers of mobile phone service providers</td>
<td></td>
</tr>
<tr>
<td>BFR1</td>
<td>Changing can lead to hidden costs that were not anticipated</td>
<td>0.7553</td>
</tr>
<tr>
<td></td>
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<td></td>
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<tr>
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<td>---</td>
</tr>
<tr>
<td><strong>BFR2</strong></td>
<td>By changing mobile phone service provider, I might be financially out of pocket with the new service provider</td>
<td></td>
</tr>
<tr>
<td><strong>BFR4</strong></td>
<td>I cannot know in advance whether the new service provider is not worse than the present one</td>
<td></td>
</tr>
<tr>
<td><strong>BETR2</strong></td>
<td>Breaking the contract prematurely with my mobile phone service provider would be too expensive for me</td>
<td>0.7210</td>
</tr>
<tr>
<td><strong>BETR4</strong></td>
<td>In my opinion, transferring my phone number would be expensive if I changed service provider</td>
<td></td>
</tr>
<tr>
<td><strong>BETR6</strong></td>
<td>Solving technical problems (e.g. cell phone unlocking) resulting from the change of mobile phone service provider will be expensive for me</td>
<td></td>
</tr>
</tbody>
</table>

*Appendix A: Measurement scales*