# Gordon Institute <br> of Business Science <br> University of Pretoria 

## Switching costs and alternatives' attractiveness as moderators in the relationship between customer engagement and switching intentions

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A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.


#### Abstract

Underpinned by social exchange theory, this study examined the influence of customer engagement on switching intentions. Breaking switching costs down to three types, procedural switching costs (PSC), financial switching costs (FSC) and relational switching costs (RSC), it further examined the role played by switching costs in this relationship. It was also the objective of this study to examine the role played by alternatives' attractiveness, but the testing could not be completed. Data was obtained from retail banking customers by means of online survey tool $(\mathrm{N}=235)$ and the hypotheses tested by means of structural equation modelling.

CE was found to have a negative influence on switching intentions. This relationship was moderated positively by RSC relating to brand relationship loss. No significant moderating effect was found in relation to the other types of switching costs. Mixed results were obtained regarding the direct effect of the different types of switching costs have on switching intentions. Some were positive, others negative, while others did not have a significant influence.

This study confirms strategic importance of customer engagement and building a good brand that customers can relate to and associate with. It further confirms that switching costs should not be seen and treated as a singular cost as the different types of costs have different effects. And finally, it provides insight into which types of switching costs firms can focus on to build or destroy switching barriers.


## KEYWORDS:

Customer engagement; Switching intentions; Switching costs; Alternatives' attractiveness

## DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Amogelang Phefo
11 November 2019

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## 1 INTRODUCTION TO THE RESEARCH PROBLEM

### 1.1 Introduction

Firms need a way to differentiate themselves in order to be or remain competitive. This quest is increasingly difficult due to goods and services being commoditised. One of the ways that has been identified for firms to differentiate themselves is by improving the customer engagement (CE). It is widely accepted that a good CE contributes significantly to a company's ability to attract and retain customers. CE has grown to become an important concept in marketing (Hollebeek, Srivastava, \& Chen, 2019). As recently as 2017, the Journal of the Academy of Marketing Science had a special issue addressing CE. CE has also been listed as one of the 2018-2020 higher priority research areas by the Marketing Science Institute (MSI) (Marketing Science Institute, 2018).

Furthermore, the costs incurred by firms to acquire new customers are high, making it necessary for firms to do as much as is possible to retain existing customers (Kim, Park, Park, Kim, \& Kim, 2018). This drive to retain customers calls for understanding the switching behaviour. Behaviour is often predicted by intentions to perform such behaviour. As a result, many scholars do not study the actual behaviour, but rather the intentions.

### 1.2 Purpose statement

The aim of this proposed study was to build on prior conceptual work on CE and examine empirically, the association between CE and brand switch intentions, together with the moderating effects of switching costs and a lack of alternatives.

CE has received a significant amount of interest in the past few years. However, despite this interest, empirical research in the area remains widely limited (So, King, Sparks \& Wang, 2016). More specifically, the CE studies have mainly been in developed economies and are limited in developing economies such as South Africa (Kumar, Rajan, Gupta, \& Pozza, 2019). Furthermore, there is also a lack of consensus amongst scholars on the conceptualisation of CE (Pansari \& Kumar, 2017).

The context of the proposed study is the banking sector. The banking sector in South Africa has been described by (Simbanegavi, Greenberg, \& Gwatidzo, 2015) as monopolistic competition This they attribute to the high concentration banks, high switching costs countered by the non-price competition, such as advertising, that is evident. The South African banking sector has for many years been dominated by four banks, namely, ABSA, First National Bank, Nedbank and Standard Bank. In the last two decades, Capitec has become a significant player in the sector. A recent study by market research firm, Consulta, suggests that $25 \%$ of the customers are ready to switch to another bank (Consulta, 2019). This risk of losing customers is increased by the looming introduction of new banks such Bank Zero, Discovery Bank and TymeBank (Consulta, 2019). The introduction of these new banks will offer retail banking customers alternatives to the more traditional banks.

This study will contribute by validating the scale developed by So, King, and Sparks (2014) by applying it to the retail banking sector. It is also expected to provide practitioners with evidence that links in they should implement ways of CE in order to minimise brand switch intentions and the related behaviour.

### 1.3 Research objectives

The objectives of the proposed study were to:

- Understand the relationship between CE and brand switch intentions;
- Understand the role played by switching cost in the relationship between CE and brand switch intentions; and
- Understand the role played by a lack of alternatives in the relationship between CE and brand switch intentions.


### 1.4 Conclusion

In this chapter, a case was made for the need for the current study. Both practitioners and academics have called for research on CE, brand switch intentions, switching costs, and a lack of alternatives.

The rest of this research report is organised in manner that follows. Chapter 2 covers a review of the literature that is relevant to further understanding the concepts of CE, brand switch intentions, switching costs, and attractiveness of alternatives.

Furthermore, Chapter 2 will show in detail the gap and need for this study. The hypotheses of this proposed study are also presented in Chapter 2. The methodology undertaken in the study will be discussed in Chapter 3. This will be followed by a presentation of the data collected in Chapter 4. In Chapter 5, the results of statistical analyses of the data collected are presented and discussed. The report is concluded in Chapter 6, with a summary of principal findings and recommendations.

## 2 LITERATURE REVIEW

### 2.1 Introduction

In this chapter the concepts that are central to this study explored in more detail. The chapter begins by briefly looking at social exchange theory, which underpins this study. Thereafter, CE, a concept for which various definitions have been put forth by scholars in the field (Lemon \& Verhoef, 2016) will be defined. This will be followed by further looking at switching intentions, switching costs and alternatives' attractiveness. This chapter will argue that engaged customers are less likely to have intentions to switch service providers. However, this relationship is not as simple because of the role played by switching costs and alternatives' attractiveness as moderators. Switching costs play a "lock-in" role, thus being a positive moderator, while alternatives attractiveness has a push effect, thus being a negative moderator of this relationship. Furthermore, it will be argued that switching costs have a direct effect on switching intentions. It will also be argued that alternatives attractiveness has a direct effect on switching intentions and on switching costs.

### 2.2 Social exchange theory

As previously mentioned, this study is underpinned by the social exchange theory. Social exchange theory (SET) involves the notion that an individuals will continue being party to a relationship only when it is beneficial to continue doing so (Harrigan, Evers, Miles, \& Daly, 2017). In so doing, the individual will compare the benefits and costs of being in the relationship and terminate the relationship should the costs outweigh the benefits (Harrigan et al., 2017). Over time, the series of interactions between parties in create obligations and expectations of reciprocity (Cropanzano \& Mitchell, 2005). Assuming both parties fulfil their obligations, is it expected that over time trust will be built (So, King, Sparks, \& Wang, 2016), thus encouraging more performance. When this trust is broken, and reciprocity not being fulfilled, the party whose costs of being in the relationship exceed the benefits will seek to obtain a balance of these tangible and intangible costs and benefit and may terminate this relationship. terminate it (Harrigan et al., 2017).

Various CE studies have been underpinned by SET, including that of Harrigan et al. (2017), who argue SET to be appropriate for research relating to CE, regardless of the sector.

SET like many other theories, has limitations. SET has been criticised for lacking specificity and for being limited in giving a priori explanations for phenomena (Cropanzano, Anthony, Daniels, \& Hall, 2017). These limitations are It is for these reasons that (Cropanzano et al., 2017) have suggested adding a second dimension, activity, when considering behaviour from a SET perspective. Addition of the new dimension improves specificity and enables one to make a priori predictions of behaviour.

### 2.3 Engagement

The term engagement has been used extensively in various disciplines of social and management sciences, including psychology, sociology, education and organisational behaviour where it has been shown to be a multidimensional concept encompassing cognitive, emotional and behavioural aspects (Brodie, Hollebeek, Jurić, \& llić, 2011). This term can be traced as far back as 1990 when Kahn applied it to work. Kahn (1990) identified three psychological conditions required for employees to employ what he termed "personal engagement" (p. 694). According to Kahn, when employees are engaged, determined on the psychological conditions of meaningfulness, safety and availability being satisfied, such employees are more likely to employ more of their physical, emotional and cognitive selves in their roles as employees. Thus, engagement was identified as a psychological state that affected behaviour. Researchers from other fields have characterised engagement "as involving vigour (energy and mental resilience), dedication (sense of significance, enthusiasm, inspiration, pride, and challenge), and absorption (concentration and engrossment); attention and absorption; and the opposite of burnout" (Vivek, Beatty, \& Morgan, 2012, p. 128).

### 2.3.1 Customer engagement

Although CE has received a considerable amount of attention in recent years, scholars are yet to reach consensus on the definition of the concept (Harmeling, Moffett, Arnold, \& Carlson, 2017; Lemon \& Verhoef, 2016). This lack of congruence
on the definition is possibly limiting progress in the development of this research domain (Harmeling et al., 2017).

The apparent difference in the conceptualisation of the concept stems from two main areas. The first is the dimensionality of the concept and the other is the variety in the focal objects. CE has been presented in various studies (such as Harmeling et al. (2017); Jaakkola \& Alexander (2014)) as a unidimensional, primarily behavioural, concept. This, according to Harmeling et al. (2017), has the benefit that it allows for in-depth understanding of the dimension. However, focusing one dimension can be limiting as there could be some inter-reliance amongst the various dimensions which researchers may fail to identify and understand without looking at the dimensions together. As a result, some studies have extended their definitions to also take into account the psychological aspects of CE. Surprisingly, there is no consistency amongst those who have taken a multidimensional approach to defining CE. The scholars emphasise different combinations of the dimensions. Some scholars have emphasised behaviour and cognition (Sarkar \& Sreejesh, 2014), some while others have emphasised behaviour, cognition and affection. A social dimension has also been suggested (Vivek, Beatty, Dalela, \& Morgan, 2014; Vivek et al., 2012), though it seems to merely an extension of the behavioural dimension.

The second area which creates an apparent difference is the variety in the focal objects. Brodie et al. (2011) defined CE as "a psychological state, which occurs by virtue of interactive, cocreative customer experiences with a focal agent/object (e.g., a brand) in service relationships" (p.260). This variety in focal objects has resulted in scholars coming up with terms such as customer brand engagement ((Hollebeek, Glynn, \& Brodie, 2014)), media engagement (Calder \& Malthouse, 2008), brand community engagement (Algesheimer et al., 2005), and online brand community engagement (Baldus, 2015). A customer will however not be engaging with a single focal object at a time. There may be times when the customer engages with multiple focal objects at the same time. As a result, CE should be defined broadly enough to be cover a wide range of focal objects, taking into account that some focal objects may be experienced at the same time.

The school oriented towards defining CE based behaviour appears to be the dominant school of thought (So et al., 2016), perhaps due to the ease with which behaviours can be observed. It is, however, insufficient to ignore the role played by psychology when defining CE. So et al. (2016) argue that a truly engaged customer
should have some form of psychological connection with a brand in addition to engaging behaviourally. For example, a customer, may without a psychological connection, engage a brand to seek information about a product (So et al., 2016). It is also peculiar that whilst the concept of engagement, as well-established as it is in other fields where it recognises the psychological aspect, it would not when used in the field of marketing.

The proposed study adopts the definition given by So et al. (2016) that CE is a "customer's personal connection to a brand as manifested in cognitive, affective and behavioural responses outside of the purchase" (p. 65). Thus. the focal object is the brand and the concept of CE is multidimensional This definition was chosen firstly on the basis that it recognises that the connection is personal. As a result, it will vary from person to person in terms of intensity and in terms of how it is expressed. The intensity of a customer's engagement can vary from non-engaged to highly engaged (Brodie et al., 2011; Vivek et al., 2012), where low engagement levels are associated with negative experiences and higher levels of engagement with more positive experiences (De Keyser, Lemon, Klaus, \& Keiningham, 2015). Secondly, the idea of CE being about a connection is important as a connection exists at a point in time, it can be long-enduring and it can end. Lastly, this definition is appropriate as it recognises the cognitive, affective and behavioural aspects of CE.

So et al. (2016) further explain CE as having underlying dimensions of enthusiasm (or vigour), attention, absorption, interaction, and identification. Each will be discussed in turn. Enthusiasm represents a customer's strong feelings of pleasure and anticipation regarding the brand or firm (So et al., 2016). Attention relates to the amount of attention the customer pays to the brand or firm and its activities describes a consumer's attentiveness to the brand (So et al., 2016). Absorption is a deeper level of attention to the point that the customer may be unaware of other things such as the passing of time and effort given towards the brand or firm. Interaction refers to a customer's in a wide range of activities with the firm and other customers or potential customers, beyond the core purchase transaction (So et al., 2016).The dimension of interaction is the focus area of scholars who view CE with a strong behavioural orientation. Interaction relates to the customer's participation in activities with other customers, potential customers, and/or with the firm, going beyond the core purchase transaction (So et al., 2014). It requires that there be at least two parties to be involved. The idea of interaction being about activities beyond the core
transaction is an important one as it differentiates customer engagement from other customer activities including repeat purchases (Harmeling et al., 2017). Repeated purchases could be perceived as evidence customers being engaged, while there is no connectedness between the customers and the firm. Furthermore, it aligns the application of engagement to other fields such as organisational psychology where the employee engagement is determined as going the "extra mile" and doing more than the minimum required by the employee (Moliner-Tena, Monferrer-Tirado, \& Estrada-Guillén, 2019). Interaction allows for the sharing of experiences and ideas. The growth of social media also presents a different platform of how interaction unfolds.

Identification is when the customer identifies with the brand or firm (So et al., 2016). The above five underlying dimensions reflect cognitive (enthusiasm, identification), affective (attention, absorption), and behavioural (interaction) aspects of CE.

Sources of CE include satisfaction and emotion ((Pansari \& Kumar, 2017), participation and involvement (Vivek et al., 2012), and satisfaction , commitment, trust, (So et al., 2014). Engaged customers, typically, display greater brand loyalty and satisfaction (Jaakkola \& Alexander, 2014) and are more likely to contribute to new product development, cocreation, service innovation, and viral marketing activity by providing word of mouth and referrals to others (Jaakkola \& Alexander, 2014; Kumar et al., 2019; Pansari \& Kumar, 2017). CE is iterative. When looking at the antecedents and consequences, some items appear both as antecedents and consequences.

It is clear from the above that customers that are engaged create both tangible and intangible value for firms (Pansari \& Kumar, 2017). CE is therefore of strategic importance to firms and firms would benefit greatly from promoting engagement of their customers. However, promoting engagement should be approached with caution as sometimes it can backfire. Customers can sometimes promote negative word of mouth resulting in negative value being created for the firm (Beckers, van Doorn, \& Verhof, 2018). In general, however, the negative aspects of CE only come to light when a firm's objectives and customers' objectives are misaligned (van Doorn et al., 2010). If a firm's objectives are aligned with those of the customers, there should be no reason for customers to use the available platforms to paint the firm in a negative light. From this perspective, CE, even when highlighting a firm's negative
aspects, is good for the firm as it drives a firm towards aligning its objectives with those of its customers.

It is argued that context is important to CE. Kumar and Pansari (2016) have argued in their conceptual framework that culture may affect CE as it would influence interactions amongst customers, employees and the firm. They further suggest that CE may be affected by the firm type and industry. As such they have called for CE research to be performed in different contexts to enable an understanding of how CE may be affected by context.

### 2.4 Switching intentions

Customer switching behaviour relates to the switching by a customer from using the services of one service provider to using the services of another. It can be either good or bad. It can lead to customers switching in (that is, new customers being obtained by a firm) or switching out (firm losing existing customers to competitors) (Jung, Han, \& Oh, 2017). From the perspective of an incumbent service provider, switching is therefore undesirable. Such switching out results in loss of revenue from the customer and possibly other customers that can be influenced by the first switching customer. Additional costs would have to be incurred by the firm in an attempt to regain such a lost customer.

Switching can also be seen as the opposite of loyalty. With the extant research performed on loyalty, the question that arises is why studies should be performed on switching. Even loyal and satisfied customers do at times switch from one service provider to another, suggesting that there could be other reasons for customers to switch. Furthermore, the variables leading to loyalty may not be symmetrical to the variables leading to switching (Bansal \& Taylor, 1999). This makes switching distinct from loyalty.

From the field of psychology, it is understood that intentions are an important predictor of behaviour. This was shown through various theories, including Ajzen's Theory of Planned Behaviour (Ajzen, 1991). Therefore, it would be reasonable to conclude that when a customer has intentions to switch brands, the customer is likely to perform the intended behaviour and actually switch brands. The close relationship between switching intentions and switching behaviour in a customer service provider relationship has also been supported by various studies including (Bansal, Taylor, \&

St. James, 2005). Switching intentions are therefore important to understand as they predict switching behaviour.

The sources of switching intentions have been identified in literature to include low trust, low satisfaction low service quality (Jung et al., 2017). Pick \& Eisend (2014) classified the antecedents into those that are firm-related, buyer-related and marketrelated.

In short, when customers are dissatisfied with a service received, they may switch to another service provider. In line with the Theory of planned behaviour, such switching behaviour is preceded by intentions to switch.

It is, however, not every customer who is dissatisfied that ends up switching. This could be as a result of switching costs and a lack of alternatives which together act as barriers to switching (Bansal et al., 2005; Kim et al., 2018).

### 2.4.1 Switching costs

"Switching costs are defined as the customer's perception of the magnitude of additional costs required to conclude the current relationship, and secure an alternative supplier" (Blut, Evanschitzky, Backhaus, Rudd, \& Marck, 2016, p. 82). These costs are once off costs and need not arise immediately upon switching (Burnham, Frels, \& Mahajan, 2003). Porter (2008) also adds that switching costs are fixed in nature.

Switching costs are sometimes seen as "barriers that hold customers in service relationships" (Jones, Mothersbaugh, \& Beatty, 2002, p. 441). However, such a view can cause limitation as there are differences between switching costs and switching barriers. As argued by El-Manstrly (2016), switching barriers are factors that make switching difficult, whereas switching costs are the losses that arise only upon switching. Thus, switching barriers exist irrespective of whether a switch has taken place.

Some scholars prefer to use the term "perceived switching costs" to make it explicit that these costs are as perceived by the customer (Barroso \& Picón, 2012). Although this paper uses the term switching costs, it refers to costs as perceived by the customer.

There are three types of switching costs; namely procedural switching costs, financial switching costs, and relational switching costs (Blut, Frennea, Mittal, \& Mothersbaugh, 2015; Burnham et al., 2003). According to the authors, the above three types are higher order with eight underlying facets as discussed in the following paragraphs.

Procedural switching costs relate to costs of time and effort, comprising of economic risk costs, evaluation costs, learning costs, and set-up costs. Economic risk cost relates to the psychological cost of accepting uncertainty over the outcome of switching to the new provider (Burnham et al., 2003; Jones et al., 2002). This risk arises because the customer has limited information to enable the customer to judge quality. Services are expected to have higher economic risk cost due to being intangible and heterogeneous (Jones et al., 2002). Evaluation costs relate to the preswitch time and effort spent seeking information about alternatives and evaluating the information to enable informed decision making (Burnham et al., 2003; Jones et al., 2002). Learning costs relate to the post-switch time and effort of adapting to the new provider (Burnham et al., 2003; Jones et al., 2002). The customer is required to learn a new skill or know-how to be able to use the new provider's product or service. Set-up costs include time and effort related to initial use of a product or service (Burnham et al., 2003).

Financial switching costs are those costs that can be measured monetarily. When switching to a new provider, customers may sacrifice certain benefits including discounts, benefits arising from loyalty schemes as well as other benefits which new customers do not enjoy (Burnham et al., 2003; Jones et al., 2002). This is the benefit loss cost. These forgone benefits create an incentive for the customer to remain with the incumbent provider (Jones et al., 2002). Monetary loss costs are the once-off financial costs incurred by the customer to initiate the new relationship, other than the cost of the good or service itself (Burnham et al., 2003). These can include deposits or initiations fees that would otherwise not be incurred if there is no switching.

Relational switching costs relate to the emotional cost of terminating relationship with other persons and the brand or company. Personal relationship loss costs relate to the affective losses arising from breaking bonds with people that the customer had become accustomed to interacting with at the incumbent provider (Burnham et al.,
2003). Brand relationship loss costs relate to the affective loss arising from ceasing to be associated with a certain brand or company (Burnham et al., 2003).

It is believed that the greater the switching costs are for customers, the less likely the customers are to switch (Kim et al., 2018). Whereas switching costs are a negative for the customer, for firms switching costs can be either negative or positive. On the one hand, switching costs can make it difficult for a firm to acquire new customers (Porter, 2008), while on the other hand, they can improve retention of existing customers. As such switching costs can be are considered by some to be a strategic imperative (Pick \& Eisend, 2014).

Studies have yielded conflicting results on the influence of switching costs on switching intentions and behaviour. Some studies have found switching costs to have a positive influence on switching, while others found no effect (Bansal et al., 2005). Most studies, however, suggest that switching costs reduce switching intentions/behaviour (Kim et al., 2018; Pick \& Eisend, 2014). El-Manstrly (2016) argues that these conflicting results are a result of studies not differentiating between the different types of switching costs.

Furthermore, in a meta-study assessing the association between the different types of switching costs and repurchase intentions/behaviour, Blut et al. (2015) found that relational switching costs had the strongest association, followed respectively by procedural switching costs and financial switching costs. Therefore, the different types of switching costs affect intentions/behaviour differently. Additionally, in measuring switching costs, it is important to measure the different types of switching costs (Barroso \& Picón, 2012). Kim et al. (2018) further highlight that research has given little attention to the different types of switching costs, focusing "on a unified concept of switching costs" (p. 213).

### 2.4.2 Alternatives' attractiveness

The construct of alternatives attractiveness relates to the customers' perception of whether alternate options in the market are available and attractive (Kim et al., 2018). These alternate options incorporate both goods/services similar to the one currently received by the customer as well as complete substitutes thereof. When making the decision to stay in or exit a relationship, buyers take into account the availability and attractiveness of alternatives in the market (Pick \& Eisend, 2014). Customers
compare the offerings across the market and this can influence the expectations from the incumbent provider (Pick \& Eisend, 2014). According to Ghazali, Nguyen, Mutum, and Mohd-Any (2016), when evaluating the attractiveness of alternatives, customers take into account existence of alternatives, the degree of difference among alternatives, and the switching costs between alternatives. The less attractive customers perceive the alternative to be, the less likely the customers are to switch to the alternative (Kim et al., 2018).

Furthermore, Lee et al. (2008) observed that customers were more likely to switch in competitive markets due to increases in alternatives resulting from the competition. In a less competitive market as is the South African retail banking sector, it can, therefore, be argued that customers are less likely to switch to another bank.

Pick and Eisend (2014) identified alternative attractiveness as a market-related antecedent to switching, affecting switching both indirectly (through reducing switching costs) as well as directly. However, limited research exists on the moderating effects of alternative attractiveness (Kim et al., 2018). In their attempt to investigate the moderating effects of alternatives attractiveness on the relationship between satisfaction and loyalty, (Kim et al., 2018) found the results to be inconclusive. Hence they subsequently echoed El-Manstrly (2016) and called for studies into the moderating effect of alternative attractiveness to be performed in other contexts as different results may be obtained.

In the context of the retail banking sector, customers are currently limited to the five main banks previously identified. Thus, the sector is oligopolistic in nature with little competition. There is little differentiation of the offerings by the main competitors. Due to these similarities, it could be argued that retail banking customers expect to derive little benefit from switching service providers.

### 2.5 Customer engagement and switching intentions

As shown above, the consequences of CE include trust, commitment, and loyalty. These consequences of CE are predominantly relational in nature as they come into being when a bond or connection has been formed. Furthermore, customers who are satisfied have also been shown to be less likely to switch service providers, and more likely to engage in repurchase activities. It would therefore follow that if customers are experiencing a high level of engagement, they are less likely to have intentions
to terminate the current relationship and switch to another brand. Thus, the first hypothesis of this paper is presented as:
$H_{1}$ : There is an inverse relationship between customer engagement and switching intentions

### 2.6 Switching costs and switching intentions

Bansal et al. (2005) found that customers may at times stay in relationships with the incumbent service provider due to high switching costs even when unhappy with the service levels or quality. Kim et al. (2018) found the different types of switching costs to have different moderating effects on the relationships between cognitive and affective satisfaction and customer loyalty. Therefore, the following are hypothesised,
$\mathrm{H}_{2 \mathrm{~A}}$ : Procedural switching costs moderate the relationship between customer engagement and switching intentions
$\mathrm{H}_{2 \mathrm{~B}}$ : Financial switching costs moderate the relationship between customer engagement and switching intentions
$\mathrm{H}_{2 \mathrm{C}}$ : Relational switching costs moderate the relationship between customer engagement and switching intentions

Furthermore, it is hypothesised that:
$\mathrm{H}_{3 \mathrm{~A}}$ : There is an inverse relationship between procedural switching costs and switching intentions
$H_{3 B}$ : There is an inverse relationship between financial switching costs and switching intentions
$\mathrm{H}_{3 \mathrm{C}}$ : There is an inverse relationship between relational switching costs and switching intentions

### 2.7 Alternatives' attractiveness and switching intentions

Because the focus of alternatives attractiveness is on what the other service providers offer, it acts as a pulling factor, drawing customers to attractive alternative (Jung et al., 2017). In the context of airlines travel, Jung et al (2017) found that customer's positive responses to alternatives, had the largest impact on their intentions to switch. Therefore, the following is hypothesised,
$\mathrm{H}_{4}$ : Alternatives' attractiveness moderates the relationship between customer engagement and switching intentions

Furthermore, (Pick \& Eisend, 2014) found that alternative attractiveness also affected customers' perception of switching costs in addition to affecting switching intentions. Following on this, it is hypothesised that:
$H_{5}$ : There is a positive relationship between alternatives attractiveness and switching intentions
$H_{6 A}$ : There is an inverse relationship between alternatives' attractiveness and procedural switching costs
$H_{6 B}$ : There is an inverse relationship between alternatives' attractiveness and financial switching costs
$H_{6 c}$ : There is an inverse relationship between alternatives' attractiveness and relational switching costs

Figure 1: Diagrammatic representation of hypotheses and proposed model


### 2.8 Conclusion

The concept of customer engagement is an important one to marketers as it has been shown several times that it contributes positively to firm performance. It is of particular importance these days as more goods and services are becoming commoditised. As such, firms have to implement strategies to ensure that their customers become or remain highly engaged and limit intentions to switch brands. In the next chapter, the proposed methodology for testing the above hypotheses will be given in detail.

## 3 RESEARCH DESIGN AND METHODOLOGY

### 3.1 Introduction

In this chapter, the research design and methodology implemented in carrying out the study is set out in detail. A research design sets out how the researcher went about answering the research question(s) of a study (Saunders, Lewis, \& Thornhill, 2009). The research design is concerned with aspects such as the philosophy underpinning the study, research approach, research strategy and time horizon. Methodology is concerned with sampling as well as data collection and analysis. The chapter is concluded by listing the limitations of the study.

### 3.2 Choice of methodology

The study was an explanatory quantitative study. It was underpinned by a positivist philosophy and followed a deductive approach. The term philosophy "relates to the development of knowledge and the nature of that knowledge" (Saunders, Lewis, \& Thornhill, 2009, p. 107). Although various philosophies exist, Saunders et al. (2009) warn against thinking that one is better than the other. The differences in the philosophies arise primarily on assumptions and beliefs of how the world works (ontology) and how knowledge is created (epistemology). The philosophy adopted by a researcher is important as it influences the research design, methodology and interpretation (Saunders \& Lewis, 2012). A positivist philosophy is one where "highly structured methods are employed to facilitate replication" (Saunders \& Lewis, 2012, p. 104). A positivist philosophy is therefore appropriate for this study as the study hypothesises about relationships among specifically identified constructs (customer engagement, switching intentions, switching costs, and alternatives' attractiveness), so as to enable prediction of how the dependent variables change when independent variables change.

Given the time constraints in which the study had to be completed, the study was cross-sectional in nature and employed a mono-methodological approach, in the form of an online survey using a self-administered questionnaire. A cross-sectional study is a study in which data is collected from the respondents at only one point in
time (Saunders \& Lewis, 2012). It thus captures the participants' views at that point in time.

### 3.3 Population

The population of interest was customers in the retail banking sector residing in the province of Gauteng, South Africa. These were limited to individual customers older than 18 years of age. They should hold an account with any bank which may be a savings or a current account, but is used as a primary account for day to day banking needs. The is no requirement for the participants to have held the account for a specific amount of time.

### 3.4 Unit of analysis

The unit of analysis is the major entity to be analysed in the proposed study. .The individual customers participating in the survey were the unit of analysis since the project concerned itself with them and their personal views.

### 3.5 Sampling method and size

A non-probability sampling method was utilised due to the full list of the population of interest not being available to the researcher (Saunders \& Lewis, 2012). Although the service providers in the banking industry should have lists of all their customers, the lists were not available to the researcher. Therefore, the researcher had to adopt a non-probability sampling method.

In selecting the sample for this study, the researcher applied snowball sampling, which is non-probability sampling method in which the initial participants aid in identifying subsequent or additional participants (Saunders et al., 2009). In this study, the initial participants were identified from the researcher's network of reach. Because the researcher has a limited network, those participants were requested to forward the link to the research survey to other individuals within their networks. As pointed out by (Babin \& Zikmund, 2016), people are more likely to complete surveys if the surveys do not come from strangers but those that they know. However, snowball sampling has the disadvantage that it increases the chances of the sample being homogenous, and not representative of the population (Saunders et al., 2009).

### 3.6 Measurement instrument

The measurement instrument was based on scales and items adapted from prior studies. The wording in the items was slightly adjusted to be specific to the context of the study. To measure customer engagement, the 25 -item scale developed by So et al. (2014) was used. All the items were measured by seven-point Likert scales ranging from strongly disagree (1) to strongly agree (7). The scale is comprehensive and addresses all the dimensions of customer engagement; identification, enthusiasm, attention, absorption, and interaction that were discussed in Chapter 2. This scale has previously been applied in the tourism sector in Australia (So et al., 2016) ( $C R>0.930, A V E>0.750$ ) and the United States (Harrigan et al., 2017) (CR $>0.913$, AVE $>0.712$ ) as well as the South African insurance sector (Petzer \& van Tonder, 2019) ( $C R>0.896, A V E>0.593$ ).

Switching intentions were measured using the scale adapted from the work of Colarelli (1984) (coefficient alpha $=0.750$ ) This three-item scale is measured on a five-point Likert scale ranging from fully disagree (1) to fully agree (5).

Switching costs were measured using a scale adapted from the work of Nagengast, Evanschitzky, Blut, and Rudolph (2014) (CR>0.780, AVE>0.640). The scale uses a five-point Likert scale ranging from fully disagree (1) to fully agree (5). The scale for measuring attractiveness of alternatives was adapted from Kim et al. (2018) ( $C R=0.925, A V E=0.805$ ), which uses a seven-point Likert scales ranging from strongly disagree (1) to strongly agree (7).

### 3.7 Reliability and validity

For the results of the study to be credible, two criteria, reliability and validity, had to be satisfied. Reliability refers to the extent to which the techniques and procedures implemented in a study will produce the same findings (Saunders et al., 2009). Validity is concerned with whether the methods employed in a study measure what they are said to measure and whether they measure it accurately (Saunders \& Lewis, 2012). To achieve this, the scales have to be measuring what they claim to measure. It is clear from these definitions that a measurement scale can be valid, without being reliable. Therefore, both reliability and validity have to be assessed separately.

In this study, reliability was assessed using Cronbach's alpha coefficient, which measures the extent to which the items in a scale measure the same thing. Cronbach's alpha coefficient is commonly used to indicate internal consistency (Hair, William, Babin, \& Anderson, 2014; Pallant, 2016) by measuring the degree to which the responses are consistent across the items in a measurement scale. Pallant (2016) recommends that the Cronbach's alpha for each scale should be above 0.7 for internal consistency to be achieved. Kline (2016) further describers Cronbach alphas from observed variables as "excellent" when they approximate 0.9 , "very good" when they approximate 0.8 , and "adequate" when they approximate 0.7 (p. 92). This study, therefore, adopted the lower limit of 0.7 as acceptable in line with the mentioned recommendations.

Validity has four dimensions to it; namely, content or face validity, convergent validity, discriminant validity and nomological validity (Hair et al., 2014).

Hair et al. (2014) explain that face validity refers to the degree to which a measurement tool can subjectively be viewed as measuring what it intends to measure, and that it refers to how relevant the questions appear to be in relation to the construct being measured. They also advise that face validity must be confirmed before data collection commences. In that way, no resources will be wasted collecting data using a measure that does not even superficially appear to be measuring what a study aims to measure. Prior to sending out the final questionnaire, as included in Appendix B, the researcher reviewed the items as included and was satisfied that that they appeared to measure the constructs they were intended to measure. Face validity for the proposed study was further strengthened by the fact that these measurement scales are adapted from previous research.

Convergent validity is an assessment of whether items that should be related are actually related (Hair et al., 2014). Discriminant validity is an assessment of whether items that should be unrelated, are actually unrelated (Hair et al., 2014). Nomological validity relates to the "degree that the summated scale makes accurate predictions of other concepts in a theoretically based model" (Hair et al., 2014, p. 124).

Nomological validity was tested using confirmatory factor analysis (CFA). The first component of SEM, which focuses on the measurement is a CFA, suited for assessing nomological validity. CFA is a branch of SEM "in which relationships among latent variables are modelled as covariances/correlations rather than as
structural relationships (i.e., regressions)" (Gallagher \& Brown, 2013, p. 289). Information from the CFA, average variance extracted (AVE) and inter-construct correlations, was reviewed compared in order to ascertain convergent and discriminant validity.

### 3.8 Data gathering process

Data was gathered by means of a self-administered online survey tool, SurveyMonkey. The link to the online survey was distributed by means of email, electronic messaging applications and on social media to individuals within the researcher's network. It is common for surveys to be used in cross-sectional studies (Saunders et al., 2009). Surveys are also an economical way of collecting data from a large population since the data is standardised and easier to compare (Saunders et al., 2009). Furthermore, (Malhotra, Birks, \& Wills, 2012) highlights that online surveys also have the benefit of allowing participants to complete the final survey at their own time in a comfortable space. The survey for this study was available online from 9 September 2019 to 3 October 2019.

There was strict compliance with ethical research standards. The study was not aimed at embarrassing the respondents, harming them, or causing them to experience any material disadvantage (Saunders et al., 2009). Participation in the study was completely voluntary and the respondents were informed, prior to commencing with the survey, that should they for whatever reason feel the need to cease participation, they would be able to do so at any point in the process without incurring any penalty.

Anonymity and confidentiality were maintained. The survey did not require the respondents to give their names or other unique identifying information in order to ensure that the identity of all the respondents remains anonymous. The researcher also endeavoured to maintain the highest level of confidentiality. Anonymity and confidentiality are often construed to have similar meanings. However, as Wiles (2013) explains, anonymity relates to the identity of the respondent. Confidentiality on the other hand, relates to anything that might be used to identify a participant. Babin and Zikmund (2016) as well as Wiles (2013) argue that although a researcher can endeavour to maintain confidentiality, confidentiality cannot be guaranteed as there might be some other unique identifier that can be used to identify the
participants. Because this study used an online tool for collecting data, one piece of unique information that was inadvertently collected was IP addresses from which the survey was completed. The IP addresses are not included in the research report, thereby maintaining confidentiality. Anonymity was maintained by not collecting the names of the participants.

Prior to completing the surveys, the respondents were required to give their informed consent. "Informed consent is a central concept in ethical research practice and is one of the key principles underpinning professional guidelines for social scientists" (Wiles, 2013, p. 25). A respondent was not able to proceed to the survey questions without giving informed consent. Saunders et al. (2009) explain that to obtain informed consent, the participant needs to give consent freely based on an understanding of the rights of the respondent and how the data collected will be used. Therefore, the participants were provided with information about the nature and purpose of the study, how and where the results of the study will be used or distributed, confidentiality and anonymity, the role to be played by the respondent, how completing the survey will unfold, as well as information about the voluntary nature of participation and they may stop any point; information which Wiles (2013) highlights as important. The informed consent form was included in the introduction to the survey (see Appendix B).

Other than the qualifying question and informed consent, the rest of the questions in the survey were not set as mandatory fields. Not only was the researcher of the view that making survey questions mandatory infringed on the respondent's freedom of choice, the researcher also of the view that leaving the questions as non-mandatory improved the results by reducing the risk that respondents would either complete the survey for the sake of completing it (without necessarily giving their truthful responses), and the risk that participants may drop out, choosing to not chose to not complete the survey if they do not like a particular mandatory question. Furthermore, to avoid multiple responses from the same person and possibly distorting the results, the online survey was set-up to only allow a single survey to be completed from one IP address.

All field work was performed only after the Research Ethics Committee of GIBS had granted clearance. This includes the distribution of the survey questionnaire for the pilot test, as well as final collection of data and analysis of thereof. A copy of the ethical clearance document is included in Appendix A.

### 3.8.1 Pilot test

Between 2 September 2019 to 7 September 2019, a pilot test was performed where the survey was distributed to 10 individuals to complete and provide feedback. The individuals were all resident in Gauteng and had bank accounts. This pilot test allowed the researcher to identify and correct errors in the survey and to make improvements to the survey. One of the improvements made was the addition of a qualifying question to the survey that required the respondents to confirm that they resided in the province of Gauteng, and were thus part of the population in which the study was interested. This qualifying question was particularly important as the researcher had applied snowball sampling and was not in control of who could complete the survey. Through review of the responses from the pilot test, it was identified that items for the alternatives' attractiveness scale had been omitted. These items were subsequently added to the online survey. The responses from the pilot test were not included in the final results as the final survey was different to the pilot survey, with the additional qualifying question and items for the alternatives' attractiveness scale.

### 3.8.2 Coding

The following coding was applied to assist with analysis of the information gathered from the survey:

- Province or residence: 1 = Yes, I stay in Gauteng Province, $2=$ No, I do not stay in Gauteng Province
- Age group: $1=18-24,2=25-34,3=35-44,4=45-54,5=55+$
- Bank: 1 = Absa, 2 = Capitec, 3 = FNB, 3 = Nedbank, 4 = Standard Bank, 0 = Other (please specify)
- Years with bank: $1=$ Less than 1 year, $2=2-5$ years, $3=6-10$ years, $4=11+$ years
- Gender: 1 = Female, $2=$ Male, $3=$ Prefer not to say, $0=$ Other (please specify)
- Race: 1 = African (Black), 2 = Caucasian (White), 3 = Coloured, 4 = Indian, 0 = Other (please specify)
- Income group: $1=$ Below R5,000, $2=$ Between R5,000 and R14,999, 3 = Between R15,000 and R24,999, 4 = Between R25,000 and R49,999, $5=$ Between R50,000 and R74,999, $6=$ Over R75,000
- 5-point Likert scale questions: $1=$ Fully disagree, $2=$ Disagree, $3=$ Neither agree nor disagree, $4=$ Agree, $5=$ Fully agree
- 7-point Likert scale questions: $1=$ Strongly disagree, $2=$ Disagree, 3 = Somewhat disagree, $4=$ Neither agree nor disagree, $5=$ Somewhat agree, 6 = Agree, 7 = Strongly agree


### 3.9 Analysis approach

Once sufficient responses had been obtained for appropriate analysis, the data was downloaded from the online survey tool. The data was reviewed for certain anomalies which resulted in some records being deleted. A record would represent all the responses from a single respondent. Records that were deleted included those records that had a large number of unanswered questions and those on which some form of trend/pattern could be identified, such as giving same response for all questions. These records would be deleted to prevent distortion of the results. Other anomalies addressed include missing data on some of the records that were not deleted. Details of all transformations to the data are presented in section 4.2.

To aid in statistical analysis, a statistical data analysis tool, Statistical Package for Social Sciences (SPSS) was utilised. All analyses were performed at a significance level, denoted as $\alpha$, of 0.05 . Significance levels used in research typically range from 0.01 to 0.1 (Hair et al., 2014). A significance level represents the amount of risk the researcher is willing to take making a type 1 error, that is concluding that a difference or correlation exits when in fact it does not (Hair et al., 2014; Salkind, 2017). The lower level of significance (for example 0.01) the lower the chances of a type 1 error occurring. Consequently, the confidence interval applied in this study is $95 \%$ confidence interval.

The measurement model was tested with a principal component analysis (PCA) and a CFA. The data was checked the presence of influential outliers (Mahalanobis' distance) and for homoscedasticity. Harman's test was used to check for common method variance.

SEM is a multivariate data analysis technique that allows for separate multiple regression equations to be performed at the same time (Hair et al., 2014). The second component of SEM relates to the structural model, and incorporates fit indices which indicate how well the structural relationships among the variables as posited by the researcher fit (Hair et al., 2014). SEM was used to test the model as presented in Figure 1, on page 16.

### 3.10 Limitations

A researcher should report on the limitations of a study. This reporting aids in ensuring that the credit that the readers attribute to the findings of the study are warranted (Price \& Murnan, 2004). Non-reporting or insufficient reporting of study limitations may result in such unwarranted credit being attributed to the findings. Brutus, Aguinis and Wassmer (2013) however, advise that researchers should report only those limitations that are significant to the study and not necessarily a list of all limitations that could possibly exist in the study. Using this guidance, the following limitations have been identified.

The results may also not be representative of the all customers and may not be representative of other industries. This is due to the sample being limited to Gauteng Province and to the retail banking sector. Generalisability may also be negatively affected by having used snowball sampling and the sample may be very similar in terms of stage of life and banking relationships. Thus, the results of the study may not be generalisable.

The study was a cross-sectional study. A longitudinal study that incorporates actual behaviour and not only study intentions may provide more valuable insights.

### 3.11 Summary of research design and methodology

The research design and methodology followed in the study was outlined in this chapter. Additionally, the anticipated limitations were outlined. This project was a cross-sectional study that collected data by means of online surveys. The surveys were targeted at retail banking customers residing in the Gauteng Province, who were selected using snowball sampling as the researcher did not have access to a list of all the retail banking customers in the province from which a probability sample could be drawn. These surveys were based on existing scales which were adapted for the specific context. The use of existing scales improves the credibility of the data and the related findings from the study. SPSS, a computer software, was used to assist in the analysis of the data collected.

## 4 RESULTS

### 4.1 Introduction

This chapter follows on from the previous one by presenting the results of the data collected through SurveyMonkey. The summaries of the data collected are presented to provide an overview of the data and some characteristics of the respondents This plays an important role in contextualising the results. Details of transformations to the data are also provided. Various tests were performed to gain meaningful insight into the data. The details of those tests and results thereof are presented in this chapter.

### 4.2 Data preparation

Data from SurveyMonkey was downloaded into Microsoft Excel for initial preparation. A total of 341 responses were received. Of these, 34 were disqualified as the respondents did not reside in Gauteng Province. A further 52 responses were deleted as the respondents did not complete the survey, answering less than $50 \%$ of all the questions. The data was also inspected for cases where the respondents provided the same response for all questions. This inspection was performed by checking for cases where the standard deviation is zero (performed separately for the 5-point questions and for the 7-point questions). No cases were identified where the standard deviation was zero. Two additional cases were deleted as the respondents had not answered more than $50 \%$ of the questions to a construct. Therefore, 253 cases (341 less34 less 52 less 2) were loaded for analysis in SPSS. However, prior to performing statistical analyses, the data was prepared as described in the following paragraphs.

The reverse coded items (ITS3, PSC5, FSC4 and RSC3) were re-coded in SPSS. After the re-coding, the data was assessed whether the missing data was missing completely at random (MCAR) by running the Little's MCAR test. Little's MCAR test returned a p-value of .087 . Due to this not being statistically significant (greater than .05), it was concluded that the values were missing completely at random. Following from this, the researcher was then able to compute estimates of the missing data Estimation Maximisation technique (EM). This was applied per dimension. Missing
data were not replaced for the categorial data, but only for variables related to the constructs being tested.

Independent samples $t$-tests were performed on the two data sets and no statistically significant variances could be identified in the means of the two samples. This was in order to ensure that the newly computed estimated did not create a significant difference in the responses obtained. Refer to Appendix C which shows the means and standard deviations per variable before and after the replacing the missing values. Additionally, the results of the Levine's test for differences and the T-test are presented in the appendix. Thus, the data used in this study is the data

### 4.3 Outliers

### 4.3.1 Univariate outliers

Outliers using the standardised scores as described by Hair et al. (2014) and Kline (2016). An outlier is a response or score that differs significantly from all other observed responses (Field, 2005; Hair et al., 2014). As Sim et al. (2005) highlight, failure to correctly identify and address outliers can lead to incorrect statistical conclusions when analysing the data. Such incorrect identification can be either not identifying outliers or even identifying non-outliers as outliers. In this study, all the data for the 58 variables were saved as standardised scores in SPSS to test for univariate outliers. Univariate outliers were identified as those where the absolute value of the standardised score was above 3.8 ( $|Z|>3.8$ ). According to (Hair et al., 2014), the threshold for identifying outliers using standardised scores can range from 2.5 for sample sizes of 80 to 4 for larger samples, hence 3.8 was chosen. Based on these tests, no outlier was identified as there was no standardised score with an absolute value above 3.8.

### 4.3.2 Multivariate outliers

Multivariate outliers were identified using the Mahalanobis distance ( $D^{2}$ ) in SPSS. It is important to identify multivariate as they take into account influence by a case across multiple dimensions or variables in the entire survey. Variable ID1 was used as the dependent variable and all the other 57 variables (scale items) from the survey being the independent. The outliers were identified as all those cases for which the cumulative probability that a value from the chi-square distribution would be greater than the calculated $D^{2}$ was lower than 0.001 .

A total of 18 cases were identified as multivariate outliers and deleted from the initial sample of 253 loaded in SPSS. As a result, the final sample size analysed for this study was $235(\mathrm{~N}=235)$. The 18 cases were identified in four rounds, as new cases of outliers kept arising after deleting the initially identified cases.

### 4.4 Normality of distribution

One of the foundational assumptions for performing statistical analysis is that the data is normally distributed (Hair et al., 2014). In assessing univariate materiality, three considerations were taken into account per variable, being skewness, kurtosis and the Shapiro-Wilk test for normality. For univariate data to be accepted as normally distributed, the $z$ score (determined by dividing the statistic by the standard error) for skewness and for kurtosis should fall within the range of -1.96 and +1.96 (Hair et al., 2014). As can be seen in Appendix D, for many of the variables, the data was either skewed (either positively or negatively) or not mesokurtic. Only one variable (FSC4) had z-scores within range for both skewness and kurtosis. The rest of the $z$-scores were outside the acceptable range. The skewness or failure to be mesokurtic was indicative of the data being non-normal. Furthermore, the p-value from the Shapiro-Wilk test was 0.000 for all the variables. At a significance level of 0.05 , the null hypothesis that the data was normally distributed was rejected.

However, Hair et al. (2014) point out that the negative impact of data not being normally distributed diminishes in larger sample sizes. They indicate larger sample sizes to be those with 200 or more cases. This study has $\mathrm{N}=235$. Consequently, no transformations of data were performed for normality. More reliance was placed on homoscedasticity assumption being

### 4.5 Demographics

Although Statistics South Africa estimates the population of Gauteng to be split equally between females and males (Statistics South Africa, 2019), this study attracted a sample that was comprised of 125 females (53.2\%) and 106 males (45.1\%) as shown in Figure 2. Four respondents (1.7\%) preferred not to say the gender they identified with.

Figure 2: Gender distribution of sample

$68.5 \%$ of the respondents identified as African, $17.9 \%$ as Caucasian, $3.4 \%$ as Coloured, while $9.8 \%$ identified as Indian. The respondents were mainly from the age groups of 18 to 24 and 25 to 34 years which together accounted for $71.4 \%$ of the respondents. Those aged between 35 and 44 years made up 22.6\% of the respondents. The rest of the respondents (6.0\%) were aged 45 years and above. The distribution of the respondents' age groups is represented in Table 1.

## Table 1: Age groups of participants

| Age group <br> in years | No. of <br> participants | Percentage |
| :--- | :---: | ---: |
| $\mathbf{1 8 - 2 4}$ | 84 | $35.7 \%$ |
| $\mathbf{2 5 - 3 4}$ | 84 | $35.7 \%$ |
| $\mathbf{3 5 - 4 4}$ | 53 | $22.6 \%$ |
| $\mathbf{4 5 - 5 4}$ | 12 | $5.1 \%$ |
| $\mathbf{5 5 +}$ | 2 | $0.9 \%$ |
|  | 235 | $100.0 \%$ |

The major banks previously identified were represented as shown in Table 2. Of these major banks, FNB had the most participants with 80, while Nedbank had the least with 22 participants. 23 participants banked with other banks, mainly Investec. As shown in Figure 3, most of the respondents (39.1\%) had been banking with their bank for two to five years. $52.4 \%$ of the respondents had been with their bank for more than six years and only $7.9 \%$ had been with their bank for less than a year.

Table 2: Bank represented in sample

| Bank | No. of <br> participants | Percentage |
| :--- | ---: | ---: |
| Absa | 31 | $13.2 \%$ |
| Capitec | 41 | $17.4 \%$ |
| FNB | 80 | $34.0 \%$ |
| Nedbank | 22 | $9.4 \%$ |
| Standard Bank | 38 | $16.2 \%$ |
| Other | 23 | $9.8 \%$ |
|  | 235 | $100.0 \%$ |

Figure 3: Years participants have been with current bank


Table 3 shows the income groups of the participants. Over $45 \%$ of the participants had an average income lower than R15,000 per month. 15.7\% earn on average more than R75,000 per month.

Table 3: Average monthly income of participants

| Income group | No. of <br> participants | Percentage |
| :--- | ---: | ---: |
| Below R5,000 | 86 | $36.6 \%$ |
| Between R5,000 and R14,999 | 20 | $8.5 \%$ |
| Between R15,000 and R24,999 | 22 | $9.4 \%$ |
| Between R25,000 and R49,999 | 41 | $17.4 \%$ |
| Between R50,000 and R74,999 | 26 | $11.1 \%$ |
| Over R75,000 | 37 | $15.7 \%$ |
| Not disclosed | 3 | $1.3 \%$ |
|  | 253 | $100.0 \%$ |

### 4.6 Reliability

Table 4 provides a summary of the Cronbach's alpha results. As can be seen in the table, Cronbach's alpha for all measured scales was above the acceptable 0.7. Cronbach's alpha for alternatives attractiveness just marginally passed the 0.7 mark. Cronbach's alpha of 0.7 was achieved on the first iteration, without any items having been deleted. Based on these results, it is accepted that the internal consistency was achieved and therefore the scales used were reliable. Detailed results of the reliability test are given in Appendix E. It is worth noting from Appendix F that higher Cronbach's alphas could have been attained if some variables were deleted. Due to the fact that Cronbach's alpha was already above 0.7 , these variables were not deleted.

Table 4: Cronbach's alpha summary

| Construct/Dimension | Number of <br> items in scale | Cronbach's <br> alpha |
| :--- | :---: | :---: |
| Customer engagement | 25 | 0.960 |
| - Identification (subscale) | 4 | 0.786 |
| - Enthusiasm (subscale) | 5 | 0.899 |
| - Attention (subscale) | 5 | 0.889 |
| - Absorption (subscale) | 6 | 0.904 |
| - Interaction (subscale) | 5 | 0.887 |
| Switching intentions | 3 | 0.771 |
| Switching costs | 27 | 0.898 |
| Alternatives attractiveness | 3 | 0.701 |

### 4.7 Exploratory factor analysis

Further to assessing Cronbach's alpha, exploratory factor analyses were conducted using the Principal Component Analysis (PCA) method in SPSS. The results of the factor analyses are detailed in the section that follows.

The first step was to assess appropriateness of performing factor analysis using Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. The minimum that KMO can measure for appropriateness is 0.06 (Hair et al., 2014; Pallant, 2016). Bartlett's test of sphericity needs to be significant. That is, the p-value for Bartlett's test should be lower than 0.05 at a $95 \%$ confidence level. The rotation method used was direct oblimin, a type of oblique approach. Oblique approaches take into account that the factors may be correlated (Pallant, 2016). Similar to Harrigan et al. (2017) and So et al. (2014), this study has utilised an oblique approach for rotation with the expectation that the factors may be correlated. Lastly, the communalities below 0.50 are not sufficient (Hair et al., 2014) and should be reviewed after assessing the. Only factor loadings above 0.4 were considered based on the sample size. This was based on the recommendation from Hair et al. (2014), taking into account that the sample size was between 200 and 250 cases.

### 4.7.1 Customer engagement

All 25 items making up CE were loaded into on PCA. At 0.931, KMO was "meritorious" (Hair et al., 2014, p. 102). Bartlett's Test for Sphericity had a p-value of 0.000 , which is below the significance level of 0.05 and therefore statistically significant. As KMO was above the minimum required and the Bartlett's test statistically significant, it was concluded that PCA was suitable. The results of the KMO and Bartlett's test are shown in Table 5.

Table 5: KMO and Bartlett's test - Customer engagement

| KMO and Bartlett's Test |  |  |
| :--- | :--- | ---: |
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .931 |  |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 3121.806 |
|  | df | 153 |
|  | Sig. | .000 |

7 scale items were deleted due to a combination of low loadings cross-loadings and low communalities. The final items included are shown in which also shows that five components were extracted. Each component is representative of the five dimensions of CE identified in Chapter 2, identification, enthusiasm, attention, absorption and interaction. The scree plot, unrotated loadings and communalities for are presented in Appendix G.

Table 6: Pattern Matrix- Customer engagement

|  | Pattern matrix ${ }^{\text {a }}$ |  |  |  |  | Structure matrix |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Component |  |  |  |  | Component |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| ID1 |  |  |  |  | 0.960 |  |  |  |  | 0.960 |
| ID4 |  |  |  |  | 0.501 |  | -0.583 | -0.620 | -0.628 | 0.720 |
| EN3 |  | -0.908 |  |  |  |  | -0.901 | -0.401 |  | 0.425 |
| EN4 |  | -0.819 |  |  |  | 0.470 | -0.907 | -0.526 | -0.487 |  |
| EN5 |  | -0.782 |  |  |  |  | -0.875 | -0.529 | -0.518 |  |
| AT1 |  |  |  | -0.633 |  | 0.460 | -0.651 | -0.544 | -0.818 |  |
| AT2 |  |  |  | -0.758 |  | 0.488 | -0.404 | -0.552 | -0.850 |  |
| AT3 |  |  |  | -0.786 |  |  | -0.429 | -0.545 | -0.854 |  |
| AT5 |  |  |  | -0.581 |  | 0.547 | -0.663 | -0.530 | -0.800 |  |
| AB1 |  |  | -0.841 |  |  | 0.452 | -0.411 | -0.869 | -0.461 |  |
| AB2 |  |  | -0.860 |  |  | 0.476 | -0.496 | -0.871 |  |  |
| AB3 |  |  | -0.790 |  |  | 0.459 | -0.438 | -0.883 | -0.608 |  |
| AB4 |  |  | -0.903 |  |  | 0.404 | -0.411 | -0.900 | -0.526 |  |
| IT1 | 0.624 |  |  |  |  | 0.801 | -0.503 | -0.598 | -0.501 |  |
| IT2 | 0.546 |  |  |  |  | 0.737 | -0.514 | -0.527 | -0.551 |  |
| IT3 | 0.788 |  |  |  |  | 0.890 |  | -0.568 | -0.470 | 0.406 |
| IT4 | 0.567 |  |  |  |  | 0.757 |  | -0.531 | -0.638 |  |
| IT5 | 0.918 |  |  |  |  | 0.836 |  |  |  |  |

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization. ${ }^{\text {a }}$
a. Rotation converged in 11 iterations.

Based on the components extracted, summated scales were computed and the mean and standard deviation thereof are presented in Table 7. The means for identification, absorption and interaction, being below 4, suggest that a slight majority of the participants tend to not identify with the bank or be involved in activities related to the bank. However, they do seem to show some enthusiasm and to pay some attention to their bank. In general, on a 7-point scale, it appears the participants believe to be neither engaged nor disengaged when it comes to their banks.

Table 7: Summated scales - Customer engagement

| Comp. | Summated scale | Variables included in <br> summated scale | Mean | Standard <br> deviation |
| :--- | :--- | :--- | :---: | :---: |
| 5 | Identification | ID1, and ID4 | 3.93 | 1.601 |
| 2 | Enthusiasm | EN3, EN4, and EN5 | 4.83 | 1.378 |
| 4 | Attention | AT1, AT2, AT3, and AT5 | 4.54 | 1.371 |
| 3 | Absorption | AB1, AB2, AB3, and AB4 | 3.14 | 1.456 |
| 1 | Interaction | IT1, IT2, IT3, IT4, andIT5 | 3.81 | 1.391 |
|  | CE | PSC4, PSC5 and PSC12 | 4.00 | 1.181 |

### 4.7.2 Switching intentions

Based on the KMO and Bartlett's Test, the scale for intention to switch was also appropriate for factor analysis; KMO was 0.672 and Bartlett's test was significant ( $\mathrm{p}<0.05$ ) as shown in Table 8. One component was extracted, accounting for $68.6 \%$ of the variance. In this component all three variables had a loading above 0.7. The communality of the variables also measured above 0.5 . No changes were therefore performed in relation to the intention to switch scale.

Table 8: KMO and Bartlett's test - Switching intentions

| KMO and Bartlett's Test |  |  |
| :--- | :--- | ---: |
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .672 |  |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 195.139 |
|  | df | 3 |
|  | Sig. | .000 |

The summated scale computed shows a mean of 2.35 (see Table 9). This suggests that the participants tend towards not having intentions to switch service providers. The low standard deviation suggests that spread in the views or intentions.

Table 9: Summated scale - Switching intention

| Summated <br> scale | Variables included in summated scale | Mean | Standard <br> deviation |
| :--- | :--- | :---: | :---: |
| Intent | ITS1, ITS2 and ITS3 | 2.35 | 0.941 |

### 4.7.3 Switching costs

The initial scale for switching costs had a total of 27 variables. It was also shown to be appropriate for factor analysis as KMO was well above 0.6 and Bartlett's test was significant ( $p<0.05$ ) as reflected in Table 10.

Table 10: KMO and Bartlett's test - Switching costs

| KMO and Bartlett's Test |  |  |
| :--- | :--- | ---: |
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .860 |  |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 2730.534 |
|  | df | 210 |
|  | Sig. | .000 |

Six components were extracted. Interestingly the subscales for the three types of switching costs had each been split into two components. Based on this, the components were thus names on what the scale items were measuring. These are reflected in Table 12.

Similar to CE scale, some scale items were deleted; five for procedural switching costs, one for financial switching costs and none for relational switching costs. These were deleted for similar reasons, being low loadings (below 0.4), cross loadings above 0.4 , supported by low communalities. One exception worth reporting was FSC4 which was deleted for a different reason. FSC4 was initially creating its own separate component. Further investigation revealed that there was a problem with the wording of FSC in the actual survey. FSC4 had incorrectly merged two separate scale items. In the survey (as shown in Appendix B), FSC4 reads as "I have spent a

Table 11: Pattern and structure matrices - Switching costs

|  | Pattern Matrix ${ }^{\text {a }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Components |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| PSC2 |  |  |  | 0.915 |  |  |
| PSC3 |  |  |  | 0.773 |  |  |
| PSC4 |  |  | -0.862 |  |  |  |
| PSC8 |  |  | -0.694 |  |  |  |
| PSC10 |  |  | -0.611 |  |  |  |
| PSC11 |  |  | -0.570 |  |  |  |
| PSC12 |  |  | -0.838 |  |  |  |
| FSC1 |  |  |  |  |  | 0.504 |
| FSC2 |  |  |  |  |  | 0.789 |
| FSC3 |  |  |  |  |  | 0.844 |
| FSC5 | 0.719 |  |  |  |  |  |
| FSC6 | 0.823 |  |  |  |  |  |
| FSC7 | 0.811 |  |  |  |  |  |
| FSC8 | 0.693 |  |  |  |  |  |
| RSC1 |  |  |  |  | 0.765 |  |
| RSC2 |  |  |  |  | 0.783 |  |
| RSC3 |  |  |  |  | 0.629 |  |
| RSC4 |  | -0.888 |  |  |  |  |
| RSC5 |  | -0.913 |  |  |  |  |
| RSC6 |  | -0.925 |  |  |  |  |
| RSC7 |  | -0.875 |  |  |  |  |

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization. ${ }^{\text {a }}$
a. Rotation converged in 10 iterations.

| Structure matrix |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Components |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 |
|  |  |  | 0.901 |  |  |
|  |  |  | 0.840 |  |  |
|  |  | -0.818 |  |  |  |
|  |  | -0.758 |  |  |  |
|  |  | -0.726 | 0.425 |  | 0.451 |
|  |  | -0.719 |  |  | 0.509 |
|  |  | -0.858 |  |  |  |
| 0.415 | -0.529 |  |  |  | 0.690 |
|  |  |  |  |  | 0.862 |
|  |  |  |  |  | 0.855 |
| 0.823 |  |  |  | 0.438 |  |
| 0.881 |  |  |  |  |  |
| 0.846 |  |  |  |  |  |
| 0.751 |  | -0.505 |  |  |  |
| 0.409 |  |  | 0.403 | 0.830 |  |
| 0.431 |  |  |  | 0.822 |  |
|  |  |  |  | 0.634 |  |
|  | -0.899 |  |  |  |  |
|  | -0.915 |  |  |  |  |
|  | -0.895 |  |  |  |  |
|  | -0.902 |  |  |  |  |

lot of time and money at this provider. I have not invested much in the relationship with this provider." The two sentences are clearly in conflict and should have been two separate scale items. Table 11 reflects the items that were retained.

As can be seen in Table 11 some of the variables had loadings below 0.7 , going as low as 0.504 for FSC1. These were accepted since they loaded above 0.4 , but were noted as items that could potentially give problems during CFA. In total, the extracted components accounted for $72.8 \%$ of the variance. The scree plot, unrotated loadings and communalities are included in Appendix G.

Based on the components extracted, summated scales were computed and their means and standard deviations are shown in Table 12. On a 5-point scale, the means suggest that the participants only just tend towards seeing these switching costs as costs that would affect them. The relational cost relating to brand (RSC_Brand) has the highest mean at 3.66, and the relational cost relating to personal relationships (RSC_Personal) has the lowest mean at 2.43. There is also little dispersion of the responses as suggested by the low standard deviations.

Table 12: Summated scales - Switching costs

| Comp. | Summated scale | Variables included in summated scale | Mean | Standard deviation |
| :---: | :---: | :---: | :---: | :---: |
| 4 | PSC_Uncertainty | PSC2 and PSC3 | 3.47 | 0.859 |
| 3 | PSC_SearchLearnCosts | PSC4, PSC8, PSC10, <br> PSC11 and PSC12 | 3.27 | 0.825 |
| 6 | FSC_Sunk | FSC1, FSC2 and FSC3 | 3.23 | 0.857 |
| 1 | FSC_Benefits | FSC5, FSC6, FSC7 and FSC8 | 3.22 | 0.905 |
| 5 | RSC_Brand | RSC1, RSC2 and RSC3 | 3.66 | . 710 |
| 2 | RSC_Personal | RSC4, RSC5, RSC6 and RSC6 | 2.43 | 1.126 |

### 4.7.4 Alternatives' attractiveness

KMO for the alternatives' attractiveness scale was mediocre, yet acceptable at 0.603. The Bartlett's test was significant $(p<0.05)$ (refer to Table 13). Therefore, overall the scale was appropriate for factor analysis.

Table 13: KMO and Bartlett's test - Alternatives' attractiveness

| KMO and Bartlett's Test |  |  |
| :--- | :--- | ---: |
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .603 |  |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 145.865 |
|  | df | 3 |
|  | Sig. | .000 |

One component was extracted with each of the three variables loading at above 0.7. The component had an Eigen value above 1 and accounted for $62.1 \%$ of the variance. The communality for AA1 was the lower end of the scale, measuring at 0.515 , while the other two items were above 0.6 . However, as all communalities were above the acceptable level of 0.5 , no changes were made to the scale for alternatives' attractiveness. Refer to Appendix $G$ for the detailed loadings, communalities and scree plot.

Based on these results, the three scale items were summated to one variable (see Table 14), which had a mean of 4.07 and standard deviation of 1.297. On 7-point scale, this suggests that the participants are rather indifferent on how attractive they find the alternatives.

Table 14: Summated scale - Alternatives' attractiveness

| Summated <br> scale | Variables included in summated <br> scale | Mean | Standard <br> deviation |
| :--- | :--- | :---: | :---: |
| Alt_Atr | AA1, AA2 and AA3 | 4.07 | 1.297 |

### 4.8 Homoscedasticity

The summated variables computed in section 4.7 were then used to test for compliance with the assumption of homoscedasticity. The assessment involved an initial visual inspection of graphs. Besides the slight deviations at the beginning and in the centre of the diagonal normal probability line in Figure 4, the residuals are closely fitting to the diagonal normal probability line, suggesting that they are normally distributed. This is consistent with Figure 5 which shows that the residuals also appear to be normally distributed using a histogram. In Figure 6, the residuals and standardised predicted scores appear to be scattered evenly around zero throughout the plot. These graphs are, therefore, suggestive that homoscedasticity is present (Field, 2005; Kline, 2016).

Figure 4: Normal probability plot - Expected and observed cumulative probabilities


Figure 5: Histogram of residuals


Figure 6: Scatterplot - Residuals and predicted values


In addition to the visual inspection, heteroscedasticity was tested for statistically by performing the Breusch-Pagan Test. The test was performed by conducting a regression analysis with the squared residuals as the dependent and retaining the independent variables as predictors. The p-value of 0.559 as shown in Table 15 was
above 0.05 . Therefore, the null hypothesis of homoscedasticity was not rejected (at a $95 \%$ confidence level) and it is was concluded that homoscedasticity was present.

Table 15: Anova for Breusch-Pagan Test

| ANOVA $^{\text {a }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sum of |  | Mean |  |  |
| Model | Squares | df | Square | F | Sig. |
| Regression | 2.774 | 12 | . 231 | . 889 | .559 ${ }^{\text {b }}$ |
| Residual | 57.701 | 222 | . 260 |  |  |
| Total | 60.475 | 234 |  |  |  |
| a. Dependent Variable: Res_1_Sqrd |  |  |  |  |  |
| b. Predicto PSC_SearchL CE_AB, CE_E | (Constant), <br> Costs, Alt_A E_AT | E_ID, <br> C_Br | SC_Uncer CE_IT, | ty, Bene | $\begin{aligned} & \text { Persor } \\ & \text { SC_Su } \end{aligned}$ |

### 4.9 Confirmatory factor analysis

With homoscedasticity confirmed, confirmatory factor analysis (CFA) was then conducted in AMOS. This involved plotting all the observed variables identified during the PCA and creating latent variables in line with the components identified in section 4.7. Covariances were also plotted for amongst all the latent variables. Once set up, the measurement model was run, and the results assessed for model fit as well as for reliability and validity.

### 4.9.1 Model fit

The first asessment was for model fit. Although there are various statistics that indicate model fitness, Kline (2016) recommends a minimum of four that should be reported when assessing a model fitness. These are chi-square $\left(X^{2}\right)$ together with its degrees of freedom and $p$-value, Steiger-Lind Root Mean Square Error of Approximation (RMSEA) and its $90 \%$ confidence interval, Bentler Comparative Fit Index (CFI), Standardised Root Mean Square Residual (SRMR). This study's measurement model (refer to Figure 7 for the measurement model) achieved $X^{2} / \mathrm{Df}=1.651\left(X^{2}=1339.202, d f=811, \mathrm{p}=0.000\right), \mathrm{CFI}=0.921, \mathrm{RMSEA}=0.053$ and SRMR $=0.065$. In line with this guidance from Hair et al. (2014), the model had adequate fit. They recommend that where $\mathrm{N}<250$ and where the number of observed
variables are more than 30 (as are the cases in this study), adequate model fit is indicated when RMSEA $<0.08$, SRMR < 0.09 provided that CFI > 0.92.

The initial test model plotted in AMOS did not satisfy model fit. The model went through some adjustments until adjusted model 3 where model fit requirements were satisfied. The different stages' model fit indicators are shown in Table 16. After the initial model was loaded and did not meet the criteria, modification indices were used to improve model fit and covariances were added to the model, giving rise to model 1. Adjusted model 1 was further improved by deleting the two variables identified during the test for reliability and validity (see section 4.9.2) to arrive at adjusted model 2. Finally, the deletion of the construct alternatives' attractiveness, also following the reliability and validity tests, gave rise to adjusted model 3. Although adjusted model 2 satisfied model fit criteria, there discriminant validity was not satisfied, resulting in the deletion of alternatives attractiveness.

Table 16: Model fit indicators for the different adjusted measurement models

|  | Criteria ${ }^{1}$ | Initial <br> model | Adjusted <br> model 1 | Adjusted <br> model 2 | Adjusted <br> model 3 <br> (final) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $X^{2}$ |  | 1595.734 | 1463.892 | 1330.910 | 1189.769 |
| $d f$ | 904 | 895 | 810 | 737 |  |
| $p$ |  | 0.000 | 0.000 | 0.000 | 0.000 |
| CMIN/Df |  | 1.765 | 1.636 | 1.643 | 1.614 |
| CFI | $>0.920$ | 0.897 | 0.916 | 0.921 | 0.928 |
| RMSEA | $<0.08$ | 0.057 | 0.052 | 0.052 | 0.051 |
| SRMR | $<0.09$ | 0.069 | 0.066 | 0.065 | 0.060 |

1 These criteria are based on Hair et al. (2014)

### 4.9.2 Reliability and validity

The measurement model was also tested for reliability, convergent validity and discriminant validity. The initial model (which was Adjusted Model 1) did not satisfy violated convergent and discriminant validity requirements. Average variance extracted (AVE) was lower than 0.5 for alternatives' attractiveness and for brand RSC. To address these violations, two variables, AA1 and RSC3, were deleted from the measurement model in order to improve the AVE for alternatives' attractiveness and for brand RSC. AA1 and RSC3 had the lower communalities in their components
during PCA and had low loadings in CFA measurement model. The discriminant validity violation was that the inter-construct correlation between alternatives' attractiveness and switching intentions was higher the square roots of the two constructs respective AVE's. As discussed previously, reliability had a discriminant validity issue which persisted even after deleting variable AA1. As a result, the whole construct was removed from the model.

As can be seen in Table 17, composite reliability (CR) was above 0.7 for all constructs. Thus, the minimum required for construct reliability was met (Malhotra et al., 2012) and confirmed the initial assessment in section 4.6 where Cronbach's alpha had been used. Subsequent to the reliability assessment in section 4.6, there were some variables that were removed, hence reliability was tested again. Convergent reliability was confirmed by the average variance extracted (AVE) being above the minimum 0.5 (Hair et al., 2014; Malhotra et al., 2012). Discriminant validity was confirmed by the maximum shared variance (MSV) which is higher than the AVE for all constructs. The square roots of the AVEs are also greater than the interconstruct correlations as presented in Table 17.

### 4.9.3 Common method variance

When data about both the independent and dependent variables is collected from the from the same respondents at the same time, there is a risk that common method variance exists in the data (Malhotra, Schaller, \& Patil, 2017; Shankar, Jebarajakirthy, \& Ashaduzzaman, 2020). Some of the factors that give rise to common method variance include when the survey respondents do not give their true responses but those that may be acceptable, socially or to the researcher; , or the sequence of questions in a survey driving the respondents to respond in a particular way (Malhotra et al., 2017). Kline (2016) warns that common method variance can inflate the intercorrelations. Consequently, common method variance could construct reliability and validity (Malhotra et al., 2017).

Therefore, the presence of common method variance was tested for using the Harman's one factor test, a commonly used method for testing for common method variance (Fuller, Simmering, Atinc, Atinc, \& Babin, 2016; Malhotra et al., 2017). A

Figure 7: Measurement model


Table 17: Reliability and validity measures

|  | CR | AVE | MSV | Customer engagement | Switching intentions | Uncertainty PSC | Search and learn PSC | Sunk FSC | Benefit FSC | Brand RSC | Personal RSC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Customer engagement | 0.918 | 0.693 | 0.468 | 0.833 |  |  |  |  |  |  |  |
| Switching intentions | 0.788 | 0.652 | 0.012 | -0.478 | 0.807 |  |  |  |  |  |  |
| Uncertainty PSC | 0.759 | 0.612 | 0.288 | 0.222 | -0.582 | 0.783 |  |  |  |  |  |
| Search and learn PSC | 0.858 | 0.552 | 0.360 | 0.463 | -0.329 | 0.419 | 0.743 |  |  |  |  |
| Sunk FSC | 0.765 | 0.524 | 0.468 | 0.684 | -0.217 | 0.179 | 0.600 | 0.724 |  |  |  |
| Benefit FSC | 0.850 | 0.588 | 0.429 | 0.578 | -0.569 | 0.521 | 0.502 | 0.604 | 0.767 |  |  |
| Brand RSC | 0.762 | 0.616 | 0.429 | 0.593 | -0.676 | 0.537 | 0.443 | 0.443 | 0.655 | 0.785 |  |
| Personal RSC | 0.923 | 0.750 | 0.348 | 0.433 | -0.109 | 0.062 | 0.265 | 0.590 | 0.366 | 0.200 | 0.866 |

Square roots of the AVEs appear on the diagonals.
$C R=$ Composite reliability, AVE = Average value extracted, MSV = Maximum shared variance

PCA was run in SPSS, using all the variables in the measurement model, while limiting extraction to only one component and having no rotation. The single component extracted accounted for $32.7 \%$ of the variance. (Doing a similar test on all 58 variables that were in the survey, the component extracted accounted for $31.1 \%$ of the variance.) It was concluded that common method variance was not an issue of concern for this study as the percentage variance explained by the single component was lower than 50\% (Jung et al., 2017; Kim et al., 2018; Malhotra et al., 2017).

### 4.10 Structural model

The model confirmed during the CFA was used as a base for the structural equation modelling (SEM). Indicator paths drawn based on the relationships hypothesised in Chapter 2 (other than those relating to alternatives' attractiveness as that construct was removed from the model). This structural model was run in AMOS and assessed for model fit. As shown in Table 18, model fit criteria were satisfied. The structural model is depicted in Figure 8

Table 18: Model-fit indicators for structural model

|  | Criteria $^{1}$ | Initial model |
| :--- | :---: | :---: |
| $x^{2}$ |  | 1189.769 |
| $d f$ |  | 737 |
| $p$ |  | 0.000 |
| CMIN/Df | $>0.920$ | 1.614 |
| CFI | $<0.08$ | 0.928 |
| RMSEA | $<0.09$ | 0.060 |
| SRMR |  |  |

1 These criteria based on Hair et al. (2014)

Figure 8: Structural model


### 4.10.1 Direct relationships in the structural model

With a Beta of -0.310 , customer engagement has an inverse relationship with switching intentions which is significant at a $95 \%$ confidence interval. Based on the Beta values as shown in Table 19, the five of the six switching cost constructs have an inverse relationship with switching intentions. However, only two of those relationships are statistically significant $(p<0.05)$ at a $95 \%$ confidence interval, being Uncertainty PSC and Brand RSC. Sunk FSC appears to have a statistically significant positive relationship to switching intentions ( $\beta=0.341, p<0.025$ ).

Table 19: Direct relationships in structural model

| Dependent <br> variable |  | Independent variable | Beta <br> coefficient | p- <br> value | Finding |
| :--- | :--- | :--- | ---: | ---: | ---: |
| Switching intentions | $\leftarrow$ | Customer engagement | -0.310 | 0.005 | Supported |
| Switching intentions | $\leftarrow$ | Uncertainty PSC | -0.266 | 0.007 | Supported <br> Not |
| Switching intentions | $\leftarrow$ | Search and learn PSC | -0.012 | 0.895 | supported <br> Not |
|  |  |  | 0.341 | 0.025 | supported <br> Switching intentions |
|  | $\leftarrow$ | Sunk FSC |  |  |  |
| Switching intentions | $\leftarrow$ | Benefit FSC | -0.220 | 0.056 | supported <br> Supported |
| Switching intentions | $\leftarrow$ | Brand RSC | -0.349 | 0.004 | Not |
|  |  |  | -0.005 | 0.949 | supported |

### 4.10.2 Moderation effects in the structural model

In order to test for the moderating effect, additional variables, named interaction terms, had to be introduced to the model (Dawson, 2014). Interaction terms were created for each of the six switching cost constructs. These were created brought into the structural model by following these steps:

- New variables were in SPSS for each of the independent variables as the mean of the observed variables included in the final model as shown in Figure 8. The
- The standardised valued of the newly created variables were also saved in SPSS.
- Six interaction terms were created as the product of the standardised scores for customer engagement and the standardised scores for the different switching costs, for example,
- Z(Customer engagement)*Z(Uncertainty PSC),
- Z(Customer engagement)*Z(Brand RSC)
- Z(customer engagement) ${ }^{\star}$ Z(Sunk FSC)
- The resulting interaction terms were then brought into the structural model in AMOS, joined to the switching intentions by means of indicator paths and also covaried with the other independent variables that were already in the structural model (customer engagement and the six switching cost latent variables.

Once, the interaction terms were setup in AMOS, the moderation model was run in AMOS. Model fit indicators were inspected again and the model confirmed as adequate $\quad\left(C M I N / D f=1.555\left(X^{2}=1453.924, \quad D F=935, \quad p=0.000\right), C F I=0.925\right.$, RMSEA $=0.049$, SRMR $=0.058$ ).

The estimates showed that the only interaction that showed a significant effect was the interaction with brand RSC ( $\mathrm{p}<0.05$ ). The other interactions, as can be seen in Table 20 had a $p$-value greater than 0.05 and were therefore not significant at the $95 \%$ confidence interval.

Table 20: Moderation model - unstandardised regression weights on switching intentions

| Independent variable $^{1}$ | weight | p-value | Finding |
| :--- | :---: | :---: | :--- |
| Interaction term: Uncertainty PSC | 0.015 | 0.809 | Not supported |
| Interaction term: Search and learn PSC | 0.091 | 0.179 | Not supported |
| Interaction term: Sunk FSC | -0.044 | 0.592 | Not supported |
| Interaction term: Benefit FSC | 0.066 | 0.433 | Not supported |
| Interaction term: Brand RSC | -0.154 | $\mathbf{0 . 0 1 5}$ | Supported |
| Interaction term: Personal RSC | -0.020 | 0.806 | Not supported |

1 - Dependent variable not displayed: Switching intentions

Figure 9: Moderating effect of brand RCS


### 4.11 Conclusion

In this chapter the results from the survey were presented and summarised. All the scales were respectively tested for validity and reliability based on Principal Component Analysis and Cronbach's alpha. Following confirmation of the validity and reliability the scales were summated to enable further analysis to be performed. Some variables were dropped during the PCA for reasons that included weak loading, or loading on more than one component. Performing PCA helped identify dimensions which were used in the CFA. CFA was performed in Amos to confirm the results of the PCA and was a base for the structural model. The CFA resulted in two variables from the EFA being deleted from the model. Model fit was also confirmed in CFA. The CFA was followed by the SEM also in Amos. In the next Chapter, the results from this chapter will be discussed in line with the hypotheses identified in Chapter 2.

## 5 DISCUSSION OF RESULTS

### 5.1 Introduction

In the previous chapter, the data gathered in the study was presented and analysed statistically. The hypothesis from Chapter 2, with some modification, were also tested in Chapter 4. In this chapter, the results of the study as presented in Chapter 4 are discussed.

### 5.2 Research objective 1

The first and primary aim of this study sought to understand the relationship between CE and switching intentions. It was then hypothesised in Chapter 2 that:
$H_{1}$ : There is an inverse relationship between customer engagement and switching intentions

This hypothesis was supported by the SEM results ( $\beta=-0.310, p$-value $=0.005$ ).

### 5.3 Research objective 2

The second objective of the study sought to understand the role played by switching cost in the relationship between CE and brand switching intentions. In general the role was hypothesised to be two-fold, a direct influence on switching intentions and a moderating effect on the relationship. It should be noted that in Chapter 2 when the hypotheses were developed, based on the learnings from (Kim et al., 2018), switching costs was not treated as a single globular cost, but there were three types of switching costs that were hypothesised on, being procedural, financial and relational switching costs. Interestingly during EFA, the costs were broken down further as separate components were being extracted. As a result, the final model (Figure 8) had split procedural switching costs (PSC) between uncertainty PSC and search and learn PSC. Financial switching costs (FSC) were split between sunk FSC and benefit FSC. Relational switching costs (RSC) were split between brand RSC and personal RSC. On this basis, the hypotheses from were amended slightly to accommodate the outcomes of the EFA and CFA. As such the discussion will be based on the amended hypotheses. Splitting of the costs emphasises that to better
understand switching costs switching costs should not be treated as one single cost (Barroso \& Picón, 2012; Kim et al., 2018)

### 5.3.1 Procedural switching costs and switching intentions

The initial hypothesis from Chapter 2 was as follows:
$\mathrm{H}_{3 \mathrm{~A}}$ : There is an inverse relationship between procedural switching costs and switching intentions

Based on the EFA and CFA this was amended to two separate hypotheses as follows:
$\mathrm{H}_{3 \mathrm{~A} 1}$ : There is an inverse relationship between uncertainty procedural switching costs and switching intentions
$H_{3 A 2}$ : There is an inverse relationship between search and learn procedural switching costs and switching intentions

Overall the inverse relationship that was expected in Chapter 2 was confirmed by the SEM results. The inverse relationships were indicated for both by the negative Beta values from the final structural model ( -0.266 for uncertainty PSC and -0.012 for search and learn PSC). However, only uncertainty PSC was statistically significant at $95 \%$ confidence interval ( $p$-value $=0.007$ ). The $p$-value for the relation to search and learn was above 0.05 . Hypothesis $\mathrm{H}_{3 \mathrm{~A} 1}$ was, therefore, supported by the results and Hypothesis $\mathrm{H}_{3 \mathrm{~A} 2}$ was rejected; leading to the conclusion that there is an inverse relationship between uncertainty PSC and switching intentions. This means that the higher the uncertainty about how things would change following switching, the less likely the customers are to have switching intentions.

In relation to the moderation effect, the initial hypothesis was
$\mathrm{H}_{2 \mathrm{~A}}$ : Procedural switching costs moderate the relationship between customer engagement and switching intentions.

This hypothesis was also amended to two separate hypotheses based on results from EFA and CFA as follows:
$\mathrm{H}_{2 \mathrm{~A} 1}$ : Uncertainty procedural switching costs moderate the relationship between customer engagement and switching intentions.
$\mathrm{H}_{2 \mathrm{~A} 2}$ : Search and learn procedural switching costs moderate the relationship between customer engagement and switching intentions.

With the interaction terms having p-values above 0.05 for both uncertainty PSC and search and learn PSC (refer to Table 20), both these hypotheses were not supported at a $95 \%$ confidence interval. The conclusion was therefore that there is no moderation by switching costs on the relationship between customer engagement and switching intentions.

### 5.3.2 Financial switching costs and switching intentions

The initial hypothesis from Chapter 2 was as follows:
$H_{3 B}$ : There is an inverse relationship between financial switching costs and switching intentions

Based on the EFA and CFA this was amended to two separate hypotheses as follows:
$\mathrm{H}_{3 \text { вг }}$ : There is an inverse relationship between sunk financial switching costs and switching intentions
$\mathrm{H}_{3 \text { вг }}$ : There is an inverse relationship between benefit financial switching costs and switching intentions

Sunk FSC was however a surprise in that it has a significant positive relationship with switching intentions.

Although not significant, the results indicated an inverse relationship to exist between benefit FSC and switching intentions. Considering that a third of the respondents were from FNB, whose eBucks reward programme is said to be the leading rewards programme in South African banking (Consulta, 2019), one would have expected that the inverse relationship between benefit FSC and switching intentions to be significant. Thus, the non-significance of this relationship speaks to the possibility that the rewards programmes by the banks are not effective in creating a form of switching barrier. The results could also be a symptom of the sample distribution.

In relation to switching costs moderating the relationship between customer engagement and switching intentions, the initial hypothesis was
$\mathrm{H}_{2 \mathrm{~B}}$ : Financial switching costs moderate the relationship between customer engagement and switching intentions

This hypothesis was also amended to two separate hypotheses based on results from EFA and CFA as follows:
$\mathrm{H}_{2 \mathrm{B1}}$ : Sunk financial switching costs moderate the relationship between customer engagement and switching intentions
$\mathrm{H}_{2 \mathrm{~B} 2}$ : Benefit financial switching costs moderate the relationship between customer engagement and switching intentions

As can be seen from Table 20, the interaction terms for both sunk FSC and benefit FSC were not significant ( p -value $<0.05$ ). Therefore, both hypotheses, $\mathrm{H}_{2 B 1}$ and $\mathrm{H}_{2 B 2}$, were, therefore, not supported. They were rejected and the conclusion was that there was no moderation effect by financial costs on the relationship between customer engagement and switching intentions.

### 5.3.3 Relational switching costs and switching intentions

The initial hypothesis from Chapter 2 was as follows:
$H_{3 c}$ : There is an inverse relationship between relational switching costs and switching intentions

Based on the EFA and CFA this was amended to two separate hypotheses as follows:
$\mathrm{H}_{3 C_{1}}$ : There is an inverse relationship between brand relational switching costs and switching intentions
$\mathrm{H}_{3 \mathrm{C} 2}$ : There is an inverse relationship between personal relational switching costs and switching intentions

These results show that customers are forming stronger bonds with the banking brands themselves and not individuals within the banks. This can be attributed to the observation of more customers moving towards online services for their banking
needs (Moliner-Tena et al., 2019). Using these online services, they interact with the brand and form connections with the brand, without reducing the amount of time they interact with bank personnel.

However, it should be noted that these results could also be a reflection of the fact that over $70 \%$ of the sample is younger than 30 years of age. Thus, the views of the older customers is limited. If that is the case, it is also an indication to the banks of the future looks.

In relation to relational switching costs moderating the relationship between customer engagement and switching intentions, the initial hypothesis was
$\mathrm{H}_{2 \mathrm{C}}$ : Relational switching costs moderate the relationship between customer engagement and switching intentions

Similar to procedural switching costs and financial switching costs, this hypothesis was also amended to two separate hypotheses based on EFA and CFA results as follows:
$\mathrm{H}_{2 \mathrm{C} 1}$ : Brand relational switching costs moderate the relationship between customer engagement and switching intentions
$\mathrm{H}_{2 \mathrm{C} 2}$ : Personal relational switching costs moderate the relationship between customer engagement and switching intentions

The interaction term for brand RSC had a significant influence ( p -value=0.015) on switching intentions at a $95 \%$ confidence interval. Hypothesis $\mathrm{H}_{2 \mathrm{C} 1}$ was supported and it was concluded that brand relational switching costs moderated negatively, the relationship between customer engagement and switching intentions. The influence of personal RSC on switching intentions was not significant ( $p$-value $=0.806$ ). As such, hypothesis $\mathrm{H}_{2 \mathrm{C} 2}$ was not supported by the results and was rejected. Similar to the direct relationship, the results that only brand RSC had a moderating effect flows from the increased used of online services and the age group of the participants.

### 5.4 Research objective 3

The third objective was to understand the role played by alternatives' attractiveness in the relationship between CE and switching intentions. Similar to switching costs, this role was hypothesised to be one of direct influence on switching intentions and
also a moderating effect on the relationship between CE and switching intentions. The related hypotheses from Chapter 2 were as follows:
$\mathrm{H}_{4}$ : Alternatives' attractiveness moderates the relationship between customer engagement and switching intentions
$H_{5}$ : There is a positive relationship between alternatives' attractiveness and switching intentions

However, as a result of discriminant validity issues which also resulted in an inadequate model fit, alternatives' attractiveness was removed from the model. It could not be shown that alternatives' attractiveness was distinct from switching intentions. The proposed hypotheses relating to alternatives' attractiveness were, therefore, not be tested in this study.

A possible cause for this could be the inclusion of a reverse coded item in the scale for switching intentions. Perhaps reverse coded items are not appropriate for a market like South Africa where the majority do not have English as a first language and may find reverse coded items to be confusing. It is worth noting that ITS3 is the only reverse coded item from the questionnaire that is included in the final model. The other reverse coded items were PSC5, FSC4, and RSC3 as discussed in section 4.2. However, since the discriminant validity issue persisted even when ITS3 was removed from the model, there could be other reasons which the researcher did not identify.

### 5.5 Conclusion

## 6 CONCLUSION

### 6.1 Introduction

In this final chapter, the findings from the study are summarised. Furthermore, recommendations are also made for future research.

### 6.2 Principal findings

In line with expectations, this study found that there was indeed an inverse relationship between customer engagement and switching intentions. The study confirmed that the more engaged customers are, the less likely they are to have intentions to switch to another service provider.

Similar to prior studies, this study has shown mixed results regarding the role of switching costs. Some costs such as uncertainty PSC and brand RSC were found in this study to be negatively related to switching intentions. Other like search and learn PSC, benefit PSC, and personal PSC did not have any significant relationship with switching intentions. To the researcher's surprise, sunk FSC, had a significant. The mixed results could stem from what was highlighted by Nagengast et al. (2014) when they mentioned that "customers are often aware of their SC only when they face a concrete switching decision. Customers who do not consider switching to a new provider might underestimate potential future SC" (p. 423)

Furthermore, it was found that this relationship between CE and switching intentions is moderated positively by brand RSC.

### 6.3 Implications of the study

Technology is changing how people interact with their banks. It has affected the nature of interactions and relationships such that customers seem to be forming stronger bonds with the brand itself than with bank employees.

Lock-in programmes do not seem effective. Bank should give more consideration to improving the loyalty programmes which then in a sense create a hurdle that a
customer considering switching would have to give up, or the target vendor have to reimburse or compensate the customer for such loss.

This study provides support for the idea of not seeing switching costs as one single cost. However, different to the findings of (Blut et al., 2016; Kim et al., 2018)each of the three SC types seem to be having some sub-dimension. Further work is required in refining the scales for the SC types.

### 6.4 Limitations of the research

Building on the limitations noted in Chapter 3, with the main limitation of this study relating to the generalisability of its findings. This stems from the effects of having used snowball sampling. Furthermore, there was no controlling for multi-banking and for extent of lock-in that the customers may be experiencing.

### 6.5 Suggestions for future research

As pointed out above, the role played by alternatives' attractiveness in the relationship between CE and switching intentions could not be investigated in study. Future research should consider investigating this role. This may include developing new measurement scales, such either for switching intentions of for alternatives' attractiveness such the two constructs are clearly distinct from each other. The researcher believes that there is still a role as alternatives attractiveness is . Not only is it likely to have an influence on switching intentions but alternatives' attractiveness also influences the perceptions of switching costs (Pick \& Eisend, 2014).

As much as intentions are accepted widely to be a good predictor of behaviour, not all intentions translate to behaviour. A research study for consideration is one that looks at investigating the intentions-behaviour gap. A longitudinal study will be appropriate as it will enable assessment of how the switching intentions are evolving over time.

### 6.6 Conclusion

This study confirmed that the more engaged customers are the less likely they are to have switching intentions. This relationship is strengthened by brand RSC. The impact of other switching costs was mixed and moderation effect was only significant for brand RSC.

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## 8 APPENDICES

### 8.1 Appendix A: GIBS Ethical clearance approval

# Gordon <br> Institute <br> of Business <br> Science <br> University <br> of Pretoria 

Dear Amogelang

Please be advised that your application for Ethical Clearance has been approved.

You are therefore allowed to continue collecting your data.

Please note that approval is granted based on the methodology and research instruments provided in the application. If there is any deviation change or addition to the research method or tools, a supplementary application for approval must be obtained

We wish you everything of the best for the rest of the project.

Kind Regards

GIBS MBA Research Ethical Clearance Committee

### 8.2 Appendix B: Survey questionnaire

## Introduction and consent

## Dear Sir/Madam

My name is Amogelang Phefo and I am currently registered for a degree of Master of Business Administration with the Gordon Institute of Business Science, University of Pretoria (GIBS). I am conducting research on the relationship between customer engagement and brand switch intentions.

Please assist by completing this survey questionnaire. The questionnaire is expected to take about 15 minutes to complete; and will help gain insights into the relationship between customer engagement and brand switch intentions.

Your participation is voluntary, and you may withdraw at any point without penalty. All data was reported anonymously. If you have any concerns, please contact my supervisor or me. Our details are provided below.

Email: 17392307@mygibs.co.za
Phone: 0723779119

Research Supervisor: Kerry Chipp<br>Email: chippk@up.ac.za<br>Phone: 0117714000

ELECTRONIC CONSENT: Please select your choice below. You may print a copy of this consent form for your records. Clicking on the "Next" button indicates that:

- You have read and understood the above information
- You voluntarily agree to participate
- You are 18 years of age or older

1. Please confirm that you reside in Gauteng Province.

- Yes, I stay in Gauteng Province
- No, I do not stay in Gauteng Province

2. What is your age group?

- 18-24
- 25-34
- 35-44
- 45-54
- 55+

3. Which bank do you primarily perform your day-to-day banking with?

- Absa
- Capitec
- FNB
- Nedbank
- Standard Bank
- Other (please specify)

4. How many years have you been banking with the bank?

- Less than 1 year
- 2-5 years
- 6-10 years
- 11+ years

5. Which gender do you identify with?

- Female
- Male
- Prefer not to say
- Other (please specify)

6. Which race group do you identify with?

- African (Black)
- Caucasian (White)
- Coloured
- Indian
- Other (please specify)

7. What is your average monthly income?

- Below R5,000
- Between R5,000 and R14,999
- Between R15,000 and R24,999
- Between R25,000 and R49,999
- Between R50,000 and R74,999
- Over R75,000

8. Thinking about your bank, including your interactions/connections with your bank and other customers, please indicate how much you agree or disagree with each of the following statements.

|  |  |  |  |  |  | $\begin{aligned} & \stackrel{\otimes}{\ddot{Q}} \\ & \stackrel{y}{2} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| When someone criticises this bank, it feels like a personal insult. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | O | $\bigcirc$ | $\bigcirc$ |
| I am enthusiastic about this bank. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I concentrate a lot on this bank. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| In my interaction with the bank, I am immersed. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | O | $\bigcirc$ | $\bigcirc$ |
| I often participate in activities of the brand community. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | O | $\bigcirc$ | $\bigcirc$ |

9. Thinking about your bank, including your interactions/connections with your bank and other customers, please indicate how much you agree or disagree with each of the following statements.

|  |  |  |  |  |  | $\begin{aligned} & \mathbb{\otimes} \\ & \stackrel{\otimes}{2} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I feel excited about this bank. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| When I talk about this bank, I usually say "we" rather than "they". | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I like learning more about this bank. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I am someone who enjoys interacting with like-minded others in the brand community. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| When interacting with the bank intensely, I feel happy. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

10. Thinking about your bank, including your interactions/connections with your bank and other customers, please indicate how much you agree or disagree with each of the following statements.

|  |  | $\begin{aligned} & \mathbb{\otimes} \\ & \stackrel{\otimes}{0} \\ & \stackrel{\oplus}{0} \end{aligned}$ |  |  |  | $\begin{aligned} & \stackrel{\otimes}{\stackrel{2}{2}} \\ & \hline \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I like to learn more about this bank. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| In general, I like to get involved in brand community discussions. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| This bank's successes are my successes. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I love this bank. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| When I am interacting with the bank, I forget everything else around me. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

11. Thinking about your bank, including your interactions/connections with your bank and other customers, please indicate how much you agree or disagree with each of the following statements.

|  |  | $\begin{aligned} & \stackrel{\otimes}{\otimes} \\ & \stackrel{\pi}{\oplus} \\ & \stackrel{\oplus}{0} \end{aligned}$ |  |  |  | $\begin{aligned} & \stackrel{\otimes}{\otimes} \\ & \stackrel{\rightharpoonup}{<} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time flies when I am interacting with the bank. | ○ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| When someone praises this bank, it feels like a personal compliment. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| If I need to change the from my current bank, there are other good banks to choose from. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I would feel more satisfied with the services of another bank as compared to my current bank. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I would be more satisfied with price plans of another bank as compared to my current bank. | $\bigcirc$ | $\bigcirc$ | O | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

12. Thinking about your bank, including your interactions/connections with your bank and other customers, please indicate how much you agree or disagree with each of the following statements.

|  |  | $\begin{aligned} & \mathbb{\otimes} \\ & \stackrel{( }{\Xi} \\ & \stackrel{\oplus}{0} \end{aligned}$ |  |  |  | $\begin{aligned} & \stackrel{\otimes}{\otimes} \\ & \stackrel{\square}{<} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I am someone who likes actively participating in brand community discussions. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I pay a lot of attention to anything about this bank. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| When I am interacting with bank, I get carried away. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I am heavily into this bank. | $\bigcirc$ | O | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

13. Thinking about your bank, including your interactions/connections with your bank and other customers, please indicate how much you agree or disagree with each of the following statements.

|  |  |  |  |  |  | $\begin{aligned} & \stackrel{\otimes}{0} \\ & \stackrel{\otimes}{2} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| When interacting with the bank, it is difficult to detach myself. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I am passionate about this bank. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Anything related to this bank grabs my attention. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| In general, I thoroughly enjoy exchanging ideas with other people in the brand community. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

14. Please indicate how much you agree or disagree with each of the following statements.

|  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | O |  |  |  |

15. Please indicate the extent to which you agree or disagree with the following statements.

|  |  |  |  | $\begin{aligned} & \stackrel{\otimes}{8} \\ & 8 \end{aligned}$ | \# |
| :---: | :---: | :---: | :---: | :---: | :---: |
| The service from another bank could be worse than the service I now receive. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I would be unfamiliar with the policies of a new bank. | $\bigcirc$ | 0 | 0 | 0 | 0 |


| If I changed banks, I would have to explain things to <br> my new bank. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| I do not care about the brand/company name of the <br> bank I use. [reverse scored] | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| At least one employee is familiar with me personally. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| All things considered, I have put a lot into previous <br> dealings with this bank. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| There are certain benefits that I would not retain if I <br> were to switch banks. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I am planning to search for a new bank during the next <br> 12 months. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

16. Thinking about your bank, please indicate how much you agree or disagree with the following statements.

|  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |

17. Please indicate how much you agree or disagree with the following statements.

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

### 8.3 Appendix C: Comparison of data before and after computation of missing responses

| Group Statistics |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Grouping | N | Mean | Std. <br> Deviation | Std. Error Mean |
| ID1 | 1.00 | 253 | 3.67 | 1.847 | . 116 |
|  | . 00 | 253 | 3.67 | 1.847 | . 116 |
| ID2 | 1.00 | 253 | 3.28 | 1.923 | . 121 |
|  | . 00 | 252 | 3.27 | 1.925 | . 121 |
| ID3 | 1.00 | 253 | 4.14 | 1.887 | . 119 |
|  | . 00 | 252 | 4.14 | 1.890 | . 119 |
| ID4 | 1.00 | 253 | 4.19 | 1.815 | . 114 |
|  | . 00 | 253 | 4.19 | 1.815 | . 114 |
| EN1 | 1.00 | 253 | 3.81 | 1.666 | . 105 |
|  | . 00 | 253 | 3.81 | 1.666 | . 105 |
| EN2 | 1.00 | 253 | 3.99 | 1.686 | . 106 |
|  | . 00 | 253 | 3.99 | 1.686 | . 106 |
| EN3 | 1.00 | 253 | 4.88 | 1.608 | . 101 |
|  | . 00 | 252 | 4.87 | 1.608 | . 101 |
| EN4 | 1.00 | 253 | 4.75 | 1.558 | . 098 |
|  | . 00 | 250 | 4.74 | 1.563 | . 099 |
| EN5 | 1.00 | 253 | 4.88 | 1.518 | . 095 |
|  | . 00 | 252 | 4.88 | 1.519 | . 096 |
| AT1 | 1.00 | 253 | 4.79 | 1.578 | . 099 |
|  | . 00 | 250 | 4.79 | 1.575 | . 100 |
| AT2 | 1.00 | 253 | 4.18 | 1.644 | . 103 |
|  | . 00 | 253 | 4.18 | 1.644 | . 103 |
| AT3 | 1.00 | 253 | 4.47 | 1.597 | . 100 |
|  | . 00 | 253 | 4.47 | 1.597 | . 100 |
| AT4 | 1.00 | 253 | 4.13 | 1.645 | . 103 |
|  | . 00 | 253 | 4.13 | 1.645 | . 103 |
| AT5 | 1.00 | 253 | 4.64 | 1.687 | . 106 |
|  | . 00 | 252 | 4.63 | 1.687 | . 106 |
| AB1 | 1.00 | 253 | 3.03 | 1.705 | . 107 |
|  | . 00 | 252 | 3.02 | 1.701 | . 107 |
| AB2 | 1.00 | 253 | 3.36 | 1.700 | . 107 |
|  | . 00 | 253 | 3.36 | 1.700 | . 107 |
| AB3 | 1.00 | 253 | 3.12 | 1.624 | . 102 |
|  | . 00 | 252 | 3.13 | 1.626 | . 102 |
| AB4 | 1.00 | 253 | 2.96 | 1.582 | . 099 |


| Group Statistics |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Grouping | N | Mean | Std. <br> Deviation | Std. Error Mean |
|  | . 00 | 253 | 2.96 | 1.582 | . 099 |
| AB5 | 1.00 | 253 | 4.19 | 1.763 | . 111 |
|  | . 00 | 253 | 4.19 | 1.763 | . 111 |
| AB6 | 1.00 | 253 | 4.38 | 1.722 | . 108 |
|  | . 00 | 252 | 4.37 | 1.720 | . 108 |
| IT1 | 1.00 | 253 | 3.81 | 1.784 | . 112 |
|  | . 00 | 252 | 3.80 | 1.783 | . 112 |
| IT2 | 1.00 | 253 | 4.60 | 1.730 | . 109 |
|  | . 00 | 252 | 4.60 | 1.729 | . 109 |
| IT3 | 1.00 | 253 | 3.66 | 1.671 | . 105 |
|  | . 00 | 252 | 3.66 | 1.670 | . 105 |
| IT4 | 1.00 | 253 | 3.97 | 1.630 | . 102 |
|  | . 00 | 251 | 3.97 | 1.631 | . 103 |
| IT5 | 1.00 | 253 | 2.87 | 1.647 | . 104 |
|  | . 00 | 253 | 2.87 | 1.647 | . 104 |
| ITS1 | 1.00 | 253 | 2.42 | 1.207 | . 076 |
|  | . 00 | 253 | 2.42 | 1.207 | . 076 |
| ITS2 | 1.00 | 253 | 2.23 | 1.240 | . 078 |
|  | . 00 | 252 | 2.23 | 1.241 | . 078 |
| ITS3 | 1.00 | 253 | 2.45 | 1.075 | . 068 |
|  | . 00 | 252 | 2.46 | 1.076 | . 068 |
| PSC1 | 1.00 | 253 | 3.63 | 1.015 | . 064 |
|  | . 00 | 252 | 3.63 | 1.015 | . 064 |
| PSC2 | 1.00 | 253 | 3.44 | 1.032 | . 065 |
|  | . 00 | 253 | 3.44 | 1.032 | . 065 |
| PSC3 | 1.00 | 253 | 3.49 | . 982 | . 062 |
|  | . 00 | 253 | 3.49 | . 982 | . 062 |
| PSC4 | 1.00 | 253 | 2.93 | 1.196 | . 075 |
|  | . 00 | 253 | 2.93 | 1.196 | . 075 |
| PSC5 | 1.00 | 253 | 3.42 | 1.123 | . 071 |
|  | . 00 | 251 | 3.43 | 1.127 | . 071 |
| PSC6 | 1.00 | 253 | 3.74 | . 947 | . 060 |
|  | . 00 | 252 | 3.74 | . 946 | . 060 |
| PSC7 | 1.00 | 253 | 3.59 | . 982 | . 062 |
|  | . 00 | 253 | 3.59 | . 982 | . 062 |
| PSC8 | 1.00 | 253 | 3.62 | . 999 | . 063 |
|  | . 00 | 253 | 3.62 | . 999 | . 063 |
| PSC9 | 1.00 | 253 | 3.63 | . 997 | . 063 |
|  | . 00 | 252 | 3.63 | . 999 | . 063 |


| Group Statistics |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Grouping | N | Mean | Std. <br> Deviation | Std. Error Mean |
| PSC10 | 1.00 | 253 | 3.25 | 1.038 | . 065 |
|  | . 00 | 253 | 3.25 | 1.038 | . 065 |
| PSC11 | 1.00 | 253 | 3.41 | . 957 | . 060 |
|  | . 00 | 252 | 3.40 | . 959 | . 060 |
| PSC12 | 1.00 | 253 | 3.03 | 1.191 | . 075 |
|  | . 00 | 253 | 3.03 | 1.191 | . 075 |
| FSC1 | 1.00 | 253 | 3.01 | 1.070 | . 067 |
|  | . 00 | 252 | 3.02 | 1.071 | . 067 |
| FSC2 | 1.00 | 253 | 3.41 | 1.026 | . 065 |
|  | . 00 | 253 | 3.41 | 1.026 | . 065 |
| FSC3 | 1.00 | 253 | 3.22 | 1.044 | . 066 |
|  | . 00 | 250 | 3.22 | 1.048 | . 066 |
| FSC4 | 1.00 | 253 | 2.73 | . 998 | . 063 |
|  | . 00 | 252 | 2.73 | 1.000 | . 063 |
| FSC5 | 1.00 | 253 | 3.18 | 1.151 | . 072 |
|  | . 00 | 252 | 3.18 | 1.153 | . 073 |
| FSC6 | 1.00 | 253 | 3.23 | 1.171 | . 074 |
|  | . 00 | 252 | 3.23 | 1.167 | . 074 |
| FSC7 | 1.00 | 253 | 3.40 | 1.059 | . 067 |
|  | . 00 | 253 | 3.40 | 1.059 | . 067 |
| FSC8 | 1.00 | 253 | 2.90 | 1.097 | . 069 |
|  | . 00 | 252 | 2.89 | 1.097 | . 069 |
| RSC1 | 1.00 | 253 | 3.92 | . 820 | . 052 |
|  | . 00 | 253 | 3.92 | . 820 | . 052 |
| RSC2 | 1.00 | 253 | 3.65 | . 877 | . 055 |
|  | . 00 | 253 | 3.65 | . 877 | . 055 |
| RSC3 | 1.00 | 253 | 3.43 | 1.178 | . 074 |
|  | . 00 | 253 | 3.43 | 1.178 | . 074 |
| RSC4 | 1.00 | 253 | 2.37 | 1.229 | . 077 |
|  | . 00 | 252 | 2.38 | 1.229 | . 077 |
| RSC5 | 1.00 | 253 | 2.42 | 1.303 | . 082 |
|  | . 00 | 252 | 2.43 | 1.302 | . 082 |
| RSC6 | 1.00 | 253 | 2.32 | 1.274 | . 080 |
|  | . 00 | 253 | 2.32 | 1.274 | . 080 |
| RSC7 | 1.00 | 253 | 2.49 | 1.305 | . 082 |
|  | . 00 | 252 | 2.49 | 1.307 | . 082 |
| AA1 | 1.00 | 253 | 4.80 | 1.652 | . 104 |
|  | . 00 | 253 | 4.80 | 1.652 | . 104 |
| AA2 | 1.00 | 253 | 3.51 | 1.676 | . 105 |


| Group Statistics |  |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | :---: |
|  | Grouping | N | Mean | Std. <br> Deviation | Std. Error <br> Mean |  |
| AA3 | .00 | 252 | 3.50 | 1.676 | .106 |  |
|  | 1.00 | 253 | 3.95 | 1.755 | .110 |  |
|  | .00 | 253 | 3.95 | 1.755 | .110 |  |



| Independent Samples Test |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assumption on equality of variances |  | Levene's Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
|  |  |  | Sig. | t | df | Sig. (2tailed) | Mean Difference | Std. Error Difference | 95\% Confidence Interval of the Difference |  |
|  |  | F |  |  |  |  |  |  | Lower | Upper |
|  | Not assumed |  |  | . 038 | 502.990 | . 970 | . 005 | . 135 | -. 260 | . 271 |
| AT1 | Assumed | . 003 | . 956 | . 025 | 501 | . 980 | . 003 | . 141 | -. 273 | . 280 |
|  | Not assumed |  |  | . 025 | 500.947 | . 980 | . 003 | . 141 | -. 273 | . 280 |
| AT2 | Assumed | . 000 | 1.000 | . 000 | 504 | 1.000 | . 000 | . 146 | -. 287 | . 287 |
|  | Not assumed |  |  | . 000 | 504.000 | 1.000 | . 000 | . 146 | -. 287 | . 287 |
| AT3 | Assumed | . 000 | 1.000 | . 000 | 504 | 1.000 | . 000 | . 142 | -. 279 | . 279 |
|  | Not assumed |  |  | . 000 | 504.000 | 1.000 | . 000 | . 142 | -. 279 | . 279 |
| AT4 | Assumed | . 000 | 1.000 | . 000 | 504 | 1.000 | . 000 | . 146 | -. 287 | . 287 |
|  | Not assumed |  |  | . 000 | 504.000 | 1.000 | . 000 | . 146 | -. 287 | . 287 |
| AT5 | Assumed | . 000 | . 991 | . 040 | 503 | . 968 | . 006 | . 150 | -. 289 | . 301 |
|  | Not assumed |  |  | . 040 | 502.990 | . 968 | . 006 | . 150 | -. 289 | . 301 |
| AB1 | Assumed | . 007 | . 933 | . 067 | 503 | . 947 | . 010 | . 152 | -. 288 | . 308 |
|  | Not assumed |  |  | . 067 | 502.999 | . 947 | . 010 | . 152 | -. 288 | . 308 |
| AB2 | Assumed | . 000 | 1.000 | . 000 | 504 | 1.000 | . 000 | . 151 | -. 297 | . 297 |
|  | Not assumed |  |  | . 000 | 504.000 | 1.000 | . 000 | . 151 | -. 297 | . 297 |
| AB3 | Assumed | . 001 | . 977 | -. 028 | 503 | . 978 | -. 004 | . 145 | -. 288 | . 280 |
|  | Not assumed |  |  | -. 028 | 502.987 | . 978 | -. 004 | . 145 | -. 288 | . 280 |
| AB4 | Assumed | . 000 | 1.000 | . 000 | 504 | 1.000 | . 000 | . 141 | -. 276 | . 276 |


| Independent Samples Test |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assumption on equality of variances |  | Levene's Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
|  |  |  | Sig. | t | df | Sig. (2tailed) | Mean Difference | Std. Error Difference | 95\% Confidence Interval of the Difference |  |
|  |  | F |  |  |  |  |  |  | Lower | Upper |
|  | Not assumed |  |  | . 000 | 504.000 | 1.000 | . 000 | . 141 | -. 276 | . 276 |
| AB5 | Assumed | . 000 | 1.000 | . 000 | 504 | 1.000 | . 000 | . 157 | -. 308 | . 308 |
|  | Not assumed |  |  | . 000 | 504.000 | 1.000 | . 000 | . 157 | -. 308 | . 308 |
| AB6 | Assumed | . 001 | . 974 | . 055 | 503 | . 957 | . 008 | . 153 | -. 293 | . 309 |
|  | Not assumed |  |  | . 055 | 502.996 | . 957 | . 008 | . 153 | -. 293 | . 309 |
| IT1 | Assumed | . 000 | . 990 | . 052 | 503 | . 959 | . 008 | . 159 | -. 304 | . 320 |
|  | Not assumed |  |  | . 052 | 502.995 | . 959 | . 008 | . 159 | -. 304 | . 320 |
| IT2 | Assumed | . 000 | . 999 | . 046 | 503 | . 964 | . 007 | . 154 | -. 295 | . 309 |
|  | Not assumed |  |  | . 046 | 502.992 | . 964 | . 007 | . 154 | -. 295 | . 309 |
| IT3 | Assumed | . 001 | . 970 | -. 051 | 503 | . 959 | -. 008 | . 149 | -. 300 | . 285 |
|  | Not assumed |  |  | -. 051 | 502.994 | . 959 | -. 008 | . 149 | -. 300 | . 285 |
| IT4 | Assumed | . 001 | . 978 | -. 004 | 502 | . 997 | -. 001 | . 145 | -. 286 | . 285 |
|  | Not assumed |  |  | -. 004 | 501.966 | . 997 | -. 001 | . 145 | -. 286 | . 285 |
| IT5 | Assumed | . 000 | 1.000 | . 000 | 504 | 1.000 | . 000 | . 146 | -. 288 | . 288 |
|  | Not assumed |  |  | . 000 | 504.000 | 1.000 | . 000 | . 146 | -. 288 | . 288 |
| ITS1 | Assumed | . 000 | 1.000 | . 000 | 504 | 1.000 | . 000 | . 107 | -. 211 | . 211 |
|  | Not assumed |  |  | . 000 | 504.000 | 1.000 | . 000 | . 107 | -. 211 | . 211 |
| ITS2 | Assumed | . 000 | 1.000 | . 028 | 503 | . 978 | . 003 | . 110 | -. 214 | . 220 |






### 8.4 Appendix D: Test for univariate normality

|  | N | Mean | Median | Mode | Std. Deviation | Skewness |  |  | Kurtosis |  |  | Shapiro-Wilk |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Statistic | Std. error | $\begin{gathered} \text { Z- } \\ \text { score } \end{gathered}$ | Statistic | Std. error | $\begin{gathered} \text { Z- } \\ \text { score } \end{gathered}$ | Statistic | df | Sig. |
| ID1 | 253 | 3.67 | 4.00 | 2.00 | 1.847 | 0.064 | 0.153 | 0.415 | -1.191 | 0.305 | -3.905 | 0.921 | 253 | 0.000 |
| ID2 | 253 | 3.28 | 2.00 | 2.00 | 1.923 | 0.419 | 0.153 | 2.735 | -1.244 | 0.305 | -4.079 | 0.873 | 253 | 0.000 |
| ID3 | 253 | 4.14 | 4.00 | 6.00 | 1.887 | -0.278 | 0.153 | -1.819 | -1.226 | 0.305 | -4.018 | 0.905 | 253 | 0.000 |
| ID4 | 253 | 4.19 | 5.00 | 5.00 | 1.815 | -0.363 | 0.153 | -2.374 | -1.013 | 0.305 | -3.323 | 0.909 | 253 | 0.000 |
| EN1 | 253 | 3.81 | 4.00 | 4.00 | 1.666 | 0.077 | 0.153 | 0.504 | -1.006 | 0.305 | -3.299 | 0.932 | 253 | 0.000 |
| EN2 | 253 | 3.99 | 4.00 | 4.00 | 1.686 | -0.143 | 0.153 | -0.933 | -0.969 | 0.305 | -3.176 | 0.936 | 253 | 0.000 |
| EN3 | 253 | 4.88 | 5.00 | 6.00 | 1.608 | -0.861 | 0.153 | -5.625 | -0.091 | 0.305 | -0.299 | 0.880 | 253 | 0.000 |
| EN4 | 253 | 4.75 | 5.00 | 6.00 | 1.558 | -0.631 | 0.153 | -4.121 | -0.261 | 0.305 | -0.856 | 0.917 | 253 | 0.000 |
| EN5 | 253 | 4.88 | 5.00 | 6.00 | 1.518 | -0.772 | 0.153 | -5.043 | 0.233 | 0.305 | 0.764 | 0.903 | 253 | 0.000 |
| AT1 | 253 | 4.79 | 5.00 | 6.00 | 1.578 | -0.767 | 0.153 | -5.008 | -0.229 | 0.305 | -0.750 | 0.894 | 253 | 0.000 |
| AT2 | 253 | 4.18 | 4.00 | 5.00 | 1.644 | -0.196 | 0.153 | -1.281 | -1.016 | 0.305 | -3.330 | 0.931 | 253 | 0.000 |
| AT3 | 253 | 4.47 | 5.00 | 5.00 | 1.597 | -0.553 | 0.153 | -3.615 | -0.616 | 0.305 | -2.021 | 0.911 | 253 | 0.000 |
| AT4 | 253 | 4.13 | 4.00 | 4.00 | 1.645 | -0.134 | 0.153 | -0.876 | -0.872 | 0.305 | -2.858 | 0.937 | 253 | 0.000 |
| AT5 | 253 | 4.64 | 5.00 | 6.00 | 1.687 | -0.571 | 0.153 | -3.727 | -0.668 | 0.305 | -2.189 | 0.907 | 253 | 0.000 |
| AB1 | 253 | 3.03 | 2.00 | 2.00 | 1.705 | 0.554 | 0.153 | 3.621 | -0.790 | 0.305 | -2.590 | 0.894 | 253 | 0.000 |
| AB2 | 253 | 3.36 | 4.00 | 4.00 | 1.700 | 0.252 | 0.153 | 1.648 | -0.955 | 0.305 | -3.129 | 0.921 | 253 | 0.000 |
| AB3 | 253 | 3.12 | 3.00 | 2.00 | 1.624 | 0.505 | 0.153 | 3.301 | -0.693 | 0.305 | -2.273 | 0.910 | 253 | 0.000 |
| AB4 | 253 | 2.96 | 2.00 | 2.00 | 1.582 | 0.678 | 0.153 | 4.431 | -0.468 | 0.305 | -1.533 | 0.893 | 253 | 0.000 |
| AB5 | 253 | 4.19 | 4.00 | 6.00 | 1.763 | -0.283 | 0.153 | -1.848 | -1.003 | 0.305 | -3.288 | 0.922 | 253 | 0.000 |
| AB6 | 253 | 4.38 | 4.00 | 4.00 | 1.722 | -0.445 | 0.153 | -2.904 | -0.733 | 0.305 | -2.403 | 0.918 | 253 | 0.000 |
| IT1 | 253 | 3.81 | 4.00 | 2.00 | 1.784 | 0.040 | 0.153 | 0.258 | -1.221 | 0.305 | -4.002 | 0.920 | 253 | 0.000 |


|  | N | Mean | Median | Mode | Std. Deviation | Skewness |  |  | Kurtosis |  |  | Shapiro-Wilk |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Statistic | Std. error | Zscore | Statistic | Std. error | $\begin{gathered} \text { Z- } \\ \text { score } \end{gathered}$ | Statistic | df | Sig. |
| IT2 | 253 | 4.60 | 5.00 | 5.00 | 1.730 | -0.608 | 0.153 | -3.969 | -0.535 | 0.305 | -1.755 | 0.908 | 253 | 0.000 |
| IT3 | 253 | 3.66 | 4.00 | 4.00 | 1.671 | 0.144 | 0.153 | 0.942 | -0.992 | 0.305 | -3.253 | 0.929 | 253 | 0.000 |
| IT4 | 253 | 3.97 | 4.00 | 4.00 | 1.630 | -0.132 | 0.153 | -0.864 | -0.863 | 0.305 | -2.829 | 0.939 | 253 | 0.000 |
| IT5 | 253 | 2.87 | 2.00 | 2.00 | 1.647 | 0.703 | 0.153 | 4.593 | -0.560 | 0.305 | -1.836 | 0.879 | 253 | 0.000 |
| ITS1 | 253 | 2.42 | 2.00 | 2.00 | 1.207 | 0.535 | 0.153 | 3.494 | -0.824 | 0.305 | -2.703 | 0.866 | 253 | 0.000 |
| ITS2 | 253 | 2.23 | 2.00 | 1.00 | 1.240 | 0.758 | 0.153 | 4.950 | -0.542 | 0.305 | -1.776 | 0.839 | 253 | 0.000 |
| ITS3 | 253 | 2.45 | 2.00 | 2.00 | 1.075 | 0.604 | 0.153 | 3.944 | -0.204 | 0.305 | -0.669 | 0.884 | 253 | 0.000 |
| PSC1 | 253 | 3.63 | 4.00 | 4.00 | 1.015 | -0.987 | 0.153 | -6.446 | 0.471 | 0.305 | 1.543 | 0.813 | 253 | 0.000 |
| PSC2 | 253 | 3.44 | 4.00 | 4.00 | 1.032 | -0.391 | 0.153 | -2.557 | -0.389 | 0.305 | -1.275 | 0.899 | 253 | 0.000 |
| PSC3 | 253 | 3.49 | 4.00 | 4.00 | 0.982 | -0.439 | 0.153 | -2.867 | -0.178 | 0.305 | -0.583 | 0.892 | 253 | 0.000 |
| PSC4 | 253 | 2.93 | 3.00 | 2.00 | 1.196 | 0.054 | 0.153 | 0.352 | -1.184 | 0.305 | -3.883 | 0.882 | 253 | 0.000 |
| PSC5 | 253 | 3.42 | 4.00 | 4.00 | 1.123 | -0.499 | 0.153 | -3.260 | -0.734 | 0.305 | -2.407 | 0.867 | 253 | 0.000 |
| PSC6 | 253 | 3.74 | 4.00 | 4.00 | 0.947 | -0.851 | 0.153 | -5.557 | 0.248 | 0.305 | 0.813 | 0.818 | 253 | 0.000 |
| PSC7 | 253 | 3.59 | 4.00 | 4.00 | 0.982 | -0.756 | 0.153 | -4.938 | -0.010 | 0.305 | -0.033 | 0.838 | 253 | 0.000 |
| PSC8 | 253 | 3.62 | 4.00 | 4.00 | 0.999 | -0.914 | 0.153 | -5.967 | 0.323 | 0.305 | 1.058 | 0.820 | 253 | 0.000 |
| PSC9 | 253 | 3.63 | 4.00 | 4.00 | 0.997 | -0.801 | 0.153 | -5.231 | 0.010 | 0.305 | 0.034 | 0.828 | 253 | 0.000 |
| PSC10 | 253 | 3.25 | 3.00 | 4.00 | 1.038 | -0.213 | 0.153 | -1.394 | -0.749 | 0.305 | -2.454 | 0.898 | 253 | 0.000 |
| PSC11 | 253 | 3.41 | 4.00 | 4.00 | 0.957 | -0.425 | 0.153 | -2.776 | -0.549 | 0.305 | -1.801 | 0.869 | 253 | 0.000 |
| PSC12 | 253 | 3.03 | 3.00 | 4.00 | 1.191 | -0.118 | 0.153 | -0.771 | -1.193 | 0.305 | -3.910 | 0.875 | 253 | 0.000 |
| FSC1 | 253 | 3.01 | 3.00 | 4.00 | 1.070 | -0.181 | 0.153 | -1.184 | -0.944 | 0.305 | -3.094 | 0.889 | 253 | 0.000 |
| FSC2 | 253 | 3.41 | 4.00 | 4.00 | 1.026 | -0.469 | 0.153 | -3.065 | -0.527 | 0.305 | -1.726 | 0.877 | 253 | 0.000 |
| FSC3 | 253 | 3.22 | 3.00 | 4.00 | 1.044 | -0.356 | 0.153 | -2.327 | -0.547 | 0.305 | -1.794 | 0.899 | 253 | 0.000 |
| FSC4 | 253 | 2.73 | 3.00 | 2.00 | 0.998 | 0.288 | 0.153 | 1.882 | -0.542 | 0.305 | -1.779 | 0.897 | 253 | 0.000 |
| FSC5 | 253 | 3.18 | 3.00 | 4.00 | 1.151 | -0.272 | 0.153 | -1.777 | -0.890 | 0.305 | -2.917 | 0.898 | 253 | 0.000 |
| FSC6 | 253 | 3.23 | 4.00 | 4.00 | 1.171 | -0.403 | 0.153 | -2.632 | -0.826 | 0.305 | -2.709 | 0.887 | 253 | 0.000 |


|  | N | Mean | Median | Mode | Std. Deviation | Skewness |  |  | Kurtosis |  |  | Shapiro-Wilk |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Statistic | Std. error | Zscore | Statistic | Std. error | Zscore | Statistic | df | Sig. |
| FSC7 | 253 | 3.40 | 4.00 | 4.00 | 1.059 | -0.612 | 0.153 | -3.994 | -0.245 | 0.305 | -0.802 | 0.876 | 253 | 0.000 |
| FSC8 | 253 | 2.90 | 3.00 | 2.00 | 1.097 | 0.096 | 0.153 | 0.629 | -0.783 | 0.305 | -2.567 | 0.912 | 253 | 0.000 |
| RSC2 | 253 | 3.65 | 4.00 | 4.00 | 0.877 | -0.817 | 0.153 | -5.334 | 0.952 | 0.305 | 3.121 | 0.842 | 253 | 0.000 |
| RSC3 | 253 | 3.43 | 4.00 | 4.00 | 1.178 | -0.439 | 0.153 | -2.871 | -0.759 | 0.305 | -2.490 | 0.890 | 253 | 0.000 |
| RSC4 | 253 | 2.37 | 2.00 | 2.00 | 1.229 | 0.578 | 0.153 | 3.773 | -0.802 | 0.305 | -2.629 | 0.861 | 253 | 0.000 |
| RSC5 | 253 | 2.42 | 2.00 | 2.00 | 1.303 | 0.534 | 0.153 | 3.487 | -0.973 | 0.305 | -3.190 | 0.856 | 253 | 0.000 |
| RSC6 | 253 | 2.32 | 2.00 | 1.00 | 1.274 | 0.588 | 0.153 | 3.838 | -0.951 | 0.305 | -3.119 | 0.840 | 253 | 0.000 |
| RSC7 | 253 | 2.49 | 2.00 | 1.00 | 1.305 | 0.362 | 0.153 | 2.363 | -1.217 | 0.305 | -3.990 | 0.858 | 253 | 0.000 |
| AA1 | 253 | 4.80 | 5.00 | 6.00 | 1.652 | -0.622 | 0.153 | -4.065 | -0.581 | 0.305 | -1.903 | 0.904 | 253 | 0.000 |
| AA2 | 253 | 3.51 | 4.00 | 4.00 | 1.676 | 0.329 | 0.153 | 2.151 | -0.697 | 0.305 | -2.285 | 0.933 | 253 | 0.000 |
| AA3 | 253 | 3.95 | 4.00 | 4.00 | 1.755 | 0.021 | 0.153 | 0.139 | -1.036 | 0.305 | -3.397 | 0.935 | 253 | 0.000 |

### 8.5 Appendix E: Mean and standard deviation per item in survey ( $\mathrm{N}=235$ )

| Identification (ID) (from So et al. (2014)) |  | Mean | Standard |
| :---: | :---: | :---: | :---: |
| ID1 | When someone criticizes this bank, it feels like a personal insult. | 3.66 | 1.822 |
| ID2 | When I talk about this bank, I usually say "we" rather than "they". | 3.29 | 1.901 |
| ID3 | This bank's successes are my successes. | 4.16 | 1.869 |
| ID4 | When someone praises this bank, it feels like a personal compliment. | 4.20 | 1.791 |
| Enthusiasm (EN) (from So et al. (2014)) |  | Mean | Standard deviation |
| EN1 | I am heavily into this bank. | 3.82 | 1.652 |
| EN2 | I am passionate about this bank. | 3.98 | 1.667 |
| EN3 | I am enthusiastic about this bank. | 4.87 | 1.578 |
| EN4 | I feel excited about this bank. | 4.74 | 1.512 |
| EN5 | I love this bank. | 4.89 | 1.465 |
| Attention (AT) (from So et al. (2014)) |  | Mean | Standard deviation |
| AT1 | I like to learn more about this bank. | 4.81 | 1.514 |
| AT2 | I pay a lot of attention to anything about this bank. | 4.21 | 1.618 |
| AT3 | Anything related to this bank grabs my attention. | 4.52 | 1.572 |
| AT4 | I concentrate a lot on this bank. | 4.19 | 1.596 |
| AT5 | I like learning more about this bank. | 4.64 | 1.642 |


| Absorption (AB) (from So et al. (2014)) | Mean | Standard <br> deviation |  |
| :--- | :--- | ---: | ---: |
| AB1 | When I am interacting with the bank, I forget <br> everything else around me. | 3.10 | 1.718 |
| AB2 | Time flies when I am interacting with the bank. | 3.34 | 1.665 |
| AB3 | When I am interacting with bank, I get carried <br> away. | 3.16 | 1.630 |
| AB4 | When interacting with the bank, it is difficult to <br> detach myself. | 3.00 | 1.582 |
| AB5 | In my interaction with the bank, I am <br> immersed. | 4.14 | 1.728 |
| AB6 | When interacting with the bank intensely, I feel <br> happy. | 4.39 | 1.689 |
| Interaction (IT) (from So et al. (2014)) | Mean | Standard |  |
| deviation |  |  |  |
| IT1 | In general, I like to get involved in brand <br> community discussions. | 3.85 | 1.772 |
| IT2 | I am someone who enjoys interacting with like- <br> minded others in the brand community. | 4.58 | 1.698 |
| IT3 | I am someone who likes actively participating <br> in brand community discussions. | 3.72 | 1.667 |
| IT4 | In general, I thoroughly enjoy exchanging <br> ideas with other people in the brand <br> community. | 4.01 | 1.617 |
| IT5 | I often participate in activities of the brand <br> community. | 2.90 | 1.626 |


| Switching intentions (ITS) (from Colarelli (1984)) |  | Mean | Standard <br> deviation |
| :--- | :--- | ---: | ---: |
| ITS1 | I frequently think of changing banks. | 2.41 | 1.178 |
| ITS2 | I am planning to search for a new bank during <br> the next 12 months | 2.23 | 1.208 |
| ITS3 | If I have my own way, I will be with my current <br> bank one year from now. [reverse scored] | 2.42 | 1.015 |


| Procedural switching costs (PSC) (from (Nagengast et al., 2014)) |  | Mean | Standard deviation |
| :---: | :---: | :---: | :---: |
| PSC1 | I am not sure what the level of service would be if I switched to a new bank. | 3.65 | 0.960 |
| PSC2 | If I were to change banks, the service I might receive at the new place could be worse than the service I now receive. | 3.45 | 0.983 |
| PSC3 | The service from another bank could be worse than the service I now receive. | 3.50 | 0.935 |
| PSC4 | It would take a lot of time and effort to locate a new bank. | 2.99 | 1.162 |
| PSC5 | If I changed banks, I would not have to search very much to find a new one. | 2.62 | 1.084 |
| PSC6 | If I were to switch banks, I would have to learn how things work at a new one. | 3.73 | 0.901 |
| PSC7 | I would be unfamiliar with the policies of a new bank. | 3.63 | 0.922 |
| PSC8 | If I changed banks, I would have to learn how the "system works" at a new one. | 3.62 | 0.955 |
| PSC 9 | Changing providers would mean that I would have learned about the policies of a new one. | 3.67 | 0.937 |
| PSC10 | If I changed banks, it would take a lot of time and effort on my part to explain to the new bank what I like and what I want. | 3.29 | 1.001 |
| PSC11 | If I changed banks, I would have to explain things to my new bank. | 3.40 | 0.925 |
| PSC12 | If I stopped purchasing from my current bank, I would have to search a lot for a new one. | 3.07 | 1.151 |


| Financial switching costs (FSC) (from Nagengast et <br> al. (2014)) | Mean | Standard <br> deviation |  |
| :--- | :--- | :---: | ---: |
| FSC1 | A lot of energy, time, and effort have gone into <br> building and maintaining the relationship with <br> this bank. | 3.05 | 1.040 |
| FSC2 | Overall, I have invested a lot in the <br> relationship with this bank. | 3.41 | 0.997 |
| FSC 3 | All things considered, I have put a lot into <br> previous dealings with this bank. | 3.22 | 1.001 |
| FSC 4 | I have spent a lot of time and money at this <br> provider. I have not invested much in the <br> relationship with this provider [reverse <br> scored]. | 2.74 | 0.964 |
| FSC 5 | This bank gives me particular privileges that I <br> would not receive elsewhere. | 3.21 | 1.110 |
| FSC 6 | By continuing to use the same bank, I receive <br> certain benefits that I would not receive if I <br> switched to a new one. | 3.30 | 1.128 |
| FSC 7 | There are certain benefits that I would not <br> retain if I were to switch banks. | 3.43 | 1.012 |
| FSC 8 | I would lose preferential treatment if changed <br> banks. | 2.95 | 1.061 |


| Relational switching costs (RSC) (from Nagengast et <br> al. (2014)) |  | Mean | Standard <br> deviation |
| :--- | :--- | ---: | ---: |
| RSC1 | I like my bank's public image. | 3.92 | 0.770 |
| RSC2 | I support the bank as a firm. | 3.66 | 0.819 |
| RSC3 | I do not care about the brand/company name <br> of the bank I use. [reverse scored] | 3.40 | 1.148 |
| RSC4 | I have developed a personal friendship with at <br> least one employee at this bank. | 2.40 | 1.195 |
| RSC5 | I have a somewhat personal relationship with <br> at least one employee at this bank. | 2.43 | 1.270 |
| RSC6 | I am friends with at least one employee at this <br> bank. | 2.35 | 1.236 |
| RSC7 | At least one employee is familiar with me <br> personally. | 2.54 | 1.272 |


| Alternatives' attractiveness (AA) (from Kim et al. <br> (2018)) | Mean | Standard <br> deviation |  |
| :--- | :--- | :---: | :---: |
| AA1 | If I need to change the from my current bank, <br> there are other good banks to choose from. | 4.77 | 1.619 |
| AA2 | I would feel more satisfied with the services of <br> another bank as compared to my current bank. | 3.48 | 1.619 |
| AA3 | I would be more satisfied with price plans of <br> another bank as compared to my current bank. | 3.95 | 1.679 |

### 8.6 Appendix F: Cronbach's alpha details

|  | Scale Mean if Item Deleted | Scale Variance if ltem Deleted | Corrected Item-Total Correlatio n | Squared Multiple Correlation | Cronbach' <br> $s$ Alpha if Item Deleted | Cronbach' s alpha |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Customer engagement |  |  |  |  |  | 0.960 |
| ID1 | 96.52 | 833.985 | 0.471 | 0.476 | 0.961 |  |
| ID2 | 96.88 | 811.188 | 0.665 | 0.506 | 0.959 |  |
| ID3 | 96.02 | 815.118 | 0.639 | 0.496 | 0.959 |  |
| ID4 | 95.98 | 808.084 | 0.742 | 0.695 | 0.958 |  |
| EN1 | 96.36 | 813.936 | 0.745 | 0.685 | 0.958 |  |
| EN2 | 96.19 | 807.632 | 0.807 | 0.752 | 0.957 |  |
| EN3 | 95.31 | 827.448 | 0.627 | 0.683 | 0.959 |  |
| EN4 | 95.44 | 818.889 | 0.759 | 0.756 | 0.958 |  |
| EN5 | 95.29 | 823.640 | 0.726 | 0.695 | 0.958 |  |
| AT1 | 95.37 | 819.971 | 0.745 | 0.739 | 0.958 |  |
| AT2 | 95.97 | 819.127 | 0.703 | 0.679 | 0.958 |  |
| AT3 | 95.65 | 823.459 | 0.675 | 0.624 | 0.959 |  |
| AT4 | 95.99 | 820.041 | 0.703 | 0.632 | 0.958 |  |
| AT5 | 95.54 | 811.566 | 0.776 | 0.748 | 0.958 |  |
| AB1 | 97.08 | 814.789 | 0.705 | 0.648 | 0.958 |  |
| AB2 | 96.84 | 816.819 | 0.707 | 0.679 | 0.958 |  |
| AB3 | 97.01 | 813.389 | 0.761 | 0.739 | 0.958 |  |
| AB4 | 97.18 | 819.414 | 0.717 | 0.710 | 0.958 |  |
| AB5 | 96.03 | 828.487 | 0.556 | 0.599 | 0.960 |  |
| AB6 | 95.79 | 812.941 | 0.738 | 0.667 | 0.958 |  |
| IT1 | 96.32 | 810.744 | 0.723 | 0.691 | 0.958 |  |
| IT2 | 95.59 | 815.549 | 0.706 | 0.638 | 0.958 |  |
| IT3 | 96.46 | 818.379 | 0.689 | 0.756 | 0.958 |  |
| IT4 | 96.17 | 820.703 | 0.686 | 0.663 | 0.958 |  |
| IT5 | 97.27 | 841.476 | 0.453 | 0.510 | 0.961 |  |
| Identification |  |  |  |  |  | 0.786 |
| ID1 | 11.65 | 21.483 | 0.498 | 0.343 | 0.779 |  |
| ID2 | 12.02 | 19.400 | 0.608 | 0.381 | 0.725 |  |
| ID3 | 11.15 | 20.659 | 0.533 | 0.366 | 0.763 |  |
| ID4 | 11.11 | 18.507 | 0.745 | 0.560 | 0.655 |  |
| Enthusiasm |  |  |  |  |  | 0.899 |
| EN1 | 18.48 | 29.661 | 0.661 | 0.553 | 0.897 |  |
| EN2 | 18.32 | 27.645 | 0.791 | 0.674 | 0.868 |  |
| EN3 | 17.43 | 29.595 | 0.710 | 0.603 | 0.886 |  |
| EN4 | 17.56 | 28.811 | 0.812 | 0.709 | 0.864 |  |
| EN5 | 17.41 | 29.551 | 0.790 | 0.649 | 0.869 |  |
| Attention |  |  |  |  |  | 0.889 |
| AT1 | 17.56 | 29.033 | 0.757 | 0.661 | 0.859 |  |
| AT2 | 18.16 | 28.113 | 0.754 | 0.572 | 0.859 |  |
| AT3 | 17.84 | 29.230 | 0.704 | 0.510 | 0.870 |  |
| AT4 | 18.18 | 30.064 | 0.632 | 0.433 | 0.886 |  |
| AT5 | 17.73 | 27.206 | 0.804 | 0.701 | 0.847 |  |


|  | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlatio n | Squared Multiple Correlation | ```Cronbach' s Alpha if Item Deleted``` | Cronbach' s alpha |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Absorption |  |  |  |  |  | 0.904 |
| AB1 | 18.03 | 47.444 | 0.734 | 0.595 | 0.887 |  |
| AB2 | 17.79 | 47.339 | 0.771 | 0.616 | 0.882 |  |
| AB3 | 17.97 | 47.168 | 0.801 | 0.679 | 0.877 |  |
| AB4 | 18.13 | 47.823 | 0.797 | 0.677 | 0.878 |  |
| AB5 | 16.98 | 49.600 | 0.623 | 0.446 | 0.904 |  |
| AB6 | 16.74 | 48.406 | 0.702 | 0.535 | 0.892 |  |
| Interaction |  |  |  |  |  | 0.887 |
| IT1 | 15.22 | 30.384 | 0.762 | 0.597 | 0.854 |  |
| IT2 | 14.49 | 32.137 | 0.695 | 0.498 | 0.870 |  |
| IT3 | 15.35 | 30.193 | 0.842 | 0.714 | 0.835 |  |
| IT4 | 15.06 | 32.256 | 0.736 | 0.577 | 0.860 |  |
| IT5 | 16.17 | 34.284 | 0.602 | 0.389 | 0.889 |  |
| Switching |  |  |  |  |  |  |
| intentions |  |  |  |  |  | 0.771 |
| ITS1 | 4.65 | 3.674 | 0.645 | 0.438 | 0.644 |  |
| ITS2 | 4.83 | 3.512 | 0.663 | 0.454 | 0.623 |  |
| ITS3 | 4.64 | 4.668 | 0.519 | 0.270 | 0.780 |  |
| Switching |  |  |  |  |  |  |
| costs |  |  |  |  |  | 0.898 |
| PSC1 | 82.9718 | 204.845 | 0.382 | 0.353 | 0.896 |  |
| PSC2 | 83.1718 | 205.448 | 0.350 | 0.545 | 0.896 |  |
| PSC3 | 83.1164 | 203.432 | 0.448 | 0.586 | 0.894 |  |
| PSC4 | 83.6271 | 199.961 | 0.455 | 0.557 | 0.894 |  |
| PSC5 | 83.9937 | 210.368 | 0.150 | 0.212 | 0.901 |  |
| PSC6 | 82.8916 | 204.262 | 0.434 | 0.523 | 0.895 |  |
| PSC7 | 82.9930 | 201.225 | 0.542 | 0.558 | 0.893 |  |
| PSC8 | 83.0016 | 199.682 | 0.580 | 0.640 | 0.892 |  |
| PSC9 | 82.9438 | 203.549 | 0.443 | 0.480 | 0.895 |  |
| PSC10 | 83.3292 | 198.635 | 0.589 | 0.595 | 0.892 |  |
| PSC11 | 83.2165 | 197.927 | 0.672 | 0.667 | 0.890 |  |
| PSC12 | 83.5462 | 196.657 | 0.567 | 0.611 | 0.892 |  |
| FSC1 | 83.5665 | 197.219 | 0.615 | 0.562 | 0.891 |  |
| FSC2 | 83.2101 | 199.278 | 0.568 | 0.575 | 0.892 |  |
| FSC3 | 83.3983 | 202.207 | 0.459 | 0.526 | 0.894 |  |
| FSC4 | 83.8830 | 212.989 | 0.083 | 0.161 | 0.901 |  |
| FSC5 | 83.4119 | 195.270 | 0.637 | 0.656 | 0.890 |  |
| FSC6 | 83.3163 | 196.019 | 0.601 | 0.704 | 0.891 |  |
| FSC7 | 83.1888 | 199.040 | 0.567 | 0.608 | 0.892 |  |
| FSC8 | 83.6693 | 197.845 | 0.579 | 0.501 | 0.892 |  |
| RSC1 | 82.6952 | 205.625 | 0.455 | 0.516 | 0.895 |  |
| RSC2 | 82.9633 | 203.845 | 0.502 | 0.496 | 0.894 |  |
| RSC3 | 83.2186 | 204.834 | 0.308 | 0.262 | 0.898 |  |
| RSC4 | 84.2182 | 199.841 | 0.444 | 0.728 | 0.895 |  |
| RSC5 | 84.1888 | 198.778 | 0.443 | 0.753 | 0.895 |  |
| RSC6 | 84.2696 | 200.343 | 0.411 | 0.697 | 0.896 |  |
| RSC7 | 84.0824 | 196.805 | 0.500 | 0.756 | 0.893 |  |


|  | Scale <br> Mean if <br> Item <br> Deleted | Scale <br> Variance if <br> Item <br> Deleted | Corrected <br> Item-Total <br> Correlatio <br> $\mathbf{n}$ | Squared <br> Multiple <br> Correlation | Cronbach' <br> s Alpha if <br> Item <br> Deleted | Cronbach' <br> s alpha |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Alternatives <br> attractiveness |  |  |  |  |  |  |
| AA1 | 7.43 | 8.473 | 0.428 | 0.225 | 0.716 | 0.701 |
| AA2 | 8.72 | 6.998 | 0.644 | 0.419 | 0.445 |  |
| AA3 | 8.25 | 7.724 | 0.492 | 0.312 | 0.642 |  |

### 8.7 Appendix G: Scree plots and unrotated loadings for factor analysis

## Customer engagement

Unrotated loadings and communalities: final
Component Matrix ${ }^{\text {a }}$

|  | Component |  |  |  |  | Communalities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 |  |
| ID1 | 0.507 |  |  | 0.538 | 0.593 | 0.926 |
| ID4 | 0.765 |  |  |  |  | 0.768 |
| EN3 | 0.637 | -0.550 |  |  |  | 0.831 |
| EN4 | 0.764 |  |  |  |  | 0.847 |
| EN5 | 0.734 | -0.423 |  |  |  | 0.789 |
| AT1 | 0.783 |  |  |  |  | 0.773 |
| AT2 | 0.742 |  |  |  |  | 0.750 |
| AT3 | 0.721 |  |  |  |  | 0.753 |
| AT5 | 0.806 |  |  |  |  | 0.777 |
| AB1 | 0.733 |  | -0.435 |  |  | 0.762 |
| AB2 | 0.734 |  |  |  |  | 0.790 |
| AB3 | 0.786 |  | -0.425 |  |  | 0.806 |
| AB4 | 0.737 |  | -0.507 |  |  | 0.816 |
| IT1 | 0.774 |  |  |  |  | 0.725 |
| IT2 | 0.752 |  |  |  |  | 0.651 |
| IT3 | 0.742 | 0.483 |  |  |  | 0.837 |
| IT4 | 0.752 |  |  |  |  | 0.701 |
| IT5 | 0.518 | 0.521 |  |  |  | 0.717 |

Extraction Method: Principal Component Analysis.
a. 5 components extracted.

Scree plot: final


## Switching intentions

Unrotated loadings and communalities

|  | Unrotated <br> loadings |  |
| :--- | ---: | ---: |
| Component 1 |  |  | Communalities

Scree plot


## Switching costs

Unrotated solution and communalities

|  | Component Matrix ${ }^{\text {a }}$ |  |  |  |  |  | $\underset{s}{\text { Communalitie }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Component |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 |  |
| PSC2 |  |  |  | 0.444 |  | 0.501 | 0.817 |
| PSC3 | 0.469 | 0.404 |  | 0.444 |  |  | 0.745 |
| PSC4 | 0.485 |  | -0.512 |  |  |  | 0.711 |
| PSC8 | 0.591 |  |  |  |  |  | 0.634 |
| PSC10 | 0.604 |  |  |  |  |  | 0.659 |
| PSC11 | 0.691 |  |  |  |  |  | 0.686 |
| PSC12 | 0.607 |  | -0.496 |  |  |  | 0.749 |
| FSC1 | 0.691 |  |  |  |  |  | 0.653 |
| FSC2 | 0.646 |  |  | -0.404 |  |  | 0.771 |
| FSC3 | 0.550 |  |  | -0.417 |  | 0.410 | 0.756 |
| FSC5 | 0.697 |  |  |  |  |  | 0.729 |
| FSC6 | 0.694 |  |  |  |  |  | 0.797 |
| FSC7 | 0.653 |  |  |  |  |  | 0.724 |
| FSC8 | 0.658 |  |  |  | 0.409 |  | 0.660 |
| RSC1 | 0.519 |  | 0.411 |  |  |  | 0.731 |
| RSC2 | 0.566 |  |  |  |  | -0.425 | 0.738 |
| RSC3 |  |  |  |  |  |  | 0.429 |
| RSC4 | 0.533 | -0.704 |  |  |  |  | 0.815 |
| RSC5 | 0.534 | -0.712 |  |  |  |  | 0.839 |
| RSC6 | 0.500 | -0.680 |  |  |  |  | 0.809 |
| RSC7 | 0.577 | -0.678 |  |  |  |  | 0.826 |

Extraction Method: Principal Component Analysis.
a. 6 components extracted.

Scree plot


## Alternatives' attractiveness

Unrotated loadings and communalities

|  | Unrotated loadings | Communalities |
| :---: | :---: | :---: |
|  | Component 1 |  |
| AA1 | 0.718 | 0.515 |
| AA2 | 0.874 | 0.763 |
| AA3 | 0.781 | 0.610 |

Scree plot


