BI Norwegian Business School - campus Oslo

GRA 19502

Master Thesis

Component of continuous assessment: Thesis Master of Science

An investigation on how corporate reputation comes into play in the Norwegian Innovation Index

:

Start: 02.03.2017 09.00

Finish: 01.09.2017 12.00

Name: Tone Staum
Name: Klarissa Teh

An investigation on how corporate reputation comes into play in the Norwegian Innovation Index

Master Thesis Report

Hand-in date:
01.09.2017

Campus:
BI Oslo

Examination code and name:
GRA 19502 Master Thesis

Programme:
Master of Science in Strategic Marketing Management

Name of supervisor:
Line Lervik-Olsen

Acknowledgements

This master thesis is submitted to BI Norwegian Business School to fulfil our MSc degree in Strategic Marketing Management.

After two years as students in this program, this thesis marks the end of our academic journey, which has provided us with valuable in-depth knowledge of the marketing profession and opportunities to improve our skills in critical thinking and academic writing. We have had the privilege to learn from several excellent professors, who have been of great inspiration to us.

Working with this thesis has been a challenging but interesting learning experience where we have put our acquired skills from the program to work. The sense of achievement from gaining more knowledge and developing these skills even further during this journey has no doubt been a source of motivation for us.

We would like to especially thank our professor and supervisor Line Lervik-Olsen, who has supported and engaged us as a remarkable supervisor. Her constructive feedback and helpful guidance throughout the process of writing this thesis have been invaluable, and it has certainly been a privilege having the opportunity to learn from and work with her over the last year.

---------------------------	------------------------
Tone Staum	Klarissa Teh

Executive summary

The importance of corporate reputation has been growing over the last decades, with CEOs consistently ranking corporate reputation as a firm's most critical key intangible resource (Hall, 1993). On a parallel and similar development, the topic of innovation has also grown to become a major focus on the agendas of CEOs, with innovation deemed necessary to offer companies a sustainable competitive advantage (Lawson and Samson, 2001). While the financial impact of corporate reputation and innovation have been well documented in the literature, research on the linkages between innovation and corporate reputation has been limited. Moreover, existing measures of innovation typically adopt methodologies on the national or firm level and do not take into account consumer perceptions in their calculations, even though it is consumers and not firms that are the best judges of the value created by innovation (Andreassen, Kurtmollaiev and Lervik-Olsen, 2016; Andreassen, Kurtmollaiev and Lervik-Olsen, 2017).

In aiming to fill the gap in the literature, this study draws inspiration from the Norwegian Innovation Index (NII) in Andreassen et al. (2016) and Andreassen et al. (2017), an innovation index measured through the perspective of customers. We seek to expand the framework and introduce a new independent variable, corporate reputation, to form the conceptual model, used to investigate our research question of how corporate reputation influences perceived relative attractiveness, perceived firm innovativeness and customer loyalty.

Using a quantitative, cross-sectional research design surveying 206 consumers of Norwegian retail banks and subsequently employing a PLS-SEM path modelling technique using SmartPLS for analysis, the findings reveal a surprising negative relationship between corporate reputation and perceived firm innovativeness by consumers. In contrast, corporate reputation positively affects perceived relative attractiveness and customer loyalty, highlighting the importance of a strong corporate reputation. Finally, the positive effect of customer satisfaction on perceived firm innovativeness underscores the importance of introducing innovations targeted at addressing actual customer needs and generating customer satisfaction.

Table of Content

1. Introduction

Corporate reputation affects the way in which various stakeholders behave towards an organisation, influencing, for example, employee retention, customer satisfaction and customer loyalty (Chun, 2005). Three decades ago, as much as 95% of the average corporation's value consisted of tangible assets, according to a report by Thomson Reuters and Interbrand. Today, 75% of that average corporation's value is intangible (Linssen, 2010). Another study conducted by Reputation Dividend in 2016 revealed that corporate reputations accounted for $3,977bn of market capitalization across the SandP 500 index in March 2016, or 20.7% of all shareholder value (Cole, Macleod and Takacs, 2016). It is thus not surprising that CEOs see corporate reputation as a valuable intangible asset (Institute of Directors, 1999). A study conducted by Hall (1993) reinforces the importance of corporate reputation as the findings reveal that CEOs consistently ranked corporate reputation as the most important key intangible resource.

A significant strand of research on corporate reputation suggests that corporate reputations are seen as critical organisational assets (Flanagan and O'Shaughnessy, 2005; Roberts and Dowling, 2002; Hall, 1992), and that good corporate reputations have strategic value for the firms that possess them (Dierickx and Cool, 1989; Rumelt, 1987; Weigelt and Camerer, 1988). One reason for such interest in corporate reputation is that it denotes a central source of competitive advantage to companies. According to the Resource-Based View, firms with assets that are valuable and rare possess a competitive advantage and may expect to earn superior returns. Those whose assets are also difficult to imitate may achieve sustained superior financial performance (Barney, 1991; Grant, 1991). In the Resource-Based View, corporate reputation is considered a firm-specific resource, among the rarest and inimitable resources, slowly accumulated through the years and linked to the specific history of an organisation. As such, corporate reputation represents a barrier to the imitation for the competing companies (Barney, 1986 and 1991; Dierickx and Cool, 1989; Amit and Schoemaker, 1993).

Much research on corporate reputation has also explored the relationship between firms' reputations and their financial performance (Deephouse, 1997; Sanchez and Sotorrio, 2007; Roberts and Dowling, 1997, 2002), suggesting that a good reputation can positively impact financial performance for reasons such as encouraging customers to pay price premiums and elevated margins, through differentiation, boosting buyer confidence, and substituting for expensive governance mechanisms (Rindova, Williamson, Petkova and Sever, 2005; Weigelt and Camerer, 1988; Peteraf, 1993; Kogut, 1988). A firm with a good reputation may possess a cost advantage because, ceteris paribus, employees prefer to work for high-reputation firms, and should therefore work harder, or for lower remuneration (Roberts and Dowling, 2002). Thus, having a good reputation makes it easier for a firm to attract and retain valuable employees (Alsop, 2004; Cravens and Oliver, 2006). Additionally, suppliers are less concerned with contractual hazards and are likely to demand payment in advance, lowering contracting and monitoring costs (Cravens and Oliver, 2006). Goldberg and Hartwick (1990) suggest that potential customers receive advertising claims more favourably if the reputation of the firm making those claims is more positive, while several other authors highlight that a good corporate reputation helps to increase a firm's sales and market share (Shapiro, 1982), gain and maintain loyal customers (Andreassen and Lindestad, 1998; Yoon, Guffey, and Kijewski, 1993). Besides, a good reputation enables firms to develop advantageous relations with the investors since it lowers the cost of the capital, attracts investments and increases the market value of shares (McMillan and Joshi, 1997). It can also consolidate relations with public authorities, the media and opinions leaders, who can influence public opinion (Siano, Vollero and Siglioccolo, 2007), as well as strengthen the ability to overcome moments of crisis or controversy (Markwick and Fill, 1997). As such, having a positive reputation generally translates into an improvement of the economic-financial, competitive and social results of a company in the long run (Fombrun and van Riel, 2004).

Whereas much of the research has focused on the financial impact of corporate reputation, research on the linkages between innovation and corporate reputation has been very limited in the literature. Against this backdrop of the importance of corporate reputation to companies, a closer look at the strategic priorities of CEOs reveals that innovation is another key topic that has been moving up the boardroom agenda as companies recognise its vital importance in sustaining growth (PwC, 2017).

During the 1980s to 1990s, managers and organisations were mostly concerned about operational challenges threatening their survival, and reacted by rationalising to core businesses, delayering, outsourcing and reengineering for productivity (Lawson and Samson, 2001). Over this period, competitive advantage fell upon variables like efficiency, quality, customer responsiveness and speed. Yet, in the new millennium, control over these factors merely embody the minimum benchmark to survive; while these factors remain crucial, businesses of today must fulfill the additional requirement to innovate, not just occasionally but frequently, swiftly and with a robust success rate, to build a sustainable competitive advantage (Lawson and Samson, 2001). There is evidence that organisational innovation can have a positive effect on financial performance (Wakelin, 1998; Yamin, Gunasekaran and Mavondo, 1999) and that regional investment in research and development results in higher regional economic growth (Rodriguez-Pose, 1999). Superior organisational performance has also been associated with innovation in product development (Nicholson, Rees and Brooks-Rooney, 1990) and use of innovative or high commitment human resource management practices (Guest, 1997; Wood, 1999). It is hence not surprising that innovation research in the marketing literature has received increasing attention as companies endeavour to offer innovative products in a bid to differentiate themselves from the competition and reap the associated financial rewards (Narver and Slater, 1990; Slater and Narver, 1995; Gleim, Lawson and Robinson, 2015). In fact, in PwC's CEO survey of 1,379 CEOs around the world in 2017, nearly a quarter of those surveyed singled out innovation as their top priority for the coming year. Given the rising importance of innovation and bearing in mind the significance of corporate reputation, it is thus crucial to address the existing gap and better understand how corporate reputation may influence innovation.

For a long time, Norway's poor ranking in international surveys of innovation capacity, such as Eurostat's large-scale Community Innovation Survey (CIS) and Innovation Union Scoreboard (IUS), have raised cause for concern (Wilhelmsen, 2012). For example, Norway was ranked only as a “moderate innovator” in the cross-national level in the European Union (EU) Commission’s annual Global Innovation Index (GII), performing below the EU average for most dimensions and indicators, and lagging behind its Scandinavian counterparts, Sweden, Denmark and Finland, which are considered as “innovation leaders” (Cornell University, INSEAD and WIPO, 015). Various Norwegian organisations have pointed out that such poor rankings is largely due to limitations in the survey methodology adopted, in which many of the existing indices measure a combination of innovation and research and development activity, which fail to accurately reflect the actual state-of-art in terms of innovation activities (Boldstad and Lie, 2014). Norway’s business structure, among other aspects, is predominantly based on raw materials; companies may not carry out as much research and development activities and yet be active in conducting innovation activities. In response to this, the Research Council of Norway and Innovation Norway jointly developed a new survey reflecting product innovation, process innovation, organisational innovation and marketing innovation, which revealed a 15% increase in the number of Norwegian companies reporting innovation activities compared to previous surveys, putting Norway’s level of innovation on par with the other Nordic countries (Boldstad and Lie, 2014). Arvid Hallén, Director General of the Research Council of Norway, has consequently emphasised the need to collect good, reliable knowledge of the actual state-of-the-art, so that firms can design even more effective measures to further enhance innovation capacity in Norway.

Related to the necessity of developing appropriate innovation indices with the ability to offer relevant insight to firms, an examination into how innovation has traditionally been measured reveals that adopted methodologies have typically been on the national or firm level. On the national level, some well-known examples include the Global Innovation Index (GII), Community Innovation Survey (CIS), European Service Innovation Scoreboard, GE Global Innovation Index and Index of Service Innovation for Nordic service companies (Table 1). Broadly speaking, these indices adopt a top-down approach that focus on the national climate with respect to innovation and do not take into account any customer insight, relying on macroeconomic indicators (e.g. number of patents, GDP growth rate, or foreign direct investments) (Andreassen et al., 2016). On the other hand, the popular press also offers numerous firm level innovation rankings, including that published by business magazines like Forbes and Fast Company, as well as established global thought leaders such as BCG and Thomson Reuters (Table 1). These innovation rankings are typically determined solely by industry insiders or executive opinion and do not take into account consumer perceptions in their calculations.

Index / First publication	**Published by**	**Sources**
National level		
Innovation Union Scoreboard (IUS) / 2001	European Commission	Community Innovation Survey (CIS); Eurostat
European Service Innovation Scoreboard (ESIS) / 2014	European Commission	Aggregate data (CIS; Regional Competitiveness Index; Structural Business Statistics)
Global Innovation Index (GII) / 2007	Cornell University, INSEAD, WIPO	Aggregate data (World Bank; United Nation; Thomson Reuters; IHS Global Insight; International Energy Agency)
GE Global Innovation Barometer / 2011	GE	GE Survey of senior executives from different countries
Index of Service Innovation / 2013	DAMVAD	DAMVAD survey of Nordic service companies
Firm level		
The 50 most innovative companies / 2005	BCG	BCG survey of senior executives from different countries
The world's most innovative companies / 2011	Forbes	Based on the difference between market capitalization and a net present value of cash flows
Top 100 global innovators / 2011	Thomson Reuters	Patent statistics (applications, grants, citations)
Elastic Innovation Index / 2014	Bluefin Solutions	Scoring by Bluefin Solutions based on a set of criteria
The world's most innovative companies / 2002	Fast Company	Based on the opinion of the editorial staff

Table 1. Examples of innovation indices (Source: Andreassen et al., 2016)

As such, the main limitation of the two approaches to measure innovation is that they do not accurately reflect the actual value that innovations create for customers (Andreassen et al., 2017), despite consumer perceptions being a key element in predicting firm performance (Rust, Lemon, and Zeithaml, 2004). As Walsh, Mitchell, Jackson and Beatty (2009) highlight, customers seem to be a company's most important stakeholder as they are the primary generators of revenue for the business, and hence should rightly be the final judges of innovations and companies' innovativeness. Secondly, regardless of how many scientists or patents a country has, new solutions that are of little or no value to customers should not be considered innovations, since it is fundamentally not countries that are innovative, but companies (Andreassen et al., 2017).

It has been proposed that firms know much too little about how innovation impacts customers' perceptions of value (Flint, 2006). While firms innovate in an effort to create goods and services not currently available in the market to meet consumer needs (van Riel, 2005), it appears somewhat ironic and surprising that consumers are seldom the focal point of innovation research. Yet, using customer data to understand perceptions of value and satisfaction is believed to be key to success for most organisations (Garver and Williams, 2009). Given that consumers will ultimately decide the success or failure of an innovation, it is the customers, and not leaders or experts, who are best qualified to assess businesses' ability to innovate.

Yet, current innovation measures assess only industry or employee perceptions and fail to account for consumer perceptions of firm innovativeness. Understanding consumer perceptions of innovation and how those perceptions influence behaviour, such as customer loyalty, is hence essential. With this in mind, we intend to adopt a broad-based, consumer-centric view of innovation, referred to as perceived firm innovativeness, to investigate its relationship with corporate reputation in the context of innovation.

1.1. Purpose of the study

This study draws inspiration from the Norwegian Innovation Index (NII) developed in Andreassen et al. (2016) and Andreassen et al. (2017), an innovation index measured through the lens of customers. We seek to expand it and introduce a new independent variable, corporate reputation, to form our conceptual model. With a focus on consumers of the Norwegian retail banking sector, our study aims to understand how corporate reputation influences perceived relative attractiveness, perceived firm innovativeness and customer loyalty.

The NII provides a consumer perspective on innovation, combining the research traditions of measuring innovation and customer satisfaction, and offers insights into the antecedents to and consequences of customer perception of firm innovativeness, and its relationships with customer loyalty (Andreassen et al., 2016). The NII differentiates itself from the existing innovation indices as shown in Table 1, adopting a novel outside-in, bottom up approach to measure a firm's overall innovation efforts and incorporating the consumers' perspective (Andreassen et al., 2016). Rather than being an objective assessment, the NII offers a subjective perception based on consumers' direct and indirect experiences with a firm's changes in innovation (Andreassen et al., 2016). It serves as an important strategic tool for managers as it gives an opportunity to measure a firm's ability to create and renew customers' expectations and thus its ability to gain, defend and increase market share (Andreassen et al, 2016).

In the Britain's Most Admired Company (BMAC) surveys between 1990 and 2009, it was found that a good reputation for innovation does not guarantee a good overall reputation; nor does a reputation for innovation lead to business success. However, where a company has a reputation for innovation and is able to manage other characteristics, there is a better chance that this company will develop its innovation capability into long-term competitive advantage and profitability (Brown and Turner, 2011). The perceptions of business leaders from 761 British companies who participated in BMAC surveys provide a perspective on the value of innovation in determining a company's overall reputation. Ou and Hsu (2013) found that a good corporate reputation benefits a high-tech firm by directly enhancing its internal resource to create value and indirectly by enhancing its innovative capability, which then influences its innovative performance. However, there is limited research investigating how corporate reputation influences how consumers perceive a company as innovative. Hence, our study will seek to address this gap and establish exactly how corporate reputation affects perceived firm innovativeness.

At the same time, many studies focus on absolute measurements such as customer satisfaction, which only state the level of corporate performance and how they are received by customers, but fail to account for how a company is evaluated in comparison with real competitors (Andreassen et al., 2016). Yet, in reality, customers choose between actual alternatives when selecting products or services in a market, and thus, it is important to take this into consideration. It has however not been established how corporate reputation may influence how a firm is perceived as attractive in relation to its competitors. This leaves some room for further research and is another question we will aim to address in our study.

Andreassen and Lindestad (1998) argued that corporate image – part of reputation – is an antecedent to customer loyalty. It is also suggested that reputation may be loyalty's strongest driver (Ryan, Rayner and Morrison, 1999). Trust is an indispensable part of corporate reputation and is also a key prerequisite for the formation of customer loyalty (Young, 1997). Empirical research has also indicated that good corporate reputation could reinforce customers' trust in corporate and product and finally promote customer repurchase (Nguyen and Leblanc, 2001). Bontis, Booker and Serenko (2007) argue that although the positive impact of corporate reputation on customer loyalty has been broadly accepted, the link between corporate reputation and customer loyalty deserves more attention. This is the third area we will seek to investigate and address in our study.

With the above in mind, this begs the research questions: *How does corporate reputation affect perceived firm innovativeness, perceived relativeness attractiveness and customer loyalty?*

As described earlier, the NII model provides invaluable insights into relevant factors that managers should take into consideration in their innovation efforts to influence customers' perceptions. However, it is a relatively new index and yet to be extensively further developed upon by other researchers or academics. As such, we will attempt to address our research question by drawing inspiration from the NII, using a structural equation modelling (SEM) – smart partial least squares (PLS) approach.

By answering our research question, we aim to fill a gap in the existing literature in several ways. Firstly, we will include corporate reputation as an additional variable in the existing NII model and investigate the influence that it has on perceived firm innovativeness, perceived relativeness attractiveness and customer loyalty, which at the present moment has not been explored by other academics and researchers. Subsequently, we aim to shed light on what these relationships might mean for managers and how they can use the findings to develop strategies that can effectively gain the loyalty of customers.

In the following sections of this paper, we will begin by reviewing the existing literature mainly adopted from the field of consumer psychology, marketing, and service marketing, together with the hypotheses derived from this review. We will then summarize the theory and hypotheses in a conceptual model, followed by our research methodology. Finally, we present the results, discussion, managerial implications, limitations and directions for future research. We highlight that as our research is inspired by the existing NII model, some of the hypotheses included in this section will be a replication of previously tested hypotheses in Andreassen et al., (2016) and Andreassen et al., (2017). In such cases, the intention will not be to fill a gap but instead to verify their findings in the context of the Norwegian retail banking sector and in relation to corporate reputation.

2. Literature review

2.1. Drivers of consumer perception of a company’s ability to innovate

In order to identify what drives the consumer perception of a company’s ability to innovate, it is important to begin by defining what innovation is. Innovation is closely connected to change, and is conceived as a means of changing an organisation, either as a response to changes in the external environment or as a pre-emptive action to influence the environment (Damanpour, 1991; Damanpour, 1996). Innovation is also related to newness, as Van de Ven (1986) states, “As long as the idea is perceived as new to the people involved, it is an ‘innovation’ even though it may appear to others to be an ‘imitation’ of something that exists elsewhere.” Zahra and Covin (1994) suggest that innovation is widely considered as the lifeblood of corporate survival and growth, while Geroski (1994) posits that the objective of corporate innovation is to strengthen corporations’ external competitiveness and enhance internal capabilities through product or process innovation.

The distinction between radical and incremental innovations is frequently underlined in innovation research. Innovations vary along a continuum from incremental to radical (Hage, 1980), where the term "radical" is associated with revolutionary innovations, whilst "incremental" is related to innovations within a paradigm (Dosi, 1982; Dewar and Dutton, 1986). In addition, "radical innovations" was used by Damanpour (1996) to characterize innovations which produce fundamental changes in the activities of an organisation and large departures from existing practices, while "incremental innovations" described innovations that represent a smaller degree of departure from current practices.

In addition, innovation is studied in many disciplines and has been defined from different perspectives (Damanpour and Schneider, 2006). Whilst some overlap exists among the various definitions of innovation, the number and diversity of definitions lead to a situation in which there is no clear and authoritative definition of innovation, given that innovation may involve a broad range of types of change, depending on the organisation's resources, capabilities, strategies, and requirements (Baregheh, Rowley and Sambrook, 2009). Typical types of innovation relate to new products, materials, new processes, new services, and new organisational forms (Ettlie and Reza, 1992). Innovation draws the attention of practitioners and researchers across an array of business and management disciplines, and has been examined in the literature on marketing, strategy, human resource management, operations management, entrepreneurship, technology, science and engineering. Each distinctive discipline offers definitions for innovation that align with the dominant paradigm of the discipline.

In the context of our study where the focus centers upon the retail banking industry and the NII, our notion of innovation draws upon the service marketing literature and in particular that proposed by Andreassen et al. (2016) and Andreassen et al. (2017), who suggest four areas in which companies can innovate in a business and thus have an impact on the customer's assessment of the company's ability to innovate – changes in the core service, changes in the service delivery, changes in customer relations and changes in the servicescape.

The first driver of consumer perception of a company's ability to innovate is a change in the core service. This relates to innovation in the actual service delivered, or the products or services that customers require in order to get a job done (Christensen, Anthony, Berstell and Nitterhouse, 2007). Here, the term "job to get done" points to the need a service provider aims to fulfill for a customer in a specific consumption situation (Andreassen et al., 2016). This may include a telecom provider offering access to communications and data, or a fitness centre offering personal training and exercise classes to customers. From a customer's perspective, the core service relates to the value created for the customer in the service received, their experience of it or value-in-use (Lusch, Vargo and O'Brien, 2007) and the outcomes of the service, including the benefits they derive from it (Carbone, 2004; Edvardsson and Olsson, 1996). A change in the core service subsequently refers to the discovery of ways to help the customer get a core job done better with new or improved existing services, with the focus on improving the outcomes for customers of a core job (Bettencourt, 2010).

The other three drivers of consumer perception of a company's ability to innovate relate to the different touch points of the customer journey or experience. Touch-points are the points of contact between a service provider and customers, and a customer might utilise several different touch-points as part of a use scenario, known as the customer journey (Clatworthy, 2011). For instance, a bank's touch points include its physical buildings, online website, physical pamphlets, self-service machines, credit cards, call-centres and bank tellers. Each time a person relates to or interacts with a touch-point, they have a service-encounter where a service is delivered. This creates an experience which augments the person's relationship with the service and its provider. The sum of all experiences from touch-point interactions colours their opinion of the service as well as the service provider (Clatworthy, 2011).

One of them is the change in the service delivery. Service delivery refers to the actual delivery of a service (Zeithaml, Berry and Parasuraman 1988) and the delivery of services and products (i.e., a firm's goods) to the customer (Lovelock and Wright, 2002; Moorman and Rust, 1999). It involves where, when, and how a service product is delivered to the customer and whether this is with high, medium, or low contact (Chen, Tsou and Huang, 2009). Changes in service delivery can be described in terms of changes in what a firm offers the world and the ways in which it creates and delivers those offerings (Francis and Bessant, 2005). As such, innovations in service delivery may be deemed as novel mechanisms of delivery that offer customers greater convenience (Lovelock and Wright, 2002) and enhance the flexibility, simplicity, availability, and efficiency of the transaction (Andreassen et al., 2016).

The third area is a change in customer relations, which refers to a change in the relationship between the service provider and the customer. All services require interaction between the company and the customer, which influences the customer experience of both service and service provider (Wirtz and Lovelock, 2016). Companies may affect customer relations by changing the way they interact with customers and take care of them. This interaction may not necessarily be directly between the employee and the customer and are often affected by technological solutions, and could include loyalty and community-building programs (Andreassen et al., 2016).

The last area that drives consumer perception of a company's ability to innovate is a change in the servicescape, where the service is delivered. The term "sevicescape" was first coined by Bitner (1992), in reference to "the design of the physical environment and service staff qualities that characterise the context which houses the service encounter, which elicits internal reactions from customers leading to the display of approach or avoidance behaviours". While initially conceptualised in the service domain as representing the physical elements in a consumption setting, Hoffman and Turley (2002) suggest that both tangible and intangible components "are essential in creating service experiences". Rosenbaum and Massiah (2011) posit that a servicescape represents a consumption setting's built (i.e. manufactured, physical), social (i.e. human), socially symbolic, and natural (environments) dimensions that affect both consumers and employees in service organisations. This is also applicable in an "electronic" or virtual servicescape, as proposed by Wanninger, Anderson and Hansen (1997). Hence, consumers experience innovations in a firm's' physical environment as, for example, changes in style, layout or ambient conditions of the firms' physical facilities, and innovations in firms' virtual environments as, for instance, introductions of new graphical designs to the firm's web page or smartphone application (Andreassen et al., 2016).

Together, these four areas in which companies can innovate in a business, and thus have an impact on the customer's assessment of the company's ability to innovate, can be classified into the broad concept of changes in innovation. Coming from the consumer's point-of-view, we term this as perceived changes in innovation.

A related concept to innovation is innovativeness, which we will further examine in section 2.3 of the literature review.

2.2. Customer satisfaction

Oliver (1997) states that satisfaction is the consumer fulfilment response – a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfilment, including levels of under- or over-fulfillment. Customer satisfaction is important as the service marketing literature has shown that customer satisfaction influences customer loyalty, which in turn affects profitability (Anderson and Fornell, 1994; Rust, Zahorik and Keiningham, 1995; Zeithaml and Parasuraman, 1990). While satisfaction with goods typically focuses on the product itself, in the context of services offerings, satisfaction could stem from both functional and technical dimensions, including tangible and intangible dimensions of the total offering (Grönroos, 1984; Bernhardt, Donthu and Kennett, 2000).

The literature reveals two distinct conceptualizations of consumer satisfaction, transaction-specific satisfaction and overall or cumulative satisfaction (Jones and Suh, 2000; Johnson, Anderson and Fornell, 1995). Up until the early 1990s, transaction-specific satisfaction dominated the marketing and consumer behaviour literature (Oliver, 1997), defining transaction-specific satisfaction as a customer's evaluation of his or her experience with and reactions to a particular product transaction, episode, or service encounter, which may vary from experience to experience (Veloutsou, Gilbert, Moutinho and Goode, 2005). More recent transaction-specific research has focused on the relationship between perceived quality and satisfaction (de Ruyter, Bloemer and Peeter, 1997) and the role of emotions in satisfaction evaluations (Oliver, 1993).

Over the last decade, cumulative or overall satisfaction, a more economic psychology-based approach to satisfaction, has grown and gained acceptance (Johnson, Gustafsson, Andreassen, Lervik and Cha, 2001). Cumulative satisfaction is relatively stable over time and resembles an overall attitude, being a cumulative construct that sums satisfaction with specific products/services of the organisation with various other facets of the company (Garbarino and Johnson, 1999) and represents a customer's overall evaluation of a product or service provider to date (Johnson et al., 1995). A key advantage of the cumulative satisfaction compared to transaction specific satisfaction is that it can better predict subsequent behaviour and economic performance, since customers make repurchase evaluations and decisions based on their purchase and consumption experience to date, and not just a particular transaction or episode (Fornell, Johnson, Anderson, Cha and Bryant, 1996; Johnson et al., 1995).

In addition, Oliver (1997) suggests that customer satisfaction as a whole comprises components of judgement (cognition) and affect (emotion), while Rai (2012) defines satisfaction as a buyer's emotional or cognitive response post subjective assessment and comparison of pre-purchase expectations and actual performance subsequent to the consumption of the product or service; meanwhile evaluating the costs incurred and benefits reaped in a specific purchase event or overtime in a course of transacting with an organisation. These benefits can be categorised as emotional or functional benefits. For the purposes of our research, we intend to study customer satisfaction as a single variable, comprising of both cognitive and emotional measures.

When consumers evaluate a firm's innovation, they may evaluate the product/service characteristics and attributes in a reasoned-based fashion (Chaiken, 1980). Experiencing an innovation by a consumer, associated to one of the four areas mentioned previously (changes in the core service, changes in the service delivery, changes in customer relations and changes in the servicescape), may simply be a function of gained benefits and, as such, be captured through cognitive assessments of net benefits that lead to customer satisfaction (Wood and Moreau, 2006). Related to the cognitive aspect of satisfaction, Boulding, Kalra, Staelin and Zeithaml (1993) suggest that an antecedent of satisfaction is how well the customer expected the product or service to perform, where customer expectations, defined as that which a customer predicts ("will" expectations) rather than a normative standard or benchmark ("should" expectations), positively affect customer satisfaction because they serve as cognitive anchors in the evaluation process (Oliver, 1980).

Alternatively, evaluating an innovation is potentially emotion generating, independent of net benefits, and this emotion may colour product evaluations (Wood and Moreau, 2006). Since creativity surprises and stimulates consumer interest (Haberland and Dacin, 1992), innovation may generate excitement among consumers, through proposing opportunities for new consumer-firm interactions and lifestyles. Consumers, feeling good about the perceived change, experience positive affect and derive hedonic value from this feeling, where hedonic refers to the feeling of pleasure related to the experience. This is reflected by the positive and arousal parts of the emotional circumplex (Watson and Tellegan, 1985). The pleasant feeling and the arousal activation means that consumers experiencing this could lead to a generation of satisfaction with the company or the innovation. Finally, a customer's experience of corporate innovation could result in a combination of cognitive and emotional satisfaction. Based on the above, we propose the following hypothesis:

H1: Perceived changes in innovation have a positive effect on customer satisfaction.

2.3. Perceived firm innovativeness

While innovation focuses on firm activity outcome, referring to an actual new product or service, production process, structure or administrative system, innovativeness refers to the capability of a firm to be open to new ideas and work on new solutions, which is an enduring characteristic and not success at one point in time (Kunz, Schmitt and Meyer, 2011). Firm innovativeness relates to a firm's capability to engage in innovation, that is, the firm's capacity to introduce some new process, product, or idea in the organisation (Damanpour, 1991; Hult, Hurley and Knight, 2004). It is present when firms pursue not only the generation of new ideas, products or processes but also their active implementation (Hurley and Hult, 1998). One key aspect is an organisation's willingness or openness to change, which is linked to whether the members of an organisation are willing to consider the adoption of an innovation or whether they are resistant to it (Zaltman, Duncan and Holbek, 1973; Hult et al., 2004). Innovativeness can also be seen as the capability of a firm to develop new product solutions at a fast rate within a specific time period (Roehrich, 2004).

Specifically, "perceived firm innovativeness" and "perceived organisational innovativeness" are distinct in terms of the group of people of which this perception reflects. Whilst "perceived organisational innovativeness" reflects mainly the perception of internal stakeholders (e.g. employees and managers), perceived firm innovativeness reflects the perception of external consumers of firm innovativeness, which is the focus of our study. Perceived firm innovativeness is a subjective consumer perception and attribution based on consumer information, knowledge, and experience (Kunz et al., 2011), and Brown and Dacin (1997) suggest that firm characteristics and behaviours must be stable over time in order to build up a consistent image of firm innovativeness.

In this study, we adopt the definition conceptualised by Kunz et al. (2011), suggesting that perceived firm innovativeness is the consumer's perception of an enduring firm capability that results in novel, creative, and impactful ideas and solutions for the market. Novelty, or newness, has been recognised as a key feature of innovativeness (Crawford and Di Benedetto, 2003), while creativity includes company efforts and activities viewed as unique from the competition and as meaningful to the consumer (Amabile, 1988; Im and Workman, 2004). Market impact is another key characteristic – an innovative firm that succeeds in altering established consumption patterns may be viewed as an industry pioneer by consumers (Kamins, Alpert and Elliott, 2000). Kunz et al. (2011) highlight that all aspects of perceived firm innovativeness are strongly interrelated and none alone suffices for an overall perception of firm innovativeness – if a firm's creative ideas frequently fails in the marketplace, it cannot be perceived as innovative, whilst successful ideas will not create a perception of firm innovativeness if the ideas are not viewed as creative and novel. In our study, perceived firm innovativeness can be said to reflect the consumer's overall assessment of the company's capacity to develop one or more of the four areas of innovation, as described in section 2.1.

Firm innovativeness is important for several reasons. Innovativeness enhances a firm's sensitivity to changing market conditions, its ability to identify and exploit attractive opportunities and its responsiveness to market developments (Hult et al., 2004), allowing them to achieve a competitive advantage and sound performance results (Salomo, Talke and Strecker, 2008). Innovativeness can also help firms gain a first-mover advantage position and form barriers preventing market entry from potential rivals, potentially increasing returns from investments in new ventures while positioning competitors towards investing in business initiatives with less available expertise (Szymanski, Troy and Bharadwaj, 1995).

From a consumer-centric viewpoint, innovativeness can generate customer excitement, increase customer satisfaction and retention and create positive word of mouth (Szymanski et al., 2007). This customer excitement, as a result of an innovation where the firm has shown responsiveness to market developments and where the customer has perceived gained benefits, can lead to higher product trial due to novelty effects relative to other offerings by the firm or the competition. Innovativeness triggers consumers' variety-seeking tendencies and translates into repeat purchases for new goods that better satisfy consumer needs (Szymanski et al., 2007). Atuahene-Gima (1996) further suggests that when new products meet customer expectations and satisfy particular customer requirements effectively, the perception of new product performance increases. As such, customer satisfaction, which results from meeting or exceeding customers' expectations, is likely an antecedent to the evaluation and perception of firm innovativeness. As per in Kunz et al.'s (2011) definition of perceived firm innovativeness, perceived firm innovativeness is the consumer's perception of an enduring firm capability that results in novel, creative, and impactful ideas and solutions for the market, and all aspects of perceived firm innovativeness are deemed necessary. We thus propose that only by providing a solution that meets customer expectations and creates customer satisfaction, may a firm enjoy a positive evaluation and be perceived as innovative in developing products or services. Therefore, we propose the following hypothesis:

H2: Customer satisfaction has a positive effect on perceived firm innovativeness.

2.4. Perceived relative attractiveness

Perceived relative attractiveness measures the attractiveness of a firm compared to other companies and is a construct capturing how a business is evaluated in comparison to real competitors, on dimensions such as price, quality and reputation, and if the customer believes that the service is better than its competitors (Andreassen and Lervik, 1999; Andreassen and Olsen, 2008).

It is important to consider perceived relative attractiveness because firstly, in reality, consumers make choices about goods and services based on real alternatives in the market, and few companies operate in a non-competitive context (Andreassen and Olsen, 2008). A change in perceived relative attractiveness by a consumer could occur upon a change in the product/service offered by its competitors, such as in price, convenience or quality. Secondly, Andreassen and Lervik (1999) found that perceived relative attractiveness is a key driver of future repurchase intention in both business and consumer contexts instead of absolute satisfaction, while exit or switching behaviour may be triggered independently of the degree of satisfaction today should customers perceive other real alternatives to be better. This notion of relative customer satisfaction as a predictor of customer future repurchase intention, instead of an absolute performance evaluation of present offers, is conceptualised within perceived relative attractiveness. Similarly, other research show that customer satisfaction, an absolute measure that does not account for the competition, has been found to have a weak and sometimes non-existent effect in predicting customer intent (Henning-Thurau and Klee, 1997).

According to Andreassen and Lervik-Olsen (1999), perceived relative attractiveness contains two dimensions, value and image attractiveness, which are both relative factors used in comparison with other companies. When making a purchase decision, it means choosing, and that requires customers to distinguish between product offer alternatives and evaluate which is preferred (Woodruff, 1997). In terms of value attractiveness, customers perceive comparable, available offers to represent different value in use, where buyers' perceptions of value represent a trade-off between the quality or benefits they perceive in the product relative to the sacrifice they perceive by paying the price (Monroe, 1990). As for image attractiveness, unlike Grönroos (1984) where image is the result of customers' perception of technical service quality (absolute evaluation), image attractiveness in this study is a relative factor.

Consumer enthusiasm and excitement for new product introductions by a firm whom they perceive as innovative may induce both a feeling of anticipation for future firm offerings as well as an expectation of satisfaction given positive past performance (Hernard and Dacin, 2010). Thus, a consistent history of product innovations augmented by high perceived firm innovativeness will likely result in a scenario where consumers are excited or even inspired by the firm, are motivated to seek out new products from the innovative firm, and have a positive predisposition toward it (Hernard and Dacin, 2010). As consumers appraise innovativeness as a positive characteristic of the firm, this should contribute to a positive evaluation of the firm (Niedrich and Swain, 2003). Hence, we propose the following hypothesis:

H3: Perceived firm innovativeness has a positive effect on perceived relative attractiveness.

2.5. Corporate reputation

Corporate reputation indicates a value judgement about a company's attributes and typically evolves over time as a result of consistent performance, reinforced by effective communication (Gray and Balmer, 1998). Gotsi and Wilson (2001) reviewed different viewpoints in the marketing literature and concluded that corporate reputation can be defined as a stakeholder's overall evaluation of a company over time, which is based on the stakeholder's direct experiences with the company, any other form of communication and symbolism that provides information about the firm's actions, and/or a comparison with the actions of other leading rivals.

Not to be confused with corporate reputation, corporate image is distinct from corporate reputation as in that it is an immediate mental picture that audiences have of an organisation, which can often be fashioned more quickly through well-conceived communication programmes (Gray and Balmer, 1998). Bernstein (1984) adds that a corporate image is manufactured and hence is not a true reflection of the company's reality. Moreover, Fiske and O'Sullivan (1994) propose that though the original meaning of image was equated with a visual representation of reality, it now frequently denotes fabrication or public impression formed to appeal to the audience rather than to reproduce reality, and conclude that the term thus implies a degree of falseness since the reality rarely matches up to the image.

Another related construct to corporate reputation is corporate identity. Corporate identity can be said to be synonymous with organisational nomenclature, logos, company house style and visual identification (van Riel and Balmer, 1997). In addition, Melewar (2003) suggests a multidisciplinary nature of the concept, which encompasses corporate communication, corporate design, corporate culture, behaviour, corporate structure, industry and corporate identity. Establishing the desired corporate identity entails “positioning” the entire company. Some authors describe this as “corporate branding” (Balmer, 1995) or vertical brand image transfer (van Riel and Maathuis, 1993).

In this study, we have chosen to incorporate corporate reputation in our model in order to identify the true reflection of the company's reality over time as seen from the consumer’s perspective, rather than an image or identity constructed by the company. As suggested by Gibson, Gonzales and Castanon (2006), corporate reputation is arguably “the single most valued organisational asset;” good corporate reputations are critical because of their potential for value creation, but also because their intangible character makes replication by competing firms considerably more difficult (Roberts and Dowling, 2002). Moreover, Wang, Lo and Hui (2003) posit that reputation plays a particularly vital strategic role in service markets, as the pre-purchase evaluation of service quality is necessarily vague and incomplete. Due to the intangible nature of services, consumers may find it more challenging to evaluate the quality of services and hence, service firms may be more likely to feel the effects of reputation loss than other types of firms (Kim and Choi, 2003). Subsequently, the effects of reputation are more likely to affect service firms than manufacturers especially when these services are high in credence qualities (Hardaker and Fill, 2005; Bromley, 2001). Given the particular importance that corporate reputation has for services firms, it becomes even more relevant in the context of our study, which is focused on the retail banking service sector.

Whilst corporate reputation tends to be referred to in broad or all-encompassing terms, it fundamentally is a multifaceted construct; apart from a general corporate reputation, firms may have context-specific reputations, including reputations for social responsibility or product quality, with each facet being conceptually related to, yet distinct from, a general corporate reputation (Hernard and Dacin, 2010). Hernard and Dacin (2010) propose a construct of perceived reputation for innovation, which takes into account an individual's perceptions of past experiences with, and consequently future expectations of a firm's product innovativeness (Weigelt and Camerer, 1988). These context-specific reputations can potentially enhance the perception of a general corporate reputation (Hernard and Dacin, 2010).

Hernard and Dacin (2010) argue that firms with a track record of successful new products are likely to have a positive reputation for innovation, be perceived as leaders on the cutting edge of product development, and thought of as creative and progressive with regard to product introductions; all of which should instil expectations of future new product innovations, given positive past performance (Hernard and Dacin, 2010). This subsequently strengthens the overall corporate reputation of the firm. A firm with a strong corporate reputation is likely to be viewed as an industry leader that is well liked by consumers in general (Hernard and Dacin, 2010). Intuitively, each successful product launch further augments the reputation of the firm in consumers' minds and over time, consumers may start to associate the high corporate reputation firm with high innovativeness.

Carpenter and Nakamoto (1989) suggest that pioneering firms greatly influence how consumers value product attributes (i.e., which ones become salient standards) and that pioneers are more likely to become the de facto standard within a category. If consumer preferences are ambiguous, consumers may view the pioneer's product as the category standard, further enhancing its reputation. Following the same line of logic, a firm with a perceived strong reputation may shape consumer perceptions through signals and reinvestment in a manner similar to market pioneers (Hernard and Dacin, 2010). If a firm consistently and successfully introduces new products to the marketplace, the personal relevance (i.e. consumer involvement) of that firm is likely to increase for consumers, and in turn, a more favourable predisposition toward the firm (Hernard and Dacin, 2010). Naturally, a greater consumer disposition may result in a more positive, or heightened, image of the innovative firm. As such, we propose the following hypothesis:

H4: Corporate reputation has a positive effect on perceived firm innovativeness.

To further study the consequences of corporate reputation, we examine an information economics perspective to corporate reputation in order to examine potential favourable and unfavourable outcomes (Walsh et al., 2009). Signalling theory (Spence, 1974; Robertson, Eliashberg, and Rymon, 1995; Rao, Qu and Ruekert, 1999) posits that firms possess observable, unalterable attributes and other unobservable attributes which are subject to manipulation, based on the assumption of an uncertain environment, that is, individuals cannot readily obtain all salient information regarding the firm. Due to inherent uncertainty in the marketplace, a firm's promotion of its reputation serves as a signal to potentially influence constituent behaviour; due to the imperfect information inherent in the marketplace, stakeholders habitually depend on corporate reputation to form perceptions and make judgments (Dowling, 1986; Fombrun and Shanley, 1990). As such, corporate reputation can serve as such a signal by which firms use to shape consumers' beliefs and hence influence their behaviour (Spence, 1974), through imparting information that enables firms to promote product quality, erect market entry barriers, charge price premiums and shape consumers' attitudes toward company products, among other outcomes (Henard and Dacin, 2010).

Related to signalling theory but from the consumer's perspective on the other hand, Olson (1972) highlights that consumers tend to rely on extrinsic cues when available intrinsic cues have low predictive value, low confidence value or both. Tversky and Kahneman (1973) propose that people typically use heuristics or shortcuts that reduce complex problem solving to more judgmental operations. In particular, Simonson and Tversky (1992) suggest the use of decision heuristics that are relational and perceptual in nature, which emphasize the ratings of a given option relative to other alternatives. Consequently, choice among options is context dependent, as the relative value of an option depends not only on characteristics of that option, but also on the characteristics of other options in the choice set (Bettman, Luce and Pyane, 1998).

Corporate reputation is also believed to have the same characteristics as self-schema, which comprises of a cognitive generalisation about the self, is derived from past experiences, and focuses on trait and behaviour information common to certain groups or types of people (Markus, 1977). As Cantor and Mischel (1979) argue, categories of people are represented cognitively by prototypes which are abstract features commonly associated with the members of the category; a consequent implication is that familiar judgments are processed more efficiently than unfamiliar judgments, and hence familiar judgments are more likely to be schematic dimensions which will elicit rapid responses. This supports Kuiper and Rogers' (1979) findings which claim that contrary to unfamiliar adjectives, familiar adjectives that are highly like or unlike the self are judged instantly.

Like corporate reputation, consumers' schemas develop, becoming richer or change, over time. Schemas are believed to influence a buyer's attitudes and beliefs by providing information cues that impact his/her perception of quality attribute performance, function as an expectation, and impact the satisfaction judgment and the consumer behaviour by processing information more efficiently

(Andreassen and Lindestad, 1998). This implies that a good corporate reputation, which is in line with the self or accepted prototype, enhances favorability by simplifying decision rules, through influencing attitudes and beliefs with regard to awareness and recognition (Aaker, 1991). In addition, Aaker (2004) proposes that customers who perceive service quality over repeated service encounters have an overall favourable image of the firm, and this image helps form an emotional attachment, which could influence its preference to other real alternatives.

As such, we hypothesize that a good corporate reputation could positively influence consumers' perceptions of relative attractiveness, based on signalling theory by firms, and heuristics and schemas used by consumers. As such, we propose the following hypotheses:

H5: Corporate reputation has a positive effect on perceived relative attractiveness.

2.6. Customer loyalty

Traditionally, customer loyalty has been defined as a behavioural measure (Kumar and Shah, 2004). These measures include probability of purchase (Farley, 1964; Massey, Montgomery and Morrison, 1970), probability of product repurchase (Lipstein, 1959; Kuehn, 1962), purchase frequency (Brody and Cunningham, 1968), repeat purchase behaviour (Brown, 1952), purchase sequence (Kahn, Kalwani and Morrison, 1986), and various aspects of purchase behaviour (Ehrenberg, 1988; DuWors and Haines, 1990).

Jacoby and Chestnut (1978) however argued that consistent purchasing as an indicator of loyalty could be invalid because of happenstance buying or a preference for convenience, and that inconsistent purchasing could mask loyalty if consumers were multi-brand loyal, and subsequently explored the psychological meaning of loyalty. Other researchers have emphasised the importance of taking into account both behavioural and attitudinal aspects of loyalty (e.g. Pritchard, Howard, and Havitz, 1992). Lutz and Winn (1974) proposed a loyalty index comprising attitudinal and behavioural measures. Engel and Blackwell (1982) defined 'true' loyalty as the preferential attitudinal and behavioural response toward one or more brands in a product category expressed over a period of time by a consumer. A psychological approach including cognitive, affective and conative elements was also analysed by Oliver (1999), where he defined customer loyalty as a deeply held commitment to rebuy or repatronise a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour. For a consumer to stay loyal to a company, he/she must believe that the company's offerings continue to be the best choice alternative (Oliver, 1999).

Customer loyalty has been universally recognised as a valuable asset to firms in competitive markets (Srivastava, Shervani and Fahey, 1998). In increasingly competitive markets, the ability to build customer loyalty is seen as the key factor in winning market share (Jarvis and Mayo, 1986) and developing sustainable competitive advantage (Kotler and Singh, 1981). Customer loyalty has been widely accepted as crucial for business success in the long run (Kunz et al., 2011). From the consumer point of view, loyalty to a firm allows them to minimize time expended in searching and in locating and evaluating purchase alternatives (Yang and Peterson, 2004). Also, customers can avoid the learning process that may consume time and effort to become accustomed to a new vendor (Yang and Peterson, 2004). Customers' attitudinal loyalty can sometimes generate exceptional value to a firm through positive word of mouth (Dick and Basu, 1994; Reichheld, 2003), a willingness to pay premium prices, and an increased likelihood of future patronage (Chaudhuri and Holbrook, 2001).

Several studies have linked corporate reputation to customer loyalty, including Walsh and Wiedmann (2004) and Barich and Kotler (1991). In addition, Fombrun (1996) is convinced that "reputation breeds customer loyalty," while corporate reputation is considered a key determinant of customer loyalty by other researchers (e.g. Anderson and Sullivan, 1993). Andreassen and Lindstad (1998) also found that a good corporate reputation, which is in line with the self or accepted prototype, has an indirect impact on customer retention by stimulating purchase from one company through simplifying decision rules, hence influencing customer loyalty.

Trust is deemed as an indispensable part of corporate reputation (Young, 1997) and is also an essential prerequisite for the formation of customer loyalty. Trust is defined as the level of reliability ensured by one party to another within a given exchange relationship (Rotter, 1967) and in a marketing context, is typically linked to consumer expectations concerning the firm's capacity to assume its obligations and keep its promises. Like corporate reputation, trust evolves out of past experience and prior interaction and it develops as the relationship matures (Rempel, Holmes and Zanna, 1985).

Nguyen and Leblanc (2001) suggest that a good corporate reputation can reinforce customers' trust in the corporate and product, and ultimately promote customer repurchase, while Nguyen, Leclerc and LeBlanc (2013) demonstrate the mediating role of customer trust between corporate reputation and customer loyalty. To begin with, a firm's already established reputation represents an indicator of their trust in this firm (Moorman, Zaltman and Deshpande, 1992; Michell, Reast and Lynch, 1998). Trustworthiness is also regarded as a key attribute of corporate reputation, which in turn is regarded as an antecedent of trust (Nooteboom, 2002; Casson and Della Giusta, 2006). Ganesan (1994) and Walsh and Beatty (2007) also found that corporate reputation is positively related to trust.

On the other hand, trust is deemed as a prerequisite to building customer relationships and as a preceding state for the development of commitment (Garbarino and Johnson, 1999; Morgan and Hunt, 1994), an exchange party's long-term desire to maintain a valuable ongoing relationship with another (Moorman, Zaltman, and Deshpande, 1992; Morgan and Hunt, 1994). The relationship between trust and loyalty is supported by reciprocity arguments. When providers act in a way that builds consumer trust, the perceived risk with the specific service provider tends to be reduced, allowing consumers to make confident predictions about the provider's future behaviours (Mayer, Davis, and Schoorman, 1995; Morgan and Hunt, 1994), which forms the basis for intended future action. Trust also affects loyalty by influencing consumers' perceptions of congruence in values with the provider (Gwinner, Gremler and Bitner, 1998); when there is perceived similarity in values between the firm and the consumer, the consumer's embeddedness in a relationship is enhanced, promoting reciprocity and contributing to relational commitment. Similarly, Keh and Xie (2009) suggest that customer trust relates positively to customer identification, which results in customers being more likely to try new products or services, to spread positive word-of-mouth about the company, to be resilient to negative information associated with it and to be more loyal (Bhattacharya and Sen, 2003; Einwiller, Fedorikhin, Johnson and Kamins, 2006). Based on the above, we propose the following hypothesis:

H6: Corporate reputation has a positive effect on customer loyalty.

Zeithaml, Berry and Parasuraman (1996) suggest that certain behaviours signal that customers are forging bonds with a company – for example, when customers praise the firm or express preference for the company over others, they are indicating behaviourally that they are bonding with the company. They also propose that amongst many ways, expressing a preference for a company over others is a manifestation of loyalty. Andreassen and Lervik (1999) suggest that based on disconfirmation theory and regret theory - where disconfirmation is based on previous interactions and meeting or exceeding expectations, and regret theory is when when the customer is satisfied with the supplier - choosing the same supplier again may create regret if dissatisfied with next experience. These theories highlights how situations influence satisfaction, which over time indicates how attractiveness is evaluated, and further on how loyalty occur as a potential result. Perceived relative attractiveness captures both accumulated and transaction satisfaction, meaning both absolute satisfaction (i.e., disconfirmation of expectations with the encounter) and also satisfaction that is relative to other real alternatives, and found that perceived relative attractiveness today is the key driver of future purchase intention in both business and consumer contexts (Andreassen and Lervik, 1999). Therefore, we propose the following hypothesis:

H7: Perceived relative attractiveness has a positive effect on customer loyalty.

3. Conceptual model

This section presents a visual representation of our conceptual model, which conceptualises the research question and hypothesis presented in the previous sections. In this study, we drew inspiration from the work on the NII model in Andreassen et al. (2016) and Andreassen et al. (2017) and subsequently expanded their model to create the conceptual model used in this paper. We will first present the latest NII model used by Andreassen et al. (2017) for reference. Next, we propose our conceptual model, which takes into account customer satisfaction instead of customer emotions and includes corporate reputation as an additional independent variable in order to investigate the effect that it has on perceived firm innovativeness, perceived relative attractiveness and customer loyalty.

3.1. The original NII model

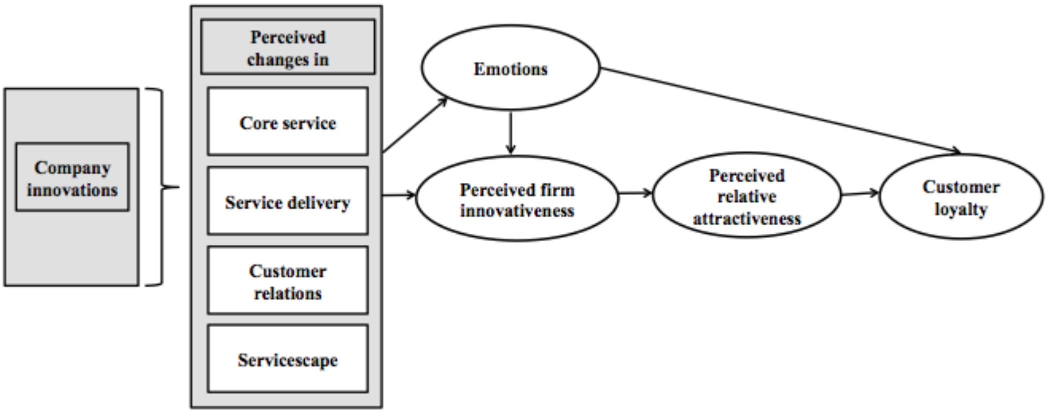

Figure 1. The Norwegian Innovation Index by Andreassen, Kurtmollaiev and Lervik-Olsen (2017)

Figure 1 shows that changes in the customer experience, that may be deemed to have occurred in the area of core service, service delivery, customer relations or servicescape, affect the customer's emotions as well as his/her perception of a company's ability to innovate, influencing perceived firm innovativeness. On one hand, the emotions of customers directly affect customer loyalty, while on the other hand, the change in perceived firm innovativeness influences the perceived relative attractiveness of the firm and subsequently customer loyalty. Emotions also suggested to affect perceived firm innovativeness. Companies that are perceived as innovative are simultaneously perceived as more attractive in the market. On the flipside, should perceived innovativeness fall due to a lack of innovations by the company, customers will find the business relatively less attractive, leading to decreased customer loyalty which could potentially threaten future revenues and profitability.

3.2. Proposed conceptual model in this study

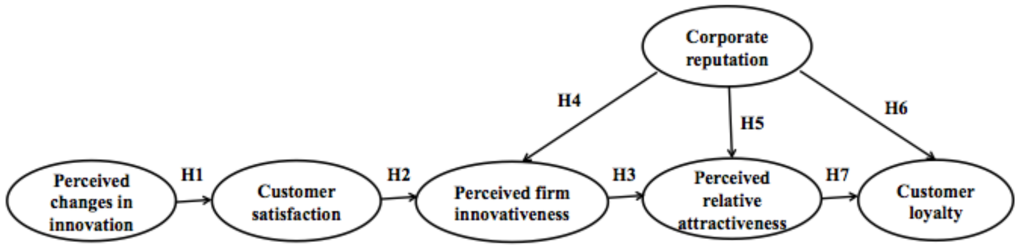

Figure 2. Our proposed conceptual model

Referring to Figure 2, we propose that the perceived changes in innovation by a consumer is an independent variable consisting of four areas (changes in the core service, service delivery, customer relations or servicescape), which affects customer satisfaction, that comprises of both cognitive and emotional dimensions (H1). Customer satisfaction is believed to influence the customer's perception of a company's ability to innovate. High customer satisfaction from perceived changes in innovation subsequently results in higher perceived relative attractiveness (H2), which in turn increases perceived relative attractiveness of the firm (H3) and ultimately customer loyalty (H7). Finally, the additional variable here, corporate reputation, is believed to influence perceived firm innovativeness (H4), perceived relative attractiveness (H5) and customer loyalty (H6).

4. Methodology

4.1. Research design

A descriptive and quantitative research design was chosen for the purpose of this study, using cross-sectional data for our analysis. Firstly, a descriptive research design was deemed appropriate as the aim of this study was to identify and verify the validity of meaningful relationships between variables within our model. In addition, a quantitative approach was considered appropriate since most of the variables included in this study had previously been examined using the same quantitative approach by Andreassen et al. (2016) and Andreassen et al. (2017). Our cross-sectional study involved collecting substantial data and information from sufficient respondents via an online questionnaire, such that correct inferences can be made about relationships between the variables in our model, and in particular the influence of corporate reputation, from the perspective of the customer (Hair, Bush and Ortinau, 2006a).

4.2. Population and sample

The population for this study includes all individuals living in Norway that have a bank account with a Norwegian retail bank.

The main sampling technique used was convenience sampling, where we first attempted to recruit potential participants for this study via Facebook and email. The advantages of convenience sampling include low costs, large sample sizes and ease of data collection (Malhotra, 2010). In addition, we also requested for some participants to recommend additional participants, via a snowball sampling method. This method is commonly used to locate, access, and involve people from specific populations in cases where the researcher anticipates difficulties in creating a representative sample of the research population (Cohen and Arieli, 2011). It has been suggested that the snowball sampling method is probably the most effective method to access hidden and/or hard to reach populations (Valdez and Kaplan, 1999). In particular, using this method was useful in helping us to identify and recruit the elderly segment of the population, in an attempt to recruit a representative sample in terms of age distribution of the Norwegian population, which we found challenging to do so based on our personal network.

4.3. Context and industry

The Norwegian retail banking industry, targeted to individual consumers, was chosen as the context of investigation. All the largest banks were represented in the study, with the largest banks having a total market size of NOK 3,941bn in terms of customer loans, with the banks with the highest market shares being DNB (28%), Sparebank 1 Stiftelsen (15%), Nordea (12%), Danske Bank (6%) and Handelsbanken (5%) (Finans Norge, 2015). In general, the Norwegian retail banking industry can be characterised with small differences as they provide very similar services with little differentiation visible to customers, across many providers (105 as of 2016). The five largest banks in terms of number of customers are DNB, Nordea, Handelsbanken, Sparebank 1 Stiftelsen and Skandiabanken (Finans Norge, 2016).

There are several reasons why we chose the banking industry. Firstly, the banking industry is characterised by customers with high involvement. According to an industry report from 2016 by Finans Norge, bank customers in Norway are highly active, often evaluating their satisfaction with their bank (Finans Norge, 2016b). The sector can be characterised as familiar, highly relatable and with frequent interaction between customers and the company; in 2016 for example, statistics revealed that almost every third customer negotiated their loan terms (Finans Norge, 2016b). Looking at the newer services provided by banks, as of 2017, more than 40% of the Norwegian population utilised mobile payment services (E24, 2017). Secondly, banking has a high competitive intensity, making it appropriate in relation to research on innovation. According to a report by Accenture Strategy, traditional retail banks in the Nordics are facing new customer demands fuelled by digital, and competition is likely to intensify even more over the coming years as digital disruptors but also global technology giants like Apple, Google, Amazon and Facebook continue to enter the financial services market with more convenient and innovative offerings targeted to their existing large customer base (Ruotsila, Ekdahl and Vitali, 2015).

While this research is limited to the Norwegian retail banking industry, we argue that our findings could be generalisable to other industries as the characteristics of this retail banking industry may be similar to other industries that provide services to a similar customer base and that are experiencing similar developments to that of the retail banking industry, such as intensifying competition. Such industries could include the insurance and IT sectors.

4.4. Operationalisation of the constructs

The definitions of the constructs in the NII model and questions for the questionnaire were built upon findings from the literature review, mostly based on research on the NII by Andreassen et al. (2016) and Andreassen et al. (2017). We chose to build upon verified and existing scales from the literature to measure the variables, whenever such scales were available. A comprehensive list of observed measures and scales used in the survey can be found in Appendix 1 and 2.

Perceived changes in innovation. We started the survey with initial questions for the independent variable, perceived changes in innovation. This variable was operationalised through questions related to the four different areas of change in innovation, based on Andreassen et al. (2016) and Andreassen et al. (2017), which include “changes in core service”, “changes in service delivery”, “changes in customer relations” and “changes in servicescape” as observed in Table 2. In addition to the perceived changes experienced, we included other questions such as the perceived recency and magnitude of such changes to measure this construct.

What changes have you experienced at (X) in terms of its products and services recently?	**Area of innovation**
- In relation to online banking	Core service, servicescape
- In relation to an app	Service delivery, servicescape
- In relation to a physical bank	Core service, servicescape
- In relation to communication between the bank and you	Customer relations
- In relation to new products	Core service
- In relation to new services	Core service

Table 2. Excerpt of questions measuring perceived changes in innovation (Source: Andreassen et al., 2016)

Customer satisfaction. As Oliver (1997) suggests that customer satisfaction as a whole comprises components of judgement (cognition) and affect (emotion), customer satisfaction was operationalised in our survey as a single variable comprising of both cognitive and emotional measures. To measure the cognitive component of customer satisfaction, questions were constructed based on the Norwegian Customer Satisfaction Barometer (NCSB) framework, a national index survey in Norway, which has been documented in Johnson et al. (2001). Three different 7-point Likert scales, anchored from *very dissatisfied to very satisfied*, *from very far away to very close*, and *from a very small extent to a very large extent*, were applied to questions that captured cognitive assessments of net benefits (Table 3). The cognitive aspect of customer satisfaction was viewed as a cognitive–evaluative judgment (Oliver and Swan, 1989) and based on expectation disconfirmation theory (i.e. performance that falls short of or exceeds expectations) (Oliver, 1980). These items capture mainly cumulative satisfaction.

Questions measuring cognitive component of customer satisfaction

- We would now like you to think back upon your experiences with your bank. How satisfied or dissatisfied are you with your bank?
- Imagine an ideal bank. How close to this ideal is your bank?
- To what extent does your bank usually meet your expectations?
- How satisfied are you with the frequency of new products and services provided by (X)?
- How satisfied are you with the quality of new products and services provided by (X)?

Table 3. Excerpt of questions measuring customer satisfaction (Sources: Johnson et al., 2001; Oliver and Swan, 1989; Oliver, 1980)

On the other hand, measuring the emotional or affective component of customer satisfaction involved asking questions based on a 7-point semantic differential scale for participants' responses comparing two different value extremes or bipolar adjectives (Osgood, 1952). The items were inspired by findings from the literature, such as Kunz et al. (2011) who based their scale development on Liljander and Strandvik (1997), and were subsequently adapted to suit the context of our study. Seven items each were deemed suitable to capture both positive affect (engaged, satisfied, inspired, positively surprised, excited, happy and enthusiastic) and negative affect (indifferent, dissatisfied, bored, disappointed, depressed, angry and irritated). The intent was to capture beliefs about cumulative satisfaction rather than transaction specific satisfaction.

Perceived firm innovativeness. The construct perceived firm innovativeness was operationalised based on a 7-point Likert rating scale by Kunz et al. (2011), who had developed their perceived firm innovativeness scale considering scales regarding organisational innovativeness (Atuahene-Gima, 1996; Hurley and Hult, 1998; Hurt, Joseph and Cook, 1977), novelty and creativity (Im and Workman, 2004; Michaut, van Trijp and Steenkamp, 2002; Moreau and Dahl, 2005) as well as innate innovativeness (Goldsmith and Hofacker, 1991; Roehrich, 2004), and who subsequently narrowed down and refined the scale to suit their study. The final scale adopted is seen in Table 4 below.

How much do you agree or disagree with the following description of your bank?

- (X) is a dynamic firm
- (X) is a creative firm
- (X) launches new products and creates market trends all the time
- (X) is a pioneer in its category
- (X) constantly generates new ideas
- (X) is an advanced, forward-looking firm
- (X) has changed the market with its offers

Table 4. Excerpt of questions measuring perceived firm innovativeness (Source: Kunz et al., 2011)

Perceived relative attractiveness. Perceived relative attractiveness was operationalised based on scales developed by Andreassen and Lervik (1999) and Andreassen and Olsen (2008) and modified to suit the context of our study. The items were represented by questions measured using two 7-point Likert scales anchored by *strongly disagree to strongly agree*, and *very unattractive to very attractive* (Table 5). Similar to Andreassen and Olsen (2008), perceived relative attractiveness contains two dimensions, value and image attractiveness, and are compared to other companies on aspects such as price, reputation and overall attractiveness.

In comparison with other banks providing similar services, to what extent are the following statements appropriate for (X)?

- (X) has better prices on its services
- (X) has better quality services
- (X) has a better reputation
- (X) is more attractive than other providers of the same service

Regarding your experiences with (X), how attractive or unattractive do you consider (X) relative to its competitors?

Table 5. Excerpt of questions measuring perceived relative attractiveness (Source: Andreassen and Lervik, 1999; Andreassen and Olsen, 2008)

Customer loyalty. The construct of customer loyalty was operationalised based on the loyalty scale established by Parasuraman et al. (1996) and by selecting the relevant items for our study. The three items chosen were measured on a 7-point Likert scale anchored by *very unlikely* to *very likely* (Table 6). We conceptualised consumer loyalty as including commitment as well as intention to behave loyal, measuring aspects such as word-of-mouth and future repurchase intention. In addition, we included another item measuring the willingness to switch to competitors, measured on a 7-point Likert scale, to additionally capture the aspect of unfavourable behavioural intentions that represent the lack of customer loyalty (Table 6).

How likely or unlikely is it that you would continue as a customer of your current bank?
How likely or unlikely is it that you would recommend your bank if anyone asks you for advice?
How likely or unlikely is it that you would talk about your bank in a positive manner?
If similar products and services were offered by another bank at a lower price, to what extent would you be willing to switch banks?

Table 6. Excerpt of questions measuring customer loyalty (Source: Parasuraman, Berry and Zeithaml, 1996)

The presence of valid scales in the literature measuring customer loyalty in the online, and specifically social media context, is fairly limited. With reference to Anderson and Srinivasan (2003), who evaluated e-loyalty, defined as the customer's favourable attitude toward an electronic business resulting in repeat buying behaviour, and items adapted from Zeithaml et al. (1996), we used these sources for inspiration. Based on these references, we introduce items that we believed would measure customer loyalty but adapted them to suit a social media context. These items intended to capture customer engagement in an online social platform and used 7-point Likert scales anchored by *very unlikely* to *very likely* (Table 7).

How likely is it that you would use social media to communicate with, or get information from (X)?

- I use social media to comment on products from (X)
- I use social media to see what others say about (X)
- I use social media to talk about my experiences with (X)
- I use social media to share/like information from (X)

Table 7. Excerpt of questions measuring customer loyalty related to social media

Corporate reputation. Corporate reputation was operationalised based on the scales used by Walsh and Beatty (2007) and Walsh et al. (2009) to capture "the customer's overall evaluation of a firm based on his or her reactions to the firm's goods, services, communication activities, interactions with the firm and/or its representatives (e.g. employees, management) and/or known corporate activities" (Walsh and Beatty, 2007). All items were measured on 7-point Likert scales where 1 indicates *strongly disagree* and 7 indicates *strongly agree*. Some items in those scales were removed due to the lack of relevance to the retail banking industry or when deemed to be too similar to another item. Based on the scale adopted by Walsh et al. (2009), we eventually refined our scale down to six items to encompass the dimensions of customer orientation, good employer, reliable and financially strong company, product and service quality and social and environmental responsibility, within the corporate reputation construct.

Which of the following statements do you associate with your bank?

- (X) treats its customers in a fair manner
- (X)'s employees are concerned about customer needs
- (X) maintains a high standard in the way they treat people
- (X) offers high quality products and services
- (X) is a strong, reliable company
- (X) supports good causes
- (X) is an environmentally responsible company

Table 8. Excerpt of questions measuring corporate reputation (Source: Walsh and Beatty, 2007 and Walsh et al., 2009)

4.5. Description of data analysis

To empirically examine the theoretical framework, we adopted a structural equation modelling (SEM) – smart partial least squares (PLS) approach. The objective of PLS is to explain variance in the endogenous variables in a satisfaction model that has bottom-line managerial relevance, such as satisfaction or loyalty (Olsen and Johnson, 2003). Hence, PLS is particularly well suited to operationalising satisfaction and loyalty models in an applied setting (Johnson and Gustafsson, 2000; Steenkamp and van Trijp, 1996).

The PLS-SEM technique is used to analyse the data by applying SmartPLS software (Ringle, Wende and Will, 2005) to handle the statistical analysis for reflective indicators. A PLS model is usually analysed and interpreted in two stages (Hulland, 1999). In the first stage, the measurement model is tested by running a Confirmatory Factor Analysis (CFA) to determine how the factors are measured by the indicators, and performing validity and reliability analyses of each of the measures in the model. In the second stage, using a Bootstrapping procedure, the structural model is tested by estimating the paths between the constructs in the model, determining their significance as well as the predictive ability of the model. This sequence is followed to ensure that reliable and valid measures of the constructs are used before drawing conclusions about the nature of the construct relationships.

4.6. Validity and reliability

The goal of a reflective measurement model assessment is to ensure the validity and reliability of the construct measures and therefore provide support for the suitability of their inclusion in the path model. It is thus crucial to examine both validity and reliability of the scales/instruments before assessing the results of the SEM. If the measurement characteristics of constructs are acceptable, we will continue with the assessment of the structural model results.

Validity. Validity is the extent to which a measure correctly represents the concept of study, and to what degree it is without systematic or nonrandom errors (Hair, Joseph, Black, Babin, Anderson and Tatham, 2006b). Unless a measure is reliable, it will not be valid, and while reliability is necessary, it is not sufficient to ensure validity (Robson, 2002). Firstly, construct validity is the extent to which our measured items actually reflect the theoretical latent constructs the items are designed to measure (Hair et al., 2006). Both convergent validity and discriminant validity are measures of construct validity, and are used to meet the confirmatory factor analysis criteria (Hair, Ringle and Sarstedt, 2011). In addition, content validity or face validity is a subjective but systematic evaluation of how well the content of a scale represents the measurement task at hand, criterion validity reflects whether a scale performs as expected in relation to other selected variables (criterion variables) as meaningful criteria, and predictive validity is concerned with how well a scale can forecast a future criterion (Malhotra, 2010). These 3 aspects of validity were ensured by utilising and adapting established and validated scales in the literature for our constructs.

Reliability. Fundamentally, reliability concerns the extent to which a measuring procedure or scale yields the same results on repeated trials; the more consistent the results given by repeated measurements, the higher the reliability of the measuring procedure (Carmines and Zeller, 1979). Reliability is related to the number of indicators representing a construct and assessing the reliability determines how many indicators are reliable and should be kept in the model (Hair et al., 2011).

4.6.1. Testing the validity and reliability of the constructs

The assessment of the reflective measurement model includes checking the convergent validity, discriminant validity, individual indicator reliability and internal consistency reliability, in order to achieve an acceptable fit of the measurement model.

Convergent validity. Convergent validity is estimated to ensure that the items assumed to measure the construct are correct and do not measure other constructs. The advantage of using convergent validity involves information on how large a proportion of the variance the items of the construct shares (Hulland, 1999). Convergent validity of the construct is determined by the average variance extracted (AVE) (Gefen, Straub and Boudreau, 2000). An AVE value that is higher than 0.5 is generally viewed as acceptable (Bagozzi and Yi, 1988).

Discriminant validity. Discriminant validity indicates the extent to which a given construct is different from other constructs (Hulland, 1999). For discriminant validity to be established, we examined the square root of AVE of each latent variable. Fornell and Larcker (1981) suggest that the square root of AVE of each latent variable should be greater than the correlations among the latent variables for discriminant validity to be established.

Indicator reliability. The indicator reliability describes the extent to which a variable or set of variables is consistent regarding what it intends to measure, or in other words, it measures how much of the indicators' variance is explained by the corresponding latent variables (Malhotra, 2010). Because the indicators are highly correlated and interchangeable, they are reflective and their reliability and validity should be thoroughly examined. The indicator reliability is tested by calculating the square of outer loadings. Individual indicator reliability values that are larger than the minimum acceptable level of 0.4 and close to the preferred level of 0.7 are deemed to satisfy indicator reliability (Wong, 2013).

Internal consistency reliability. The traditional criterion for internal consistency is Cronbach's alpha, which provides an estimate of the reliability based on the intercorrelations of the observed variables. To satisfy reliability, Cronbach's alpha should be above 0.70. Although Cronbach's alpha is the most widely accepted and used reliability measured, prior literature recommends the use of Composite Reliability scores instead of Cronbach's Alpha in PLS-SEM. Unlike in the case of Cronbach's alpha, the composite reliability score is not influenced by the number of items in each scale (Barroso, Carrión and Roldán, 2010). Composite reliability is deemed as a closer estimation of reliability, as Cronbach's alpha tends to provide a conservative measurement and underestimates the internal consistency reliability. (Bagozzi and Yi, 1988; Hair, Sarstedt, Ringle and Mena, 2012) Composite reliability should be 0.7 or higher to satisfy internal consistency reliability. In our study, we examine both Cronbach's alpha and the composite reliability score to obtain a more comprehensive view of internal consistency reliability.

4.7. Pre-test

A pre-test of the complete questionnaire was conducted on a sample of 10 random respondents to get a representative selection to evaluate the survey performance. The pre-test used the same procedures and measurements as the final survey.

Distribution was accomplished by email, and included further questions regarding feedback on experience, content, question wording, layout, interpretation and suggestions for improvements. We received valuable feedback concerning unclear wording, time-consumption and similarities between questions that were experienced as repeating questions, which we subsequently addressed by merging them into one question. Other suggestions and issues identified around question wording and layout were also dealt with and corrected, before we distributed the final version of the survey online.

4.8. Survey development and data collection

A web-based survey was developed using Qualtrics. This survey channel was selected on the basis that internet-based questionnaires are relatively low cost and practical for a large sample (Check and Schutt, 2012). The survey was subsequently distributed online, using Facebook as the predominant platform for recruitment, with no incentives offered.

The survey was conducted in Norwegian, due to the characteristics of the chosen population and to minimize potential misunderstandings or wording problems. The online questionnaire was designed to gather information from respondents about the different variables in the NII model, namely perceived changes in innovation, customer satisfaction, perceived firm innovativeness, perceived relative attractiveness among Norwegian banks, as well as corporate reputation and customer loyalty to the bank. The indicators for perceived changes in innovation, customer satisfaction, perceived firm innovativeness, perceived relative attractiveness and customer loyalty were largely based on previous work on the NII by Andreassen et al. (2016) and Andreassen et al. (2016) and questions were tailored towards the Norwegian retail banking industry. We further extended the list with additional questions on corporate reputation to obtain the information that is the focus of our research question.

Demographic questions were included to ensure different segments were present and that the final sample was representative of the population, including questions on gender, age, level of education household income and marital status.

According to Malhotra (2010) there is a risk of "alienating the respondents" by asking personal questions. Some questions, such as income or education level, were also considered to be of sensitive nature. To raise the likelihood of obtaining responses from participants, the subject of anonymity was emphasised in the cover letter and the respondents were provided with response categories for both income and education level (Malhotra, 2010).

The responses obtained from Qualtrics were then imported to IBM SPSS Statistics 24 for data cleaning and checks, to weed out suspicious response patterns, missing values or outliers. After the data clean up, the file was converted and imported into SmartPLS for further statistical PLS-SEM analyses.

A copy of the questionnaire can be found in Appendix 3.

5. Results

5.1. Respondent characteristics

Referring to Appendix 4, the results showed an almost equal distribution of 49% males and 51% females. The modal age group was from 21 to 30 years old (59.7%), with 76.7% of respondents in the range of 21 to 40 years old. Slightly more than half of the respondents (51.9%) had more than 3 years of higher education while average household income level of the sample was in the range of NOK 600,000 to NOK 799,000.

In the context of banking behaviour, slightly more than half of the respondents (53.9%) used DNB as their main bank, with Sparebank1 (17%), Nordea (10.2%) and Skandiabanken (6.8%) notably being the next three banks most widely used. Other banks indicated in the survey, with less than 2.5% of respondents each, included Danske Bank, Storebrand, Handelsbanken, Gjensidige Bank, Eika, OBOS Banken and Jernbanepersonalets Bank og Forsikring.

5.2. Data cleaning

In Qualtrics, we had a total of 318 recorded responses, however, only 206 were 100% completed by respondents with the remaining being only partially completed, which translated to a 65% response rate. For subsequent analyses, we filtered out all partially completed questionnaires and obtained a final dataset of 206 respondents. As forced responses were used in the survey, there were no missing values in this dataset.

In terms of guidelines for sample sizes, less than 100 is considered “small” and may only be appropriate for very simple models; 100 to 200 is “medium” and may be an acceptable minimum sample size if the model is not too complex; and greater than 200 is “large,” which is acceptable for most models (Kline, 2005). Based on our responses, we had a large sample size of 206 respondents.

The dataset from Qualtrics containing 206 respondents was subsequently imported into SPSS for data cleaning. Several variables were recoded. For example, the names of banks were recoded into numbered categorical variables for greater ease of analysis.

Given that the large part of our survey questions were measured on a 7-point Likert scale, the possibility of exceptionally high or low values was limited. The data showed no outliers or extreme values.

5.3. Description of the dataset

5.3.1. Descriptive statistics

Table 9 illustrates the overview of the descriptive statistics for the latent variables, in terms of mean, standard deviation, skewness and kurtosis. The descriptive statistics of the indicators can be found in Appendix 5.

Variable	Mean	Std. Dev.	Skewness	Kurtosis
Perceived changes in innovation	2.89	0.83	-0.20	0.33
Customer satisfaction	4.61	0.82	0.07	0.42
Perceived firm innovativeness	4.39	1.13	-0.33	0.67
Perceived relative attractiveness	4.46	0.94	0.06	1.37
Customer loyalty	3.37	0.91	0.32	0.37
Corporate reputation	4.92	1.04	-0.26	-0.18
Threshold		*Below 2*	*-1 to 1*	*-3 to 3*

Table 9. Descriptive statistics for latent variables

Mean values for latent variables. Based on the mean values as shown in table 9, corporate reputation has the largest score of 4.92, which implies that respondents in our survey generally perceived their banks as having a strong corporate reputation. With the next highest mean of 4.61, respondents seemed to be generally satisfied with their banks. This appears to be in line with prior literature research, as according to Andreassen et al. (2017), today, the average customer satisfaction in Norway is 72 (on a scale from 0 to 100) based on the Norwegian Customer Satisfaction Barometer, implying that most Norwegian companies provide goods and services of high quality that confirm customer expectations. On the other hand, it is interesting to note the low mean scores for perceived changes in innovation (2.89) and customer loyalty (3.37). These scores imply that the respondents in our survey perceived that the changes in innovations experienced have been fairly low, and did not feel particularly loyal to their banks.

Variation in response. We next examine the standard deviation to determine the statistical dispersion of the latent variables. Having a standard deviation of under 2 implies that the values are sufficiently close to the mean while a value above 2 indicates that the data is spread out in a wide range of values (Janssens et al., 2008). All the variables appear to have fairly low dispersion, with perceived firm innovativeness having the highest standard deviation of 1.13. As all standard deviations fell below 2, this indicates that all values were close to the expected value and sufficiently centred around the mean. Similarly, all indicators had a standard deviation of under 2 (Appendix 5, Table 1).

Normality check by examining skewness and kurtosis. We also checked the normality of the latent constructs and indicators through the shape characteristics of the distribution, by examining the measures for skewness and kurtosis in SPSS (Hair, Joseph, Black, Babin, and Anderson, 2014a). It is crucial to examine the normal distribution of variables because it can be an underlying assumption in statistical techniques that are to be used in further analyses (Janssens et al., 2008). Skewness refers to the tendency of deviations from the mean to be greater on one side while kurtosis reveals the peakedness or flatness of a curve (Malhotra, 2010). The aim is to have data showing a normal distribution, as implied by having a symmetric bell-shaped curve and a kurtosis closer to zero (Malhotra, 2010).

Looking at the latent constructs in Table 9, half of the variables had a positive skew while the other half had a negative skew. All latent constructs, apart from corporate reputation, were more peaked than a normal distribution. This was particularly so for the construct of perceived relative attractiveness which showed a positive value of 1.37, revealing a peaked distribution (Hair et al., 2014a). Having said that however, all latent constructs fell into the acceptable range of values of -1 to 1 for skewness and -3 to 3 for kurtosis in order to prove a normal distribution (Corrado and Su, 1996).

In terms of the indicators, the results revealed that of the 54 indicators, 12 measures did not meet the criteria of normality (Appendix 5, Table 1). As the use of a PLS approach, such as that used in our study, allows for no assumptions about data distribution (Vinzi, Trinchera and Amato, 2010), we deem this an appropriate technique to adopt despite having a skewed data distribution. In addition, many industry practitioners and researchers note that, in reality, it is often difficult to find a data set that meets these requirements. Several studies have also shown that most data in social sciences have a non-normal distribution (Bentler and Chou, 1987; Barnes, Cote, Cudeck and Malthouse, 2001). Tabachnick and Fidell (2007) state that skewness will not make a substantive difference when the sample is reasonably large while Hair et al. (2014a) posit that sample sizes of more than 200 usually have the statistical power to reduce the detrimental effects of nonnormality. As such, our sample size of 206 implies that we can assume our data to be approximately normally distributed.

5.3.2. Multicollinearity

We next conduct a multicollinearity assessment, whereby each set of exogenous latent variables in the inner model is checked for potential collinearity problems, to determine if any of the variables should be eliminated, merged into one, or have a higher-order latent variable developed. Multicollinearity is problematic because it can increase the variance of the regression coefficients, making them unstable and difficult to interpret (Frost, 2013). In a reflective model, such as that in our study, there is potentially multicollinearity at the structural level, whereby the latent variables which are modelled as causes of an endogenous latent variable may be multicollinear (Janssens et al., 2008).

One way to measure multicollinearity is the variance inflation factor (VIF), which assesses how much the variance of an estimated regression coefficient increases if your predictors are correlated (Mansfield and Helms, 1982). VIF coefficients for the structural model are evaluated using the "Inner VIF Values" in Table 10. A common rule of thumb is that problematic multicollinearity may exist when the VIF coefficient is higher than 4.0, with some using the more lenient cut-off of 5.0. VIF is the inverse of the tolerance coefficient, for which multicollinearity is flagged when tolerance is less than 0.25, with some using the more lenient cut-off of 0.20 (Hair, Hult, Ringle and Sarstedt, 2016). All VIF scores fell well below the threshold of 5.0, hence indicating no issues of multicollinearity (Table 10).

	INNOVATION	LOYAL	PFI	PRA	REPUTAT	SATISFACTION
INNOVATION						1.000
LOYAL						
PFI				1.077		
PRA		1.693				
REPUTAT		1.693	2.168	1.077		
SATISFACTION			2.168			

Table 10. VIF values

5.4. Measurement model evaluation

There are two sub models in a structural equation model; the outer model, also known as the measurement model, specifies the relationships between the latent variables and their observed indicators, while the inner model, also known as the structural model, specifies the relationships between the independent and dependent latent variables (Wong, 2013). In this section, we will discuss the analyses related to the outer or measurement model.

5.4.1. Confirmatory factor analysis

We conducted confirmatory factor analyses (CFA) to examine the respective variables. Testing these observed measures reflecting different latent constructs, we found some variation between scores.

Outer loadings represent the absolute contribution of the indicator to the definition of its latent variable. The closer the loadings are to 1.0, the more reliable that latent variable. Generally, for a well-fitting reflective model, factor loading estimates should be higher than 0.5, and ideally, 0.7 or higher (Hair, Black, Babin, Anderson and Tatham, 2010; Henseler, Ringle and Sarstedt, 2012). Other studies have reported that factor loadings should be greater than 0.5 for better results (Truong and McColl, 2011; Hulland, 1999). A loading of 0.70 is the level at which about half the variance in the indicator is explained by its factor and is also the level at which explained variance must be greater than error variance. Another rule of thumb is that an indicator with a measurement loading in the 0.40 to 0.70 range should be dropped if doing so improves composite reliability (Hair et al., 2016).

In addition, to evaluate the factorability, having a Kaiser-Meyer-Olkin (KMO) value of 0.5 and significant results from the Bartlett’s test of sphericity indicate that the sample is adequate and suitable for factor analysis.

Based on the indicators which remain in the model after the validity and reliability checks, Table 11 shows the output from SmartPLS showing the outer loadings for the indicators. All indicators exhibit a high outer loading value, with the lowest value being that shown by the indicator of perceived firm innovativeness measuring to what extent the customer perceived the bank as dynamic (*pfi_1a*=0.653). Further exploring the outer model by checking the t-statistics, Table 11 shows that all of the outer model loadings are highly significant (t-statistic ≥ 1.96). As such, we keep the following indicators in the model for subsequent evaluation of the structural model.

		Outer loading (t-statistic)
SATISFACTION	sat_1	0.776 (17.755)
	sat_2	0.724 (16.077)
	sat_3	0.774 (21.833)
	sat_4b	0.723 (16.445)
	sat_4d	0.709 (15.728)
	sat_4f	0.678 (11.209)
	sat_5	0.673 (17.135)
	sat_6	0.715 (17.152)
	sat_4g	0.740 (15.783)
INNOVATION	innov_1	0.824 (4.041)
	innov_2	0.742 (3.794)
LOYAL	loyal_1a	0.844 (28.704)
	loyal_1b	0.954 (145.790)
	loyal_1c	0.931 (97.966)
PFI	pfi_1a	0.653 (11.573)
	pfi_1b	0.790 (22.438)
	pfi_1c	0.853 (39.585)
	pfi_1d	0.816 (24.228)
	pfi_1e	0.885 (45.196)
	pfi_1f	0.858 (34.059)
	pfi_1g	0.886 (47.827)
PRA	pra_1b	0.799 (22.184)
	pra_1c	0.822 (27.562)
	pra_1d	0.884 (41.387)
	pra_2	0.825 (27.745)
REPUTAT	rep_1a	0.836 (20.919)
	rep_1b	0.878 (41.723)
	rep_1c	0.900 (55.307)
	rep_1d	0.833 (29.443)
	rep_1e	0.844 (32.490)

Table 11. Outer loadings and t-statistics

Customer satisfaction. Customer satisfaction provides an explained variance of 48.2%, with majority of the indicators showing satisfactory factor loadings with the exception of two that had factor loadings of slightly under 0.5 (Appendix 6, Table 1). The KMO value was 0.890 and Bartlett's test of Sphericity was found to be significant ($p < .000$). Thus, we conclude satisfactory inter-correlation exists among all factors. Additionally, the scale had been empirically validated by the NCSB framework, which has basis in research by Johnson et al. (2001).

Perceived firm innovativeness. Perceived firm innovativeness provides an explained variance of 68.1% with 5 of 7 indicators showing high factor loadings of more than 0.80 (Appendix 6, Table 2). Although one indicator showed a factor loading of below 0.50, we argue that the observed measures reflect perceived firm innovativeness in a fair manner as the scale has been empirically validated by Kunz et al. (2011). The KMO value was satisfactory at 0.895 and Bartlett's test of Sphericity was found to be significant ($p < .000$).

Perceived relative attractiveness. Perceived relative attractiveness with five indicators provides an explained variance of 61.1%, with all indicators showing satisfactory factor loadings with the exception of *pra_1a* that had a factor loading of slightly under 0.5 (Appendix 6, Table 3). The KMO value was satisfactory at 0.834 and Bartlett's test of Sphericity was found to be significant ($p < .000$).

Corporate reputation. All six indicators of corporate reputation showed satisfactory factor loadings with total explained variance of 61.4% (Appendix 6, Table 4). KMO value was satisfactory at 0.863 and the Bartlett's test of Sphericity was found to be significant ($p < .000$).

Customer loyalty. We found a low explained variance of 36.8% when all eight indicators were included, with four indicators associated with social media showing negative or very low factor scores (Appendix 6, Table 5). The low scores on factor loadings and explained variance suggest that observed social media measures do not explain customer loyalty well. Following this, we produced factor loadings and explained variance for the reduced customer loyalty scale by removing the four indicators and the remaining loadings became considerably improved with an explained variance of 69.7%. This adds an argument to use the reduced scale, which is based on that used by Parasuraman et al. (1996). The

KMO value was satisfactory at 0.726 and Bartlett's test of Sphericity was found to be significant (p <.000).

5.4.2. Validity and reliability

Convergent validity. An AVE value that is higher than 0.5 is generally viewed as acceptable (Bagozzi and Yi, 1988). Given that the AVEs scores for all latent variables are 0.5 or greater, convergent validity is hence established (Table 12).

	AVE
INNOVATION	0.614
SATISFACT	0.525
PFI	0.678
PRA	0.694
REPUTAT	0.737
LOYAL	0.830

Table 12. Convergent validity check

Discriminant validity. For discriminant validity to be established, Fornell and Larcker (1981) suggest that the square root of AVE of each latent variable should be greater than the correlations among the latent variables. Running the Fornell-Larcker Criterion Analysis for checking discriminant validity, we observe that the square root of AVE of each latent variable is greater than the correlations among the latent variables. For example, under *LOYAL*, the value 0.911 is larger than 0.053 (row) as well as 0.310, 0.682, 0.786 and 0.707 (column) (Table 13). The results indicate that discriminant validity is well established.

	INNOVATION	LOYAL	PFI	PRA	REPUTAT	SATISFACTION
INNOVATION	**0.784***					
LOYAL	0.053	**0.911***				
PFI	0.252	0.310	**0.824***			
PRA	0.132	0.682	0.486	**0.833***		
REPUTAT	0.045	0.786	0.267	0.640	**0.859***	
SATISFACTION	0.212	0.707	0.549	0.662	0.723	**0.724***

Table 13. Discriminant validity check

*(The numbers marked with the * indicate the square root of AVE of each latent variable)*

Indicator reliability. As the square of outer loadings fell below the value of 0.4, which is the minimum value for satisfying indicator reliability, some of the underlying indicators for perceived changes in innovation, customer satisfaction, perceived relative attractiveness, customer loyalty and corporate reputation were removed (Appendix 7, Table 1).

Firstly, for the construct perceived changes in innovation, the item measuring when the change was experienced was not significant and hence removed. For the customer satisfaction construct, we removed the indicators that measured the emotional feelings indifferent versus engaged, bored versus inspired and depressed versus excited, as these were reported not to be significant for the respondents in this context. For perceived relative attractiveness, the item measuring the comparison of price to competitors' prices was removed. In addition, the underlying customer loyalty indicators that were removed were related to the use of social media for interaction with the bank, as they were found to be not significant. The last indicators removed from corporate reputation concerned the support of good causes and environmental friendliness. The removed indicators did not fundamentally change the constructs, as most of the indicators were kept and all remaining indicators displayed a value of above 0.4. They were thus deemed acceptable and kept for checking the internal consistency reliability subsequently.

Consequently, the constructs comprised of a range of two to seven items (Table 14). Because the constructs' measurement properties are less restrictive with PLS-SEM, constructs with fewer items (e.g. one or two) can be used than those that CB-SEM requires (Hair et al., 2011).

Internal consistency reliability. To satisfy internal consistency reliability, Cronbach's alpha or composite reliability should be above 0.70 (Bagozzi and Yi, 1988; Hair et al., 2012). While the construct for perceived changes in innovation was observed to exhibit a low Cronbach's alpha of 0.375, composite reliability scores for all latent variables were greater than the required 0.7 (Table 14). Hence, all indicators were kept as the composite reliability scores demonstrated high levels of internal consistency.

	Observed Measures	No. of Items	Cronbach's Alpha	Composite Reliability
INNOVATION	*innov_1, innov_2*	2	0.375	0.761
SATISFACT	*sat_5, sat_6, sat_1, sat_2, sat_3, sat_4b, sat_4d, sat_4f, sat_4g*	9	0.890	0.908
PFI	*pfi_1a, pfi_1b, pfi_1c, pfi_1d, pfi_1e, pfi_1f, pfi_1g*	7	0.919	0.936
PRA	*pra_1b, pra_1c, prac_1d, pra_2*	4	0.853	0.901
REPUTAT	*rep_1a, rep_1b, rep_1c, rep_1d, rep_1e*	5	0.911	0.933
LOYAL	*loyal_1a, loyal_1b, loyal_1c*	3	0.897	0.936

Table 14. Internal consistency reliability check

5.5. Structural model evaluation

After the measurement fit was shown to be acceptable, we proceeded to examining the structural fit of the inner model. According to Henseler and Sarstedt (2013), PLS-SEM does not have a standard goodness-of-fit statistic and efforts to establishing a corresponding statistic have proven highly problematic. Instead, the assessment of the model's quality is based on its ability to predict the endogenous constructs. Specifically, the criteria that facilitate this assessment are the coefficient of determination (R^2), F^2, cross-validated redundancy (Q^2) and path coefficients (β). The output from the PLS-SEM are depicted in Figure 3 and Table 17.

5.5.1. Assessment of the R^2, F^2 and Q^2 values

According to Chin (1998), R^2 measures the relationship of a construct's explained variance to its total variance. As a rule of thumb, R^2 values of 0.75, 0.50 and 0.25 may be considered substantial, moderate and weak, respectively (Hair et al., 2011; Henseler et al, 2009; Wong, 2013).

In examining the endogenous constructs' predictive power, perceived relative attractiveness and customer loyalty have fairly substantial R^2 values of 0.516 and 0.673 respectively (Fig. 3). In other words, the latent variables perceived firm innovativeness and corporate reputation together explain 51.6% of the variance in perceived relative attractiveness, while the latent variables perceived relative attractiveness and corporate reputation together explain 67.3% of the variance in customer loyalty. This is a high degree of explanatory power, but there is also other factors playing in on explaining perceived relative attractiveness and customer loyalty respectively.

The prediction of perceived firm innovativeness was slightly weaker with R^2 of 0.342, indicating that customer satisfaction and corporate reputation together explain 34.2% of the variance in perceived firm innovativeness (Fig. 3). Perceived changes in innovation alone was observed to explain only 4.5% of the total variance in customer satisfaction (Fig. 3). The lower degree of explanatory power of perceived changes in innovation on customer satisfaction suggests that there are several other variables that play a prominent role in driving customer satisfaction that are unaccounted for in this model, in line with prior literature and empirical research on customer satisfaction.

In addition, we examined the model's F^2 effect size, which shows how much an exogenous latent variable contributes to an endogenous latent variable's R^2 value (Wong, 2013). As the effect sizes from the model estimation illustrates the strength of the relationship between the latent variables, it is important to report F^2 values in addition to significance in order to discuss the contribution of the study and its external validity (Wong, 2013).

According to Wong (2013), F^2 values of 0.02, 0.15, and 0.35 indicate low, moderate and high effect sizes. From Table 15, the F^2 effect sizes indicate that the effects of perceived changes in innovation on customer satisfaction (0.047) and corporate reputation on perceived firm innovativeness (0.061) to be of fairly low strengths, while the effects of perceived firm innovativeness on perceived relative attractiveness (0.220) as well as perceived relative attractiveness on customer loyalty (0.166) to be of moderate strength. Finally, the F^2 values reveal strong effects for customer satisfaction on perceived relative attractiveness (0.410), corporate reputation on perceived relative attractiveness (0.579) and highest of all, corporate reputation on customer loyalty (0.633). The findings emphasizes the importance of the influence of corporate reputation on perceived relative attractiveness and customer loyalty, as well as the importance of customer satisfaction on perceived relative attractiveness.

	F^2
INNOV -> SATISFACT	0.047
PFI -> PRA	0.220
PRA -> LOYAL	0.166
REPUTAT -> LOYAL	0.633
REPUTAT-> PFI	0.061
REPUTAT -> PRA	0.579
SATISFACT -> PFI	0.410

Table 15. The F^2 effect sizes between latent variables

Further, we examine the Stone-Geisser's Q^2 value (Stone, 1974; Geisser, 1974), which represents an evaluation criterion for the cross-validated predictive relevance of the inner model, calculated through a blindfolding procedure. The smaller the difference between predicted and original values, the greater the Q^2 and thus the model's predictive accuracy. As indicated by Chin (1998), a Q^2 value of greater than zero has predictive relevance. As a relative measure of predictive relevance, values of 0.02, 0.15, and 0.35 indicate that an exogenous construct has a small, medium or large predictive relevance for a selected endogenous construct. Table 16 reveals that the inner model overall has an acceptable degree of predictive relevance with regard to the endogenous factors.

	Q^2
INNOVATION	
LOYAL	0.521
PFI	0.227
PRA	0.393
REPUTAT	
SATISFACT	0.035

Table 16. Construct cross-validated redundancy

5.5.2. Path coefficients and path effects

The significance assessment builds on bootstrapping standard errors as a basis for calculating t-values for the path coefficients. The path coefficient value, β, indicates the strength of the relationship between constructs. To examine the relationship between two constructs, we check the path coefficients, algebraic sign, magnitude and significance to analyse how strong the effect of one variable is on another variable. The weight of different path coefficients enables us to rank their relative statistical importance (Wong, 2013).

Path coefficient values are standardised on a range from -1 to +1, with coefficients closer to +1 representing strong positive relationships and coefficients closer to -1 indicating strong negative relationships. The determination of whether the size of the coefficient is meaningful must be interpreted in light of the context of the research. Wong (2013) suggest that the path coefficients should exceed 0.200 to account for a certain impact within the model and be significant at least at the 5% significance level.

Results from the bootstrapping procedure (206 cases, 5000 samples, no sign changes) reveal that all seven structural relationships in our inner model, as proposed in our hypotheses, are significant ($p \leq 0.05$) (Table 17). Overall, we found support for 6 of our 7 hypotheses proposed, which we will elaborate upon in the subsequent section.

Endogenous Variable	**Paths**	**Direct Effect**	**Indirect Effect**	**Total Effect**	**t-statistic**	**P-value**
SATISFACTION ($R^2 = 0.045$)	**INNOVATION → SATISFACT**	**0.212***		0.212*	2.690	0.009
PFI ($R^2 = 0.342$	**SATISFACT → PFI**	**0.765***		0.765*	9.813	0.000
	INNOVATION → PFI		0.162*	0.162*	2.488	
	REPUTAT → PFI	**-0.295***		-0.295*	3.162	0.002
PRA) ($R^2 = 0.516$)	**PFI → PRA**	**0.339***		0.339*	6.219	0.000
	INNOVATION → PRA		0.055*	0.055*	2.103	
	REPUTAT → PRA	**0.549***	-0.100*	0.450*	11.845	0.000
	SATISFACT → PRA		0.259*	0.259*	5.164	
LOYAL ($R^2 = 0.673$)	**REPUTAT → LOYAL**	**0.592***	0.136*	0.729*	13.639	0.000
	INNOVATION → LOYAL		0.017	0.017	1.937	
	PFI → LOYAL		0.103*	0.103*	4.315	
	PRA → LOYAL	**0.303***		0.303*	6.583	0.000
	SATISFACT → LOYAL		0.079*	0.079*	3.807	

Table 17. PLS-SEM: Inner model path coefficient sizes and significance
(*significant at the 5% level)

H1 is supported. The inner model suggests that perceived changes in innovation have a significant (p-value=0.009) positive direct effect of (β=0.212) on customer satisfaction and a t-statistic of 2.690, indicating a moderate strength of the effect of perceived changes in innovation on customer satisfaction (Table 17).

H2 is supported. Customer satisfaction has a significant (p-value=0.000) positive direct effect of (β=0.765) on perceived firm innovativeness and a t-statistic of 9.813. This indicates a strong effect as β (β=0.765) is high. This suggests that it is crucial to achieve good customer satisfaction for a firm to have an innovative image perceived by its customers through its innovation efforts.

H3 is supported. Perceived firm innovativeness has a significant (p-value=0.000) positive direct effect of (β=0.339) on perceived relative attractiveness of moderate magnitude. The higher a firm is perceived as innovative by consumers, the more attractive it is relatively to its competitors.

However, H4 is not supported. Instead of a positive effect, corporate reputation has a significant (p-value=0.002) negative direct effect of (β=-0.295) and a t-statistic of 3.162 on perceived firm innovativeness. A stronger corporate reputation appears to be negatively related to how innovative a firm is perceived by its customers.

H5 is supported. Corporate reputation has a significant (p-value=0.000) positive direct effect of (β=0.549) and a t-statistic of 11.845 on perceived relative attractiveness. The positive effect of corporate reputation on the perceived relative attractiveness of a firm is fairly strong.

H6 is supported. Corporate reputation has a significant (p-value=0.000) positive direct effect of (β=0.592) and a t-statistic of 13.639 on customer loyalty. Similar to the case of H5, the positive effect of corporate reputation on customer loyalty is fairly strong.

Finally, H7 is supported. Perceived relative attractiveness has a significant (p-value=0.000) positive direct effect of (β=0.303) and a t-statistic of 6.583 on customer loyalty. The higher the perceived relative attractiveness of the firm, the higher the loyalty from its customers enjoyed by the firm.

Overall, the results highlight the important role of corporate reputation in directly driving perceived relative attractiveness and customer loyalty with relatively strong path coefficients β of 0.549 and 0.592 respectively, with corporate reputation having a marginally stronger direct effect on customer loyalty. While the magnitude of the effect is comparably smaller, interestingly, corporate reputation has a direct negative significant effect on perceived firm innovativeness as represented by a path coefficient of -0.295.

In considering the indirect effects, a perceived change in innovation is seen to have an indirect positive, albeit fairly small, effect on perceived firm innovativeness (0.162), perceived relative attractiveness (0.055) and customer loyalty (0.017). In terms of the links associated with corporate reputation, the total effect of corporate reputation on perceived relative attractiveness is diminished through the mediator perceived firm innovativeness (-0.100), while the total effect of corporate reputation on customer loyalty is enhanced through the indirect effects of all other latent variables, ie. a perceived change in innovation, perceived firm innovativeness, perceived relative attractiveness and customer satisfaction (Table 17).

5.6. Main findings summarised

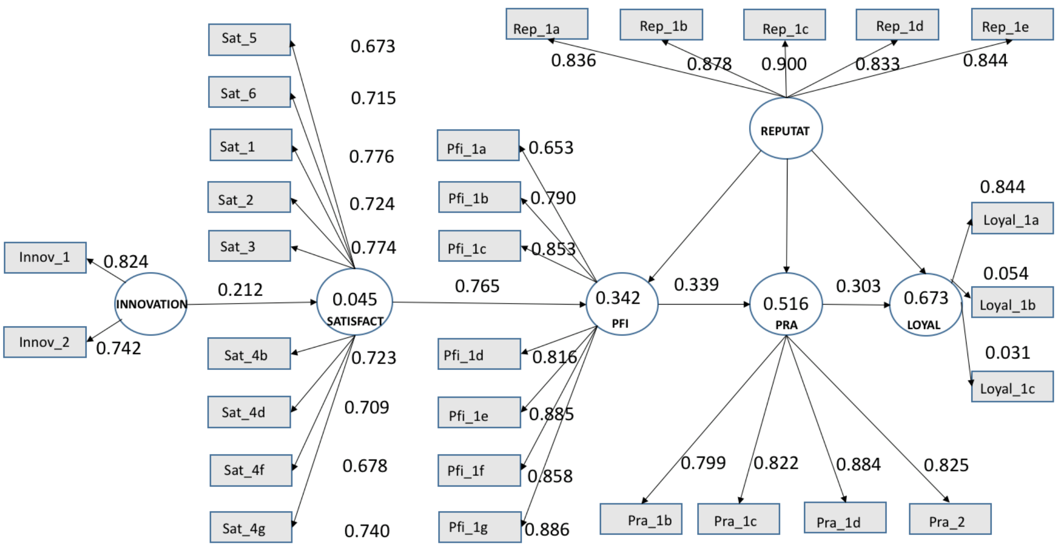

Figure 3. Empirical model

Summarising the results in the table below, the results indicate that six of the seven hypotheses proposed are supported, as seen in Figure 3.

Hypothesis	Result
H1: Perceived changes in innovation have a positive effect on customer satisfaction.	**Supported**
H2: Customer satisfaction has a positive effect on perceived firm innovativeness.	**Supported**
H3: Perceived firm innovativeness has a positive effect on perceived relative attractiveness of the company.	**Supported**
H4: Corporate reputation has a positive effect on perceived firm innovativeness.	**Not supported**
H5: Corporate reputation has a positive effect on perceived relative attractiveness.	**Supported**
H6: Corporate reputation has a positive effect on customer loyalty.	**Supported**
H7: Perceived relative attractiveness has a positive effect on customer loyalty.	**Supported**

Table 18. Summary of findings

6. Discussion

As discussed at the beginning of this study, corporate reputation, seen as one of the most critical assets of an organisation, has been growing in importance over the last decades, accounting for a considerably greater proportion of an organisation's total value than before (Linssen, 2010). CEOs are also consistently ranking corporate reputation as the most important key intangible resource (Hall, 1993), underscoring the importance of corporate reputation. On a parallel track, but of comparable significance, innovation has similarly been another major focus area for CEOs, with innovation research in the marketing literature receiving increasing attention over time (Narver and Slater, 1990; Slater and Narver, 1995; Gleim, Lawson and Robinson, 2015). While the financial impact of having a strong corporate reputation and of innovation have been well documented in the literature, research on the linkages between innovation and corporate reputation has been very limited. On top of that, most existing measures or rankings of innovation adopt methodologies on the national or firm level, determined solely by industry insiders or executive opinion and fail to take into account consumers' perceptions in their calculations, when it is consumers and not firms that are the best judges of the value created by innovation (Andreassen et al., 2017).

With the objective of addressing these gaps in the literature, our study aimed to answer the research question investigating the effects of corporate reputation on perceived firm innovativeness, perceived relative attractiveness and customer loyalty. This study drew inspiration from the previous work by Andreassen et al. (2017) on the development of the NII model to measure innovation based on the consumer's perspective, and expanded it by incorporating an additional independent variable, corporate reputation. Our conceptual model was used to investigate the importance of corporate reputation within this innovation framework, and specifically, how corporate reputation affects perceived firm innovativeness, perceived relative attractiveness and customer loyalty. Concurrently, we examined and verified the relationships involving other variables within the model, namely perceived changes in innovation and customer satisfaction, customer satisfaction and perceived firm innovativeness, perceived firm innovativeness and perceived relative attractiveness, as well as perceived relative attractiveness and customer loyalty.

In doing so, this study makes an important contribution to the existing literature on corporate reputation and innovation and fills the gap by providing insight into the relationship between corporate reputation and perceived firm innovativeness, and presents the interesting finding of a significant negative relationship between the two variables. At the same time, the other six hypothesised relationships between the other variables were also supported and validated, confirming the significant positive relationships between perceived changes in innovation and customer satisfaction, customer satisfaction and perceived firm innovativeness, perceived firm innovativeness and perceived relative attractiveness, as well as perceived relative attractiveness and customer loyalty. These findings serve to contribute to the theoretical literature by building upon a theoretically-rooted methodology that allows managers to measure and track customers' perceptions of a company's ability to innovate over time, reinforcing the existing NII framework by Andreassen et al. (2016) and Andreassen et al. (2017). We will further discuss these findings in this section.

Corporate reputation and its effect on perceived firm innovativeness, perceived relative attractiveness and customer loyalty

This study uncovered some interesting insights into the influence that our variable of interest, corporate reputation, has on perceived firm innovativeness, perceived relative attractiveness and customer loyalty. Firstly, our findings confirmed that corporate reputation has a statistically significant positive effect on both perceived relative attractiveness of the firm and customer loyalty. Thus, we found support for H5 and H6. In considering only the direct effects, corporate reputation appeared to have a marginally stronger effect on customer loyalty relative to perceived relative attractiveness, of which both are of moderate magnitudes.

In other words, when customers perceive a bank as having a strong corporate reputation - which could be driven by it being perceived as treating its customers fairly, being more concerned about customer needs, having high quality products or services, being a strong and reliably company, supporting good causes or being environmentally responsible - the more attractive it is viewed by consumers relative to competitor banks, whereby aspects such as the quality of products/services are also seen more favourably by consumers. As Simonson and Tversky (1992) suggest, consumers use decision heuristics that are relational and perceptual in nature, which emphasize the ratings of a given option relative to other alternatives. When uncertain about their preferences and indecisive while screening similar alternatives, the presence of an alternative which offers a decisive advantage over another may be chosen as a tiebreaker (Simonson and Tversky, 1992). Consequently, within their consideration set, consumers may be more inclined to select products or services from a retail bank with highest perceived relative attractiveness, which is driven by a strong corporate reputation.

In addition, the findings suggest that the more positive a bank's corporate reputation is, the more loyal its customers. When customers perceive a bank as having a strong corporate reputation, driven by the factors mentioned above, they are more likely to continue as a customer of their current bank, recommend their bank and talk positively about their bank to others. Our findings support what the literature suggests about how a good corporate reputation can reinforce customers' trust in the corporate and product, which is a prerequisite to building customer relationships and to the development of customers' commitment and long-term desire to maintain a valuable ongoing relationship with their bank (Garbarino and Johnson, 1999; Moorman, Zaltman, and Deshpande, 1992; Morgan and Hunt, 1994). Moreover, customer trust, that is reinforced by a good corporate reputation, leads to customers having positive identification with their bank, which makes them more likely to spread positive word-of-mouth about their bank. This is in line with the findings in the literature, such as Keh and Xie (2009) and Bhattacharya and Sen (2003).

On the contrary, H4 was not supported as our findings revealed that while found to be significant, the relationship between corporate reputation and perceived firm innovativeness was a negative one. This suggests that the stronger the corporate reputation of the bank, the lower the perceived firm innovativeness by Norwegian consumers - there is a higher tendency for consumers not to perceive their bank as dynamic, creative, a pioneer, advanced and forward-looking, or one that constantly generates new ideas, launches new products and creates market trends.

One plausible explanation for this surprising finding is that the consumer view of traditional or incumbent retail banks as being reliable, trustworthy and secure - key dimensions of a strong reputation - appears to be paradoxical to the image that one might have of innovativeness in financial services, which most consumers tend to associate with new financial technology entrants, also known as FinTech firms; while FinTech startups are usually seen as innovative and associated with mobile functionality, simplicity, big data, accessibility, agility, cloud computing, contextuality, personalization and convenience, most traditional banks have few of these qualities, but are instead are associated with trust and security, significant capitalisation and customer indifference (Brear, 2015). Larson, Goldsmith and Allen (2013) contend that consumers associate innovativeness with a higher level of functional risk which is inversely correlated to trust, an indispensable part of a strong corporate reputation (Young, 1997). Furthermore, a World Fintech Report by Capgemini revealed a significant trust gap, between financial brands and FinTech companies, where incumbent financial institutions have a clear advantage over FinTech companies in safety (fraud protection), reliability, and transparency, but are tackling the problem of staying innovative in the eyes of their customers (Grazel, 2016). As such, banks that have a strong corporate reputation and that are trusted by consumers appear to also be perceived as less innovative by them.

Having said this, we highlight that the variables corporate reputation and customer satisfaction together only explain 34.2% of the variance in perceived firm innovativeness, which suggests that there are other variables variance remained unexplained and are due to factors not included in the study.

Perceived changes in innovation and its effect on customer satisfaction

The proposed hypothesis that perceived changes in innovation have a positive effect on customer satisfaction was supported (H1). When customers perceive a change related to the four areas of innovation (changes in the core service, changes in the service delivery, changes in customer relations and changes in the servicescape), it influences them to feel more satisfied with their bank and its products and/or services, perceive their bank as closer to their ideal, have their expectations better met by their bank and/or feel positive affect for their bank.

Our findings support the literature which suggest that experiencing an innovation may be a function of gained benefits and may be captured through cognitive assessments of net benefits that lead to customer satisfaction or be potentially emotion generating, independent of net benefits, or both (Wood and Moreau, 2006).

In this study, we observed from the survey that apps and online banking services were reported as the most commonly perceived areas of innovation/change, which appear to be in line with the digital transformation that the retail banking sector is undergoing currently (Dupas, Grebe, De T'Serclaes, Vasy, and Walsh, 2017).

Customer satisfaction and its effect on perceived firm innovativeness

Our findings found support for H2, showing that customer satisfaction has a significant positive effect on perceived firm innovativeness. In other words, when customers feel satisfied with their bank and its products and/or services, perceive their bank close to their ideal, have their expectations well met by their bank or feel positive affect for their bank, they also tend to perceive their bank as a pioneer, as more dynamic, creative, advanced and forward-looking, or more likely to launch new products, create market trends and generate new ideas all the time.

Our findings appear to agree with Atuahene-Gima (1996) who suggests that when new products/services meet customer expectations and satisfy particular customer requirements effectively, the perception of new product performance increases and as such, customer satisfaction, which results from meeting or exceeding customers' expectations, results in a positive evaluation and perception of firm innovativeness. In addition, Kunz et al.'s (2011) defined perceived firm innovativeness as the consumer's perception of an enduring firm capability that results in novel, creative, and impactful ideas and solutions for the market, and all aspects of perceived firm innovativeness are deemed necessary; this suggests that only by providing a solution that meets customer expectations and creates customer satisfaction, may a firm enjoy a positive evaluation and be perceived as innovative in developing products or services. In addition, our results contribute to the literature by expanding upon the findings of Andreassen et al. (2017) who found that customer emotions positively affect perceived firm innovativeness, by demonstrating that customer satisfaction, which comprises of both emotional and cognitive dimensions, has a positive effect on perceived firm innovativeness.

Perceived firm innovativeness and its effect on perceived relative attractiveness of the company

Perceived firm innovativeness was found to have a positive effect on the perceived relative attractiveness of the company, supporting H3. This implies that the more consumers view a bank as being a pioneer, as dynamic, creative, advanced and forward-looking, or more likely to launch new products, create market trends and generate new ideas all the time, the more attractive the bank is perceived relative to its competitors, also influencing their perception on aspects such as quality or value versus other real alternatives.

When a firm succeeds on being perceived as innovative, customers perceive them as being open to new ideas, willing to change and more likely to develop new solutions, which affects relative attractiveness positively (Zaltman et al., 1973; Hult et al., 2004). This implies that companies should not only innovate, but more importantly ensure that they are actually perceived as innovative by consumers through their innovations, in order for them to be more positively evaluated by consumers in comparison with real competitors and achieve a competitive advantage (Andreassen and Lervik, 1999; Andreassen and Olsen, 2008). Being perceived as relatively more attractive is valuable, as it is a key driver of repurchase intention (Andreassen and Lervik, 1999).

Our findings are in line with the literature, for example Hernard and Dacin (2010), who suggest that a consistent history of product innovations augmented by high perceived firm innovativeness will likely result in a scenario where consumers are excited or even inspired by the firm, are motivated to seek out new products from the innovative firm, and have a positive predisposition toward it.

Perceived relative attractiveness and its effect on customer loyalty

Last but not least, our findings demonstrated that perceived relative attractiveness has a positive effect on customer loyalty and found support for H7. The more attractive a bank is perceived in relation to other banks in the market, the more likely is a customer inclined to continue as a customer of their current bank, recommend their bank or talk positively about it to others. This reinforces the findings by Andreassen and Lervik (1999) who found that perceived relative attractiveness today, which captures accumulated and transaction satisfaction that is both absolute and in relation to other real alternatives, is a key driver of future purchase intention. In addition, this supports what Zeithaml, Berry and Parasuraman (1996) propose in that when customers express preference for a company over others, not only are they indicating behaviourally that they are bonding with the company, but that is also a manifestation of their loyalty.

Perceived relativeness attractiveness and corporate reputation together explain 67.3% of the variance in customer loyalty, underscoring the importance of taking both variables into account in order to establish the loyalty of customers.

7. Managerial implications

In pursuit of growing and running a business that is viewed as innovative by consumers, managers of retail banks must be knowledgeable about what specific areas to focus on and build upon, in order to achieve the desired perception of innovativeness amongst consumers. The conceptual model and findings from this study provides managerial and strategic implications for retail banks that will allow them to allocate limited resources more effectively.

Firstly, the negative relationship between corporate reputation and perceived firm innovativeness implies that managers of retail banks possessing a strong reputation in the marketplace face the challenge of consumers perceiving their bank as being low in innovativeness. As such, when introducing or implementing actual innovations in the marketplace, managers can attempt to overcompensate for the existing low perception in firm innovativeness by investing more resources in marketing, advertising and general publicity in order to raise consumer awareness and draw more attention to these specific innovation efforts. For example, DNB's retail bank, which boasts a very strong reputation amongst consumers and maintains a dominant position in the provision of current accounts, savings accounts, and mortgages (GlobalData, 2016), succeeded in raising its perceived firm innovativeness amongst consumers when launching Vipps, a person-to-person mobile payment app in Norway by supporting it with record-breaking marketing spend and creative advertising, even transforming the name of the app into a widely used 'verb' in Norway (Nyman, 2016).

Next, the positive relationship between corporate reputation and perceived relative attractiveness as well as customer loyalty implies that managers of banks possessing strong corporate reputations can leverage upon this strong intangible asset to increase market share and profitability via two channels. Firstly, managers should invest resources to attract and acquire new customers who are not already customers of the bank but perceive it as being relatively more attractive than other competitors, since they are highly inclined to buy products or services from a retail bank with highest perceived relative attractiveness. As Simonson and Tversky (1992) suggest, when uncertain about their preferences and indecisive while screening similar alternatives, the presence of an alternative which offers a decisive advantage over another may be chosen as a tiebreaker. It is thus crucial for managers to identify and target these specific consumers, for example through surveys or focus groups. Secondly, managers of banks with strong corporate reputations can focus on retaining existing customers and cross-selling or upselling relevant new products or services to them, based on our findings that it is customers who trust their bank and perceive them as having a strong corporate reputation who will be more loyal, which could mean driving the most referrals and being more willing to consolidate their banking needs with a single financial services provider over the long term. Managers should thus adopt appropriate strategies focused on retaining and growing the share of wallet of existing customers, who perceive their bank as having a strong reputation. After all, loyal customers tend to be less price sensitive and are cheaper to maintain (Galbreath, 2002). Furthermore, since consumers that perceive a bank as relatively more attractive than other banks also tend to be more loyal customers, banks that actually succeed in acquiring these particular group of people as new customers are likely to also enjoy the added advantage of them being more loyal customers in the future.

In addition, the results of this study provide bank managers with the knowledge that improving the perceived innovativeness of the firm by consumers requires creating innovations that elicit customer satisfaction. Managers should adopt the mindset of innovating to satisfy customers' needs and address their pain points, rather than innovating so as not to fall behind the competition. Allocating a firm's scarce resources to the right innovations is crucial in order to generate the desired outcome in improving perceived firm innovativeness. In order to identify what innovations customers may derive most satisfaction from, retail banks should reach out to customers and obtain candid assessments of their performance and what customers' pain points are. Such initiatives can include interviews and focus groups, workshops conducted on a regular basis, and quantitative approaches to track the sensitivity and satisfaction of customers and collect “voice of customer” data. In addition, banks can deploy real-time analytics that integrate data from online and offline channels to provide a unified view of the customer in order to collect data to come up with personalised innovations that generate higher customer satisfaction and in turn increase perceived firm innovativeness.

The positive relationship between perceived firm innovativeness and perceived relative attractiveness also provides managers with the knowledge that consumers’ appraisals of how innovative a firm is are important for it to be viewed as more attractive than competitor banks. When deploying innovations, managers should leverage upon the positive predisposition of consumers towards innovations and continuously communicate changes and developments to them, in order to get customers excited and raise their perceptions of firm innovativeness and consequently perceived relative attractiveness over time.

Overall, the findings underscore the importance of having a strong corporate reputation. The key insight that managers should draw from this study is that investing resources to build up and maintain a strong corporate reputation over time is absolutely essential, particularly amidst a backdrop of increasing competition from new financial services providers that are competing for the same customers. Ultimately, it is this idea of trust, associated with a strong corporate reputation, that is what transforms customers from static sources of revenue into advocates and growth engines of the bank.

8. Limitations and future research

8.1. Limitations

There are several limitations inherent in this study which must be taken into account. The first concerns the chosen context of our study. As we surveyed only consumers of the Norwegian retail banking sector, these findings may not necessarily be generalisable to the banking sectors of other countries as consumers’ perceptions are subjective and may differ due to moderating variables such as culture. In addition, one may point out that using only data relating to the retail banking industry implies that these findings may not be applicable to other industries, for example manufacturing firms which have very different industry characteristics from services firms. Despite this, we argue that there is a possibility of extending our findings to industries that share similar industry characteristics, developments and a customer base as banks, such as the insurance industry.

In addition, our research design adopts a cross-sectional approach. While it offers an inexpensive, quick and relatively easy way of evaluating the relationships between many different variables at the same time and is typically used for examining consumer attitudes or preferences, and is hence suitable for our study, it is unable to capture changes in observed variables over time. For instance, corporate reputation as defined in the literature review is a stakeholder's overall evaluation of a company over time (Gray and Balmer, 1998); as such using a cross-sectional research design would not capture any potential lagged effects. For the purposes of this master thesis, however, collecting data across time for a longitudinal study would have required considerable time and resources, which would have been challenging given time and resource constraints.

Further, the constructs measured in our survey reflect behavioural intention, rather than actual behaviour. While useful, research has shown that intention is not a reliable indicator of actual future behaviour taken by the consumer (Sheppard, Hartwick and Warshaw, 1988). As we utilised a self-reporting method, the results may also risk suffering from social desirability bias, the tendency of research subjects to give socially desirable responses instead of choosing responses that are reflective of their true feelings (Grimm, 2010; Van de Mortel, 2008).

In terms of the method of sampling used, we used convenience and snowballing sampling methods that relied on our network of personal contacts and used Facebook as the dominant channel of distribution and recruitment of respondents, as this enabled us to achieve the sample size we wanted in a relatively fast and inexpensive way. A shortcoming is that the Facebook population is not perfectly representative as its users tend to be younger, better educated, and some groups might be entirely excluded (e.g. people without Internet access) (Kosinski, Matz, Gosling, Popov and Stillwell, 2015), which could potentially lead to undercoverage. However, we argue that the sheer size of Facebook's population implies that even the underrepresented populations are relatively large. Secondly, snowball sampling methods do not meet the gold standard of randomised sampling as the method can introduce biases (Kurant, Markopoulou and Thiran, 2011), and the first participants tend to disproportionately affect the composition of the sample as people tend to interact with others similar to themselves (McPherson, Smith-Lovin and Cook, 2001). However we argue that the approach of asking elderly participants to recommend friends to participate in our survey was useful in helping us gain access this older group of people that we found challenging to recruit, which increased their representation and resulted in a more balanced distribution of all age groups in our final sample.

8.2. Future research

To further strengthen the generalisability of our findings, we suggest using a simple random sampling method in order to obtain a larger and more representative sample of the population, through engaging a third party professional marketing bureau to carry out the data collection. As such we can address generalisability across different segments of the population, to many age, educational and socio-economic groups within the population. Including subjects from different age groups, sexes, races and socioeconomic or education statuses increases the representativeness of the sample and increases prospects for generalisation (Mutz, 2011).

As the formation of corporate reputation is driven by a dynamic process influenced by experience and external stimuli over time, identifying any time lag is interesting. The time aspect is also interesting for other variables such as perceived firm innovativeness. Future research should further elucidate the nature of perceived firm innovativeness and investigate how stable perceived firm innovativeness is over time, as Brown and Dacin (1997) suggest that firm characteristics and behaviours must be stable over time in order to build up a consistent image of firm innovativeness. Given more time to conduct the research, we suggest adopting a longitudinal study that tracks actual behaviour over a time period, which would not only allow us to study any dynamic effects but also enable us to avoid the biases related to self-reporting methods (e.g. a survey that measures intended behaviour). After all, research has shown that actual behaviour by the consumer has stronger reliability than intended behaviour (Sheppard et al., 1988).

This study could be replicated by focusing on other sectors outside of the banking industry, in particular those with very different characteristics such as manufacturing firms, in order to help us understand potential differences across industries and confirm the generalisability of the findings. In addition, extending the research to include other countries would increase the external validity of the study and allow us to compare our findings across different cultural contexts. It could also be interesting to investigate any potential moderating effects of other variables such as consumer characteristics or demographics. One suggestion is to investigate how different segments as categorised by consumers' life stages may affect perceived firm innovativeness. By comparing respondents' data across countries, cultures or demographics, managers may gain further insight into the differences in perceptions of relative attractiveness and firm innovativeness, as well as relationships between the other variables.

In addition, further research on the operationalised constructs is recommended. One proposal is to operationalise perceived changes in innovation to encompass the dimensions of radical and incremental changes, or alternatively, incorporate two separate variables that differentiate between incremental and radical innovations. In doing so, managers can gain insight into how perceived firm innovativeness may be affected by each type of innovation and consequently derive valuable managerial or strategic implications.

By identifying other potential factors or variables that may affect perceived firm innovativeness and incorporating them into an expanded NII model, this would allow the derivation of the optimal model. Consequently, managers would be able to obtain a more detailed picture of how to both measure and rank perceived firm innovativeness, thereby increasing the relevance of the model.

References

Aaker, D. A. (1991). Managing brand equity. *Capitalizing on the value of a brand name.*

Aaker, D. A. (2004). Leveraging the corporate brand. *California management review*, *46*(3), 6-18.

Alsop, R. J. (2004). The 18 immutable laws of corporate reputation. Dow Jones and Company, 17-18.

Amabile, T. M. (1988). A model of creativity and innovation in organisations. *Research in organisational behaviour*, *10*(1), 123-167.

Amit, R., and Schoemaker, P. J. (1993). Strategic assets and organisational rent. *Strategic management journa*l, 14(1), 33-46.

Amores-Salvadó, J., Martín-de Castro, G., and Navas-López, J. E. (2014). Green corporate image: moderating the connection between environmental product innovation and firm performance. *Journal of Cleaner Production, 83*, 356-365.

Anderson, R. E. (1973). Consumer dissatisfaction: The effect of disconfirmed expectancy on perceived product performance. *Journal of marketing research,* 38-44.

Anderson, R. E., and Srinivasan, S. S. (2003). E-satisfaction and e-loyalty: A contingency framework. *Psychology and marketing*, 20(2), 123-138.

Anderson, E. W., and Sullivan, M. W. (1993). The antecedents and consequences of customer satisfaction for firms. *Marketing science*, *12*(2), 125-143.

Anderson, E. W., and Fornell, C. (1994). A customer satisfaction research prospectus. *Service quality: New directions in theory and practice*, *14*(1), 239-266.

Andreassen, T. W. (1994). Satisfaction, loyalty and reputation as indicators of customer orientation in the public sector. *International Journal of Public Sector Management*, *7*(2), 16-34.

Andreassen, T. W., and Lindestad, B. (1998). Customer loyalty and complex services: The impact of corporate image on quality, customer satisfaction and loyalty for customers with varying degrees of service expertise. *International Journal of service Industry management*, *9(1),* 7-23.

Andreassen, T. W., and Lindestad, B. (1998). The effect of corporate image in the formation of customer loyalty. *Journal of Service Research*, *1(1)*, 82-92.

Andreassen, T.W., and Lindestad, B. (1998). Customer loyalty and complex services: The impact of corporate image on quality, customer satisfaction and loyalty for customers with varying degrees of service expertise. *International* *journal of service industry management*, *9*(1), 7-23.

Andreassen, T. W., and Lervik-Olsen, L. (1999). Perceived relative attractiveness today and tomorrow as predictors of future repurchase intention. *Journal of Service Research, 2(2)*, 164-172.

Andreassen, T.W. and Lervik-Olsen, L. (2008). The impact of customers' perception of varying degrees of customer service on commitment and perceived relative attractiveness. *Managing Service Quality, 18 (4)*, 309 – 328.

Andreassen, TW and Lervik-Olsen, L. (2016). *Service and innovation. 2nd ed. Bergen: Fagbokforlaget.*

Andreassen, T. W., Lervik-Olsen, L., and Calabretta, G. (2015). Trend spotting and service innovation. *Journal of Service Theory and Practice,* 25(1), 10-30.

Andreassen, T. W., Kurtmollaiev, S., and Lervik-Olsen, L. (2016). Innovasjonsevne i norske bedrifter: Magma - Tidsskrift for økonomi og ledelse, 2016 (07) 24-32.

Andreassen, T. W., Kurtmollaiev, S., and Lervik-Olsen, L. (2017). Revolutionizing innovation rankings: the NHH approach. *NHH*, Centre for Service Innovation. Retrieved from www.nhh.no/en/research-centres/csi/csi-news-and-blogs/2017/revolutionizing-innovation-rankings-the-nhh-approach/.

Andreassen, T. W., Kurtmollaiev, S., and Lervik-Olsen, L. (2017). Norsk Innovasjonsindeks. *NHH*, Centre for Service Innovation. Retrieved from https://www.nhh.no/norsk-innovasjonsindeks/.

Andreassen, T. W., Kurtmollaiev, S., and Lervik-Olsen, L. (2017). Om NII. *NHH*, Centre for Service Innovation. Retrieved from https://www.nhh.no/norsk-innovasjonsindeks/om-nii/.

Athanassopoulos, A., Gounaris, S., and Stathakopoulos, V. (2001). Behavioural responses to customer satisfaction: an empirical study. European journal of *marketing, 35(5/6)*, 687-707.

Atuahene-Gima, K. (1996). Market orientation and innovation. *Journal of business research*, *35*(2), 93-103.

Bagozzi, R. P., and Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, *16*(1), 74-94.

Balmer, J.M.T. (1995a). Corporate identity: the power and the paradox. *Design Management Journal, Winter,* pp. 39-44.

Balmer, J.M.T. (1995b). Corporate branding and connoisseurship. *Journal of General Management, Vol. 21 No. 1,* Autumn, pp. 22-46.

Baregheh, A., Rowley, J., and Sambrook, S. (2009). Towards a multidisciplinary definition of innovation. *Management decision*, *47*(8), 1323-1339.

Barich, H., and Kotler, P. (1991). A framework for marketing image management. *MIT Sloan Management Review,* 32(2), 94.

Barnes, J., Cote, J., Cudeck, R., and Malthouse, E. (2001). Checking assumptions of normality before conducting factor analyses. *Journal of Consumer Psychology*, *10*(1/2), 79-81.

Barroso, C., Carrión, G. C., and Roldán, J. L. (2010). Applying maximum likelihood and PLS on different sample sizes: studies on SERVQUAL model and employee behaviour model. *Handbook of partial least squares*, 427-447.

Bernhardt, K. L., Donthu, N., and Kennett, P. A. (2000). A longitudinal analysis of satisfaction and profitability. *Journal of business research*, *47*(2), 161-171.

Bentler, P. M., and Chou, C. P. (1987). Practical issues in structural modeling. *Sociological Methods and Research*, *16*(1), 78-117.

Bettencourt, L. (2010). Service innovation: How to go from customer needs to breakthrough services. *McGraw Hill Professional.*

Bhattacharya, C. B., and Sen, S. (2003). Consumer-company identification: A framework for understanding consumers' relationships with companies. *Journal of marketing*, 67(2), 76-88.

Bhattacharya, C. B., and Sen, S. (2003). Consumer-company identification: A framework for understanding consumers' relationships with companies. Journal of marketing, 67(2), 76-88.

Bettman, J. R., Luce, M. F., and Payne, J. W. (1998). Constructive consumer choice processes. *Journal of consumer research,* 25(3), 187-217.

Bitner, M. (1992). Servicescapes: the impact of physical surroundings on customers and employees. *Journal of Marketing, 56(2),* 57-71.

Bolstad, S., Lie, E. (2014). Norway more innovative than previous surveys suggest. Retrieved January 13, 2017, from http://www.forskningsradet.no/en/Newsarticle/Norway_more_innovative_than_previous_surveys_suggest/1253997022614

Bontis, N., Booker, L. D., and Serenko, A. (2007). The mediating effect of organisational reputation on customer loyalty and service recommendation in the banking industry. *Management decision*, *45*(9), 1426-1445.

Boulding, W., Kalra, A., Staelin, R., and Zeithaml, V. A. (1993). A dynamic process model of service quality: from expectations to behavioural intentions. *Journal of marketing research*, 30(1), 7.

Brear, D. (2015). What Differentiates Banking and Fintech? Retrieved June 29, 2017, from https://thefinancialbrand.com/53102/banks-fintech-start-up-comparison/

Brody, R. P., and Cunningham, S. M. (1968). Personality variables and the consumer decision process. Journal of Marketing Research.

Bromley, D. B. (2001). Relationships between personal and corporate reputation. *European journal of marketing*, *35*(3/4), 316-334.

Brown, G. H. (1952). Brand loyalty—Fact or fiction? Advertising Age, 23(June 9), 53–55.

Brown, M., and Turner, P. (2011). Innovation and Corporate Reputation: Britain's Most Admired Company. *Technological, Managerial and Organizational Core Competencies: Dynamic Innovation and Sustainable Development: Dynamic Innovation and Sustainable Development*, 264.

Brown, T. J., and Dacin, P. A. (1997). The company and the product: Corporate associations and consumer product responses. *The Journal of Marketing*, 68-84.

Brønn, Peggy S. (2005). When it Comes to Image, It's Identity That Matters. *Magma - Tidsskrift for økonomi og ledelse 2005 ;Volume 8.(1)* p. 20-28 BI

Byrne, B. M. (2000). Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming. *Lawrence Erlbaum Associates.*

Cainelli, G., Evangelista, R., and Savona, M. (2004). The impact of innovation on economic performance in services. *The Service Industries Journal,* 24(1), 116-130.

Cantor, N., and Mischel, W. (1979). Prototypes in person perception. *Advances in experimental social psychology*, 12, 3-52.

Carbone, L. P. (2004). Clued in. *FT Prentice Hall, New Jersey*.

Carlson, R. O. (1963). The nature of corporate images. *The Corporation and Its Publics*, 24-47.

Carmines, E. G., and Zeller, R. A. (1979). *Reliability and validity assessment* (Vol. 17). Sage publications.

Carpenter, G. S., and Nakamoto, K. (1989). Consumer preference formation and pioneering advantage. *Journal of Marketing research*, 285-298.

Casson, M., and Della Giusta, M. (2006). 19 The economics of trust. *Handbook of trust research,* 332.

Chaiken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of personality and social psychology*, *39*(5), 752.

Chaudhuri, A., and Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty. *Journal of marketing*, *65*(2), 81-93.

Check, J., and Schutt, R. K. (2011). *Research methods in education*. Sage Publications.

Chen, J. S., Tsou, H. T., and Huang, A. Y. H. (2009). Service delivery innovation: Antecedents and impact on firm performance. *Journal of Service Research*, *12*(1), 36-55.

Chin, W. W. (1998). Commentary: Issues and opinion on structural equation modeling.

Christensen, C. M., Anthony, S. D., Berstell, G., and Nitterhouse, D. (2007). Finding the right job for your product. *MIT Sloan Management Review*, *48*(3), 38.

Chun, R. (2005). Corporate reputation: Meaning and measurement. *International Journal of Management Reviews*, 7(2), 91-109.

Clatworthy, S. (2011). Service innovation through touch-points: Development of an innovation toolkit for the first stages of new service development. *International Journal of Design*, *5*(2).

Cohen, N., and Arieli, T. (2011). Field research in conflict environments: Methodological challenges and snowball sampling. *Journal of Peace Research*, 48(4), 423-435.

Cole, S., Macleod, S., and Takacs, R. (2016). The 2016 US Reputation Dividend Report. Retrieved August, 2017, from http://www.reputationdividend.com /files/9114/7634/1581/US-2016_Rep_Div_Report.pdf

Compeau, D., Higgins, C. A., and Huff, S. (1999). Social cognitive theory and individual reactions to computing technology: A longitudinal study. *MIS quarterly,* 145-158.

Cornell University, INSEAD and WIPO (2015): *The Global Innovation Index 2015: Effective Innovation Policies for Development*, Fontainebleau, Ithaca, and Geneva.

Cornell University, INSEAD, and WIPO (2016): *The Global Innovation Index 2016: Winning with Global Innovation*, Ithaca, Fontainebleau, and Geneva.

Corrado, C. J., and Su, T. (1996). Skewness and kurtosis in SandP 500 index returns implied by option prices. *Journal of Financial research,* 19(2), 175-192.

Cravens, K. S., and Oliver, E. G. (2006). Employees: The key link to corporate reputation management. *Business Horizons*, *49*(4), 293-302.

Crawford, M., and Di Benedetto, A. (2003). *New products management*.

Damanpour, F. (1991). Organizational innovation: A meta-analysis of effects of determinants and moderators. *Academy of management journal*, *34*(3), 555-590.

Damanpour, F. (1996). Organizational complexity and innovation: developing and testing multiple contingency models. *Management science*, *42*(5), 693-716.

Damanpour, F., and Schneider, M. (2006). Phases of the adoption of innovation in organisations: Effects of environment, organisation and top managers. *British journal of Management*, *17*(3), 215-236.

De Carvalho, J., and Chima, F. O. (2014). Applications of structural equation modeling in social sciences research. American International Journal of Contemporary Research, 4(1), 6-11.

De Ruyter, K., Bloemer, J., and Peeters, P. (1997). Merging service quality and service satisfaction. An empirical test of an integrative model. *Journal of economic psychology*, 18(4), 387-406.

Deephouse, D. L. (1997). Part IV: How do reputations affect corporate performance?: The effect of financial and media reputations on performance. *Corporate Reputation Review*, 1(1), 68-72.

Dewar, R. D., and Dutton, J. E. (1986). The adoption of radical and incremental innovations: An empirical analysis. *Management science*, *32*(11), 1422-1433.

Dick, A. S., and Basu, K. (1994). Customer loyalty: toward an integrated conceptual framework. *Journal of the academy of marketing science*, *22*(2), 99-113.

Dierickx, I., and Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management science*, 35(12), 1504-1511.

Dosi, G. (1982). Technological paradigms and technological trajectories: a suggested interpretation of the determinants and directions of technical change. *Research policy*, *11*(3), 147-162.

Dowling, G. R. (1986). Managing your corporate images. *Industrial marketing management*, *15*(2), 109-115.

Dowling, G. (2001). Creating Corporate Reputations: Identity. Image, Performance. *Oxford university press*.

Dowling, G., and Moran, P. (2012). Corporate reputations. *California Management Review*, *54*(2), 25-42.

Drucker, P. (1974). Management: Tasks, Responsibilities, Practices. *Harper and Row, New York.*

Dupas, M., Grebe, M., De T'Serclaes, J., Vasy, B., and Walsh, I. (2017). Global Retail Banking 2017: Accelerating Bionic Transformation. Retrieved August 31, 2017, from https://www.bcg.com/publications/2017/financial-institutions-global-retail-banking-2017-bionic-transformation.aspx

DuWors, R. E., Jr., and Haines, G. H., Jr. (1990). Event history analysis measures of brand loyalty. Journal of Marketing Research, 27(4), 485.

Easterby-Smith, M., Thorpe, R., and Jackson, P. R. (2012). *Management research (Book)*. Sage.

Edvardsson, B., and Olsson, J. (1996). Key concepts for new service development. *Service Industries Journal*, *16*(2), 140-164.

Ehrenberg, A. (1988). Repeat buying: Theory and applications (2nd edition). London: Charles Griffin and Co.

Einwiller, S. A., Fedorikhin, A., Johnson, A. R., and Kamins, M. A. (2006). Enough is enough! When identification no longer prevents negative corporate associations. *Journal of the Academy of Marketing Science*, 34(2), 185-194.

Engel, J. F., and Blackwell, R. D. (1982). Consumer behaviour. New York: The Dryden Press.

Enis, B. M. (1967). An analytical approach to the concept of image. *California Management Review, 9(4),* 51-58.

Ettlie, J. E., and Reza, E. M. (1992). Organizational integration and process innovation. *Academy of management journal*, *35*(4), 795-827.

Farley, J. U. (1964). Why does brand loyalty vary over products? Journal of Marketing Research, 1, 9–14.

Finans Norge. (2017). Last retrieved 06.08.2017 from https://www.finansnorge.no/aktuelt/sporreundersokelser/forbruker-og-finanstrender/finansbarometeret-2016/knallhard-konkurranse-om-kundene/

Fiske, J., and O'Sullivan, T. (1994). Key concepts in communication and cultural studies. *London and New York: Routlege*, 231-173.

Flanagan, D. J., and O'shaughnessy, K. C. (2005). The effect of layoffs on firm reputation. *Journal of management*, *31*(3), 445-463.

Flint, D. J. (2006). Innovation, symbolic interaction and customer valuing: thoughts stemming from a service-dominant logic of marketing. *Marketing Theory*, *6*(3), 349-362.

Forbes. (2014), “The world’s most innovative companies,” Retrieved from http://www.forbes.com/innovative-companies/list/

Forgas, J. P. (1995). Mood and judgment: the affect infusion model (AIM). *Psychological bulletin, 117(1),* 39.

Fornell, C. (1992), “A National Customer Satisfaction Barometer: The Swedish Experience,” *Journal of Marketing*, Vol. 56 No. 1, pp. 6-21

Fornell, C., and Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 39-50.

Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., and Bryant, B. E. (1996). The American customer satisfaction index: nature, purpose, and findings. *The Journal of Marketing*, 7-18.

Fombrun, C., and Shanley, M. (1990). What's in a name? Reputation building and corporate strategy. *Academy of management Journal*, *33*(2), 233-258.

Fombrun, C. (1996). *Reputation*. John Wiley and Sons, Ltd.

Francis, D., and Bessant, J. (2005). Targeting innovation and implications for capability development. *Technovation*, *25*(3), 171-183.

Galbreath, J. (2002). Success in the relationship age: building quality relationship assets for market value creation. *The TQM magazine*, 14(1), 8-24.

Gallouj, F., and Weinstein, O. (1997). Innovation in services. *Research policy*, *26*(4-5), 537-556.

Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. *The Journal of Marketing,* 1-19.

Garbarino, E., and Johnson, M. S. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. *the Journal of Marketing*, 70-87.

Garver, M. S., and Williams, Z. (2009). Examining A Model Of Understanding Customer Value And Satisfaction Data. *Marketing Management Journal*, *19*(1).

Gefen, D., Straub, D., and Boudreau, M. C. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the association for information systems*, 4(1), 7.

Geisser, S. (1974). A predictive approach to the random effect model. *Biometrika*, 61(1), 101-107.

Geroski, P., Machin, S., and Van Reenen, J. (1993). The profitability of innovating firms. *The RAND Journal of Economics*, 198-211.

Geroski, P. A., Van Reenen, J., and Walters, C. F. (1997). How persistently do firms innovate?. *Research Policy, 26(1),* 33-48.

Gibson, D., Gonzales, J. L., and Castanon, J. (2006). The importance of reputation and the role of public relations. *Public Relations Quarterly*, *51*(3), 15.

Gleim, M. R., Lawson, S. J., and Robinson, S. G. (2015). When Perception Isn't Reality: An Examination Of Consumer Perceptions Of Innovation. *Marketing Management Journal*, *25*(1), 16-26.

GlobalData. (2016). Retail Banking Country Snapshot: Norway 2016. Retrieved June 29, 2017, from https://www.globaldata.com/store/report/vf0060ci--retail-banking-country-snapshot-norway-2016/

Golder, P. N., Shacham, R., and Mitra, D. (2009). Findings—Innovations' Origins: When, By Whom, and How Are Radical Innovations Developed?. *Marketing Science*, *28*(1), 166-179.

Goldsmith, R. E., and Hofacker, C. F. (1991). Measuring consumer innovativeness. *Journal of the Academy of Marketing Science*, 19(3), 209-221.

Gray, E. R., and Balmer, J. M. (1998). Managing corporate image and corporate reputation. *Long range planning, 31(5),* 695-702.

Grant, R. M. (1991). The resource-based theory of competitive advantage: implications for strategy formulation. *California management review,* 33(3), 114-135.

Grazel, J. (2016). Introducing The World FinTech Report 2017 | Capgemini. Retrieved July 1, 2017, from https://business.linkedin.com/marketing-solutions/blog/marketing-for-financial-services/2016/world-fintech-report-2017--the-battle-is-about-trust-not-tech

Grimm, P. (2010). Social desirability bias. *Wiley International Encyclopedia of Marketing*.

Grönroos, C. (1984), "A service quality model and its marketing implications", *European Journal of Marketing*, Vol. 18 No. 4, pp. 36-44.

Grönroos, C. (1988), "Service quality: the six criteria of good perceived service quality", *Review of Business*, Vol. 9, Winter, pp. 10-13.

Guest, D. E. (1997). Human resource management and performance: a review and research agenda. *International journal of human resource management,* 8(3), 263-276.

Guillemin, M., and Gillam, L. (2004). Ethics, reflexivity, and "ethically important moments" in research. *Qualitative inquiry*, *10*(2), 261-280.

Gwinner, K. P., Gremler, D. D., and Bitner, M. J. (1998). Relational benefits in services industries: the customer's perspective. *Journal of the academy of marketing science*, 26(2), 101-114.

Haberland, G. S., and Dacin, P. A. (1992). The development of a measure to assess viewers' judgments of the creativity of an advertisement: A preliminary study. *ACR North American Advances*.

Hage, J. (1980). *Theories of organisations: Form, process, and transformation*. John Wiley and Sons.

Hair, Joseph F. jr., Robert P. Bush and David J. Ortinau. (2006a). *Marketing Research: within a changing environment.* 3rd edition. New York: McGraw-Hill Irwin.

Hair, Joseph F., Jr, William C. Black, Barry J. Babin, Rolph E. Anderson and Ronald L. Tatham (2006b). *Multivariate Data Analysis*. 6th edition. Upper Saddle River, NJ: Pearson Prentice Hall.

Hair Jr, J. F., Black, W. C., Babin, B. J., Anderson, R. E., and Tatham, R. L. (2010). SEM: An introduction. *Multivariate data analysis: A global perspective*, 629-686.

Hair, J. F., Ringle, C. M., and Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.

Hair, J. F., Sarstedt, M., Ringle, C. M., and Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the academy of marketing science*, *40*(3), 414-433.

Hair, J. F., Black, W.C., Babin, B. J., and Anderson R.E. (2014). *Multivariate Data Analysis*. 7th ed. UK: Pearson Education Limited Edition.

Hair J. F., Hult, G. T. M., Ringle, C., and Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM).* Sage Publications.

Hall, R. (1992). The strategic analysis of intangible resources. *Strategic management journal*, *13*(2), 135-144.

Hall, R. (1993). A framework linking intangible resources and capabiliites to sustainable competitive advantage. *Strategic management journal*, *14*(8), 607-618.

Hardaker, S., and Fill, C. (2005). Corporate services brands: The intellectual and emotional engagement of employees. *Corporate Reputation Review*, *7*(4), 365-376.

Hauser, J., Tellis, G. J., and Griffin, A. (2006). Research on innovation: A review and agenda for marketing science. *Marketing science*, *25*(6), 687-717.

Henard, D. H., and Dacin, P. A. (2010). Reputation for product innovation: Its impact on consumers. *Journal of Product Innovation Management*, *27*(3), 321-335.

Hennig-Thurau, T., and Klee, A. (1997). The impact of customer satisfaction and relationship quality on customer retention: A critical reassessment and model development. *Psychology and marketing*, *14*(8), 737-764.

Henseler, J., Ringle, C. M., and Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *New challenges to international marketing (pp. 277-319)*. Emerald Group Publishing Limited.

Henseler, J., Ringle, C. M., and Sarstedt, M. (2012). Using partial least squares path modeling in advertising research: basic concepts and recent issues. *Handbook of research on international advertising*, 252.

Henseler, J., and Sarstedt, M. (2013). Goodness-of-fit indices for partial least squares path modeling. *Computational Statistics,* 1-16.

Henseler, J., Ringle, C. M., and Sarstedt, M. (2016). Testing measurement invariance of composites using partial least squares. *International Marketing Review*, 33(3), 405-431.

Herzenstein, M., Posavac, S. S., and Brakus, J. J. (2007). Adoption of new and really new products: The effects of self-regulation systems and risk salience. *Journal of Marketing Research*, 44(2), 251-260.

Hoffman, K. D., and Turley, L. W. (2002). Atmospherics, service encounters and consumer decision making: An integrative perspective. *Journal of Marketing theory and practice*, *10*(3), 33-47.

Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal*, 195-204.

Hult, G. T. M., Hurley, R. F., and Knight, G. A. (2004). Innovativeness: Its antecedents and impact on business performance. *Industrial marketing management*, *33*(5), 429-438.

Hunt, H. K. (Ed.). (1977). Conceptualization and measurement of consumer satisfaction and dissatisfaction (No. 77-103). *Marketing Science Institute.*

Hurley, R. F., and Hult, G. T. M. (1998). Innovation, market orientation, and organisational learning: an integration and empirical examination. *The Journal of Marketing,* 42-54.

Hurt, H. T., Joseph, K., and Cook, C. D. (1977). Scales for the measurement of innovativeness. *Human Communication Research,* 4(1), 58-65.

Im, S., and Workman Jr, J. P. (2004). Market orientation, creativity, and new product performance in high-technology firms. *Journal of marketing, 68(2),* 114-132.

Institute of Directors (IOD) (1999). *Reputation Management: Strategies for Protecting Companies, their Brands and their Directors*. London: Director Publications (Director's Guide Series).

Izard, C. E. (1984). Emotion-cognition relationships and human development. *Emotions, cognition, and behavior,* 17-37.

Jacoby, J., and Chestnut, R. W. (1978). *Brand loyalty measurement and management*. New York: Wiley.

Janssens, W., De Pelsmacker, P., and Van Kenhove, P. (2008). *Marketing research with SPSS.* Pearson Education.

Jarvis, L. P., and Mayo, E. J. (1986). Winning the market-share game. *Cornell Hotel and Restaurant Administration Quarterly*, *27*(3), 72-79.

Johnson, M. D., Anderson, E. W., and Fornell, C. (1995). Rational and adaptive performance expectations in a customer satisfaction framework. *Journal of consumer research*, *21*(4), 695-707.

Johnson, M. D., Gustafsson, A., Andreassen, T. W., Lervik, L., and Cha, J. (2001). The evolution and future of national customer satisfaction index models. *Journal of economic Psychology*, *22*(2), 217-245.

Johnson, M., and Gustafsson, A. (2006). *Improving customer satisfaction, loyalty and profit: An integrated measurement and management system*. John Wiley and Sons.

Jones, M. A., and Suh, J. (2000). Transaction-specific satisfaction and overall satisfaction: an empirical analysis. *Journal of services Marketing*, *14*(2), 147-159.

Kahn, B. E., Kalwani, M. U., and Morrison, D. G. (1986). Measuring variety-seeking and reinforcement behaviors using panel data. Journal of Marketing Research, 23(2).

Kamins, M. A., Alpert, F. H., and Elliott, M. T. (2000). Independent and interactive effects of exposure sequence, pioneership awareness, and product trial on consumer evaluation of a pioneer brand. *Journal of Consumer Psychology*, *9*(4), 223-229.

Keh, H. T., and Xie, Y. (2009). Corporate reputation and customer behavioral intentions: The roles of trust, identification and commitment. *Industrial marketing management,* 38(7), 732-742.

Kent, G. (2013), “RandD spending expected to grow in 2013,” Retrieved from http://www.businesswire.com/news/home/20130102005674/en/Spending-Expected- Grow-2013 #.UvqCOTstZpg

Kim, J. B., and Choi, C. J. (2003). Reputation and product tampering in service industries. *The Service Industries Journal*, *23*(4), 3-11.

Kline, R. B. (2005). Methodology in the social sciences.

Kogut, B. (1988). Joint ventures: Theoretical and empirical perspectives. *Strategic management journal,* 9(4), 319-332.

Kotler, P., and Singh, R. (1981). Marketing Warfare in the 1980s. *The Journal of Business Strategy*, *1*(3), 30.

Kotler, P., and Armstrong, G. (2010). *Principles of marketing*. Pearson Education.

Kosinski, M., Matz, S. C., Gosling, S. D., Popov, V., and Stillwell, D. (2015). Facebook as a research tool for the social sciences: Opportunities, challenges, ethical considerations, and practical guidelines. *American Psychologist,* 70(6), 543.

Kuehn, Alfred. (1962). Consumer brand choice as a learning process. Journal of Advertising Research, 2(March-April), 10–17.

Kuiper, N. A., and Rogers, T. B. (1979). Encoding of personal information: Self–other differences. *Journal of Personality and Social Psychology*, 37(4), 499.

Kumar, V, and Shah, D. (2004). Building and sustaining profitable customer loyalty for the 21st century. *Journal of retailing*, *80*(4), 317-329.

Kunz, W., Schmitt, B., and Meyer, A. (2011). How does perceived firm innovativeness affect the consumer? *Journal of Business Research*, *64*(8), 816-822.

Kurant, M., Markopoulou, A., and Thiran, P. (2011). Towards unbiased BFS sampling. *IEEE Journal on Selected Areas in Communications,* 29(9), 1799-1809.

Larson, J. S., Goldsmith, K., and Allen, B. J. (2013). When a Reputation for Innovativeness Confers Negative Consequences for Brands.

Lawson, B., and Samson, D. (2001). Developing innovation capability in organisations: a dynamic capabilities approach. *International journal of innovation management,* 5(03), 377-400.

Lazarus, R. S. (1991). Cognition and motivation in emotion. *American psychologist, 46(4),* 352.

Lewis, M., Sullivan, M. W., and Michalson, L. (1984). 9 The cognitive-emotional fugue. *Emotions, cognition, and behavior,* 264.

Liao, S., and Cheng, C. C. (2014). Brand equity and the exacerbating factors of product innovation failure evaluations: A communication effect perspective. *Journal of business research*, *67*(1), 2919-2925.

Liljander, V., and Strandvik, T. (1997). Emotions in service satisfaction. *International Journal of service industry management*, 8(2), 148-169.

Linssen, A. (2010, February 01). Your Brand Reputational Value Is Irreplaceable. Protect It!. *Forbes*. Retrieved August 04, 2017, from https://www.forbes.com/2010/02/01/brand-reputation-value-leadership-managing-ethisphere.html

Lipstein, Benjamin. (1959). The dynamics of brand loyalty and brand switching. In: Proceedings of the fifth annual conference on the advertising research foundation (pp. 101–108). New York: Advertising Research Foundation.

Lovelock, C. H., and Wright, L. (2002). *Principles of service marketing and management*. Prentice Hall.

Lusch, R. F., Vargo, S. L., and O'Brien, M. (2007). Competing through service: Insights from service-dominant logic. *Journal of retailing*, *83*(1), 5-18.

Lutz, R. J. and Winn, P. R. (1974). Developing a Bayesian measure of brand loyalty: A preliminary report. In: Curhan, Ronald C. (Ed.), Combined proceedings. Chicago: American Marketing Association, pp. 104–108

Macchi M., Levi D. J., Westland, S. (2016). Banking reinvented: beyond value chains to value networks. *Accenture Strategy.*

Malhotra, N. K. (2010). *Marketing research an applied orientation.* Pearson Education India.

Markus, H. (1977). Self-schemata and processing information about the self. *Journal of personality and social psychology*, 35(2), 63.

Massey, W. F., Montgomery, D. B., and Morrison, D. G. (1970). Stochastic models of buyer behavior. Cambridge: MIT Press.

Mayer, R. C., Davis, J. H., and Schoorman, F. D. (1995). An integrative model of organisational trust. *Academy of management review*, 20(3), 709-734.

McMillan, G. S., and Joshi, M. P. (1997). Part IV: How do reputations affect corporate performance?: Sustainable competitive advantage and firm performance: The role of intangible resources. *Corporate Reputation Review*, *1*(1), 81-85.

McPherson, M., Smith-Lovin, L., and Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual review of sociology,* 27(1), 415-444.

Melewar, T. C. (2003). Determinants of the corporate identity construct: a review of the literature. *Journal of marketing Communications, 9(4),* 195-220.

Michaut, A., van Trijp, H.., and Steenkamp, J. B.. (2002). Dimensions of product newness and their differential effect on market success. *Success Working Paper.*

Michell, P., Reast, J., and Lynch, J. (1998). Exploring the foundations of trust. *Journal of Marketing Management,* 14(1-3), 159-172.

Monroe, K. B. (1990). *Pricing: Making profitable decisions*. McGraw-Hill Companies.

Moorman, C., and Rust, R. T. (1999). The role of marketing. *The Journal of Marketing*, 180-197.

Moorman, C., Zaltman, G., and Deshpande, R. (1992). Relationships between providers and users of market research: The dynamics of trust within and between organisations. *Journal of marketing research*, 29(3), 314.

Morgan, R. M., and Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *The journal of marketing,* 20-38.

Moreau, C. P., and Dahl, D. W. (2005). Designing the solution: The impact of constraints on consumers' creativity. *Journal of Consumer Research*, 32(1), 13-22.

Mutz, D. C. (2011). *Population-based survey experiments.* Princeton University Press.

Narver, J. C., and Slater, S. F. (1990). The effect of a market orientation on business profitability. *The Journal of marketing*, 20-35.

Nguyen, N., and Leblanc, G. (2001). Corporate image and corporate reputation in customers' retention decisions in services. *Journal of retailing and Consumer Services*, *8*(4), 227-236.

Nguyen, N., Leclerc, A., and LeBlanc, G. (2013). The mediating role of customer trust on customer loyalty. *Journal of service science and management*, 6(01), 96.

Nicholson, N., Rees, A., and Brooks-Rooney, A. (1990). Strategy, innovation and performance. *Journal of Management Studies,* 27(5), 511-534.

Niedrich, R. W., and Swain, S. D. (2003). The influence of pioneer status and experience order on consumer brand preference: A mediated-effects model. *Journal of the Academy of Marketing Science*, *31*(4), 468-480.

Nooteboom, B. (2002). *Trust: Forms, foundations, functions, failures and figures.* Edward Elgar Publishing.

Norsk kundebarometer. (2017). Retrieved August 1, 2017, from https://www.bi .no/forskning/norsk-kundebarometer/

Nyman, H. (2016). DNB er Årets markedsfører for tredje gang. Retrieved May 29, 2017, from http://kampanje.com/markedsforing/2016/03/dnb-er-arets-markeds forer---igjen/

Oliver, R. L. (1997). Satisfaction: A behavioral perspective on the customer. New York.

Oliver, R.L. (1999). Whence consumer loyalty. *Journal of Marketing*, 63(4), 33–44.

Oliver, R. L. (2014). *Satisfaction: A behavioral perspective on the consumer*. Routledge.

Oliver, R. L., and Swan, J. E. (1989). Equity and disconfirmation perceptions as influences on merchant and product satisfaction. *Journal of consumer research,* 16(3), 372-383.

Olsen, L. L., and Johnson, M. D. (2003). Service equity, satisfaction, and loyalty: from transaction-specific to cumulative evaluations. *Journal of Service Research*, *5*(3), 184-195.

Olson, J. C., and Jacoby, J. (1972). Cue utilization in the quality perception process. *ACR Special Volumes.*

Ou, Y. C., and Hsu, L. C. (2013). How Does Corporate Reputation Affect Innovative Performance?. *International Business Research*, *6*(12), 46.

Parasuraman, A., V.A. Zeithaml and L.L. Berry. 1988. "SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality". *Journal of Retailing*, 64 (1):12-40.

Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic management journal*, *14*(3), 179-191.

Pritchard, M. P., Howard, D. R., & Havitz, M. E. (1992). Loyalty measurement: A critical examination and theoretical extension. *Leisure Sciences*, 14(2), 155-164.

PwC. (2017). 20th CEO Survey. Retrieved August, 2017, from https:// www.pwc.com/gx/en/ceo-survey/2017/pwc-ceo-20th-survey-report-2017.pdf.

Rai, A. K., and Srivastava, M. (2012). Customer loyalty attributes: A perspective. *NMIMS management review*, *22*, 49-76.

Rao, A. R., Qu, L., and Ruekert, R. W. (1999). Signaling unobservable product quality through a brand ally. *Journal of Marketing Research*, 258-268.

Reichheld, F. F. (2003). The one number you need to grow. *Harvard business review*, *81*(12), 46-55.

Rempel, J. K., Holmes, J. G., and Zanna, M. P. (1985). Trust in close relationships. *Journal of personality and social psychology,* 49(1), 95.

Reynolds, F. D., and Rentz, J. O. (1981). Cohort analysis: an aid to strategic planning. *The Journal of Marketing*, 62-70.

Richter, Nicole Franziska, Rudolf R. Sinkovics, Christian M. Ringle, Christopher Schlägel, (2016). A critical look at the use of SEM in international business research. *International Marketing Review,* Vol. 33 Issue: 3, pp.376-404.

Rindova, V. P., Williamson, I. O., Petkova, A. P., and Sever, J. M. (2005). Being good or being known: An empirical examination of the dimensions, antecedents, and consequences of organisational reputation. *Academy of Management Journal*, 48(6), 1033-1049.

Ringle, C., Wende, S., and Will, A. (2005). Smart-PLS Version 2.0 M3. *University of Hamburg*.

Roberts, P. W., and Dowling, G. R. (1997). Part IV: How Do Reputations Affect Corporate Performance?: The Value of a Firm's Corporate Reputation: How Reputation Helps Attain and Sustain Superior Profitability. *Corporate Reputation Review*, *1*(1), 72-76.

Roberts, P. W., and Dowling, G. R. (2002). Corporate reputation and sustained superior financial performance. *Strategic management journal*, *23*(12), 1077-1093.

Robertson, T. S., Eliashberg, J., and Rymon, T. (1995). New product announcement signals and incumbent reactions. *The Journal of Marketing*, 1-15.

Robson, Colin. (2002). *Real World Research, second edition.* Blackwell Publishing.

Rodríguez-Pose, A. (1999). Innovation prone and innovation averse societies: Economic performance in Europe. *Growth and change*, 30(1), 75-105.

Roehrich, G. (2004). Consumer innovativeness: Concepts and measurements. *Journal of business research*, *57*(6), 671-677.

Roseman, I. J., Spindel, M. S., and Jose, P. E. (1990). Appraisals of emotion-eliciting events: Testing a theory of discrete emotions. *Journal of Personality and Social Psychology, 59(5),* 899.

Rosenbaum, M. S., and Massiah, C. (2011). An expanded servicescape perspective. *Journal of Service Management*, *22*(4), 471-490.

Rotter, J. B. (1967). A new scale for the measurement of interpersonal trust. *Journal of personality,* 35(4), 651-665.

Rumelt, R. P. (1987). Theory, strategy, and entrepreneurship. *The competitive challenge*, 137, 158.

Ruotsila, I., Ekdahl, P., and Vitali, D. (2015). Digital disruption in Nordic retail banking. Retrieved August 28, 2017, from https://www.accenture.com/t20150924T055551__w__/se-en/_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Strategy_7/Accenture-Digital-Disruption-Nordic-Retail-Banking-Study.pdf

Rust, R. T., Zahorik, A. J., and Keiningham, T. L. (1995). Return on quality (ROQ): Making service quality financially accountable. *The Journal of Marketing*, 58-70.

Rust, R. T., Lemon, K. N., and Zeithaml, V. A. (2004). Return on marketing: Using customer equity to focus marketing strategy. *Journal of marketing*, *68*(1), 109-127.

Ryan, M. J., Rayner, R., and Morrison, A. (1999). Diagnosing customer loyalty drivers. *Marketing Research*, *11*(2), 18.

Sánchez, J. L. F., and Sotorrío, L. L. (2007). The creation of value through corporate reputation. *Journal of business Ethics*, 76(3), 335-346.

Salomo, S., Talke, K., and Strecker, N. (2008). Innovation field orientation and its effect on innovativeness and firm performance. *Journal of product innovation management*, *25*(6), 560-576.

Schaie, K. W., and Willis, S. L. (1991). Adult personality and psychomotor performance: Cross-sectional and longitudinal analyses. *Journal of Gerontology*, *46*(6), P275-P284.

Shapiro, D. A., and Shapiro, D. (1982). Meta-analysis of comparative therapy outcome research: A critical appraisal. *Behavioural and Cognitive Psychotherapy*, 10(1), 4-25.

Sheppard, B. H., Hartwick, J., and Warshaw, P. R. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of consumer research,* 15(3), 325-343.

Siano, A., Vollero, A., and Siglioccolo, M. (2007, May). Corporate reputation management: A set of drivers in the governance-structure-system model. Empirical evidences from crisis communication. In *11th International Conference on Reputation, Brand, Identity and Competitiveness*.

Simonson, I., and Tversky, A. (1992). Choice in context: Tradeoff contrast and extremeness aversion. *Journal of marketing research,* 29(3), 281.

Slater, S. F., and Narver, J. C. (1995). Market orientation and the learning organisation. The Journal of marketing, 63-74.

Snoj, B., Pisnik Korda, A., and Mumel, D. (2004). The relationships among perceived quality, perceived risk and perceived product value. *Journal of Product and Brand Management*, *13*(3), 156-167.

Spence, M. (1974). Competitive and optimal responses to signals: An analysis of efficiency and distribution. *Journal of Economic theory*, *7*(3), 296-332.

Srivastava, R. K., Shervani, T. A., and Fahey, L. (1998). Market-based assets and shareholder value: A framework for analysis. *The Journal of Marketing*, 2-18.

Steenkamp, J. B. E., and van Trijp, H. C. (1996). Quality guidance: A consumer-based approach to food quality improvement using partial least squares. *European Review of Agricultural Economics*, *23*(2), 195-215.

Stone, M. (1974). Cross-validatory choice and assessment of statistical predictions. *Journal of the royal statistical society.* Series B (Methodological), 111-147.

Szymanski, D. M., Troy, L. C., and Bharadwaj, S. G. (1995). Order of entry and business performance: An empirical synthesis and reexamination. *The Journal of Marketing*, 17-33.

Szymanski, D. M., Kroff, M. W., and Troy, L. C. (2007). Innovativeness and new product success: Insights from the cumulative evidence. *Journal of the Academy of Marketing Science*, *35*(1), 35-52.

Tavassoli, S., and Karlsson, C. (2015). Persistence of various types of innovation analysed and explained. *Research Policy*, *44*(10), 1887-1901.

Truong, Y., and McColl, R. (2011). Intrinsic motivations, self-esteem, and luxury goods consumption. *Journal of Retailing and Consumer Services*, 18(6), 555-561.

Tse, D. K., and Wilton, P. C. (1988). Models of consumer satisfaction formation: An extension. *Journal of marketing research,* 204-212.

Tse, D. K, Nicosia, F. M., and Wilton, P. C. (1990). Consumer satisfaction as a process. *Psychology and Marketing, 7(3)*, 177.

Tushman, M. L. (1997). Winning through innovation. Strategy and Leadership, 25(4), 14-19.

Tversky, A., and Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive psychology*, 5(2), 207-232.

Van Riel, C. B. M., and Maathuis, O. J. M. (1993). *Corporate Branding.* Working Paper, Erasmus University Rotterdam.

Van Riel, C. B., and Balmer, J. M. (1997). Corporate identity: the concept, its measurement and management. *European journal of marketing, 31(5/6),* 340-355.

Vinzi, V. E., Trinchera, L., and Amato, S. (2010). PLS Path Modeling: From Foundations to. *Proceedings of the 20th SAS User Group International Confr, 1995 Chapter*, *2*.

Wakelin, K. (1998). The role of innovation in bilateral OECD trade performance. *Applied Economics,* 30(10), 1335-1346.

Walsh, G., and Wiedmann, K. P. (2004). A conceptualization of corporate reputation in Germany: An evaluation and extension of the RQ. *Corporate Reputation Review*, 6(4), 304-312.

Walsh, G., Mitchell, V. W., Jackson, P. R., and Beatty, S. E. (2009). Examining the antecedents and consequences of corporate reputation: A customer perspective. *British Journal of Management*, 20(2), 187-203.

Wang, Y., Lo, H. P., and Hui, Y. V. (2003). The antecedents of service quality and product quality and their influences on bank reputation: evidence from the banking industry in China. *Managing Service Quality: An International Journal*, *13*(1), 72-83.

Wanninger, L. A., Anderson, C., and Hansen, R. (1997). *Designing servicescapes for electronic commerce: An evolutionary approach*. Carlson School of Management,[University of Minnesota].

Watson, D., and Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological bulletin*, *98*(2), 219.

Weigelt, K., and Camerer, C. (1988). Reputation and corporate strategy: A review of recent theory and applications. *Strategic management journal*, 9(5), 443-454.

Weiss, H. M., and Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work.

Westbrook, R. A., and Reilly, M. D. (1983). Value-percept disparity: an alternative to the disconfirmation of expectations theory of consumer satisfaction. *NA-Advances in Consumer Research Volume 10.*

Wirtz, J., and Lovelock, C. (2016). *Services marketing: People, technology, strategy*. World Scientific Publishing Co Inc.

Wilhelmsen, Lars. (2012). A question of context: Assessing the impact of a separate innovation survey and of response rate on the measurement of innovation activity in Norway. *Statistics Norway,* Documents 2012/51.

Witell, L., Anderson, L., Brodie, R. J., Colurcio, M., Edvardsson, B., Kristensson, P., ... and Wallin Andreassen, T. (2015). Exploring dualities of service innovation: implications for service research. *Journal of Services Marketing*, *29*(6/7), 436-441.

Wong, K. K. K. (2013). Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. *Marketing Bulletin*, *24*(1), 1-32.

Wood, S. (1999). Human resource management and performance. *International journal of management reviews,* 1(4), 367-413.

Wood, S. L., and Moreau, C. P. (2006). From fear to loathing? How emotion influences the evaluation and early use of innovations. *Journal of Marketing*, *70*(3), 44-57.

Woodruff, R. B. (1997). Customer value: the next source for competitive advantage. *Journal of the academy of marketing science*, *25*(2), 139-153.

Valdez, A., and Kaplan, C. D. (1998). Reducing selection bias in the use of focus groups to investigate hidden populations: The case of Mexican-American gang members from South Texas. *Drugs and Society,* 14(1-2), 209-224.

Van de Mortel, T. F. (2008). Faking it: social desirability response bias in self-report research. *Australian Journal of Advanced Nursing*, The, 25(4), 40.

Van de Ven, A. H. (1986). Central problems in the management of innovation. *Management science*, *32*(5), 590-607.

Van Riel, A. C. (2005). Introduction to the special issue on service innovation management. *Managing Service Quality: An International Journal*, *15*(6), 493-495.

Veloutsou, C., Gilbert, G. R., Moutinho, L. A., and Goode, M. M. (2005). Measuring transaction-specific satisfaction in services: are the measures transferable across cultures?. *European Journal of Marketing*, *39*(5/6), 606-628.

Yamin, S., Gunasekaran, A., and Mavondo, F. T. (1999). Innovation index and its implications on organisational performance: a study of Australian manufacturing companies. *International Journal of Technology Management,* 17(5), 495-503.

Yang, Z., and Peterson, R. T. (2004). Customer perceived value, satisfaction, and loyalty: The role of switching costs. *Psychology and Marketing*, *21*(10), 799-822.

Yoon, E., Guffey, H. J., and Kijewski, V. (1993). The effects of information and company reputation on intentions to buy a business service. *Journal of Business research*, *27*(3), 215-228.

Young, D. (1997). Establishing and maintaining good corporate reputation.

Yu, Y. T., and Dean, A. (2001). The contribution of emotional satisfaction to consumer loyalty. *International journal of service industry management*, *12*(3), 234-250.

Zahra, S. A., and Covin, J. G. (1994). The financial implications of fit between competitive strategy and innovation types and sources. *The Journal of High Technology Management Research*, *5*(2), 183-211.

Zaltman, G., Duncan, R., and Holbek, J. (1973). *Innovations and organisations*. John Wiley and Sons.

Zeithaml, V. A., Berry, L. L., and Parasuraman, A. (1988). Communication and control processes in the delivery of service quality. *The Journal of Marketing*, 35-48.

Zeithaml, V., and Parasuraman, A. (1990). Berry. Leonard L. *Delivering Service Quality: Balancing Customer Perceptions and Expectations*.

Appendix 1: Observed measures

Table 1. Observed measures

Nr.	Label	Question	Construct
1	*bank*	Which bank is your main service provider?	Demographic
2	*innov_1a*	What changes have you experienced at (X) in terms of its products and services recently? - In relation to online banking	Perceived changes in innovation
3	*innov_1b*	What changes have you experienced at (X) in terms of its products and services recently? - In relation to an app	Perceived changes in innovation
4	*innov_1c*	What changes have you experienced at (X) in terms of its products and services recently? - In relation to a physical bank	Perceived changes in innovation
5	*innov_1d*	What changes have you experienced at (X) in terms of its products and services recently? - In relation to communication between the bank and you	Perceived changes in innovation
6	*innov_1e*	What changes have you experienced at (X) in terms of its products and services recently? - In relation to new products	Perceived changes in innovation
7	*innov_1f*	What changes have you experienced at (X) in terms of its products and services recently? - In relation to new services	Perceived changes in innovation
8	*innov_1g*	What changes have you experienced at (X) in terms of its products and services recently? - Other	Perceived changes in innovation
9	*innov_2*	How large in magnitude were the change(s) experienced?	Perceived changes in innovation
10	*innov_3*	When did you experience the change(s)?	Perceived changes in innovation
11	*rep_1a*	Which of the following statements do you associate with your bank? - (X) treats its customers in a fair manner	Corporate reputation
12	*rep_1b*	Which of the following statements do you associate with your bank? - (X)'s employees are concerned about customer needs	Corporate reputation
13	*rep_1c*	Which of the following statements do you associate with your bank? - (X) maintains a high standard in the way they treat people	Corporate reputation
14	*rep_1d*	Which of the following statements do you associate with your bank? - (X) offers high quality products and services	Corporate reputation
15	*rep_1e*	Which of the following statements do you associate with your bank? - (X) is a strong, reliable company	Corporate reputation
16	*rep_1f*	Which of the following statements do you associate with your bank? - (X) supports good causes	Corporate reputation
17	*rep_1g*	Which of the following statements do you associate with your bank? - (X) is an environmentally responsible company	Corporate reputation
18	*loyal_1a*	How likely or unlikely is it that you would continue as a	Customer

		customer of your current bank?	loyalty
19	*loyal_1b*	How likely or unlikely is it that you would recommend your bank if anyone asks you for advice?	Customer loyalty
20	*loyal_1c*	How likely or unlikely is it that you would talk about your bank in a positive manner?	Customer loyalty
21	*loyal_1d*	How likely is it that you would use social media to communicate with, or get information from (X)? - I use social media to comment on products from (X)	Customer loyalty
22	*loyal_2a*	How likely is it that you would use social media to communicate with, or get information from (X)? - I use social media to see what others say about (X)	Customer loyalty
23	*loyal_2b*	How likely is it that you would use social media to communicate with, or get information from (X)? - I use social media to talk about my experiences with (X)	Customer loyalty
24	*loyal_2c*	How likely is it that you would use social media to communicate with, or get information from (X)? - I use social media to share/like information from (X)	Customer loyalty
25	*loyal_3*	If similar products and services were offered by another bank at a lower price, to what extent would you be willing to switch banks?	Customer loyalty
26	*pra_1a*	In comparison with other banks providing similar services, to what extent are the following statements appropriate for (X)? - (X) has better prices on its services	Perceived relative attractiveness
27	*pra_1b*	In comparison with other banks providing similar services, to what extent are the following statements appropriate for (X)? - (X) has better quality services	Perceived relative attractiveness
28	*pra_1c*	In comparison with other banks providing similar services, to what extent are the following statements appropriate for (X)? - (X) has a better reputation	Perceived relative attractiveness
29	*pra_1d*	In comparison with other banks providing similar services, to what extent are the following statements appropriate for (X)? - (X) is more attractive than other providers of the same service	Perceived relative attractiveness
30	*pra_2*	Regarding your experiences with (X), how attractive or unattractive do you consider (X) relative to its competitors?	Perceived relative attractiveness
31	*pfi_1a*	How much do you agree or disagree with the following description of your bank? - (X) is a dynamic firm	Perceived firm innovativeness
32	*pfi_1b*	How much do you agree or disagree with the following description of your bank? - (X) is a creative firm	Perceived firm innovativeness
33	*pfi_1c*	How much do you agree or disagree with the following description of your bank? - (X) launches new products and creates market trends all the time	Perceived firm innovativeness
34	*pfi_1d*	How much do you agree or disagree with the following description of your bank? - (X) is a pioneer in its category	Perceived firm innovativeness
35	*pfi_1e*	How much do you agree or disagree with the following description of your bank? - (X) constantly generates new ideas	Perceived firm innovativeness
36	*pfi_1f*	How much do you agree or disagree with the following description of your bank? - (X) has changed the market with its offers	Perceived firm innovativeness
37	*pfi_1g*	How much do you agree or disagree with the following	Perceived firm

		description of your bank? – (X) is an advanced, forward-looking firm	innovativeness
38	*sat_1*	We would now like you to think back upon your experiences with your bank. How satisfied or dissatisfied are you with your bank?	Customer satisfaction
39	*sat_2*	Imagine an ideal bank. How close to this ideal is your bank?	Customer satisfaction
40	*sat_3*	To what extent does your bank usually meet your expectations?	Customer satisfaction
41	*sat_4a*	What emotions do you feel when you use (X)'s products/services? – I feel indifferent ------- engaged	Customer satisfaction
42	*sat_4b*	What emotions do you feel when you use (X)'s products/services? – I feel dissatisfied ------- satisfied	Customer satisfaction
43	*sat_4c*	What emotions do you feel when you use (X)s products/services? – I feel bored ------- inspired	Customer satisfaction
44	*sat_4d*	What emotions do you feel when you use (X)s products/services? – I feel disappointed ------- positively surprised	Customer satisfaction
45	*sat_4e*	What emotions do you feel when you use (X)'s products/services? – I feel depressed ------- excited	Customer satisfaction
46	*sat_4f*	What emotions do you feel when you use (X)'s products/services? – I feel angry ------- happy	Customer satisfaction
47	*sat_4g*	What emotions do you feel when you use (X)'s products/services? – I feel irritated ------- enthusiastic	Customer satisfaction
48	*sat_5*	How satisfied are you with the frequency of new products and services provided by (X)?	Customer satisfaction
49	*sat_6*	How satisfied are you with the quality of new products and services provided by (X)?	Customer satisfaction
50	*sex*	What is your gender?	Demographic
51	*age*	What is your age group?	Demographic
52	*edu*	What is your level of education?	Demographic
53	*inc*	What is your household income level?	Demographic
54	*status*	What is your marital status?	Demographic

Appendix 2: Questions and scales

Table 1. Use of Likert scale for observed measures

Nr.	**Label**	**Use of Likert scale**
9	*innov_2*	1= very small, 7 = very big
11	*rep_1a*	1 = strongly disagree, 7 = strongly agree
12	*rep_1b*	1 = strongly disagree, 7 = strongly agree
13	*rep_1c*	1 = strongly disagree, 7 = strongly agree
14	*rep_1d*	1 = strongly disagree, 7 = strongly agree
15	*rep_1e*	1 = strongly disagree, 7 = strongly agree
16	*rep_1f*	1 = strongly disagree, 7 = strongly agree
17	*rep_1g*	1 = strongly disagree, 7 = strongly agree
18	*loyal_1a*	1 = very unlikely, 7 = very likely
19	*loyal_1b*	1 = very unlikely, 7 = very likely
20	*loyal_1c*	1 = very unlikely, 7 = very likely
21	*loyal_1d*	1 = to a small extent, 7 = to a large extent
22	*loyal_2a*	1 = to a small extent, 7 = to a large extent
23	*loyal_2b*	1 = to a small extent, 7 = to a large extent
24	*loyal_2c*	1 = to a small extent, 7 = to a large extent
25	*loyal_3*	1 = to a small extent, 7 = to a large extent
26	*pra_1a*	1 = strongly disagree, 7 = strongly agree
27	*pra_1b*	1 = strongly disagree, 7 = strongly agree
28	*pra_1c*	1 = strongly disagree, 7 = strongly agree
29	*pra_1d*	1 = strongly disagree, 7 = strongly agree
30	*pra_2*	1 = very unattractive, 7 = very attractive
31	*pfi_1a*	1 = strongly disagree, 7 = strongly agree
32	*pfi_1b*	1 = strongly disagree, 7 = strongly agree
33	*pfi_1c*	1 = strongly disagree, 7 = strongly agree
34	*pfi_1d*	1 = strongly disagree, 7 = strongly agree
35	*pfi_1e*	1 = strongly disagree, 7 = strongly agree
36	*pfi_1f*	1 = strongly disagree, 7 = strongly agree
37	*pfi_1g*	1 = strongly disagree, 7 = strongly agree
38	*sat_1*	1 = very dissatisfied, 7 = very satisfied
39	*sat_2*	1 = very far away, 7 = very close
40	*sat_3*	1 = to a small extent, 7 = to a large extent
48	*sat_5*	1 = very dissatisfied, 7 = very satisfied
49	*sat_6*	1 = very dissatisfied, 7 = very satisfied

Appendix 3: Original questionnaire in Norwegian

Denne spørreundersøkelsen er laget av to studenter i MSc Strategic Marketing Management ved Handelshøyskolen BI i forbindelse med vår masteroppgave.

Målet med undersøkelsen er å forstå kundens meninger om endringer i bankers produkter og tjenester. Undersøkelsen vil ta ca. 3-7 minutter. Alle svar er anonyme. Vær vennlig å svar så ærlig som mulig, det finnes ingen rette/gale svar.

Takk for at du ønsker å ta denne spørreundersøkelsen, det setter vi stor pris på.

Endring

Q1 Hvilken bank er din "hovedbank"?

☐ DNB
☐ Nordea
☐ Sparebank1
☐ Skandiabanken
☐ Handelsbanken
☐ Danske Bank
☐ Annen bank ____________________________________

Q2 Hvilke endringer har du opplevd hos (X) og dens produkter og tjenester den siste tiden?

☐ I forbindelse med nettbank
☐ I forbindelse med en app
☐ I forbindelse med fysisk bankfilial
☐ I forbindelse med kommunikasjon mellom banken og deg
☐ I forbindelse med nye produkt(er)
☐ I forbindelse med nye tjenester
☐ Andre ____

Q3 Hvor stor(e) opplevde du endringen(e)? På en skala fra 1-7, endringen var: (1 = Svært liten, 7 = Svært stor)

Q4 Når opplevde du endring(ene)?

☐ 0-3 måneder siden
☐ 3-6 måneder siden
☐ 6-9 måneder siden
☐ 9-12 måneder siden
☐ Mer enn 1 år siden

Q5 Beskriv endring(ene). ______________________

Omdømme

Q6 På en skala fra 1 til 7, hvilken av de følgende utsagnene assosierer du med din bank? (1 = svært uenig, 7 = svært enig)

- (X) behandler kundene sine på en rettferdig måte
- (X)'s ansatte er opptatt av kundens behov
- (X) opprettholder en høy standard i måten de behandler folk på
- (X) tilbyr produkter og tjenester av høy kvalitet
- (X) er en troverdig bedrift
- (X) støtter gode formål
- (X) er en miljøansvarlig bank

Lojalitet

Q7 På en skala fra 1 til 7, hvor sannsynlig eller usannsynlig er det at du vil: (1 = svært usannsynlig, 7 = svært sannsynlig)

- Fortsette som kunde hos din nåværende bank?
- Anbefale din bank, dersom noen spør deg om råd?
- Omtale din bank på en positiv måte?

Q8 Hvor sannsynlig er det at du benytter sosiale medier for å kommunisere med, eller få informasjon fra (X)? (1 = i svært liten grad, 7 = i svært stor grad)

- Jeg benytter sosiale medier for å kommentere produkter/tjenester fra (X)
- Jeg benytter sosiale medier for å se hva andre sier om (X)
- Jeg benytter sosiale medier for å uttrykke mine erfaringer med (X)
- Jeg benytter sosiale medier for å dele/like informasjon fra (X)

Q9 Hvis tilsvarende produkter og tjenester tilbys av andre banker til en lavere pris, i hvilken grad ville du være villig til å bytte bank? (1 = i svært liten grad, 7 = i svært stor grad)

Relativ attraktivhet

Q10 Nå ber vi deg om å sammenligne med andre banker som tilbyr samme produkter og tjenester. Sammenlignet med andre tilsvarende banker, i hvor stor grad passer følgende utsagn til (X)? (1 = svært uenig, 7 = svært enig)

- (X) har bedre priser på sine produkt/tjenester
- (X) har bedre kvalitet på sine produkt/tjenester
- (X) har bedre omdømme
- (X) er mer attraktiv enn andre leverandører av samme produkt/tjenester

Q11 Med tanke på dine erfaringer med (X). Hvor attraktiv eller uattraktiv opplever du at (X) er i forhold til sine konkurrenter? (1 = i svært uattraktiv, 7 = i svært attraktiv)

Opplevd innovasjonsevne hos bedriften

Q12 Hvor enig eller uenig er du i følgende beskrivelse av din bank? (1 = svært uenig, 7 = svært enig)

- (X) er en dynamisk bank
- (X) er en kreativ bank
- (X) lanserer nye produkter og skaper trendene i markedet hele tiden
- (X) er først ute med nye løsninger
- (X) stadig genererer nye ideer
- (X) endrer markedet med sine tilbud
- (X) er innovativ og fremtidsrettet

Tilfredshet og følelser

Q13 Nå vil vi be deg om å tenke tilbake på dine erfaringer med banken din. Totalt sett hvor fornøyd eller misfornøyd er du med banken på en skala fra 1-7? (1= svært misfornøyd, 7 = svært fornøyd)

Q14 Tenk deg en ideell bank. Hvor nært opp til dette idealet er din bank på en skala fra 1-7? (1 = svært langt unna, 7 = svært nære)

Q15 I hvilken grad pleier banken å innfri dine forventninger? (X) innfrir mine forventninger: (1 = i svært liten grad, 7 = i svært stor grad)

Q16 Hvilke følelser opplever du når du bruker (X)'s produkter og tjenester?

Jeg blir likegyldig	1	2	3	4	5	6	7	Begeistret
Jeg blir misfornøyd	1	2	3	4	5	6	7	Fornøyd
Jeg kjeder meg	1	2	3	4	5	6	7	Blir inspirert
Jeg blir skuffet	1	2	3	4	5	6	7	Positivt overrasket
Jeg blir deprimert	1	2	3	4	5	6	7	Opprømt
Jeg blir sint	1	2	3	4	5	6	7	Glad
Jeg blir irritert	1	2	3	4	5	6	7	Tilfreds

Kognitiv tilfredshet

Q17 På en skala fra 1 til 7, hvor fornøyd er du med: (1 = svært misfornøyd, 7 = svært fornøyd)

- Hyppigheten av nye produkter og tjenester levert av (X)?
- Kvaliteten på nye produkter og tjenester levert av (X)?

Demografi

Q18 Kjønn

- ☐ Mann
- ☐ Kvinne

Q19 Alder:

- ☐ 20 år eller yngre
- ☐ 21-30 år
- ☐ 31-40 år
- ☐ 41-50 år
- ☐ 51-60 år
- ☐ 61-70 år
- ☐ 71 eller eldre

Q20 Nasjonalitet:

- ☐ Norsk
- ☐ Andre: ____

Q21 Utdanning:

- ☐ Grunnskole
- ☐ Videregående skole
- ☐ 3 års høyere utdanning
- ☐ Mer enn 3 års høyere utdanning

Q22 Årlig inntekt i din husstand:

- ☐ Lavere enn 200.000kr
- ☐ 200.000 - 399.000 kr
- ☐ 400.000 - 599.000 kr
- ☐ 600.000 - 799.000 kr
- ☐ 800.000 - 999.000 kr
- ☐ 1.000.000 kr - 1.299.000 kr
- ☐ 1.300.000 - 1.499.000
- ☐ Mer enn totalt 1.500.00 kr
- ☐ Jeg ønsker ikke å oppgi informasjon om min inntekt

Q23 Status:

- ☐ Singel
- ☐ Samboer
- ☐ Gift

Q24 Har du barn? Isåfall, vennligst angi hvor mange:

- ☐ Nei
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4 eller flere

Q25 Bor barna i ditt hushold?

- ☐ Ja
- ☐ Nei

Appendix 4: Respondent characteristics

What is your gender?			
	Frequency	Percent	Cumulative Percent
Male	101	49.0	49.0
Female	105	51.0	100.0
Total	206	100.0	
What is your age group?			
	Frequency	Percent	Cumulative Percent
20 years old or younger	*3*	*1.5*	*1.5*
21 to 30 years old	*123*	*59.7*	*61.2*
Up to 30 years old	126	61.2	61.2
31 to 40 years old	*35*	*17*	*78.2*
41 to 50 years old	*19*	*9.2*	*87.4*
51 to 60 years old	*19*	*9.2*	*96.6*
61 to 70 years old	*7*	*3.4*	*100*
71 years old or older	*0*	*0*	*100*
30 years and above	80	38.8	100.0
Total	206	100.0	
What is your level of education?			
	Frequency	Percent	Cumulative Percent
Elementary school	1	0.5	0.5
High school	27	13.1	13.6
3 years of higher education	71	34.5	48.1
More than 3 years of higher education	107	51.9	100.0
Total	206	100.0	
What is your household income level?			
	Frequency	Percent	Cumulative Percent
Below 200,000kr	31	15.0	15.0
200,000 - 399,000 kr	22	10.7	25.7
400,000 - 599,000 kr	47	22.8	48.5
600,000 - 799,000 kr	18	8.7	57.3
800,000 - 999,000 kr	17	8.3	65.5
1,000,000 - 1,299,000 kr	25	12.1	77.7
1,300,000 - 1,499,000	10	4.9	82.5
More than 1,500,000 kr	11	5.3	87.9

I do not wish to provide information about my income	25	12.1	100.0
Total	206	100.0	
What is your marital status?			
	Frequency	Percent	Cumulative Percent
Single	86	41.7	41.7
In a relationship (unmarried)	72	35.0	76.7
Married	48	23.3	100.0
Total	206	100.0	
What bank do you use?			
	Frequency	Percent	Cumulative Percent
DNB	111	53.9	53.9
Nordea	21	10.2	64.1
Sparebank1	35	17.0	81.1
Skandiabanken	14	6.8	87.9
Storebrand	5	2.4	90.3
Handelsbanken	5	2.4	92.7
Danske Bank	9	4.4	97.1
Gjensidige Bank	2	1.0	98.1
Eika	2	1.0	99.0
OBOS Banken	1	0.5	99.5
Jernbanepersonalets Bank og Forsikring	1	0.5	100.0
Total	206	100.0	

Appendix 5: Descriptive statistics of indicators

Table 1. Descriptive statistics of indicators

Indicator	Mean	Standard Deviation	Skewness	Kurtosis
bank	2.36	1.98911	1.811	3.129
innov_1a	0.3641	0.48234	0.569	-1.693
innov_1b	0.4951	0.50119	0.02	-2.019
innov_1c	0.2087	0.4074	1.444	0.086
innov_1d	0.1214	0.32734	2.336	3.491
innov_1e	0.0922	0.29006	2.839	6.12
innov_1f	0.1359	0.34354	2.14	2.606
innov_1g	0.1165	0.32161	2.408	3.837
innov_2	3.91	1.812	-0.234	-0.889
innov_3	3.2184	1.52886	-0.283	-1.398
rep_1a	4.95	1.384	-0.439	0.245
rep_1b	4.93	1.452	-0.636	0.138
rep_1c	5	1.46	-0.476	-0.167
rep_1d	5.2	1.324	-0.572	-0.094
rep_1e	5.44	1.323	-0.562	-0.378
rep_1f	4.67	1.263	0.267	-0.006
rep_1g	4.23	1.114	0.33	2.26
loyal_1a	5.56	1.603	-0.989	0.145
loyal_1b	4.99	1.722	-0.645	-0.3
loyal_1c	5.21	1.496	-0.486	-0.431
loyal_1d	2.27	1.779	1.226	0.406
loyal_2a	2.08	1.538	1.315	0.792
loyal_2b	1.63	1.19	1.916	2.778
loyal_2c	1.83	1.401	1.652	1.95
loyal_3	3.4612	1.85471	0.296	-0.916
pra_1a	4.07	1.232	0.186	1.241
pra_1b	4.56	1.203	0.079	0.327
pra_1c	4.42	1.242	-0.029	0.279
pra_1d	4.5	1.205	0.11	0.514
pra_2	4.73	1.162	0.018	0.082
pfi_1a	4.61	1.271	-0.318	0.718
pfi_1b	4.58	1.326	-0.239	0.186
pfi_1c	4.33	1.437	-0.356	-0.001
pfi_1d	4.24	1.461	-0.306	-0.126
pfi_1e	4.16	1.294	-0.211	0.435
pfi_1f	4.23	1.535	-0.284	-0.217
pfi_1g	4.61	1.327	-0.534	0.558
sat_1	5.3	1.247	-0.639	0.362
sat_2	4.83	1.371	-0.459	-0.167
sat_3	5.11	1.26	-0.395	-0.269
sat_4a	4.11	1.35	-0.436	0.711

sat_4b	4.96	1.285	-0.558	0.544
sat_4c	3.98	1.211	-0.202	0.856
sat_4d	4.36	1.021	-0.224	1.808
sat_4e	4.21	0.947	-0.464	3.434
sat_4f	4.44	0.99	0.331	1.431
sat_4g	4.76	1.413	-0.293	-0.034
sat_5	4.47	1.067	0.454	1.049
sat_6	4.85	1.008	0.249	-0.595
sex	1.51	0.501	-0.039	-2.018
age	2.75	1.169	1.307	0.654
edu	3.38	0.727	-0.799	-0.408
inc	4.4	1.903	0.442	-0.996
status	1.82	0.787	0.339	-1.309

Appendix 6: Factor loadings and explained variance

Table 1. Satisfaction

Factor Loadings: Satisfaction

Label	Question/Indicators/Observed Measures Reflecting Satisfaction	Factor
		1
sat_1	We would now like you to think back upon your experiences with your bank. How satisfied or dissatisfied are you with your bank?	0,754
sat_2	Imagine an ideal bank. How close to this ideal is your bank?	0,676
sat_3	To what extent does your bank usually meet your expectations?	0,705
sat_4a	What emotions do you feel when you use (X)'s products/services? - I feel indifferent ------- engaged	0,496
sat_4b	What emotions do you feel when you use (X)'s products/services? - I feel dissatisfied ------- satisfied	0,741
sat_4c	What emotions do you feel when you use (X)s products/services? - I feel bored ------- inspired	0,586
sat_4d	What emotions do you feel when you use (X)'s products/services? - I feel depressed ------- excited	0,719
sat_4e	What emotions do you feel when you use (X)'s products/services? - I feel angry ------- happy	0,598
sat_4f	What emotions do you feel when you use (X)'s products/services? - I feel irritated ------- enthusiastic	0,738
sat_4g	How satisfied are you with the frequency of new products and services provided by (X)?	0,781
sat_5	How satisfied are you with the quality of new products and services provided by (X)?	0,467
sat_6	We would now like you to think back upon your experiences with your bank. How satisfied or dissatisfied are you with your bank?	0,575
Extraction Method: Maximum Likelihood. 1 factors extracted. 5 iterations required.		

Explained Variance: Satisfaction

	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	5,788	48,230	48,230
2	1,395	11,622	59,852
3	1,059	8,824	68,676
4	0,764	6,367	75,043
5	0,543	4,528	79,571
6	0,516	4,302	83,874
7	0,454	3,780	87,654
8	0,409	3,409	91,063
9	0,317	2,638	93,701
10	0,282	2,348	96,049
11	0,243	2,027	98,075
12	0,231	1,925	100,000
Extraction Method: Maximum Likelihood.			

Table 2. Perceived Firm Innovativeness

Factor Loadings: Perceived Firm Innovativeness

Label	Question/Indicators/Observed Measures Reflecting Perceived Firm Innovativeness	Factor
		1
pfi_1a	How much do you agree or disagree with the following description of your bank? - (X) is a dynamic firm	0,487
pfi_1b	How much do you agree or disagree with the following description of your bank? - (X) is a creative firm	0,660
pfi_1c	How much do you agree or disagree with the following description of your bank? - (X) launches new products and creates market trends all the time	0,846
pfi_1d	How much do you agree or disagree with the following description of your bank? - (X) is a pioneer in its category	0,858
pfi_1e	How much do you agree or disagree with the following description of your bank? - (X) constantly generates new ideas	0,917
pfi_1f	How much do you agree or disagree with the following description of your bank? - (X) is an advanced, forward-looking firm	0,858
pfi_1g	How much do you agree or disagree with the following description of your bank? - (X) is a dynamic firm	0,850
Extraction Method: Maximum Likelihood. 1 factors extracted. 5 iterations required.		

Explained Variance: Perceived Firm Innovativeness

	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	4,770	68,140	68,140
2	0,963	13,751	81,891
3	0,381	5,440	87,331
4	0,277	3,961	91,292
5	0,234	3,338	94,630
6	0,226	3,223	97,852
7	0,150	2,148	100,000
Extraction Method: Maximum Likelihood.			

Table 3. Perceived Relative Attractiveness

Factor Loadings: Perceived Relative Attractiveness

Label	**Question/Indicators/Observed Measures Reflecting Perceived Relative Attractiveness**	**Factor**
		1
pra_1a	In comparison with other banks providing similar services, to what extent are the following statements appropriate for (X)? - (X) has better prices on its services	0,485
pra_1b	In comparison with other banks providing similar services, to what extent are the following statements appropriate for (X)? - (X) has better quality services	0,733
pra_1c	In comparison with other banks providing similar services, to what extent are the following statements appropriate for (X)? - (X) has a better reputation	0,752
pra_1d	In comparison with other banks providing similar services, to what extent are the following statements appropriate for (X)? - (X) is more attractive than other providers of the same service	0,871
pra_2	Regarding your experiences with (X), how attractive or unattractive do you consider (X) relative to its competitors?	0,727
Extraction Method: Maximum Likelihood. 1 factors extracted. 5 iterations required.		

Explained Variance: Perceived Firm Innovativeness

	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	3,057	61,131	61,131
2	0,760	15,202	76,333
3	0,472	9,436	85,769
4	0,417	8,349	94,118
5	0,294	5,882	100,000
Extraction Method: Maximum Likelihood.			

Table 4. Corporate reputation

Factor Loadings: Corporate Reputation

Label	Question/Indicators/Observed Measures Reflecting Corporate Reputation	Factor
		1
rep_1a	Which of the following statements do you associate with your bank? - (X) treats its customers in a fair manner	0,772
rep_1b	Which of the following statements do you associate with your bank? - (X)'s employees are concerned about customer needs	0,884
rep_1c	Which of the following statements do you associate with your bank? - (X) offers high quality products and services	0,906
rep_1d	Which of the following statements do you associate with your bank? - (X) is a strong, reliable company	0,747
rep_1e	Which of the following statements do you associate with your bank? - (X) supports good causes	0,773
rep_1f	Which of the following statements do you associate with your bank? - (X) is an environmentally responsible company	0,495
rep_1g	Which of the following statements do you associate with your bank? - (X) treats its customers in a fair manner	0,516
Extraction Method: Maximum Likelihood. 1 factors extracted. 5 iterations required.		

Explained Variance: Corporate Reputation

	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	4,297	61,386	61,386
2	1,063	15,187	76,573
3	0,443	6,332	82,905
4	0,379	5,414	88,319
5	0,370	5,284	93,603
6	0,290	4,148	97,751
7	0,157	2,249	100,000
Extraction Method: Maximum Likelihood.			

Table 5. Customer loyalty

Factor Loadings: Customer loyalty

Label	**Question/Indicators/Observed Measures Reflecting Customer Loyalty**	**Factor**
		1
loyal_1a	How likely or unlikely is it that you would continue as a customer of your current bank?	0,753
loyal_1b	How likely or unlikely is it that you would recommend your bank if anyone asks you for advice?	0,969
loyal_1c	How likely or unlikely is it that you would talk about your bank in a positive manner?	0,885
loyal_1d	How likely is it that you would use social media to communicate with, or get information from (X)? - I use social media to comment on products from (X)	-0,054
loyal_2a	How likely is it that you would use social media to communicate with, or get information from (X)? - I use social media to see what others say about (X)	-0,045
loyal_2b	How likely is it that you would use social media to communicate with, or get information from (X)? - I use social media to talk about my experiences with (X)	-0,062
loyal_2c	How likely is it that you would use social media to communicate with, or get information from (X)? - I use social media to share/like information from (X)	0,051
loyal_3	If similar products and services were offered by another bank at a lower price, to what extent would you be willing to switch banks?	0,431
Extraction Method: Maximum Likelihood. 1 factors extracted. 5 iterations required.		

Explained Variance: Customer Loyalty

	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	2,946	36,824	36,824
2	2,620	32,752	69,577
3	0,793	9,915	79,492
4	0,552	6,902	86,394
5	0,414	5,179	91,573
6	0,334	4,169	95,742
7	0,220	2,756	98,498
8	0,120	1,502	100,000
Extraction Method: Maximum Likelihood.			

Appendix 7: Indicator reliability check

Table 1. Outer loadings and square of outer loadings for indicators

Construct	**Indicator**	**Outer Loading**	**Square of Outer Loading**
INNOVATION	*innov_1*	0.824	0.678
	innov_2	0.742	0.550
LOYAL	*loyal_1a*	0.844	0.712
	loyal_1b	0.954	0.910
	loyal_1c	0.931	0.868
PFI	*pfi_1a*	0.653	0.427
	pfi_1b	0.790	0.624
	pfi_1c	0.853	0.727
	pfi_1d	0.816	0.666
	pfi_1e	0.885	0.783
	pfi_1f	0.858	0.736
	pfi_1g	0.886	0.786
PRA	*pra_1b*	0.799	0.639
	pra_1c	0.822	0.676
	pra_1d	0.884	0.781
	pra_2	0.825	0.680
REPUTAT	*rep_1a*	0.836	0.699
	rep_1b	0.878	0.771
	rep_1c	0.900	0.810
	rep_1d	0.833	0.694
	rep_1e	0.844	0.713
SATISFACT	*sat_1*	0.776	0.602
	sat_2	0.724	0.524
	sat_3	0.774	0.599
	sat_4b	0.723	0.522
	sat_4d	0.709	0.502
	sat_4f	0.678	0.459
	sat_4g	0.740	0.548
	sat_5	0.673	0.452
	sat_6	0.715	0.512