The Impact of Virtual Agents on Customer Loyalty in Major Swedish Banks
Abstract

Background
Since the emergence of digital banking, the financial sector has experienced a significant transformation in both how business is conducted and how services are provided to customers. Previous literature has examined how new technologies and the digitalization of banks' customer service affect customer loyalty. Although, since virtual agents acting as service providers in the banking sector is a relatively new phenomenon, there is limited research concerning the implications it will have on the bank-customer relationship. Hence, the novelty and relevance of the topic makes it interesting for further research.

Purpose
Through the identified underlying factors affecting customer loyalty, the purpose of this study is to examine how customer loyalty will be affected by the implementation of virtual agents as service providers in major Swedish banks.

Method
This is a qualitative study, and the empirical data were collected from semi-structured in-depth interviews with bankers at four major Swedish banks, as well as with ten highly-educated customers who are frequent users of bank services.

Findings
The findings showed that virtual agents must affect customer service to a large extent to have a profound impact on customer loyalty. Virtual agents will be able to replace human bankers regarding simpler inquiries satisfyingly. On the other hand, the demand for personal interactions regarding more complex matters is found to be important.
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1. Introduction

This section introduces the subject Artificial Intelligence, its increasing use in several operational areas, as well as the importance of customer loyalty in banks to achieve a competitive advantage. This is followed by the problem formulation and the purpose of this thesis. Furthermore, this section includes delimitations and the research question that this research pursues to answer.

1.1. Background

Cars that drive themselves, artificial agents and machines that analyze X-rays is today a reality in an increasingly technology-driven world. The continuous automatization and development of artificial intelligence (AI), defined as the development of algorithms that can perform tasks that traditionally required human intelligence, have already had a significant impact on productivity as well as on peoples' lives (Financial Stability Board, 2017; McKinsey, 2017). These ongoing changes amount to both possibilities and challenges for companies in various sectors and will continue to affect the way businesses operate (McKinsey, 2017).

Historically, manufacturing has been most affected by the rise of automation technologies. However, AI has recently begun to show a strong presence in the service sector (Huang & Rust, 2018). The striking outcomes of the Internet's continuous development and expansion, together with the automatization and technological advancements, have resulted in new communication channels between customers and companies (Ganguli & Roy, 2011). In contrast to before, customers no longer need to adjust to firms' opening hours, public holidays or wait in long phone queues to get access to various basic services (Zook & Smith, 2016). Also, the expansion of information technology and digitalization has also opened for new arenas where customer experience can take place. One area where AI is about to transform the way services are provided is in the banking sector (Financial Stability Board, 2017).

Since the emergence of digital banking, the financial sector has experienced a considerable transformation in both how business is conducted and how services are provided to customers.
(Lähteenmäki & Nääsi, 2013). This transformation is now continuing with the implementation of AI-technologies in several key areas (Financial Stability Board, 2017). According to a study by IBM (2017), by 2020, it is estimated that 85 percent of all customer interactions will be made without any human involvement. This estimate is indicative of the speed at which the technological shift occurs and as such, it is vital for banks to design strategies that are in line with this change. Larsson and Viitaoja (2017) find that banks seek to minimize their operational costs regarding personnel, which could yield them an advantage concerning both differentiation and cost. However, as the ability to retain long-term customer relationships is considered one of the essential competitive advantages for a bank, they must avoid compromising the quality of their different services. Consequently, Srinivasan, Anderson and Ponnavolu, (2002) and Heffernan, O'Neil, Travaglione and Droulers, (2008) agree that obtaining customer loyalty is the ultimate objective of customer service. As argued by Huang and Rust (2018), since the technological advancement regarding AI already has had a profound impact on the activities serving customers, it will most likely affect the bank-customer relationship.

1.2. Problem Discussion

Recently, banks have introduced artificial service providers in their customer service. i.e., virtual agents that carry out client interactions either by voice or text. Many are still in trial phase, and the current generation used provides customers with information or answers to simple questions (Forbes, 2017). However, the abilities and features of the AI-technology are developing rapidly and becoming increasingly advanced (Financial Stability Board, 2017).

Over the last years, competition between firms has increased, especially in the banking sector, which has made it increasingly important for banks to differentiate themselves from their rivals. Customer loyalty has been identified as one of the most critical aspects in this respect (Heffernan, O'Neil, Travaglione & Droulers, 2008). Customer loyalty impacts significantly on cost reduction and profits, and thus on the overall performance of a bank (Mosavi, Sangari & Keramati, 2018). Therefore, banks work hard to establish and maintain loyal customer relationships. However, what creates and retains loyal customers is influenced by various factors. Since the bank-customer interaction often involve human inputs (Ndubisi, Koh Wah & Ndubisi, 2007; Coelho & Henseler, 2012), the implementation of virtual agents in customer
service is likely to affect customer loyalty. Consequently, it is crucial for banks to understand how the redesign of customer service will play out, and the implications this may have on customer loyalty.

Previous literature has examined how new technologies and the digitalization of banks' customer service affect customer loyalty (Durkin et al., 2003; Giebelhausen et al., 2014; Larsson & Viitaoja, 2017; Ndubisi et al., 2007; Pousttchi & Dehnert, 2017). Moreover, since AI-technologies in the service sector, and particularly the banking sector, is a relatively new phenomenon, there is limited research concerning the implications it will have on the bank-customer relationship (Colby, Mithas, & Parasuraman, 2016; Huang & Rust, 2018; Marinova et al., 2016). As observed by Huang & Rust (2018, p. 2): “The observation that AI constitutes a major source of innovation yet is increasingly replacing service jobs, motivates us to explore more fully and rigorously the way AI will reshape service.” In short, the relevance and the novelty of virtual agents in the banking sector, as well as its potential impact on customer loyalty, makes it an important topic for further research.

1.3. Purpose

This thesis seeks to explore how customer loyalty will be affected by an implementation of virtual agents as service providers in major Swedish banks. While considering previous research on customer loyalty, digitalization of the banking industry, and AI-technologies in customer service, the aim is to build upon existing literature and explore the implications associated with the implementation of virtual agents. To investigate the topic more thoroughly, a two-sided perspective based on empirical data collected from both Swedish bank representatives and bank customers will be applied. In turn, this thesis strives to provide useful insights for banks to better understand the effects an implementation of the artificial service provider may have on customer loyalty.

1.4. Delimitations

In this thesis, the focus is specifically on private bank customers, and corporate customers are therefore not included. Furthermore, because of time constraints, all empirical data were gathered from banks and bank customers in Sweden. In addition, the study focuses on major
Swedish banks, while niche banks were excluded.

In the Swedish banking industry, Handelsbanken, Nordea, Skandinaviska Enskilda Banken (SEB) and Swedbank are referred to as the four major banks (Swedish Bankers’ Association, 2017). These banks hold a considerable market share of the private customers (Konkurrensverket, 2016) and account for approximately 70 percent of deposits and lending (Swedbank, 2017). Moreover, the fifth largest bank in Sweden in terms of private customers is Länsförsäkringar Bank (Länsförsäkringar), with a market share of five percent (Länsförsäkringar, 2017). Except for Swedbank, all these banks are included in our study. These banks will be referred to as major banks. By targeting these banks, the research is able to encompass roughly 60 percent of the Swedish private customer market in the banking sector (Konkurrensverket, 2016).

1.5. Research Question

How will customer loyalty for private customers be affected when major Swedish banks implement virtual agents as service providers?
2. Literature Review

This section consists of a presentation and discussion of the existing literature on customer loyalty, digitalization of the banking industry and artificial intelligence in customer service. The first subsection discusses customer loyalty as a critical variable for banks' profitability. Secondly, how the digitalization of the banking sector has affected the bank-customer relationship is discussed. Lastly, research concerning AI is presented including its increasing presence in various industries and operational areas, and its effects on how service is provided.

2.1. Customer Loyalty

Customer loyalty is a complex and contested subject within the marketing literature. Stone, Woodcock and Machtynger (2000), define loyalty as a state of mind including beliefs and attitudes developed over time. Moreover, it can be referred to as the result of the accumulated experience that customers have with services or products, including emotional involvements and physical interactions (Ngo Vu & Nguyen Huan, 2016). A customer that is loyal will consistently rebuy or re-patronize a good or a service and thereby express commitment, disregarding marketing activities and situational factors that may cause a switching behavior (Oliver, 1999). Hence, customer loyalty is characterized by the following attributes: the customers consider the company as their first service provider (Caruana, 2002), and they exhibit continuous re-purchasing behavior and recommend the product to other customers (Caruana, 2002; Collier & Bienstock, 2006; Dabholkar, Shepherd & Thorpe, 2000; Ganesh, Arnold & Reyholds, 2000; Reichheld, 2003). Therefore, it is of high importance to manage not only customers' behavior but also their attitudes towards the company to establish a long-term relationship and to prevent them from switching to alternative providers (Stone, Woodcock & Machtynger, 2000).

Based on existing definitions, the core principles that comprise customer loyalty have been combined and developed into a more comprehensive description. As a result, throughout this thesis customer loyalty will be defined as: “Customer loyalty is a state of mind, where customers have a certain set of attitudes towards a firm and intend to commit to a long-term relationship. Moreover, loyal customers are not based solely on their repurchasing behavior
but also their tendency to promote their preferred firm to its peers, as well as a sense of connection that is strongly embedded with the customer.”

2.1.2. Implications of Customer Loyalty

As argued by Lee and Cunningham (2001), developing and maintaining customer loyalty, or creating long-term relationships with customers, is the key for service firms to both survival and growth. It is further claimed that the payoffs of customer loyalty are particularly true in the banking sector (Reichheld & Sasser, 1990). Especially in the process of acquiring new customers in today’s challenging business environment, where many competitors offer similar services (Mosavi, Sangari & Keramati, 2018). Furthermore, Lee and Cunningham (2001) emphasize the fact that a firm’s service quality is easily duplicated by other actors in the market, which makes it even more important to achieve customer loyalty.

The advantages a firm obtains from the bank-customer relationship are linked to the loyalty of a customer. A loyal customer will stay with the bank longer, generate more revenue and offer valuable information to the bank (Mosavi et al., 2018). As a result, banks will more easily understand the needs and expectations of its customers, making the employees more productive and in turn enable them to provide better services (Fandos Roig, García & Moliner Tena, 2009). The authors further emphasize the fact that loyal customers will assist in the process of attracting new ones, thanks to their reference to the bank to its peers. This is further endorsed by Reinartz and Kumar (2002), who mentions that loyal customers cost less to serve, they are willing to pay more than other customers and more likely to engage in word-of-mouth marketing. Moreover, the process of keeping existing customers is said to be five times less expensive than the cost of acquiring new ones (Mosavi et al. 2018). Obtaining and retaining a loyal customer base is, therefore, one of the key variables for a company’s profitability (Srinivasan et al., 2002; Heffernan et al., 2008).

2.2. Digitalization of the Banking Sector

Holmlund, Strandvik and Lähteenmäki (2016) assert that, for a long time, the banking system was relatively quiescent and unchanging. The situation proved disadvantageous as it created a belief among decision-makers that they could continue to manage customers following
previously developed practices and processes. According to Durkin, Howcroft, O'Donnell and McCartan-Quinn (2003) and Lähteenmäki and Nääsi (2013), the process of digitalization radically changed these perceptions and the banking sector experienced a disruption in its business model. More specifically, the subsequent growth in Internet banking, as well as the variety of services that became accessible through digital banking solutions, have resulted in customers increasingly interacting through digital channels. Kamakodi and Khan (2008) maintain that the banking industry has become very technology-intensive and that banking operations and processes were redesigned as a result of the introduction of new technology. Larsson and Viitaoja (2017) elaborate on this and argue that as the Internet has continued to grow and expand, so has its implications on the banking sector. They agree with Durkin et al. (2003) and Kamakodi and Khan (2008) in that new ways of interacting have emerged that impact the banking sector.

Nam, Lee and Lee (2016) claim that the technological advancements within the banking industry have had an enormous impact on the way banks manage and provide customer service. Furthermore, the authors emphasize the current industry development, where banks try to move away from the traditional branches and personnel-assisted channels toward more automated, self-assisted channels. Pousttchi and Denert (2017) claim that the automated communication and modern data analysis have changed the design of customer relationships and that especially the younger generation is looking for services that reflect their perception of modern day life. According to Larsson and Viitaoja (2017), in 2015, 38 percent of customers reported that the primary reason for staying with their bank was satisfactory online services. Giebelhausen, Robinson, Sirianni and Brandy (2014) do not agree with these results and argue that including technological advancements in customer service can have an adverse effect on the customers because of decreased human interaction.

Larsson and Viitaoja (2017) argue that, since a large variety of banks' services are available over the Internet it will both reduce costs and enhance customer loyalty through an increase in availability. Although, Ndubisi et al. (2007) claim that the decrease in human interaction makes it increasingly difficult to build trust and quality relationships, factors considered necessary for customer loyalty. Hence, banks must increase their efforts to develop trustworthy relationships with its customers to promote digital solutions and achieve customer loyalty (Mukherjee & Nath, 2003). Furthermore, several studies identify trust as a predominant factor in relationship building (Mukherjee & Nath, 2003; Ndubisi et al., 2007;
According to Durkin et al. (2003), customers also find some banking activities too essential or complicated to do online, where greater importance is assigned to face-to-face interaction. However, this is independent of how familiar the customer is with remote banking, as well as how important remote banking is perceived. Ndubsi et al. (2007) claim that with digitalization and further technological innovations, existing bank-customer relationships is at stake when technical solutions replace services provided by humans. Pousttchi and Denert (2017) reiterate this point, stating that traditional and established relationships, built upon trust and loyalty, face the risk of being questioned as new forms of banking emerges.

2.3. Artificial Intelligence

2.3.1. Introduction to Artificial Intelligence

Huang and Rust (2018) argue that AI can be viewed as machines which execute aspects similar to human intelligence. Financial Stability Board (2017) defines AI as: “...theory and development of computer systems to perform tasks that traditionally have required human intelligence” (p. 4). AI constitutes a significant source of innovation and is increasingly applied in various operational areas (Rust & Huang, 2014). The ability to create non-biological intelligence has been a goal of humanity for a long time, and the establishment of AI as a field date back to 1956 (Spector, 2006). The ultimate and original goal of AI was the ability to construct computer systems that can think, more specifically, machines that possess a human-like intelligence (Grégoire, Lagniez & Mazure, 2014). Brynjolfsson and McAfee (2014) argue that what computers can achieve will become increasingly impressive because of two facts: the development of real and useful AI and a widespread connection between people through a common digital network, i.e., the Internet. Recently, machines have progressed into demonstrating abilities that used to be exclusively human, like complex communication and pattern recognition. For instance, there is recent progress in natural language processing (NLP), which enables machines to read and interpret as well as produce both text and spoken language (Financial Stability Board, 2017). Also, advancements in machine learning, referring to a computer's ability to refine its processes automatically and continuously improve its results as it gets access to more data (Brynjolfsson & McAfee, 2014).
The revolutionary impact of AI has resulted in growing attention from researchers in multidisciplinary fields, and two major research fields can be recognized; First, the service literature that focuses on how new intelligent technologies can be applied, and how service is enabled through emerging technologies (Colby, Mithas, & Parasuraman, 2016; Marinova et al., 2017; Rafeli, et al., 2017). The research predicts, among other things, an increase in self-service technologies (Meuter, Ostron, Roundtree, & Bitner, 2000) and an expansion of the service sector (Rust & Huang, 2014). Second, the economic literature has investigated what impact AI will have on jobs and human labor (Brynjolfsson & McAfee, 2016; Fölster, 2015; Davenport & Kirby, 2015; McKinsey, 2017).

2.3.2. Artificial Intelligence in the Service Sector

Huang and Rust (2018) explain that AI applications have not previously been as successful in the service sector because a lot of tasks require the ability to act upon intuition as well as interpreting and displaying emotions. In an automated production line, these cognitive factors are of less importance and have therefore facilitated the implementation in the manufacturing sector (Autor & Dorn, 2012). In addition, the authors further claim that service jobs rely more on spontaneous interactive communication and contextual understanding than manufacturing jobs. However, Huang and Rust (2018) present evidence that AI-technology increasingly gains intuitive and empathetic intelligence, resembling those of a human. Simultaneously, jobs are being replaced at a faster pace, according to the economic research on new intelligent technologies (Brynjolfsson & McAfee, 2014; Fölster, 2015; Davenport & Kirby, 2015; McKinsey, 2017).

AI is currently replacing service jobs and is already being applied in the front office, and this development will reshape the service sector and decrease the human interaction between customers and service providers (Huang & Rust, 2018; Financial Stability Board, 2017). Marinova et al. (2016) maintain that, depending on the level of intelligence of the technology as well as its suitability for frontline interactions, intelligent technologies can enhance both productivity and customer satisfaction. Huang and Rust (2018) argue that transactional services, where relational benefits are limited, will in the short run benefit from AI replacement. In contrast to more relational services, where human workers are expected to be more beneficial since the human touch will be difficult for AI-technologies to mimic.
2.3.3. Virtual Agents in Service Encounters

From the field of AI research, agent technology has emerged (Pani & Venugopal, 2008). Virtual agents are one of the most recent innovations within AI and can be defined as computer-generated agents with human-like attributes, with the ability to simulate human behavior and interact with customers through AI-technology (Verhagen, van Nes, Feldberg & van Dolen, 2014). A virtual agent can understand the underlying context of what is communicated, reflect upon the discussion and express itself in a human-like manner (Fölster, 2015). They can either possess a human-like appearance and communicate with customers verbally, or in more abstract shape, e.g., in a chat interacting through text. Moreover, Verhagen et al. (2014) further suggest that virtual agents can substitute humans in the role of a service provider and carry out tasks that previously were performed by a human agent. Pani and Venugopal (2008) argue that artificial service providers will have the ability to enhance customer interactions and customize the service.

Castelli, Manzoni, and Popovic (2016) argue that the quality of service, specifically the time a consumer must wait to be provided with a service, is a significant aspect of customer satisfaction. Virtual agents have the potential to deliver reliable service and are not affected by human needs or external circumstances, which means that they can operate 24 hours a day. This would significantly reduce the time it takes for customers to receive assistance and as such improve the quality of service (Castelli et al. 2016). Moreover, virtual agents have an advantage over human agents since they can remember everything a customer reveals and use that information to enhance the quality of future encounters (Pani & Venugopal, 2008) and autonomous systems base their decisions on objective facts without emotional involvement (Wisskirchen et al. 2017). However, as pointed out by Eletter, Yaseen and Elrefae (2010), rationality in customer service is not always appropriate. When a decision is to be made, a virtual agent may be programmed to follow specific criteria and comply with an acceptable level of risk that it is allowed to take. A human agent may be more flexible regarding decision criteria and level of risk, potentially realizing that it in some cases is worth incurring extra risk to achieve a greater reward.
3. Theoretical Framework

This section will establish a theoretical framework that will be used as a foundation for the empirical research. An existing framework for customer loyalty is revised by deducting and adding co-creators of customer loyalty.

3.1. Choice of Theories

By analyzing previous literature concerning customer loyalty in financial services and what constitutes this state, the Model of Customer Switching Intentions (Mosavi et al. 2018) has been identified. This model encompasses factors that have been considered vital in several research studies on the topic.

3.1.1. Model of Customer Switching Intentions

Mosavi et al. (2018) present a framework developed for investigating customer switching intentions in the banking sector. According to this theory, customer perceived value, customer satisfaction, customer trust, switching barriers and customer loyalty will, directly or indirectly, influence the switching intention. The purpose of the framework was to examine how the interrelation between these variables create a mechanism that may reduce the switching intention of banking customers, as this had not previously been addressed.

The presented framework is empirically justified through a quantitative study and the results demonstrate that customer-perceived value influences how satisfied customers are with the service provider; therefore, it has a direct impact on customer satisfaction. Following the model, customer satisfaction, in turn, will affect the switching intention, customer trust, and customer loyalty directly. In addition, customer trust affects customer loyalty directly. Moreover, the model demonstrates a direct influence of customer loyalty on switching intentions. Additionally, the framework is concerned with how customer loyalty affects the switching intentions of customers, which is shown to have a significant negative impact. Finally, the moderating role of switching barriers between customer satisfaction and switching intentions, as well as between customer loyalty and switching intentions, are included.
Figure 1. Model of Customer Switching Intentions
(Mosavi et al., 2018, p. 7.)

3.2. Revision of Framework

3.2.1. Revision of Model Customer of Switching Intentions

Even though the framework was developed for investigating customer switching intentions, it contributes to a suitable foundation for understanding the factors building up to customer loyalty. In accordance with Mosavi et al. (2018) findings, the relationships have been confirmed in previous literature. A study conducted by Chen, Chung and Wu (2010), reported that customer satisfaction has a significant positive influence on both customer loyalty and customer trust. Moreover, empirical evidence demonstrates that customer trust directly influences customer loyalty in a positive manner (e.g., Ha, Janda & Muthaly, 2010; Shin, Chung, Oh, & Lee, 2013). Additionally, previous research carried out by Jana and Chandra (2016), demonstrate that customer perceived value has a positive effect on customer satisfaction. Consequently, as this thesis aims to analyze factors that influence customer loyalty, it is not relevant to include switching intentions and switching barriers as they do not have an impact on customer loyalty (Mosavi et al., 2018). Hence, to address the chosen
purpose, the framework will be revised and switching barriers and switching intentions will be excluded.

As the framework has been developed in early 2018, the components, as well as the interrelated relationships between them, have been examined recently. Hence, the framework gives an accurate view of how customer loyalty is achieved in the banking sector today. In addition, the model was developed and used for a quantitative study, where the aim was to validate the relationship between the variables (Mosavi et al., 2018). Although, this paper does not aim to revalidate or investigate these relationships, it seeks to utilize this framework as a foundation for the empirical results, where each factor will be examined independently. Thus, despite this being a qualitative study, the model is considered relevant and applicable to this paper. The components used in the revised model has been deemed the most significant through analyzing a vast amount of studies on the subject. In addition, the components that were identified were also found to be highly applicable within the banking sector (Al-Hawari, Hartley & Ward, 2005; Beerli, Martin & Quintana, 2004; Rao & Budde, 2015; Rust & Chung, 2006; Wang, Lo & Hui, 2003). However, in recent literature concerning customer loyalty and the banking sector, together with the implementation of digital solutions, customization and service quality were two reoccurring factors. These factors were recognized to have an impact on customer loyalty (e.g., Coelho & Henseler, 2012; Larsson & Viitaoja, 2016; Ganguli & Roy, 2010) and have therefore been added to the framework. The additional factors are presented below.

3.2.2. Addition of Customization

Coelho and Henseler (2012), have conducted an empirical study on what effects customization in the banking sector has on perceived service quality, customer satisfaction, and customer loyalty. The findings provide substantial empirical evidence that service customization is a considerable co-creator of customer loyalty, by the mediated role of customer satisfaction, service quality and customer trust. Another study by Larsson and Viitaoja (2017), shows that the evolving digitalization allows for greater flexibility and has made it easier for firms to provide tailored solutions to its customers. Hence, the addition of the factor to the framework is highly relevant for this research since it is proven to have a significant influence on customer loyalty. Moreover, one of the main features with AI is machine learning, which enables virtual agents to learn from past events, analyze a large
amount of historical customer data as well as finding patterns that are less obvious to human observers (Brynjolfsson & McAfee, 2014). Therefore, there is a possibility that this will improve the bank's ability to customize service offerings (Financial stability board, 2017).

3.2.3. Addition of Service Quality

Ismail, Haron, Ibrahim and Hara (2006) and Khan and Fasih (2014) found that service quality has a significant and positive relationship with customer loyalty, through the mediating role of customer satisfaction. Kuo, Wu and Deng (2009) also conclude that service quality positively influences customer-perceived value. As a result, enhancing service quality will directly improve the customer perceived value and customer satisfaction. Thus, it is considered a relevant component in the construct of customer loyalty. Furthermore, Ganguli and Roy (2011) found that service quality is of high importance in technology-based banking, and Castelli, Manzoni and Popovic (2016) propose that banks should incorporate AI-technologies to improve the service quality. As a result, the implementation of virtual agents is likely to influence this co-creator. Thus, service quality complements the chosen framework in a suitable manner.
3.4. Modified Theoretical Framework

This section will present the five factors identified as significant for achieving customer loyalty, and included in the revised model. Each element is discussed, analyzed and described to provide a comprehensive understanding of their direct or indirect impact on customer loyalty.

3.4.1. Customer Loyalty

Customer loyalty is the desired end-state which is developed and maintained through several contributory factors. Hence, customer loyalty can be seen as a result of the following set of factors (Beerli et al., 2004): customer satisfaction, customer trust, customer perceived value, service quality and customization.
3.4.5. Customization

Anderson, Fornell and Rust (1997) define customization as a form of differentiation, meaning that firms tailor their offerings to meet heterogeneous needs of their customers. This is following Black, Childers and Vincent (2014), who claim that customized services are designed to meet specific needs of consumers. Rust and Chung (2006) suggest an alternative view of customization. They assert that, when services involve human interactions, the service provider can adjust to the needs of the individual customer and as such customize the offering. Moreover, Rust and Chung (2006) emphasize the importance and growth potential of service customization in areas where new technologies are prevalent.

Customization has the potential to enhance the customer experience and in turn, contribute to higher service quality. However, the customization of service offers can lead to higher costs, lower productivity and lower efficiency, although, these problems will be mitigated by new, more efficient technologies (Rust & Chung 2006). In addition, Beerli et al. (2004) argue that, because banks offer quite homogenous services, they need to differentiate its offers in accordance with customer needs to obtain a competitive edge.

3.4.6. Service Quality

Ganguli and Roy (2011) define service quality as an overall assessment by the customers of the service offered. Ismail et al. (2006) found that service providers' main objective is to develop services that satisfy the needs and expectations of the customers. In other words, service providers should aim to close the gap between expectations and perceptions held by the customers, with the use of the service provided. Also, Ganguli and Roy (2011) maintain that service quality is achieved once the expectation and the outcome of the service coincide.

Wang, Lo and Hui (2003) claim that it is imperative to offer a high level of service quality to customers to survive and achieve success in the banking sector. Digitalization has reduced the importance of geographical proximity, leading to an increased emphasis on convenience and time flexibility (Yang, Jun, & Peterson, 2004). According to Yang, Jun and Peterson (2004), the importance of service quality has, amongst other things, risen because of reduced switching costs, easier access and tougher competition. As a result, differentiation in service quality to attract and retain customers has become increasingly important. Anderson et al.
argue that the more time that is dedicated to each customer, the lower the productivity. However, each customer will be given a more in-depth service experience, which has the potential to increase service quality.

3.4.4. Customer Perceived Value

Vandermerwe (2003) claims that value is defined by the customers and refers to the customers' satisfaction of the total experience. Furthermore, Payne and Holt (2001) claim that the foundation of value is constructed upon benefits and sacrifices. Mosavi et al. (2018) further elaborate on this by stating that perceived value is the customers' evaluation of the trade-offs between the realized sacrifices and benefits when selecting and using a specific service from the available alternatives on the market. Hence, customer value is the perception of the customers and not something that is decided by the service provider (Hu, Kandampully & Juwaheer, 2009). In addition, Sweeney and Soutar (2001) stress that customer perceived value can sometimes be mixed up with customer satisfaction since both are value assessments. However, customer satisfaction occurs after a customer has used a service, whereas customer perceived value happens continuously.

Because of the fiercer competition in the banking sector, the customer realizes little differences in services (Samad, 2007). The author further argues that the ability to create and enhance customer value is of high importance in the banking sector. Barnes and Howlett (1998) claim that banks can differentiate themselves from competitors by understanding what creates and enhances customer perceived value. Traditionally, Skudiene, Evenhart, Slepirkaire and Reardon (2013), argues that the front-line employees have been the major providers of customer perceived value since they interact directly with the customers.

3.4.2. Customer Satisfaction

The traditional view of customer satisfaction was that it resulted directly from a post-purchase judgment or reaction (Oliver, 1999). However, more recent research defines customer satisfaction as customers' assessment of the received service value (Mosavi et al. 2018). It has also been argued that customer satisfaction can be viewed as the result of the relationship between what the customers expect and their perception of the service quality (Ngo Vu & Nguyen Huan, 2016). Wang (2014) adds on to this perspective by claiming that a customer
feels satisfied when a service is in line with her or his requirements and needs. It is evident from the diverse literature that customer satisfaction is an essential ingredient for building and retaining a loyal customer base (Ngo Vu & Nguyen Hu, 2016; Leverin & Liljander 2006; Mosavi et al., 2018).

Customer satisfaction in the banking sector has gained an increased interest among researchers in recent years (Riquelme, Mekkaoui & Rios, 2009). This can be explained by a fiercer competition and rapid technological change. More customers are willing to choose digital channels over traditional banking channels. Hence, online channels are becoming more important for creating satisfied customers and securing a loyal customer base (Liébana-Cabanillas et al., 2013).

3.4.3. Customer Trust

Customer trust is defined as the “willingness to rely on an exchange partner in whom one has confidence” (Moorman, Zaltman & Deshpande, 1992, p. 315). According to van Esterik-Plasmeijer and van Raaij (2017), when customers experience a high level of trust for companies, they feel confident that their interests are taken care of. Furthermore, the authors state four factors leading up to customer trust, namely: competence, transparency, integrity and customer orientation.

Customer trust in the financial sector is seen as more challenging to establish compared to other industries because of its highly intangible characteristics. However, customer trust within banks is seen as a key factor to ensure customer loyalty (van Esterik-Plasmeijer & van Raaij, 2007; Ndubsi et al., 2007). If customers have trust in their banks, they are much more likely to forgive a negative experience (van Esterik-Plasmeijer & van Raaij, 2007). Chen and Barnes (2007) claim that the importance of trust in the digital context is more important than in the traditional channels, due to a higher degree of uncertainty connected to the online environment. Moreover, Grabner-Kräuter and Faullant (2008) argue that when firms engage in online activities, trust extends beyond the companies' boundaries, as the online system also needs to be entrusted by the customers. For customers to be willing to use new technologies, it is necessary that trust in the online channels is established (Gefen & Straub, 2004; McKnight & Chervany, 2001).
3.5. Application of Framework

The relationships between the factors within the original theoretical framework building up to customer loyalty are investigated and empirically supported by Mosavi et al., (2018), as well as by additional scholars (e.g. Chen et al., 2010; Ha et al., 2010; Shin, Chung, Oh, & Lee, 2013; Jana & Chandra, 2016). This also applies to the two additional factors, customization and service quality (Coelho & Henseler, 2012; Ismail et al., 2006; Khan & Fasih 2014). Addressing the purpose of the research, the potential effect of each factor by the implementation of virtual agents in banks’ customer service will be examined independently. Moreover, the empirically supported relationships will be utilized to investigate how the potential implications for each factor in turn will affect customer loyalty.
4. Methodology & Method

The first part of this section will present the methodology including research philosophy, purpose, approach and strategy. Moreover, the choice of data collection method is given and validated. The second subsection will present the method used when gathering and analyzing our empirical data, including the data collection process, population and sampling method, the interview design, and finally how the collected data were analyzed.

4.1 Methodology

4.1.1 Research Philosophy

The research philosophy encompasses the nature, source and development of knowledge. The assumptions about human knowledge and the nature of realities encountered in the research process will affect the understanding of the research question, the methods used and the interpretations of the findings (Saunders, Lewis & Thornhill, 2012). Collis and Hussey (2014), identify positivism and interpretivism as two main research paradigms. Positivism as introduced in natural science, suggests that social reality is objective, and the goal is to arrive at law-like generalizations. Moreover, positivism suggests measurement based on numerical values when investigating social phenomena and is, therefore, more suitable for quantitative research (Saunders et al., 2012).

Creswell (2014) maintains that, instead of measuring phenomena, qualitative research describes and characterizes it. Moreover, this method allows the researcher to observe and capture the research subjects' thoughts and perceptions. Hence, in accordance with the research question and purpose of this study, a qualitative research method is adopted. The interpretive approach is introduced as an alternative angle of social reality and considered suitable for qualitative research (Collis & Hussey, 2014). The approach is underpinned by the belief that social reality is subjective, i.e., since it is shaped by our perceptions (Dudovskiy, 2016). Saunders et al. (2012) argue that humans are “social actors” who interpret and perceive reality differently. By using the interpretivist philosophy, we can enter the “social world” of the research subjects and understand customer loyalty and virtual agents from their point of
view (Saunders et al., 2012). Moreover, instead of measuring social phenomena, interpretivism focuses on exploring the complexity, which is done through qualitative research (Collis & Hussey, 2014). It is evident throughout various literature that customer loyalty is highly complex, therefore, the implications virtual agents may entail are consequently difficult to measure. Hence, given the purpose of our research, the interpretivist approach is suitable.

4.1.2. Research Purpose

According to Collis and Hussey (2014), research can be classified after its purpose, namely; exploratory, descriptive, analytic or predictive. An exploratory approach is beneficial when the aim is to investigate certain phenomena (Robson, 2002). It can be particularly relevant when researching a topic that has not previously been extensively examined (Collis & Hussey, 2014). Because of the novelty of virtual agents acting as service providers in the banking sector, the present body of research has not yet addressed its probable influence on customer loyalty. Therefore, exploratory research is suitable. Additionally, Saunders et al. (2012, p. 171) point out that an exploratory study is “flexible and adaptable to change.” Consequently, this is seen as advantageous for the research study as it allows for changes to be made throughout the process.

4.1.3. Research Approach

The concept research approach concerns the link between theory and research (Collis & Hussey, 2014). According to Alvesson and Sköldberg (2009), there are three main approaches to research, namely deductive, inductive and abductive. A deductive approach is often referred to as a “top-down” approach, where the researcher starts thinking about a theory and then narrows it down to create hypotheses that can be tested. This approach is appropriate when the researcher wants to confirm (or invalidate) original theories. The deductive approach is often associated with a quantitative study. On the other hand, an inductive approach is referred to as a “bottom-up” approach (Dudovskiy, 2016). It implies that the researcher utilizes collected data to explore phenomena, and then identify themes and patterns to come up with new theories and/or creates a theoretical framework (Saunders et al., 2012). Lastly, the abductive approach starts by presenting unpredicted facts or “puzzles” where the
researcher identifies certain phenomena that previous theories fail to explain (Dudovskiy, 2016).

In an inductive approach, the research question can be formulated at the beginning of the research and is based on observations and existing theory (Dudovskiy, 2016). This research follows an exploratory purpose, beginning with an open research question and excludes hypotheses concerning the outcome. Through the collection of empirical data, we can explore the phenomena customer loyalty and virtual agents and identify themes and patterns to provide new theories. Hence, the inductive research approach is considered to be appropriate. Furthermore, induction is usually associated with a qualitative study and also more suitable when studying a small sample of subjects, which is the case in this research (Saunders et al., 2012).

4.1.4. Research Strategy

According to Saunders et al. (2012), the research strategy aims to create a way to answer the research question efficiently. There are several classifications of research strategies. Certain strategies, such as experiment and survey, are more suitable for a quantitative method, whereas other strategies, e.g., case study, grounded theory and ethnography, are more appropriate for a qualitative method (Collis & Hussey, 2014). Although, concerning the characteristics of this study, it is not assigned to any specific category. However, the research strategy will be exploratory, as well as based on an interpretivist philosophy and an inductive approach. Hence, all choices regarding data collection and interpretation of findings will follow this strategy. Moreover, this study has a two-sided perspective, focusing on both bank customers and bank representatives.

4.1.5. Data Collection via Interviews

Qualitative data can be collected through different methods, e.g., interviews, focus groups, observation, diaries and protocol analysis (Collis & Hussey, 2014). However, to gain an in-depth understanding of the respondents' perceptions, knowledge and feelings about the selected theme, interviews seem to be most suitable. Moreover, interviews allow researchers
to collect comprehensive information and is also useful for discussing complex topics (Saunders et al., 2012), such as customer loyalty and AI-technologies.

DiCicco-Bloom and Crabtree (2006) argue that to create meaning together with the interviewee by examining their experiences and perceptions about a particular field of study, in-depth interviews are preferred. Moreover, when conducting in-depth interviews through an interpretivist philosophy, the approach could be either unstructured or semi-structured. For this thesis, semi-structured and in-depth interviews will be applied, which implies that some interview questions are prepared in advance while allowing for further discussion even if it is not included in the initial interview questions (Collis & Hussey, 2014). Since virtual agents and customer loyalty are associated with a certain degree of ambiguity, it might be necessary to elaborate on certain aspects to obtain a deeper understanding of the interviewees' perceptions (Saunders et al., 2012). With an unstructured method, no questions are prepared in advance and they develop during the interview. This could result in essential information being ignored and was therefore deemed less appropriate (Collis & Hussey, 2014).

4.2 Method

4.2.1. Literature Search

A comprehensive literature search was conducted to establish a greater understanding of the topic, to attain valuable information, as well as to identify a gap in literature that this research aims to fill (Collis & Hussey, 2014). Literature has been collected using Jönköping University's database, Primo, together with other electronic databases such as Emerald Insight, Science Direct and Scopus. Peer-reviewed articles have been searched for in relevant journals such as the European Journal of Marketing, the International Journal of Bank Marketing and The Services Industries Journal. To ensure that articles of high quality and credibility were used, the number of citations have been taken into consideration. However, since virtual agents is a relatively new concept, as well as it experiences a rapid technological development, more recent articles have been preferred which in some cases have resulted in the inclusion of articles that had not yet accumulated many citations. Moreover, due to the newness of the topic, the relevant literature is limited. Therefore, some information has been gathered from reports. To ensure credibility of the report, year of publication and publisher
have been carefully considered. When the literature has been searched for, keywords such as “customer loyalty,” “banking sector,” “customer service,” “artificial intelligence” and “virtual agents” have frequently been used. Literature concerning virtual agents, customer loyalty in general, as well as customer loyalty in the banking sector, have built up to the established literature review.

4.2.2 Data Collection

4.2.2.1 Population and Sampling

There are two major methods to consider when sampling a population. First, probability sampling, which refers to a technique where the selection is done randomly, and all sample elements have the same probability of being selected (Saunders et al., 2012). Second, non-probability sampling, when the units are not chosen randomly, but in a subjective manner. Despite that a non-probability sample yields a subjective perspective, it enables a collection of rich, in-depth information that will be used to develop an understanding about the potential effects an implementation of virtual agents may have on customer loyalty in banks (Saunders et al., 2012). According to the research strategy, two samples were selected, including representatives from the major Swedish banks and bank customers. In addition, because this research follows an interpretivist paradigm, the aim is not to generalize the populations through the two samples, therefore a non-probability sampling method is appropriate (Collis & Hussey, 2014).

4.2.2.1.1 Sample Bank Customers

Kuzel (1999, as cited in DiCicco Bloom & Crabtree, 2006) argues that a technique referred to as purposive sampling can be used when sampling for in-depth interviews. The method is used to obtain richness and depth in the collected data. Moreover, since this paper does not intend to find statistical relationships, purposive sampling is therefore appropriate (Eisenhardt, 1989). The intention when gathering primary data from bank customers was to capture the expectations of their bank concerning the co-creators of customer loyalty. Moreover, we sought to capture the customers' opinions and perceptions regarding virtual agents as service providers. We targeted customers based on various characteristics that were
aligned with the purpose and research question of this study. Hence, with the purposive sample, we were able to capture the customers' perceptions more profoundly. Moreover, we were able to avoid the requirement of a large sample and instead sample interviewees that had the ability to meet the research purpose. Furthermore, Saunders et al. (2012) claim that qualitative data should continue to be collected until data saturation is reached, meaning when additional data provides very few or no new insights. This technique was applied, and after the tenth interview, we deemed that the uniqueness in perceptions from the previous interviewees was low and decided that the sample size was sufficient.

Al-Somali, Gholami and Clegg (2009) show that education has a positive influence on the tendency to use online banking. Since the purpose is to create a more in-depth understanding concerning the customers' perceptions, it was suitable to select sample elements with a high propensity to use the new service channel. Chau and Ngai (2010) found that younger individuals, below age 30, are more likely to use online banking services than older age groups. Nevertheless, it was found appropriate to also include older individuals, because they possess a more considerable experience of using banks' services. Therefore, since disparities exist between the interviewees when it comes to age and experience, it creates a heterogeneous sample (Saunders et al., 2012). But, Patton (2002, as cited in Saunders et al. 2012) argues that a heterogeneous sample allows for unique insights that may have been lost in a homogenous sample. Consequently, we focused on highly educated customers to the major Swedish banks that have experience from using various services provided by their bank, and that are frequent users of its online services. We only targeted those with a minimum of three years of academic studies, thus considered highly educated (Table 1). In addition, the frequency criterion was considered when a customer used any of their bank's online services at least four times a week. Lastly, personal networks were utilized to get in contact with interviewees. Hence, in addition to purposive sampling we used convenience sampling, since the sample elements were selected based on their availability (Saunders et al., 2012).
4.2.2.1.2 Sample Bank Representatives

Obtaining interviews with bank representatives was critical for the study. This was also done through purposive sampling (Saunders et al., 2012). Once we had approached the banks, the bank proposed suitable spokespersons with the expertise to aid in fulfilling the purpose of this study. By contacting the five largest Swedish banks in terms of private customers, through telephone, email, personal networks and through co-workers at their offices, we were able to have interviews with four of them. The sample includes representatives from SEB, Handelsbanken, Nordea and Länsförsäkringar. The interviewed bank representatives had strategic decision-making positions and/or a position focusing on AI-technologies. Therefore, they were able to provide insights regarding how a virtual agent is used or will be used, and the potential effects it may entail. The sample is considered homogeneous since all the interviewees are involved in matters regarding customer service and/or AI-technologies, as well as working for a major Swedish bank. The interviews with the spokespersons are presented in Table 2. Furthermore, one criterion when selecting which banks to interview was that at least half of them had implemented virtual agents in their customer service. The sample also contains banks that have not yet implemented virtual agents, although they follow the matter carefully and as such had insights valuable for this study. An important aspect of having banks that had not yet implemented AI-technologies in its customer service is that it reduces biases. We believe that the banks that

<table>
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<tr>
<th>Profile/Participant</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
<th>M1</th>
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<td>Female</td>
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<tr>
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</tr>
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<td>SEB</td>
<td>Handelsbanken</td>
<td>Nordea</td>
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<td>00:20:50</td>
<td>00:21:52</td>
<td>00:22:07</td>
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<tr>
<td>Technique</td>
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<td>Face-to-Face</td>
<td>Face-to-Face</td>
<td>Face-to-Face</td>
<td>Face-to-Face</td>
</tr>
<tr>
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<td>22/03/18</td>
<td>07/04/18</td>
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<td>22/03/18</td>
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<th>M3</th>
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<td>Age</td>
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<td>Bachelor's Degree</td>
<td>Doctor of Philosophy</td>
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<td>Handelsbanken</td>
<td>SEB</td>
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<td>00:18:59</td>
<td>00:41:28</td>
<td>00:31:56</td>
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<td>Face-to-Face</td>
<td>Face-to-Face</td>
<td>Face-to-Face</td>
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<td>07/04/18</td>
<td>19/04/18</td>
<td>07/04/18</td>
<td>16/04/18</td>
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</table>
have already implemented virtual agents are exposed to the risk of being biased towards the positive aspects that virtual agents may imply. The aim was to create a more objective perspective on the matter.

Table 2. Bank Representatives Profiles

<table>
<thead>
<tr>
<th>Interview Bank</th>
<th>Name</th>
<th>Position</th>
<th>Technique</th>
<th>Date of Interview</th>
<th>Interview Length</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Patrik Wärd</td>
<td>Business Developer</td>
<td>Face-to-Face</td>
<td>16/03/18</td>
<td>01:00:55</td>
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<tr>
<td></td>
<td>Krisina Stark</td>
<td>Project Coordinator, Customer Support</td>
<td>Face-to-Face</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Henrik Sirborg</td>
<td>Digitalization &amp; Innovation</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Interview SEB</td>
<td>Erika Lundin</td>
<td>Team Leader, Center of Excellence for Aida</td>
<td>Face-to-Face</td>
<td>05/04/18</td>
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</tr>
<tr>
<td></td>
<td>Staffan Hedberg</td>
<td>Center of Excellence for Aida</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Interview Länsförsäkringar</td>
<td>Katarina Wetterholm</td>
<td>Business Unit Director, Jönköping</td>
<td>Face-to-Face</td>
<td>12/04/18</td>
<td>00:45:16</td>
</tr>
<tr>
<td>Interview Nordea</td>
<td>Mattias Fras</td>
<td>Head of AI Strategy &amp; Acceleration</td>
<td>Face-to-Face</td>
<td>13/04/18</td>
<td>00:45:24</td>
</tr>
</tbody>
</table>

4.2.2.2. Interview Process

Saunders et al., (2012) stress the importance of establishing personal contact with the interviewee if the aim is to obtain in-depth reflections and answers. Moreover, as stated by Collis and Hussey (2014), face-to-face interviews are useful when addressing complex topics and facilitates a comprehensive data collection. Hence, all interviews were conducted face-to-face and body language was used to demonstrate our interest and to induce a feeling within the interviewee that they will not be judged depending on the answers provided (McCracken, 1988). According to Saunders et al. (2012), there are various ethical principles to take into consideration when conducting interviews. One principle, however, was considered particularly important because it concerns the privacy of those taking part in the study. They
argue that it is crucial to gain informed consent, ensure confidentiality and maintain anonymity if so requested. Therefore, it was highly relevant that we offered the respondents anonymity and confidentiality (Saunders et al., 2012). However, the bankers who participated in the interviews gave us an informed consent to use their full name and titles within this paper. In addition, no confidentiality agreements were requested. On the other hand, to protect the customers' private information and to enable them to speak freely, they were given anonymity. The outline of the bank representative and bank customer interviews followed a similar pattern, and questions were asked regarding the identified five factors leading up to customer loyalty: customization, service quality, customer perceived value, customer satisfaction and customer trust. In the last section of the interview, the participants were asked questions about customer loyalty, the purpose of putting it last was to allow the interviewees to provide more in-depth answers after reflecting upon the components.

The first part of the interviews differed between bank representatives and bank customers. For both the bank representative and customer interviews, a short introduction to the research topic was given as well as our expectations of the interviewees. According to Saunders et al. (2012), it is important that the respondents are aware of the study's purpose from an ethical perspective. When conducting the customer interviews, the respondents were given a short explanation of a virtual agent's characteristics and abilities before the interview commenced. This was necessary since virtual agents in banks' customer service is a relatively new phenomenon and most of the interviewed customers had not used the technology. Afterward, we began asking background questions – “What is your position in the bank?” or “What type of service do you use the most?” – To gather basic information about the interviewees. Throughout all interviews, probing questions were asked to get the interviewee to elaborate on previous answers and to obtain greater insights (Collis & Hussey, 2014). Except for the background questions where closed questions were asked, open and hypothetical questions were asked to prompt the interviewees to think and reflect more deeply on the issues. The interview questions are fully stated in Appendix 1 and 2. Thanks to the semi-structured approach, the participants were allowed to speak freely (Saunders et al., 2012). As a result, the structure of the interviews varied depending on whether the questions had already been covered previously. All interviews were recorded, and they varied in length depending on whether they were conducted with bank representatives or customers. The interviews with bank representatives were more extensive and lasted for approximately 50 minutes, whereas the customer interviews lasted for about 24 minutes.
4.2.3. Data Analysis

To not limit the banks' and customers' ability to convey their knowledge and perceptions adequately, the interviews were held in Swedish. They were then transcribed and carefully translated into English to capture the context and meaning, as well as ensuring the applicability of the data to this paper.

According to Seers (2012), as the analysis of qualitative data includes interpretations, it has the risk of being subjective. However, Collis and Hussey (2014) assert that, with an interpretivist paradigm and an exploratory purpose, patterns and themes should be identified to pursue this purpose. To ensure credibility, by initially analyzing the data individually, and then combine our interpretations, a more critical analysis of the data was achieved (Saunders et al., 2012). Categories and key themes were derived from the empirical data, where similarities and differences were highlighted, connected and analyzed. Since qualitative data have a unique and complex nature, it was important to categorize the findings (Saunders et al., 2012). The factors presented in the theoretical framework facilitated this process in terms of structure and assisted in distinguishing certain themes, specifically the interviews with bank representatives. However, the customer interviews were slightly more challenging to interpret and categorize. The customers had issues with separating the factors, which created the need for new categories that would encompass the relevant data, which also helped bring a more nuanced perspective to this paper. The next course of action was to unitize the data, which is the process of assembling relevant parts to the appropriate themes, categories, and factors (Saunders et al., 2012). This step was critical to discover patterns, connection and key themes that emerged from the empirical data. Lastly, the findings were tied back to the relevant theory presented in the frame of references.

4.2.4. Trustworthiness and Quality of Research

Trustworthiness and quality of research is an important aspect to consider when conducting studies, to ensure that the research is perceived credible by others. For a quantitative study, the concepts of validity and reliability are vital to ensure credibility. Because of the difference between a qualitative and a quantitative study, reliability and validity varies. However, for a
qualitative study, validity and reliability are often replaced by other measures of credibility. The reason being that those concepts are technically unsuitable because of the interpretivist nature of a qualitative study, where reality is perceived as complex and socially constructed (Saunders et al., 2015). As a result, the four criteria of dependability, credibility, transferability and authenticity have emerged.

4.2.4.1 Dependability

Dependability entails “...recording all of the changes to produce a reliable/dependable account of the emerging research focus that may be understood and evaluated by others” (Saunders et al., 2015, p. 206). To ensure dependability, the interviews with bank customers and bank representatives were transcribed directly after they were conducted. The objective was to obtain the most accurate comprehension of the interviews. All the research-related material is available upon request and at least two of the authors participated in each interview.

4.2.4.2 Credibility

Credibility implies that the data gathered from the participants is interpreted and used as intended, as well as that the research is deemed acceptable by others (Saunders et al., 2015). To ensure credibility, the techniques of triangulation or member validation can be used. In this thesis, the focus has been on triangulation where at least two people analyze the data independently to ensure that it is properly understood (Saunders et al., 2012). This technique was used to evaluate and confirm the findings, and thus the credibility of the research. Moreover, semi-structured interviews allowed us to ask follow-up questions on answers that were considered vague or that had the potential of being interpreted differently. By asking such questions, we improved the chance of understanding the findings correctly. Furthermore, for an interpretivist approach, it is particularly important to use triangulation as it adds breadth, complexity, depth and richness to the research (Saunders et al. 2015).

4.2.4.3 Transferability

Transferability refers to the fact that qualitative research typically is conducted on small samples, where data is gathered from the participants' perceptions and knowledge, in contrast
to a quantitative study (Saunders et al., 2015). As a result, if the study were replicated, the findings would not necessarily be the same. However, to fulfill the criterion of transferability, this paper thoroughly describes the course of action of this research regarding the research question, sampling method, interview questions and design, findings and interpretation. The goal is to provide the reader with sufficient information to be able to conduct the same research in a different setting, e.g., in other Nordic countries.

4.2.4.4 Authenticity

As mentioned in section 4.2., the interpretivist paradigm seeks to understand the complexity of social phenomena. Moreover, one objective to achieve authenticity is to promote fairness by representing all views in the research (Saunders et al., 2015). To contribute to a more authentic representation of the research, we chose to include the perspectives of bank representatives as well as bank customers. Moreover, to maintain objectivity and fairness, both banks who have and have not implemented virtual agents in their customer service are included in the sample. Finally, each sample element will be represented and discussed in the empirical results.
5. Empirical Results

This section presents the empirical findings that were collected in the form of interviews with bank representatives of four major Swedish banks and ten interviews conducted with bank customers.

5.1. Findings Bank Representatives

During the interviews with the bank representatives, the authors aimed to investigate their view of customer loyalty, how they work to achieve this desired state and their perception of how virtual agents will affect the factors building up to customer loyalty.

5.1.1. Customization

Regarding the banks' customer base, it is evident that their customers are relatively heterogeneous in terms of their circumstances in life, e.g., income, age, occupation, location and so forth. Therefore, the banks aim to segment the customers to provide various targeted offerings.

“Depending on which services you have, you end up in different parts of the private customer segment partly depending on your circumstances in life.” – Staffan Hedberg, SEB.

However, there is a variety of basic services that are standardized. A common notion is that simpler services do not have the same urgency to be customized.

“There is a base of services and products that many of us want.” – Katarina Wetterholm, Länsförsäkringar.

However, Nordea emphasizes that there is an increasing demand for customization:
“Generally, we are a product-oriented organization pushing offers to the customers; however, this is about to change because you must nowadays customize the products or services to what the customer demands.” – Mattias Fras, Nordea.

The findings regarding a virtual agent's ability to customize offers show that the opportunities are currently limited since they operate in offline mode. As a result, they are unable to store individual customer data, which is seen as a fundamental aspect of its ability to customize offerings. Concerning the prospects of virtual agents, SEB and Nordea identify more opportunities compared to Handelsbanken and Länsförsäkringar. However, all banks agree that virtual agents will be able to store a significant amount of customer data. Consequently, this will allow them to understand customer needs better and thereby customize their offerings with this information at hand.

“Customization can be done with the help of AI. That is the thing, if you have virtual agents, you can customize your offerings in a cost-effective way.” – Mattias Fras, Nordea.

Handelsbanken and Länsförsäkringar stress the importance of having local offices to better understand the local market. In addition, they state that customization occurs in the physical meeting because it facilitates their ability to understand the customers' individual needs. Handelsbanken adds that a virtual agent would act as a complement to the employees rather than an independent entity:

“It is highly beneficial with humans because when they have knowledge about the local market and customers, they can be supported by a machine's ability to extract relevant information from the extensive amount of data.” – Henrik Sirborg, Handelsbanken.

Moreover, Handelsbanken is also concerned with regulations, morale, and ethics:

“Our desire to customize on an individual level is, to some extent, colliding with legislation and ethics, which forces us to become more streamlined in our offerings. Therefore, we must segment our customers.” – Patrik Wård, Handelsbanken.
5.1.2. Service Quality

To achieve a high service quality, the banks agree that it is crucial to create a flexible, effective and convenient experience. For instance, SEB and Nordea emphasize that receiving assistance shortly after customers’ request for it will affect service quality positively. All the interviewed banks mention the possible benefits of virtual agents’ ability to assist the bank in handling simpler inquiries. SEB, Nordea, and Länsförsäkringar state that this would decrease the waiting time, as responses will be generated immediately.

“There will never be a queue at AIDA (SEB’s virtual agent), so she can serve any number of customers, there are no restrictions.” – Staffan Hedberg, SEB.

According to SEB’s outlook, when the virtual agent can perform tasks and not just answer questions, she will be able to streamline processes and reduce the number of employees involved. This will create a more convenient and time-efficient experience for the customer. From the empirical data, it seems clear that the ability to provide eminent service quality requires a high level of competence.

“The fundamental idea is to be competent in the personal interaction in the office, through the phone or wherever the service is provided.” – Patrik Wård, Handelsbanken.

Länsförsäkringar further states:

“Länsförsäkringar put a lot of emphasis on recruiting the right people, with the right competence, intentions, and values, as this will contribute to a better service quality.” – Katarina Wetterholm, Länsförsäkringar.

Handelsbanken and Länsförsäkringar claim that personal interaction with the customer is the main contributor to service quality because the human competence enables them to fully understand the customers' needs. They see a risk with an increased service through virtual agents, as the personal touch disappears to some extent. However, they agree with SEB that the use of virtual agents will allow employees to focus on more complex customer inquiries, as the simpler questions and concerns have already been handled. Länsförsäkringar highlights this advantage:
“Because we still believe in the physical meeting, our employees could focus on the complex issues rather than the quick and simple ones, since those matters will already have been handled satisfactorily.” – Katarina Wetterholm, Länsförsäkringar.

SEB and Nordea mention a future beneficial use with virtual agents, namely that it can work as a tool for the bank to gather feedback and customer data. The bank can then use this feedback to improve service quality. Handelsbanken agrees with SEB and Nordea, that assimilating feedback is of great importance to understand the customers and identify areas of improvements.

“By putting something out there all the time, even if not a complete product, we constantly ask customers what they think in order to get their perspective, instead of focusing on what we believe or think they want.” – Erika Lundin, SEB.

5.1.3. Customer Perceived Value

The banks accentuate the importance of putting the customer in focus and to create value by meeting their individual needs. Länsförsäkringar states that one way to do this is by providing a holistic service solution and to continuously signal to the customer that their needs are the bank's top priority. Handelsbanken emphasizes that the customers should be seen as individuals rather than as belonging to a mass, to comprehend their individual needs.

“Someone called customer service to check if their card could be used abroad, and then it ended up with pension savings, money that needed to be placed and five to six other things that could not have been taken care of by a chatbot, were handled.” – Patrik Wård, Handelsbanken.

All banks agree that, since virtual agents will drastically cut the phone queues, it will facilitate access to a human agent for customers with more complex concerns. In addition, the employees will have more time to help each customer, which in turn they think will add extra value. However, Länförsäkringar and Handelsbanken also see a risk in the reduced human interaction that will result from the use of virtual agents.
“As opposed to a machine, humans have the ability to sense the customer as well as the specific circumstance and then act accordingly.” – Patrik Wård, Handelsbanken.

To boost the customers' perceived value, another aspect is to provide service beyond the customers' expectations. SEB emphasizes that the bank should aim to identify such needs that the customers cannot see themselves:

“To proactively be able to recognize things that the customer is not able to see herself, that she is missing or if she doesn't know something that she needs or needs to do...” – Staffan Hedberg, SEB.

SEB continues by stating:

“We see that the customer has this specific loan, for example, and then we come up with one or two suggestions regarding possible changes for the customers and what these changes would entail, despite that the customer did not ask about the loan himself.” – Staffan Hedberg, SEB.

Länsförsäkringar, Handelsbanken, and SEB express a concern regarding virtual agents, by partially allowing them to replace humans as service providers, it can result in a weaker connection between the bank and its customers. Länsförsäkringar and Handelsbanken identify a particular risk, namely that virtual agents will oversee the customers' fundamental needs and fail to go beyond the concern that prompted the customer to contact the bank in the first place. Creating value for the customer goes beyond just providing answers and solutions to questions raised by the customer, the bank also needs to satisfy other basic human needs, such as safety and compassion.

“When customers call us and want to report a stolen or lost card, our job is more than to just cancel the card. Customers in those situations are often very stressed and as a result, we must show support, empathy and provide guidance.” – Kristina Stark, Handelsbanken.

SEB provides some prospects regarding the virtual agent's ability to explore needs that the customer may not have thought of, based on available customer data:
“For instance, the virtual agent will be able to gather information from the Swedish Pensions Agency and realize that the customer's pension would be 40 percent lower than her income today when she retires, then the customer is suggested to save SEK 200 more a month and ends up with it being 30 percent lower instead.” – Staffan Hedberg, SEB.

5.1.4. Customer Satisfaction

To enhance customer satisfaction, the banks agree that a high degree of availability and accessibility should be offered. SEB emphasizes that there is an increased demand for time-efficiency and convenience in the solutions and processes of the bank's services today:

“I mean, if we want to find out about something today, we reach for our phones and google the answer and then you are satisfied and happy. AIDA works in the same manner; within 30 seconds you are able to get an answer to your question.” – Staffan Hedberg, SEB.

The empirical data show that virtual agents will have the possibility to increase availability and flexibility since they can provide service without being limited by staffing constraints or staff work schedules. Thus, resulting in enhanced convenience for the customers. Moreover, it is evident that the customers expect the banks to offer several different ways to approach them. Therefore, the banks believe that it is beneficial for the customer satisfaction that virtual agents provide an additional channel and thus be a valuable complement to their customer service. However, it is also evident that it requires a right balance between virtual and human interaction to maximize customer satisfaction.

“It is a reasonably large difference regarding what humans and the technology excel at, and this needs to be emphasized and taken advantage of.” – Henrik Sirborg, Handelsbanken.

Handelsbanken highlights an advantageous scenario with virtual agents:
“When utilizing virtual agents as a service channel, the customers can proceed at their preferred pace. As opposed to a phone meeting that generally occurs at a rapid pace, it creates a risk that the customer gets lost on the way.” – Kristina Stark, Handelsbanken.

Whatever matters the customers have, they expect it to be easy to resolve. In addition, it becomes increasingly important that digital channels are easy to use. Handelsbanken and Nordea emphasize that getting help fast and quick access to the bank's services at all times create satisfied customers.

“Waiting in line, being transferred between different departments, and when it takes time to resolve an issue is often considered annoying and frustrating by the customers. Customers value relevance, speed, and simplicity.” – Mattias Fras, Nordea.

SEB has some concerns regarding virtual agents and ease of use, and they state that some miscommunication between the customer and the virtual agent occurs since people tend to change their use of language. This may complicate the virtual agent's ability in helping and meeting the expectations of their customers.

“When you google something you only write one word and that is what occurs in the chat as well, but if you chat with a human agent the text is more extensive, one does not just simply type 'Mobile BankID.”’ – Erika Lundin, SEB.

Nordea mentions this from another perspective, that customer satisfaction will increase if the virtual agent possesses exceptional dialogue capabilities. However, they also express concerns that it is challenging to find standardized dialogue flows that are suitable for every customer.

“By training and improving the virtual agent, combined with a skilled linguist who can provide her with an extraordinary dialogue flow, you will achieve more satisfied customers than if you were to just implement a chatbot.” – Mattias Fras, Nordea.

Länsförsäkringar and Handelsbanken claim that they have the most satisfied customers among the five largest banks in Sweden. They believe that this is the result of a strong local presence and profound knowledge regarding the local customers.
“Once again, we need to grow at all levels, but we need to retain the personal encounter with the customers. I believe that yields customer satisfaction.” – Katarina Wetterholm, Länsförsäkringar.

5.1.5. Trust

It is a collective agreement among the bank representatives that the banking industry is associated with a high level of trust. Handelsbanken, SEB, and Länsförsäkringar claim trust to be the most important factor affecting customer loyalty, it is vital for banks to work to maintain this trust actively. The respondents agree that one way to do this is by exhibiting high-level transparency.

“We are very transparent about what we do, and what we do not do, we believe that is important to build trust.” – Katarina Wetterholm, Länsförsäkringar.

Handelsbanken mentions that transparency will be increasingly important when it comes to the use of virtual agents. They predict potential customer concerns as customers will be unwitting of where their data will end up:

“Complexity in the world and which one dare to share information with, where the data ends up and how it is analyzed, will become increasingly important. Companies must disclose how they use the data.” – Henrik Siborg, Handelsbanken.

The findings show that banks need to demonstrate competence and reliability to earn trust. The digital channels need to work seamlessly, as well as to be user-friendly. SEB mentions a possible risk with the use of virtual agents as they cannot answer all questions, which in turn could lead to customers perceiving the virtual agent as lacking competence. But, they further explain a scenario which might mitigate the potentially harmful effect:

“Concerning the implications of trust, if she is unable to answer questions, currently there are many questions that she cannot answer, the customer may then think that it is a lousy product. I believe that, if she hands over the customer successfully to a human agent when she is unable to provide an answer, the customer will receive excellent help.” – Staffan Hedberg, SEB.
When the banks were asked whether they believe that customers will be willing to share personal information with a virtual agent, SEB, Nordea and Länsförsäkringar said that they probably would. The reason being that customers generally have a high degree of trust toward banks, this trust would cover virtual agents as well. SEB claims:

“The internet bank contains all the personal information, so I do not believe that there would be a difference if a virtual agent identifies the customer instead.” – Erika Lundin, SEB.

Nordea mentions a possible risk with handling customers digitally, as there is a general perception that banks do this to save costs and not to enhance the experience of the customers. However, Nordea also states, together with Handelsbanken and Länsförsäkringar, that banks must be innovative and keep up with technological developments. If banks fail to do this, it could result in a loss of trust.

5.1.6. Customer Loyalty

According to the findings, it is evident that the banks measure customer loyalty regarding customer engagement and commitment, meaning the customers allocate most of their bank related matters to one single bank.

“Private customers can have many different banks, but loyalty is when a bank is sufficiently competent to retain its customers over time.” – Staffan Hedberg, SEB.

It is also apparent that a customer is seen as loyal if they recommend the bank to its peers.

“Yes, you could be a satisfied customer, but being a loyal customer is slightly better because then you tell your friends and family that they should choose Länsförsäkringar.” – Katarina Wetterholm, Länsförsäkringar.

“Technically, it is when the customer recommends the bank to someone else.” – Mattias Fras, Nordea.
Handelsbanken, SEB, and Nordea further state that the long-term perspective is essential.

“The long-term relationship, that the bank is able to be with you the whole way, that is what we want.” – Patrik Wård, Handelsbanken.

There was a tendency among the banks to discuss the various aspects and characteristics associated with the previous components when describing customer loyalty. The complexity of customer loyalty is highlighted, and the banks explain that the factors are interdependent. However, trust is considered the cornerstone of customer loyalty.

“If we are talking about banks as a service provider, I believe that if the customer does not have trust in the bank, they will switch, and the other aspects become irrelevant.” – Staffan Hedberg, SEB.

5.2. Findings Bank Customers

Through the second sample, we investigated bank customers’ expectations and perception towards their bank’s services based on the factors in the theoretical framework, as well as their perception of how virtual agents may affect them. When the customers were asked about their general attitude towards virtual agents, there was a difference of opinion. M1, F1, and F4 were positive in the sense that they believe that this new technology will be able to optimize services and improve the experiences. F3, M3, M4, M5 were somewhat positive but emphasized that the development is inevitable. A more skeptical view was provided by F2, M2, and M6, who claim that virtual agents are associated with a high degree of uncertainty.

An overall finding was that the customers were unable to separate the different factors building up to customer loyalty and instead took a more holistic approach when answering the questions. Therefore, it was not possible to divide the findings by each factor. Instead, the results are categorized into the identified main themes derived from the interviews, including; customer orientation, trust, competence, accessibility, personal connection, convenience and customer loyalty.
5.2.1 Customer orientation

The findings show that a majority of the customers emphasize that banks should work in the best interest of the customers and not only to maximize profit for the bank. M5 is concerned with banks tending to lead their customers to specific products which are not necessarily the best option for the individual customer.

“You cannot be sure that they give you the advice that is best for you, but the ones that are most profitable for the bank.” – M5.

M5 is further concerned with that the virtual agents will be used in a similar manner:

“I cannot be sure that a virtual agent is not programmed in the same way as they have programmed their employees when you speak to them.” – M5.

Most of the respondents have a perception that banks are more concerned about profiting from you as a customer rather than to provide the best possible service. It is vital that the bank does not take advantage of the information superiority they possess in order sell additional products but instead work to satisfy the actual needs of the customers.

“You are always at some kind of disadvantage relative to the bank and it is essential that you get the help you requested satisfactorily at a bank meeting, and not that they sold you a pension insurance when you were there for a loan.” – F4.

All interviewees agree on the importance of their bank treating them as individual customers with individual needs. Banks should be informed and knowledgeable about the individual customer's background and be updated on the current situation, to offer help and develop offerings accordingly. M4 states that banks should give advice beyond the primary concern based on these individual customer needs.

“If I am going to buy shares or borrow money, I appreciate it if the bank can give information that other people and I might not think about when we do various types of transactions.” – M4
M5 and M6 are skeptical of the reason as to why banks want to use virtual agents in customer service.

“That the banks save money. There are no other reasons, that is the only reason why they do it.” – M6.

F4 and M5 suggest that the virtual agents must be highly developed, as well as produced with a clear customer focus in order to generate benefits for the customer.

5.2.2. Competence

The findings show that all customers think it is important that the bank employees are able to answer questions and exhibit proficiency when it comes to all the banks’ different products and services.

“It is important that the bankers are competent and know what they are doing, if you have a question they should be able to answer it.” – M1.

“When I wanted to open a foreign currency account, the banker clearly did not know what he was doing. He did not know anything about the rules and regulations. Spontaneously, that makes me uncomfortable, when you speak to a banker you really want him or her to be highly knowledgeable about the services they offer and how to use them.” – F2.

Some of the respondents express a concern with the use of virtual agents in customer service. M1, M3, and M6 argue that the virtual agent will not have the required competence in the initial phase to answer all possible questions.

“People will be outraged when the virtual agents cannot answer all questions.” – M3.

“It would be scary if it could. Then we are where we should not be.” – M6.
5.2.3. Trust

It is evident that customers have a high degree of trust towards the traditional banking industry, including renowned and well-established banks. However, a majority emphasize that security is of high importance, hence, banks need to ensure and display that this is their top priority. M2, M3, and M4 further emphasize that good governance and transparency towards the customers is vital to induce a high degree of trust.

The customers were asked if a personal meeting or interaction via phone support induces more trust than receiving services online. The respondents' opinions were somewhat split. F1, M1, and M6 stated that a personal interaction invariably provides a higher level of trust.

“Today I feel a greater sense of trust when I talk to somebody instead with some chat. So, personal service is very important for trustworthiness.” – M1.

The remaining respondents claimed that it depends on the issue at hand, if it is more complex, they want a person to handle the problem.

“It depends on the matter, if I want to discuss a savings account for my grandchildren, then I want to have a personal meeting.” – F4.

It is evident that most of the respondents are willing to expose personal information online, in this case, through the banks’ online channels. Moreover, a majority would feel confident in sharing personal information with a virtual agent.

“The banks want it to be safe for the customers to have a bank, therefore they have to prioritize safety.” – M2.

M5 stated:

“There is no difference, they have this information anyway, it is available in public registers, so I do not believe there is going to be any problem.” – M5.
However, M6 and M3 explain that they feel uncertain about where the information may end up.

“Right now, there is an ongoing concern with sharing personal information, for instance, Google and Facebook capture information about you that you have not approved.” – M3.

5.2.4. Accessibility

A general finding is that customers visit bank branches less often compared to before and instead handle their business through the bank's online channels or phone support. It is also evident that the customers value that all services have high accessibility and that it is easy to get in contact with the bank through all its service channels. More specifically, customers want to be able to reach the bank fast and receive answers or the necessary help efficiently.

“Simply, it should be easy to get in contact with the bank.” – M1.

“On some occasions when I have visited the bank they have closed at three o'clock, that is very annoying.” – F2.

A common concern of the customers is that the phone queues often are extremely long when calling the phone support, and they stress the importance of short waiting times. A majority believe that virtual agents will mitigate this problem and contribute to increased accessibility.

“A virtual agent will increase the simplicity for me to get in contact with the bank.” – F4.

The banks' online channels have an important role. The customers think that it should be easy to carry out routine tasks through the online channels, for instance, the internet bank or the bank's mobile app. F1, F2, F3 and M2 highlight that they want to be able to do as much as possible online:

“It is important with an app that is easy to use and through which you can find the information you want.” – M2.
A majority agree that it should neither be time- nor energy-consuming to be granted a personal meeting with a bank representative. If a physical meeting is necessary, it should be easy to book one.

“Contact details should be available so that it is easy to get in contact with a banker.” – F1.

M5 states that it is often hard to get in contact with the suitable banker today:

“The lack of opportunity to meet someone personally when I want to is something that I miss today.” – M5.

5.2.5. Personal Connection

Customers have a perception that an interaction with a virtual agent in comparison to a human agent will feel less personal. Some also believe that the connection between banks and customers will be lost when human service providers are replaced. However, some customers agree that this does not matter, as long as they receive the required help.

“If I am interacting with a virtual agent, it will completely lack a personal feeling. But it does not matter as long as I receive help regarding the matter for which I contact them.” – M1.

M2 feels that a virtual agent will be unable to understand the customer as an individual and their specific needs. This is considered an important aspect because several respondents stated that they value when banks see them as individuals with specific needs, and not just ones among a mass.

“I believe I have a difficulty with artificial counterparts, this is because I get placed in a compartment where complex algorithms have determined where I end up.” – F4.

In addition, all respondents agree that they value the personal relationship to some extent. M3 even left a major Swedish bank due to the lack of a personal banker:
“I recently moved my bank business from Swedbank to Handelsbanken, where it immediately got better, and I became more positive. Mainly because the personal relationship is significant to me, I didn't have a personal banker or relationship at Swedbank.” – M3.

M5 also stresses the need for a personal banker:

“At least have a personal banker, that each year you get an email saying that if I need help this is the person to contact.” – M5.

One interesting finding was that two respondents have acquaintances or friends at the bank whom they would contact regarding bank-related matters (F4, M6). They suggest that this significantly improves their personal connection to the bank.

5.2.6. Convenience

The empirical findings show that the customers demand seamless processes, for instance, resolving issues without interacting with a bank representative. In essence, the customers want to be able to do a variety of tasks in a straightforward manner without contacting the bank.

“I want to be able to order a new credit card, set up a new account, or report a lost or stolen credit card by myself in an easy manner. In such cases, the personal meeting is irrelevant.” – F4.

A large portion of the respondents wants user-friendly services. For instance, the mobile app and internet bank should suffice for most of the concerns. Navigating online on the bank's website or in the app should be seamless and easy. F3 even feel that personal meetings are superfluous:

“... for instance, when negotiating my loans. The person who calls me have in fact no mandate to negotiate my loans, instead, I must call the specific bank branch I am connected to and chase down some banker there who is very hard to get hold of.” – F3.
In relation to user-friendliness and seamlessness, many of the customers demand the bank to be innovative and keep up with the ongoing technological advancements. They emphasize that new, innovative solutions enhance trust towards their bank.

“Nordea is the first bank to offer Apple Pay as a payment method, which I think is a fantastic service. It facilitates a lot, by just grabbing the phone and pay with Touch-ID, or by using Apple Watch and connects it to the payment terminal and it's done.” – M2.

It is evident from the empirical data that the respondents want time-efficiency when it comes to receiving help, e.g., it should not be time- and energy-consuming to establish contact with a bank representative. However, the most pressing issue for the interviewees was the phone queue. This is where they envisage virtual agents, enabling the banks to assist many customers simultaneously.

“Generally, I think it is incredibly frustrating with phone queues and I get very annoyed when I must type in a million things before I am able to speak to someone.” – F2.

5.2.7. Customer Loyalty

When the customers were asked about how they view customer loyalty, most of the customers stated that they are loyal towards their bank if it can provide competitive offerings. Basically, the banks should not charge extra for certain basic services and they should be sufficiently capable of retaining its customers. However, the customers are aware that, e.g., the interest rate may slightly differ across banks, but seldom enough to make them switch to another bank.

M1 and F4 stated that they are loyal when they recommend the bank to their peers:

“If I am satisfied and recommend the bank to my friends and family, that's when I consider myself loyal.” – M1.

F1, F4, M1 and M2 value long-term relationships with their bank and that it should be a mutual commitment between the bank and the customer to create a relationship and then
actively work to maintain it. Together with M2 and M3, M5 also feel that the bank should emphasize the personal interaction.

“Perhaps once a month, check up on my situation, ask how things are and what I think of the bank, to build a long-lasting relationship. I believe this creates loyalty because there is a mutual commitment.” – M2.

An interesting aspect was that F2, F3, F4, and M6 considered themselves loyal because they were just too lazy to switch to another bank. Although, they agree that if an alternative was substantially better, they might have reconsidered. However, F4 and M6 had previously evaluated different alternatives but concluded that the major Swedish banks are similar in their offerings and prices, labeling them "stupidly loyal" because it was rarely worth the time and effort to switch.

M5 does not consider himself loyal to a particular bank, because he uses various banks depending on the services he needs:

“I do not consider myself a loyal customer since I have five different banks for the various services I require. I am not a loyal customer in that sense.” – M5.
6. Analysis

This section analyses the findings from the empirical data from both bank representatives and bank customers, together with the literature presented earlier. The factors constituting customer loyalty are discussed to gain a deeper understanding of how they will affect the desired state.

6.1. Customization

The findings show that bank customers are relatively heterogeneous, and their needs depend mainly on their circumstances in life. The need for customization, however, depends on the dimension of the service demand. Concerning more simple services, customers do not have any specific need to be provided with customized service offerings. Accordingly, basic services are more standardized. However, it is evident that banks should tailor solutions based on individual needs when the service demand is more complex. Customers want their bank to be updated on their current situation and develop solutions based on their specific needs. Moreover, we find that it is also an increased demand for customization in banks' services, which is following Beerli et al. (2004) who argue that banks need to differentiate their offers based on individual customer needs to remain competitive. Beerli et al. (2004) also found that the adjustment of service offers based on the individual customer currently happens to a large extent through human interaction, since it facilitates the understanding of individual needs, which is in accordance with Rust and Chung's (2006) findings.

Pani and Venugopal (2008) assert that one benefit of virtual agents is that they remember everything that the customer communicates and then utilizes that information to increase the relevance of future communications, and thus customize the service. However, virtual agents used in banking are currently in offline mode. Therefore, the AI-technology is unable to store customer data which bars the possibility of customizing offers. Given the potential value in such customization, there is every reason to believe that these abilities will be realized in the not too distant future. On the other hand, current regulations and legal frameworks affecting the banking sector may limit this development. Hence, because of a virtual agent's limited abilities, it does not yet affect customization to a substantial degree in either a positive or
negative direction. But given that the regulations are alleviated to allow such activities, customization abilities are likely to be realized. Moreover, as the findings reveal that customers request customization in more complex situations, which virtual agents will struggle to satisfy in the initial stages, it will be difficult for them to customize offers in the near future.

6.2. Service Quality

A major factor affecting service quality is the time it takes for a customer to receive help. As a result, banks try to reduce the waiting time by implementing virtual agents into the customer service. This is in line with Castelli et al. (2016) who claim that AI-technologies will impact positively on service quality because of increased and faster response rates to customer inquiries. The findings indicate that this will be accomplished by allowing virtual agents to handle simpler inquiries and generate answers immediately. As a consequence, this will enable human agents to focus on more complex issues, which, according to Anderson et al. (1997), can lead to enhanced service quality. The banks emphasize the benefit that employees will have more time to handle complex issues rather than answering basic questions, become more motivated and develop their competences regarding complex matters. However, as virtual agents are currently unable to answer all questions received, this could be perceived as a lack of expertise and thus have a negative impact on service quality. Therefore, it is vital that virtual agents are well-developed in order to have a positive effect on the service quality.

As stressed by the bank interviewees, they continuously work to improve the service quality by processing and responding to the continuous feedback they receive from their customers. Virtual agents could facilitate this process because of a virtual agent's ability to collect and analyze massive amounts of data. Consequently, banks would be able to continuously accumulate and evaluate the effect of improvements in their customer service. Thus, we would argue that virtual agents provide increased opportunities for developing a high service quality by analyzing customer attitudes towards service offerings. However, this ability will only be realized when the virtual agent operates in online mode and are therefore currently limited. By contrast, virtual agents will be able to perform a new range of services when operating in online mode. However, customers have expressed a concern that a virtual agent will not have the required competence to deliver more complex service offers. Therefore, on
the manner in which the AI-technology is developed and used in the future will determine whether it will have a positive or negative effect on service quality.

6.3. Customer Satisfaction

The findings indicate that to create satisfied customers, high accessibility plays an important role. The customers have a multifaceted view of accessibility. First, it should neither be time-nor energy-consuming to get access to the bank's services. If customers have an issue they need to resolve, they want to be able to solve it in a time-efficient manner. Since virtual agents are able to operate at all hours and can handle an unlimited number of customers, we argue that this will increase the accessibility of the bank's services. Second, when customers want to meet a human banker, they demand that the meeting should be scheduled within a reasonable period of time. Today, customers are dissatisfied with the fact that it requires extensive time and effort to get in contact with a personal banker. Therefore, the banks must adapt to these requirements which, according to Wang (2014), results in satisfied customers.

The channel through which customers prefer to contact the bank differs. Therefore, it has become increasingly important to provide several alternative channels. A majority of the interviewed customers had not been to a bank office in years, which is partly because of more efficient services offered through online banking. Hence, in line with Liébana-Cabanillas et al. (2013), providing exceptional digital solutions is a particularly important strategy for banks to achieve satisfied customers. The findings indicate that seamless processes that can be attained through online channels, without the need of external involvement, will enhance customer satisfaction. Conversely, extensive phone queues and time-consuming processes may have an opposite effect. Hence, virtual agents as service providers will improve the quality of the online platform and thereby affect customer satisfaction positively. This conclusion is in line with Huang and Rust (2018), who find that simpler services will benefit from being replaced by AI-technologies because relational benefits are limited.

Customers require their bank to provide online platforms where a large variety of inquiries can be dealt with. However, there will still be a need for personal meetings. Some banks are shutting down branches in the attempt to satisfy the need for more online services, but customers with more complex needs still demand personal services (see also Huang & Rust
2018). Therefore, achieving a proper balance between AI managed online services and personal services, as well as physical meetings with customers on the bank's premises, will be critical for the traditional banking sector.

Furthermore, some customers are worried that the implementation of virtual agents is just a tool for banks to cut costs. Since a large portion of a bank’s expenses is related to operational costs, i.e., salaries and rental cost for office space (Castelli et al., 2016), it is crucial that the substitute services are of sufficient quality and deemed to be adequate substitutes by customers. Hence, banks must have a clear customer focus when implementing virtual agents to avoid a negative impact on customer satisfaction. As a result, we argue that the potential positive implications for customer satisfaction are the virtual agents’ ability to handle simple inquiries correctly and at the same time fulfilling customers’ demand for time-efficiency, convenience, and seamlessness. But to satisfy the spectrum of both simple and complex concerns, a balance between human- and virtual agents is needed.

6.4. Customer Perceived Value

The findings indicate that to create value, it is critical that banks put the customers' needs in focus and induce a feeling that their main concern is to satisfy consumer demand rather than just to maximize operational profits. This is in line with Hu, Kandampully and Juwaheer (2009), who conclude that customer perceived value is something that is determined by the customer, not by the service provider.

We found that how value is added depends on the dimension of the service demand. Regarding simpler matters, it is evident that customers value tools and service procedures that enable them to satisfy their service demand with as little effort as possible. This gives further support to the findings of Mosavi et al. (2018) and Payne and Holt (2001) that customer perceived value is the result of the customer's perceived sacrifices and benefits. Hence, a decrease in the sacrifices made and/or an increase in the realized gains enhance the perceived value. The findings show that customers value the personal interaction to some extent and that there is a concern that the connection between the bank and customer will weaken by the implementation of virtual agents. However, since this does not apply for more simple matters, where instead time-efficiency and simplicity are vital rather than the personal touch, we argue
that virtual agents have the potential to increase customer perceived value in that area. Apart from a high degree of efficiency regarding simpler matters, it is evident from the findings that it is of great importance that banks are proactive and go beyond the customers’ primary concern. To add extra value, the banks must identify needs that customers are not able to see themselves. Our findings are in line with Barnes and Howlett (1998) who found that banks can differentiate themselves by understanding what creates value for its customers.

Since virtual agents will handle the simple customer inquiries, we argue that there is a possibility that the employees will have more time to put on the more complex matters. However, this depends on why banks implement virtual agents. If the incentive is to enhance the customer service by allocating the gained time to the customers, it may affect the factor positively. But, if the substitution is narrowly motivated as a means to raise profits by cutting the wage bill, it can backfire and change the perceived value negatively. It is therefore important for customers that virtual agents are developed with a clear customer focus to generate additional benefits.

The findings indicate how the service is provided need to be adjusted depending on the situation and value-creation entails more than just providing answers and solutions to simple queries. For instance, sometimes the service provider needs to show empathy, true understanding, and compassion, which virtual agents will struggle to achieve. This is strengthened by Eletter et al. (2010) statement that virtual agents are programmed in a certain manner and will consistently act based on rationality in comparison to humans. Hence, there is a risk that virtual agents will fail to adapt to situational differences and invariably act rationally, which is not always preferred. Consequently, addressing the future use of virtual agents, when handling more extensive customer matters, there is a risk that their rational way of acting may impact negatively on customer perceived value.

6.5. Customer Trust

The findings indicate that customer trust is the most important factor to achieve customer loyalty. As trust is seen as more difficult to establish in the financial sector than in other sectors (van Esterik-Plasmeijer & van Raaij, 2007), and is even more crucial in a digital
context (Chen & Barnes, 2007), we argue that it will be critical for banks to ensure trust with the implementation of virtual agents.

We found that one main aspect enhancing customer trust is the level of competence among employees. A critical aspect is that everything should work smoothly. As virtual agents currently are imperfect when it comes to answering customer inquiries, there is a high risk that customers will perceive virtual agents negatively under some circumstances. However, if trust is established before the implementation of virtual agents, customers are much more likely to forgive a negative experience (van Esterik-Plasmeijer & van Raaij, 2007). Nevertheless, the findings also indicate that banks need to be innovative and keep up with technological developments to induce trust. Altogether, the implementation of virtual agents runs the risk of impairing trust for banks if they fail to ensure that the AI-technology is capable of satisfactorily answering the bulk of customer inquiries. Alternatively, the banks should have a well-functioning system to handover tricky requests from a virtual agent to a human agent. Thus, to avoid a negative impact on trust, it is crucial that virtual agents are employed in areas where they can meet the required standard and competence.

Transparency- and safety concerns have been identified as two critical parts of customer trust. The findings show that it is important that banks are transparent with their operations. Customers have expressed a skepticism that banks implement virtual agents merely to cut costs and not for the benefit of the customer. Therefore, it will be crucial for banks to ensure necessary customer not to lose trust when virtual agents are introduced. Additionally, it is highly relevant that the virtual agents are programmed to have a high degree of customer focus. We argue that if this is not accomplished, it may affect trust negatively. Additionally, we found that customers experience uncertainty about where the information from the virtual interaction will end up and how it will be handled. When an online system, such as virtual agents are used, trust is extended beyond the banks' boundaries’ (Grabner-Kräuter & Faullant, 2008) and thus, customers must also have trust in the digital environment. However, the findings indicate that customers have high confidence in the safety of the bank and therefore, customers will not be concerned with sharing personal information with virtual agents. Consequently, we argue that it is vital for banks to maintain the trust embedded within the industry, as this trust then will spill over on the virtual agents, facilitating the implementation of the AI-technology into customer service.
6.6. Customer Loyalty

Customer loyalty has not been examined in itself, but rather as the result of how the underlying factors have been affected. As a result, we argue that virtual agents will affect customer loyalty through their impact on any of the factors. However, an interesting finding from our research is that most customers emphasize trust when they are asked what they consider to be the strongest contributor to loyalty.

Evidently, customer loyalty is highly complex, and the underlying factors are co-dependent. The banks suggest that customers are loyal when they allocate most of their bank-related matters to one single bank. This is in line with Caruana's (2002) finding that customer loyalty is when customers see their bank as their primary service provider. Moreover, a long-term perspective is emphasized and switching intentions do not arise because competitors offer more attractive solutions. This is in accordance with Oliver's (1999) findings that a customer who engages in re-purchasing or re-patronizing behavior while disregarding marketing activities and situational factors is considered loyal. In addition, previous research suggests that a loyal customer will recommend the bank to its peers (Reinartz & Kumar, 2002; Collier & Bienstock, 2006), which is supported by our findings.

It is evident that customers in our study do not fulfill all criteria for being a loyal customer as suggested by the findings and literature. We found that customers only consider themselves loyal in the sense that they stay with their bank for an extended period of time and allocate most of their bank-related matters to one single bank. The main reason for sticking to the same bank is the perception that the alternatives are too similar regarding their offers and that switching costs would be too high. Thus, potential options need to be substantially better to induce switching. The findings suggest that major Swedish banks are competitive regarding their overall service solutions. Hence, these banks are able to provide services and products of sufficiently high quality to retain their customers.

We have identified both positive and negative effects of the implementation of virtual agents on customer loyalty. Moreover, potential impacts of the future abilities of virtual agents have also been distinguished, but these effects will depend on how the AI-technology develops. First, service quality, customer perceived value, and customer satisfaction can be affected positively because of the increased time-efficiency, seamlessness, simplicity, and availability
that the virtual agent can bring. The area of application will mainly affect less complicated services and it is critical that virtual agents possess sufficient competence to achieve the desired outcome. The more complex service inquiries will also be favored if the labor input released is re-allocated instead of removed. Second, we argue that virtual agents currently affect customization in neither a positive nor negative manner because of their limited use. However, if virtual agents are able to get access to customer data, there will be opportunities for customization. Lastly, we find that customer trust is the most important factor for customer loyalty. However, the use of virtual agents may entail negative implications for customer trust. Hence, to mitigate the risk associated with customer trust and the implementation of virtual agents, banks need to exercise great caution to ensure that trust is not compromised. Moreover, since customers expect their banks to provide them with the best possible service and to benefit from technological developments, the implementation of virtual agents can contribute to a consolidation of trust.
7. Conclusion

This section provides a summary of our key findings along with our final conclusions.

Because of the novelty of virtual agents as service providers in major Swedish banks, there is a lack of relevant literature concerning its effects. Therefore, the purpose of this thesis was to fill this void by identifying the potential implications it might have for customer loyalty. A main conclusion from the study is that customers by definition are not loyal towards their bank. The reasons customers stay with their bank are because of convenience and that the perceived differences between the major banks are too small. For virtual agents to have a distinct impact on customer loyalty, they will need to be implemented in such manner that it entails a significant difference in the customer service. If the virtual agents are only implemented into customer service to a small extent, customers may not regard this as generating proper and apparent benefits. In conclusion, the influence on customer loyalty of the virtual agents will depend on the extent to which they are used in customer service.

We have identified that virtual agents have the possibility to affect all the factors that contribute to customer loyalty, either positively or negatively, and either in terms of their current or future abilities. Because it is a developing technology, its abilities continuously change which makes it difficult to assure its effects. However, a conclusion that can be made is that it will, to a large extent, depend on why banks implement the technology and how they will be used to deliver service. For the virtual agents to enhance customer loyalty, they have to be implemented with a strict customer focus. It is crucial that virtual agents are used solely in areas and for tasks that they can handle flawlessly since customers expect and demand that their bank's services are provided seamlessly and with a satisfactory level of competence. In addition, customers want to be able to handle a large share of their service inquiries through the online channels, which the virtual agents will facilitate. However, there is still demand for human interaction concerning more complex services. Thus, a bank must find an optimal balance between virtual and human agents based on their customers' needs and preferences. Consequently, it might result in negative consequences for customer loyalty if the virtual agents replace human bankers to a too large extent and if the financial aspect becomes the main incentive, instead of capitalizing on the excess labor to deliver superior customer service. In short, banks' strategies and external factors will, to a large extent, influence the
effects that virtual agents will have on customer loyalty. Therefore, we are unable to conclude how each factor will be affected, instead, the potential impacts have been identified.
8. Discussion

In this section the empirical findings are discussed and interpreted. The first two subsections discuss the theoretical and managerial implications that can be concluded from the results of this research. The third subsection presents the limitations that we have encountered during the process. The last subsection presents implications for further research and suggestions for future studies.

8.1. Theoretical Implications

This thesis contributes to the academic literature in consumer behavior regarding banks' customer service. It provides insights into how the implementation of virtual agents as service providers will be received by the customers and thereby affect their loyalty towards the bank. Because of the newness associated with this technological advancement, existing literature has not yet addressed the topic.

8.2. Managerial Implications

Based on our interviews and interpretation of the literature we judge that banks can increase their likelihood of successfully implementing virtual agents by understanding how it may affect the bank-customer relationship. However, this will, to a large extent, depend on what purpose and how the virtual agents are implemented. There is a mistrust against banks that they design their activities with the financial aspect as the main incentive, instead of the benefits for their customers. Since handling customer inquiries through virtual agents are more cost-effective with regards to human labor, it becomes critical for banks to, from a loyalty perspective, demonstrate the advantages it will bring to customers. Another aspect for banks to consider is how the customer data gathered from the interaction with their virtual agent are handled. To ensure trust, transparency, and security, this needs to be strongly emphasized by the banks.

To be able to take advantage of the potential positive effects, it is vital that the implementation is carried out with a strict customer focus, with their needs and expectations
as the main priority. In addition, personal interaction needs to remain an option and be easily accessible, since our results suggest that this need cannot be overlooked. Concerning more simple demands, customers want efficiency and simplicity, but when it comes to more complex matters, personal interaction is still demanded. Hence, it is crucial that virtual agents do not become a substitute, but rather a complement used in areas where they can deliver equivalent or superior service to human bank employees, and the areas of operations need to be planned accordingly. Another concern that the banks must take into consideration is the training of the virtual agent and how it is programmed. Regarding more complex service demands, banks need to go beyond the customer's primary concern. As a result, if virtual agents' area of application expands, it is critical that they are trained and programmed to be able to handle situational differences and distinguish needs to operate in a satisfactory manner. Ultimately, if these aspects are taken into consideration, banks can arguably capitalize on virtual agents to positively impact customer loyalty.

8.3. Limitations

Because of the novelty of virtual agents in banks' customer service, where some banks have not yet even implemented it, the service has not been used extensively by our respondents. Therefore, it should be taken into consideration that the interviewed bank customers have not been able to base their answers on practical experience but rather on their perception of the service. Consequently, this could be subject to insufficient knowledge and understanding of the topic. Thus, if virtual agents would have been used more extensively by the interviewed customers, the findings might have been different. Moreover, the capabilities of virtual agents are currently under development and their characteristics change over time. Consequently, the study has been based on both its current abilities and forecasts of how the virtual agents will operate and be used in the future, and we cannot ensure that the deployment of virtual agents will be as projected. Hence, if the development would progress in a different direction than projected, there is a risk that our findings will only be applicable to the current state. In addition, the extant literature on virtual agents as service providers is limited. This means that there was little research available to use as a basis for our study. Another limitation is our small sample size. If random sampling or a survey would have been used that could have resulted in other findings. The various mentioned limitations have been considered throughout
the writing process, the purpose and research questions have been developed to mitigate the effect of any shortcomings caused by external factors.

8.4. Future Research

The research on virtual agents within the banking industry is limited, and more research is needed to improve our understanding of the concept and its potential implications. Since the technology and practical use of virtual agents are in its initial stages, one could conduct this research again, when, and if, it has been further established. However, the same purpose and research method used in this study could be applied for future research too. Today, the younger generation may be more accustomed to digitalization, it would, therefore, be interesting to investigate whether the outcome of this study would change if a demographic variable such as age was considered. This would allow for further interesting research on the subject and could be a good complement to the field. Moreover, to arrive at more firmly established findings, future researchers could explore this subject on a larger sample. One could also do a longitudinal study, which would allow the researchers to identify the long-term effects.

Moreover, future research could investigate the impacts of the new legislation enacted by the European Union, the General Data Protection Regulation, GDPR. GDPR increases the rights of consumers to manage their personal data and it requires companies to inform consumers of how the data is being used (European Union, 2018). This may impact the use of AI-technologies and how firms can utilize, store and analyze customer data. Since companies have access to sensitive customer data, this legislation may lead to increased transparency or discourage customers from sharing their data. As a result, it would be interesting to study what implications this regulation may have with regards to this research.
9. References


Appendix 1. Interview Guide Bank Representatives

Background questions
1. What is your position in the bank?
2. How far have you come with the implementation of AI-technologies in customer service?
3. How do you work with matters regarding AI?

Customization
1. Do your customers have homogenous needs or do you tailor services based on individual needs?
2. What effects do you believe that AI will have regarding the identification and understanding of customer needs?
3. Which, if any, possibilities to customize solutions for customers do you see with AI?

Service Quality
1. In your opinion, what creates a high degree of service quality?
2. How do you work to ensure a high degree of service quality?
3. What opportunities do you see that AI can bring to improve service quality?
4. Regarding the quality of customer service, do you believe there is anything a human agent can contribute that a virtual agent cannot?

Customer Perceived Value
1. In your service offerings, which factors create value for your customers?
2. Do you believe that AI in customer service will add value to the customer or do you see any risks?
3. In what way do you think a virtual agent’s unlimited accessibility may affect customers perceived value of the service?

Customer Satisfaction
1. Based on your experience of a successful customer experience, what aspects generate a satisfied customer?
2. How do you think that a virtual agent will be able to meet and satisfy the aspects that you mentioned previously?
3. Is there something the virtual agent will have difficulties to achieve?
**Customer Trust**

1. How do you define customer trust and what do you do to achieve it?
2. In your opinion, how was customer trust affected when banks became more digitalized?
3. How do you think the significance of customer trust will change in the future?
4. Do you believe that a customer will entrust and confide personal and sensitive information to a virtual assistant or is the trust dependent on a human relation?

**Customer Loyalty**

1. According to your perception, what does customer loyalty entail?
2. What do you think leads to customer loyalty?
3. What are your procedures to achieve customer loyalty?
4. Which of the five previous factors do you think have the most impact on customer loyalty?
5. What are the largest risks with an increased service provided by virtual agents and the decreased human interaction between bank and customer?
Appendix 2. Interview Guide Bank Representatives, Swedish

Bakgrundsfrågor
1. Vad har du/ni för roll i banken?
2. Hur långt har ni kommit med implementeringen av AI-teknologi i kundtjänst?
3. Hur jobbar du/ni med frågor gällande AI?

Kundanpassning
1. Har era kunder homogena behov eller skräddarsyr ni service utifrån individuella behov?
2. Vilken påverkan tror du/ni AI kommer att ha gällande förståelsen av kunders behov?
3. Hur tror du/ni att användandet av AI i kundtjänst möjliggör skräddarsydda lösningar till kunder?

Servicekvalitet
1. Vad anser ni skapar en hög kvalitet på servicen?
2. Hur jobbar ni för att säkerställa en hög servicekvalitet?
3. Vilka möjligheter ser du/ni att AI har för att förbättra servicekvaliteten?
4. Finns det något som du/ni tror att en mänsklig agent kan bidra med när det kommer till kvalitet I kundbemötandet som virtuella agenter kommer att ha svårt att leva upp till?

Kundens uppfattade värde
1. Vad med er service skapar mest värde för era kunder?
2. Tror du/ni att AI I kundservice kommer att addera värde till kunden eller ser ni några risker?
3. Hur tror du/ni att en virtuell agents obegränsade tillgänglighet kommer att påverka kundens uppfattade värde av servicen?

Kundnöjdhet
1. Av er erfarenhet av en lyckad kundupplevelse, vilka faktorer genererar en nöjd kund?
2. Hur tror du/ni att en virtuell agent kommer kunna bemöta och tillfredsställa de faktorer som ni nämnde nyss?
3. Finns det något som du/ni tror att en virtuell agent kommer ha svårt att uppnå?

Kundförtroende
1. Hur ser ni på kundförtroende och vad gör ni för att uppnå detta?
2. Hur ser du/ni att kundförtroendet har påverkats när banker blivit mer och mer digitala?
3. Hur tror du/ ni att betydelsen av kundförtroende kommer att förändras i framtiden?
4. Tror du/ni att en kund kommer att anförtro sig och delge personlig och känslig information till en virtuell agent, eller kräver det en mänsklig relation?

Kundlojalitet
1. Vad anses du/ni att kundlojalitet innebär?
2. Vad anses du/ni bygger en stark kundlojalitet?
3. Hur jobbar ni för att uppnå kundlojalitet?
4. Vilka av de fem faktorer som vi har nämnt tror ni har störst inverkan på kundlojalitet?
5. Vilka är de största riskerna med en ökad service genom virtuella agenter, när den mänskliga interaktionen mellan bank och kund minskar?
Appendix 3. Interview Guide Bank Customers

Background Questions
1. What is the name of your bank(s)?
2. Are you a frequent user of the bank’s digital services?
3. What type of service do you use the most?
4. For what bank matters would you prefer having a personal meeting rather than a digital meeting?
5. Are you familiar with the concept Virtual Agents, that can perform similar tasks in the customer service as a human agent?
6. Do you have any experience with this kind of interaction?

Customization
1. Does the service your bank offers match the needs you have as a customer?
2. Are there any services you think should be more customized for you and your personal needs?

Service Quality
1. What aspects do you believe contribute to a high service quality?
2. How do you perceive the quality of your bank’s services?
3. What services are you satisfied with, and which can be improved?
4. In what way do you believe a virtual agent will affect the service quality?

Customer Perceived Value
1. When it comes to service, what factors create value in the interaction between you and the bank?
2. How does your bank create value for you?
3. How do you perceive AI in customer service, i.e., will it add value or have a negative impact?

Customer Satisfaction
1. What factors are essential in order to make you a satisfied customer?
2. What expectations do you have on your bank’s services?
3. How would you describe a successful bank meeting?
4. Is there anything your bank can improve to make you a more satisfied customer?
Customer Trust
1. What aspects are important for the bank in order to gain your trust?
2. Do you think that a personal meeting provides more confidence in the bank than if you receive help online?
3. Would you feel comfortable in entrusting personal information to a virtual-/artificial agent?
4. According to your perception, will the interaction between you and the bank feel more personal if you receive help from a virtual agent than, e.g., a chat or other digital channels?

Customer Loyalty
1. According to your perception, what does customer loyalty entail?
2. When do you consider yourself loyal to the bank?
3. What factors, in general, do you consider important for building loyalty towards your bank?
4. Which of the five factors we brought up do you consider the most important for a bank to live up to in order for you to be a loyal customer?
5. How is your attitude towards virtual agents and artificial intelligence in general, are you positive, skeptical or indifferent?
Appendix 4. Interview Guide Bank Customers, Swedish

Bakgrundsfrågor
1. Vilken bank är du kund hos?
2. Är du en frekvent användare av bankens digitala tjänster?
3. Vilken typ av service använder du mest?
4. I vilka bankärenden föredrar du att ha ett personligt möte och i vilka ärenden föredrar du att göra dem digitalt?
5. Är du bekant med konceptet virtuella agenter, som utför tjänster istället för en människa?
6. Har du någon erfarenhet av den typen av interaktion?

Kundanpassning
1. Hur tycker du att den servicen som din bank erbjuder idag matchar dina behov?
2. Finns det några tjänster som du tycker att din bank borde anpassas sig mer utefter dig och dina personliga behov?

Servicekvalitet
1. Vilka faktorer och aspekter anser du bidrar till en hög kvalitet på servicen?
2. Hur anser du att kvalitén på servicen hos din bank är, vad är bra och vad kan bli bättre?
3. Hur tror du att en virtuell agent kommer att påverka servicekvalitén?

Kundens uppfattade värde
1. När det kommer till service, vad anser du skapar värde i interaktionen mellan dig och banken?
2. Hur anser du att din bank skapar värde för dig?
3. Tror du att AI i kundservice kommer att addera värde eller tror du att det får en negativ påverkan? Hur?

Kundnöjdhet
1. Vilka faktorer är viktiga för att göra dig till en nöjd kund?
2. Vad har du för förväntningar på din bank när det kommer till service?
3. Hur skulle du beskriva ett lyckat bankmöte?
4. Finns det något din bank hade kunnat förbättra för att göra dig till en nöjdare kund?
**Kundförtryende**

1. Vad anser du skapar ett högt förtryende för en bank från din sida, vilka faktorer är viktiga?
2. Anser du att ett personligt möte inger ett större förtryende för din bank än att få hjälp online?
3. Tror du att du hade känt dig bekväm med att anförtro dig med personliga uppgifter till virtuella/artificiella agenter?
4. Tror du att interaktionen kommer att kännas mer personlig om du får hjälp av en virtuell agent än om du använder till exempel en chatt eller andra digitala kanaler?

**Kundlojalitet**

1. Vad anser du att kundlojalitet innebär och när anser du dig vara lojal till din bank?
2. Vilka faktorer, i stora drag, anser du är viktiga för att du ska vara lojal mot din bank?
3. Vilka av de fem faktorerna vi nämnt tycker du är viktigast att banken lever upp till för att du ska vara en lojal kund?
4. Hur är din inställning gentemot virtuella agenter och artificiell intelligens i allmänhet, är du positiv, skeptisk eller likgiltig?