



**CUSTOMER RESISTANCE TO CHATBOTS IN FINANCIAL SERVICES: A SOCIAL EXCHANGE
THEORY PERSPECTIVE**

by

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**CUSTOMER RESISTANCE TO CHATBOTS IN FINANCIAL SERVICES:
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ABSTRACT

Chatbots are becoming the new employees as they are increasingly being used by financial service providers to replace humans in customer interactions. Despite the numerous advantages chatbots offer, overcoming customer resistance remains challenging for firms. This study leaned on social exchange theory by examining customers' perceived benefits and perceived costs of chatbots and how these can be mitigated or exploited to overcome customer resistance to chatbots in the financial services industry. This study had two primary objectives: to ascertain the implications of financial service providers employing chatbots instead of human service employees on customer relationships and to suggest how financial service providers can overcome customer resistance to chatbots to improve customer relationships.

The findings were anticipated to assist marketers in improving their use of chatbots to overcome customer resistance thereof and enhance customer relationships. Qualitative research was conducted utilising an exploratory research design and non-probability sampling, comprising online semi-structured interviews with 20 internet banking customers. The interpretation of findings followed a phenomenological analysis, focusing on participants' experiences and providing insight through dense descriptions. This study found that the extent to which a chatbot is humanised can influence its perceived creepiness, as well as customer expectations of the service interaction. This study also found that disclosing a chatbot's identity to customers can have positive effects, specifically relating to increasing perceived transparency and setting reasonable expectations for the interaction. Moreover, it was found that customers' privacy concerns stem from a lack of knowledge about how chatbots work. However, customers' perceptions of increased risk may be reduced by educating customers about chatbots.

Based on these findings, this study offers actionable insights for financial service providers on reducing customer resistance to chatbots by maximising benefits and minimising perceived risks. Key strategies include integrating chatbots with human support, enhancing customer education on chatbot capabilities, and ensuring transparency around data privacy. By managing customer expectations and offering personalised, accessible chatbot experiences, financial service providers can increase customer trust and satisfaction, while reducing perceived risk. These insights help practitioners and policymakers advance innovation and the use of chatbots in the financial sector.

This study enhances the literature by clarifying how to implement chatbots more effectively in financial services, addressing customer concerns and minimising negative impacts on customer relationships. It offers a unique contribution by applying social exchange theory to examine customer resistance to chatbots in financial services, a context that has received little attention in past literature. Unlike earlier studies that focused on different theories such as uncanny valley or technology acceptance models, this study emphasises customers' perceived costs and benefits, demonstrating the applicability of social exchange theory in AI contexts. This study also contributes new insights into strategies for reducing customer resistance, highlighting how chatbot transparency, education, and anthropomorphism influence customer perceptions. This unique perspective on overcoming resistance enhances the understanding of chatbot use in financial services.

Keywords: chatbots, social exchange theory, financial services, customer resistance, customer relationship management, service robots, South Africa.

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CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

The ongoing tension between service providers adopting chatbots and consumers resisting them poses a persistent and long-term challenge (Huang, Markovitch & Stough, 2024). Artificial intelligence (“AI”) technologies are increasingly being integrated into society, presenting an opportunity for firms to enhance customer experiences and relationships (Ho & Chow, 2023). These technologies are particularly impacting how firms deliver services to their customers (Huang & Dootson, 2022). Concerning services, AI can be defined as “the configuration of technology to provide value in the internal and external service environments through flexible adaptation enabled by sensing, learning, decision-making and actions” (Bock, Wolter & Ferrel, 2020:317). In essence, AI allows firms to use machines to perform business activities typically performed by human service employees (Vlačić, Corbo, e Silva & Dabić, 2021). As a noteworthy example of AI service technology, a chatbot is defined as an “E-service agent that represents a technological evolution of the traditional service agent involved in direct firm–customer exchanges” (Murtarelli, Gregory & Romenti, 2021:928).

Recently, chatbots have sparked interest in the media (Shrivastava, 2023; Dwivedi, Kshetri, Hughes, Slade, Jeyaraj, Kar, Baabdullah, Koohang, Raghavan, Ahuja & Albanna, 2023). As an example of this, ChatGPT, introduced by OpenAI, is an advanced AI chatbot that uses natural language processing tools to answer questions and converse with consumers in a way that sounds human (Mathur, 2023). Notably, ChatGPT attracted approximately 100 million users within two months (Shrivastava, 2023). Following its widespread success, Google introduced its Bard chatbot in an effort to stay competitive (Forbes Africa, 2023). Numerous organisations have also highlighted chatbots’ abilities in customer services (Mogaji & Nguyen, 2022; Pizzi, Scarpi & Pantano, 2021; Luo, Tong, Fang & Qu, 2019; Xiao & Kumar, 2021; Campbell, Sands, Ferraro, Tsao & Mavrommatis, 2020; Mostafa & Kasamani, 2022; Thomaz, Salge, Karahanna & Hulland, 2020).

Within the financial services industry, chatbots are becoming more commonly used as a way to improve customer service and automate certain tasks (Mogaji & Nguyen, 2022; Soetan, Mogaji & Nguyen, 2021; Sugumar & Chandra, 2021). Chatbots continue to transform the financial industry and offer banks new ways to interact with customers (Laky, 2023; Payne, Peltier & Barger, 2021; Gummerus, Lipkin, Dube & Heinonen, 2019). As such, they represent a key opportunity for establishing and managing customer relationships (Kull, Romero & Monahan, 2021). However, chatbots can have negative implications for customer relationships if used ineffectively. For example, Microsoft’s Twitter chatbot, Tay, produced highly offensive and racist responses to customers after being asked race-related questions, which adversely impacted Microsoft’s reputation (Puntoni, Reczek, Giesler & Botti, 2021). Thus, it is necessary to understand how customers perceive AI in financial services, wherein competition is intense, and customer relationships are an important asset (Riedel, Mulcahy & Northey, 2022).

More specifically, customer resistance to chatbots is a significant challenge that can undermine their potential benefits in enhancing customer relationships (Kull *et al.*, 2021; Mostafa & Kasamani, 2022). This resistance is particularly pronounced in financial services (Priya & Sharma, 2023) and poses a substantial barrier for firms (Kallel, Ben Dahmane Mouelhi, Chaouali & Danks, 2023). Addressing this resistance is crucial as innovations, such as chatbots, depend on customer adoption, and failure to overcome resistance can result in unsuccessful innovations (Mani & Chouk, 2018). To better understand customer resistance to chatbots in financial services, this study focused on the implications

of chatbots, with a particular focus on how chatbots can be used effectively in financial services to overcome customer resistance to them.

Uniquely, this study differs from other studies investigating chatbots versus humans due to its focus on customer relationships in the financial services industry. Previous studies investigating chatbots versus humans have predominantly been conducted in other contexts, such as retail (e.g., Song, Xing, Duan, Cohen & Mou, 2022 and Tran, Pallant & Johnson, 2021) and hospitality (e.g., Roy & Naidoo, 2021 and Sheehan, Jin & Gottlieb, 2020). Additionally, prior research on customer resistance to chatbots have been conducted in various contexts, including healthcare (Müller, Mattke, Maier & Weitzel, 2019), personalised advertising (Kim, Ryoo, Lee & Lee, 2023), e-commerce (Cheng, Bao, Zarifis, Gong & Mou, 2021), and community enterprises (Kwangsawad & Jattamart, 2022). Different theories, such as cognitive appraisal theory (Wang, Bao, Zarifis, Gong & Mou, 2023) and the stimulus-organism-response (SOR) framework (Cheng *et al.*, 2021), were used. Therefore, this study differs from prior research by focusing on a financial services context and by adopting social exchange theory, allowing it to contribute to the literature on customer resistance to chatbots in financial services.

Limited research has explored the role of chatbots in financial services from the social exchange theory perspective (De Keyser & Kunz, 2022). This theory is suitable to investigate how customer resistance to chatbots can be overcome as it allows for insight into how customers evaluate and navigate these interactions (Blau, 1964). In line with social exchange theory, this study posits that the more value a customer perceives in a chatbot, in terms of benefits, the more willing the customer will be to engage with the chatbot (Stafford & Kuiper, 2021). In this way, social exchange theory assists in understanding how customers weigh the advantages and disadvantages of using chatbots and how these evaluations can be leveraged to mitigate their resistance. As such, this study is unique as it leans on social exchange theory to offer insight into customers' perceived benefits and perceived costs of chatbots and how these can be mitigated or exploited to overcome chatbot resistance in the financial services industry. Previous research primarily utilised theories other than social exchange theory and often overlooked the dual aspects of customer resistance, which can include both negative and positive perceptions of chatbots (Fatima, Khan, Bahmannia, Chatrath, Dale & Johns, 2024; Bock *et al.*, 2020; Blau, 1964). Therefore, this study addresses a unique research gap by applying this theory to examine customer interactions with chatbots in the financial services sector, focusing on perceived costs and benefits.

Furthermore, this study identifies a critical research gap concerning customer resistance to chatbots in the financial services sector, particularly focusing on challenges posed by poor service quality, privacy concerns and unmet expectations (Crollic, Thomaz, Hadi & Stephen, 2022; Huang & Dootson, 2022). Existing literature highlights these issues but lacks comprehensive strategies to mitigate customer resistance and enhance satisfaction (Meng, Li & Huang, 2023; Yang, Sun & Shen, 2023). By applying social exchange theory, a framework that has been underutilised in this context (De Keyser & Kunz, 2022), this study aims to provide insights into how financial service providers can effectively use chatbots while maintaining and enhancing their customer relationships. As such, this study addresses the need for a deeper understanding of customer preferences regarding chatbot interactions and their implications for service delivery in a challenging economic environment (Ho & Chow, 2023).

This initial chapter provides context to the study by explaining the subjects of relationship marketing and AI, particularly chatbots. This background serves to contextualise this study's research problem, which is subsequently presented. The research problem sheds light on the research questions and objectives, also introduced in this chapter. After understanding the study's aims via its research questions and

objectives, the methodology is explained, followed by how this study contributes theoretically, methodologically, and managerially to the investigation of chatbots. Before concluding this chapter, a layout of the study is presented.

1.2 BACKGROUND

Chapters 2 and 3 provide a thorough review of the relevant literature to offer a theoretical comprehension of chatbots in service marketing. This section provides an initial understanding of key concepts relevant to this study, beginning with relationship marketing, which refers to “all marketing activities directed toward establishing, developing and maintaining successful relational exchanges” (Morgan & Hunt, 1994:22). Relationship marketing has become pivotal in service marketing (Jones, Ranaweera, Murray & Bansal, 2018). In services marketing, customers form relationships with their service providers through a series of service encounters, which describes any interaction between the two parties (Bitner, 1990; Voorhees, Fombelle, Gregoire, Bone, Gustafsson, Sousa & Walkowiak, 2017). If a service encounter is handled inefficiently, the firm can suffer significant consequences, including reduced profits, loss of customers, and negative word of mouth (Tax, Brown & Chandrashekar, 1998; Bitner, Booms & Mohr, 1994). As such, it is valuable to investigate the ways in which service encounters, such as those involving chatbots, can be improved upon so as to avoid negative impacts on the firm and enhance customer relationships.

Ensuring strong customer relationships is critical in marketing, specifically in the service industry (Bejou, 1997). The financial services industry is particularly concerned with customer relationships (Laky, 2023; Gao, Melero-Polo & Sese, 2020; Barnes, 1997). This is because customer relationships in financial services are particularly uncertain and constantly changing (Heinonen, 2014), particularly in banking (Chai & Dibb, 2018). It is becoming more difficult for banks to differentiate themselves, and there is increasing pressure to enhance service quality and employ new methods (Nejad, 2022; Gao *et al.*, 2020; Sayil, Akyol & Golbasi Simsek, 2019). Therefore, it is key for financial service providers to enhance their relationship marketing strategies by adopting new technologies (Nejad, 2022; Ryals & Payne, 2001). This emphasises the need for service providers to overcome customer resistance to chatbots in order to leverage the benefits of adopting new technologies (Nejad, 2022).

AI is one such technology that has a notable impact on the services industry (Huang & Dootson, 2022). It is not predicted to replace relationship marketing but rather improve upon it and significantly enhance how firms manage their customer relationships (Kull *et al.*, 2021; Libai, Bart, Gensler, Hofacker, Kaplan, Kötterheinrich & Kroll, 2020). With AI, firms benefit from an enhanced understanding of customer needs, faster, more accurate processing, and the ability to manage numerous customers simultaneously (Huang & Dootson, 2022; Campbell *et al.*, 2020; Luo *et al.*, 2019; Libai *et al.*, 2020; Kumar, Rajan, Venkatesan & Lecinski, 2019). AI allows firms to reduce costs by automating certain marketing functions, such as customer service, leading to improved profitability (Davenport, Guha, Grewal & Bressgott, 2020). AI has had more influence in some industries than others (Rai, 2020), with its most significant impact felt in industries with large volumes of customer data, such as retail, consumer packaged goods, travel, and, related to this study, banking (Davenport *et al.*, 2020; Rai, 2020).

It is becoming more common for an AI, non-human service employee to be utilised in service encounters across various industries (Huang *et al.*, 2024; Li & Zhang, 2023; Robinson, Orsingher, Alkire, De Keyser, Giebelhausen, Papamichail, Shams & Temerak, 2020). Service employees, both human and robotic, are the face of the firm (Robinson *et al.*, 2020; Mende, Scott, van Doorn, Grewal & Shanks, 2019). In this study, “employee” refers to service employees who interact directly with

customers (De Keyser, Köcher, Alkire, Verbeeck & Kandampully, 2019). Chatbots, noteworthy examples of AI service technology (Henkel, Bromuri, Iren & Urovi, 2020), represent the transformation of the traditional service employee (Shevlin, 2023; Murtarelli *et al.*, 2021). They are a type of service robot (Blut, Wang, Wunderlich & Brock, 2021); a self-ruled agent servicing customers through social exchange (Meyer, Jonas & Roth, 2020; Wirtz, Patterson, Kunz, Gruber, Lu, Paluch & Martins, 2018; Blut *et al.*, 2021; Jörling, Böhm & Paluch, 2019). Chatbots primarily communicate via text through messaging platforms (Adam, Wessel & Benlian, 2021). Unlike human service employees, chatbots are easier to scale, significantly less costly, more reliable, void of human error, and are always available to customers (Chung, Ko, Joung & Kim, 2020; Adam *et al.*, 2021; Huang & Rust, 2018; Meyer-Waarden, Pavone, Poocharontou, Prayatsup, Ratinaud, Tison & Torné, 2020). As chatbots are increasingly used by firms, they have important implications for customer relationships (Crollic *et al.*, 2022; Murtarelli *et al.*, 2021; Kull *et al.*, 2021; Nam & Kannan, 2020; Steinhoff, Arli, Weaven & Kozlenkova, 2019).

Within financial services, chatbots continue to transform the financial industry and offer banks new ways to interact with customers (Laky, 2023; Nejad, 2022; Payne *et al.*, 2021). Globally, the chatbot market in BFSI (Banking, Financial Services, and Insurance) is expected to grow significantly, from \$1.3 billion in 2023 to \$11.6 billion by 2032, at a compound annual growth rate (CAGR) of 27.5% (PR Newswire, 2024). This growth is driven by the increased use of chatbots on social media platforms, increased awareness, and the increasing popularity of chatbots. However, barriers to chatbot adoption include high initial costs, lack of product differentiation, and data privacy and security concerns (Yahoo Finance, 2024). In developed countries, chatbot adoption is driven by advanced AI capabilities and digital banking trends. Whilst in developing countries, there is significant untapped potential for chatbot expansion, with factors such as infrastructure and regulation differing across areas (PR Newswire, 2024). Economic contributions from chatbots are seen in improved productivity, reduced labour costs, and streamlined operations, supporting GDP growth in financial sectors worldwide. As more financial service providers, particularly banks, employ chatbots, their contribution to the sector's revenue is expected to increase and make a substantial impact on global economic growth (Yahoo Finance, 2024; PR Newswire, 2024).

In banking specifically, chatbots are increasingly being used to assist customers (Hentzen, Hoffmann, Dolan & Pala, 2022; Adam *et al.*, 2021). They can communicate with customers on behalf of the bank and assist customers with checking account information and making payments, for example (Mogaji & Nguyen, 2022; Belanche Casalo, Flavián & Schepers, 2020). Significantly, chatbots erase the need for a banking employee (Shevlin, 2023; Payne *et al.*, 2021; Gummerus *et al.*, 2019), making them particularly useful when banking services are restricted, such as during the COVID-19 pandemic (Eren, 2021). However, customer resistance to chatbots limits their usefulness to service providers (Mozafari, Weiger & Hammerschmidt, 2022; Luo *et al.*, 2019), representing a challenge. Overcoming this resistance to chatbots is essential because an innovation's success requires customers being willing to use it (Mani & Chouk, 2018; Kreger, 2023; Huang *et al.*, 2024). This underscores the significance of addressing customer resistance to chatbots. This background served to provide context to the research problem, which is discussed in the ensuing section.

1.3 RESEARCH PROBLEM

A research problem is an issue in the work environment that indicates a gap in the existing literature or discrepancies among previous researchers (Creswell, 2017). Although less costly than a human service employee, chatbots may provide poor-quality service and frustrate customers, which could adversely impact customer relationships (Crollic *et al.*, 2022; Huang & Dootson, 2022; Kull *et al.*, 2021; Libai *et al.*,

2020). Chatbots may also confuse customers or respond inappropriately (Adam *et al.*, 2021; Canhoto & Clear, 2020). They also present privacy and security risks for customers (Bouhia, Rajaobelina, PromTep, Arcand & Ricard, 2022; Murtarelli *et al.*, 2021; Puntoni *et al.*, 2021). When chatbots fail to meet customer expectations in services, they affect the customer experience, possibly hindering customer loyalty and satisfaction (Crollic *et al.*, 2022). An example of a chatbot having negative implications is Microsoft's Twitter chatbot, Tay, which produced highly offensive and racist responses to customers after being asked race-related questions. This adversely affected Microsoft's reputation (Puntoni *et al.*, 2021). Therefore, as service providers are likely to continue using chatbots, it is important to understand how to use chatbots effectively while maintaining positive relationships with customers (Crollic *et al.*, 2022; Bock *et al.*, 2020). This signifies a relevant problem in the workplace, as chatbots' influence is expected to continue in the foreseeable future (Maar, Besson & Kefi, 2023).

Since the COVID-19 pandemic, the financial services industry has been under stress due to increased business uncertainty (Wongsansukcharoen, 2022). This stress is exacerbated by the current economic climate, leading Goldman Sachs to let go of more than 3,000 employees, its largest layoff since the 2008 financial crisis (Azhar & Murdoch, 2023). Considering the current financial climate, AI is crucial for financial service providers, such as banks, to improve their customer experience, thereby strengthening their customer relationships (Ho & Chow, 2023). Maintaining customer relationships is critical to financial service providers' success (Laky, 2023). However, implementing AI, such as chatbots, presents numerous challenges for financial service providers, including customer resistance (Kreger, 2023; de Andrés-Sánchez & Gené-Albesa, 2023; Meng *et al.*, 2023). Overcoming resistance to chatbots is important for firms to be able to exploit the advantages chatbots offer (Kallel *et al.*, 2023). Many customers prefer not to deal with chatbots, opting to interact with a human service employee instead (Huang *et al.*, 2024; de Andrés-Sánchez & Gené-Albesa, 2023; Meng *et al.*, 2023; Shevlin, 2023; Luo *et al.*, 2019). However, the new reality in banking is that chatbots have become the new employees. Banks are increasingly replacing human service employees with chatbots, essentially integrating chatbots into the team (Shevlin, 2023). Therefore, financial service providers need to understand how they can exploit chatbots' value and overcome customer resistance. This is worthy of investigating, as customer resistance to chatbots represents a key obstacle to their adoption (Meng *et al.*, 2023) and restricts their usefulness to service providers (Kreger, 2023; Meng *et al.*, 2023; Mozafari *et al.*, 2022). However, previous studies examining the effective use of chatbots focus on an organizational perspective, instead of a customer perspective (Zhang, Følstad & Bjørkli, 2023; Meyer von Wolff, Hobert & Schumann, 2021), or focused on the customer's communication journey exclusively (van der Goot, Hafkamp & Dankfort, 2020). Moreover, previous studies examining customer resistance to chatbots have been conducted in other contexts, such as healthcare (Müller *et al.*, 2019).

Furthermore, research into the effective use of AI in financial services is limited (Riedel *et al.*, 2022; Mogaji, Farquhar, Van Esch, Durodié & Perez-Vega, 2022). Existing literature on AI and chatbots in financial services presents several gaps that this study aims to address. Social exchange theory has also been underutilised in this context and prior research primarily focuses on other theoretical frameworks, such as the technology acceptance model (De Keyser & Kunz, 2022; Bock *et al.*, 2020; De Cicco, Iacobucci, Aquino, Romana Alparone & Palumbo, 2021) or innovation resistance theory (Kwangsawad & Jattamart, 2022; Chang & Hsiao, 2024). Scholars highlight the unclear impact of AI on the social exchange process between customers and firms, particularly regarding traditional perceptions of costs and benefits (Bock *et al.*, 2020). Additionally, while previous studies acknowledge customer resistance to chatbots, they provide limited insights into strategies to mitigate this resistance and the factors contributing to it (Yang *et al.*, 2023; Cheng Zhang, Cohen & Mou, 2022). Moreover, while

previous research has explored customer satisfaction with chatbots, there is a need for a deeper examination of customer preferences for chatbot interactions and their impact on relationships with financial service providers (Blazevic & Sidaoui, 2022). By addressing these unresolved questions, this study contributes to a more comprehensive understanding of the dynamics between customers and chatbots in the financial services sector.

Considering the above, the research problem of this study was: Customer resistance to chatbots in financial services is a major barrier to their effective adoption (Meng *et al.*, 2023). Issues such as poor service quality, privacy concerns, and unmet customer expectations decrease customer satisfaction (Crolic *et al.*, 2022; Huang & Dootson, 2022; Bouhia *et al.*, 2022). With the current financial climate placing more pressure on banks to improve their customer experience through leveraging AI (Ho & Chow, 2023), this study aims to identify strategies that financial service providers can use to overcome customer resistance so as to leverage the benefits of chatbots and improve customer relationships. To address the research problem and the aforementioned critical research gaps, this study asked: ***How can financial service providers overcome customer resistance to chatbots to improve their customer relationships?*** This study's research questions and objectives are presented in the next section.

1.4 RESEARCH QUESTIONS AND OBJECTIVES

This study sought to achieve an enhanced understanding of chatbots in services, particularly how they can be used more effectively to overcome customer resistance and improve financial service provider's customer relationships. Regarding the research problem, the research questions and objectives follow, commencing with the research questions.

- *Research Question 1: What are the implications of financial service providers using chatbots versus human service employees on customer relationships?*
- *Research Question 2: How can financial service providers overcome customer resistance to chatbots to improve their customer relationships?*

The primary research objectives listed hereunder were formulated to address the research questions.

- *Objective 1: To ascertain the implications of financial service providers using chatbots versus human service employees on their customer relationships.*
- *Objective 2: To suggest how financial service providers can overcome customer resistance to chatbots to improve customer relationships.*

This study's first research question addressed the implications of using chatbots versus human service employees on customer relationships to extend the literature on the negative implications on customer relationships (Grewal, Guha, Saturnino & Schweiger, 2021; Mostafa & Kasamani, 2022). With the aim to contribute to chatbot resistance literature (Crolic *et al.*, 2022; Huang & Rust, 2021), the second research question addressed how chatbots can be used more effectively to mitigate their negative implications and overcome customer resistance to chatbots. This is important to consider because, despite firms' increasing interest in implementing chatbots in customer services, consumers remain doubtful of AI technology in financial services (Priya & Sharma, 2023). This is an issue because an innovation's success relies on customer adoption and unaddressed resistance can result in its failure (Mani & Chouk, 2018). Customer resistance has caused numerous innovations to fail (Heidenreich & Kraemer,

2016). Moreover, customer expectations for chatbots have intensified due to several chatbots becoming increasingly advanced. This has led to an issue where conventional banking chatbots may fall short of meeting heightened consumer demands for personalisation, relevance, and speed caused by more advanced AI chatbots, such as ChatGPT. For example, if consumers regularly engage with ChatGPT and subsequently interact with their bank's chatbot, they could experience dissatisfaction due to heightened expectations (Johnson, 2023), emphasising the relevance of the research questions. Together, these research questions enhanced our understanding of how chatbots can be used more effectively in financial services to enhance customer relationships. These research questions are further explained in Chapter 3. An exploratory research design was utilised to address the research questions. The ensuing section provides an overview of the research design.

1.5 METHODOLOGY

This study applied an exploratory research design with a qualitative method to gather primary research data. Qualitative research enables detailed descriptions and unlimited data (Barker, Pistrang & Elliot, 2015; Creswell & Poth, 2016), leading to an in-depth understanding of a problem (De Ruyter & Scholl, 1998; Flick, 2007; Carson, Gilmore, Perry & Gronhaug, 2001). Interviews are a popular method utilised for gathering data in qualitative research (Flick, 2007; McGregor, 2017; Merriam & Tisdell, 2016), and were conducted in this study to gather data from participants' unique perspectives to generate new insights uninfluenced by existing literature (Flick, 2007; Daymon & Holloway, 2010; Merriam & Tisdell, 2016).

Semi-structured interviews were conducted using a set of broad questions as well as probing questions (McGregor, 2017; Gavin, 2008). Semi-structured interviews permitted an explorative interaction with participants (Silverman, 2006; Zikmund, Carr & Griffin, 2013). Open-ended questions allowed participants to contemplate their interactions with chatbots, increasing the findings' integrity (Mollenkopf, Frankel & Russo, 2011; Plewa, Sweeney & Michayluk, 2015). Video-based, online, semi-structured interviews were conducted to ensure participants' comfort (Creswell & Poth, 2016) and adhere to the "social distancing" protocol enforced during the COVID-19 pandemic (Dodds & Hess, 2020; Libai *et al.*, 2020). The sampling frame extended to Cape Town, Durban, and Johannesburg, South Africa as these major cities account for the three provinces with the largest share of the population (Statistics South Africa, 2020). Interviews were conducted between 10 December 2020 and 15 January 2021.

The target population comprised internet banking users in South Africa. Quota sampling was employed to ensure a representative sample based on age and gender (Daniel, 2011). Participants were chosen through convenience sampling, constituting the second stage in the quota sampling process (Hauser & Hansen, 1944; Daniel, 2011). A sample size of 20 was selected and justified by past literature (e.g., Soetan *et al.*, 2021; Tynan, McKechnie & Hartley, 2014; Sangle-Ferriere & Voyer, 2019; Kvale & Brinkmann, 2009; Plewa *et al.*, 2015). The quota was met for age (31.65% between 20 and 29; 32.25% between 30 and 39; 21.33% between 40 and 49; and 14.77% between 50 and 59 years old), as well as for gender (50% male and 50% female). Participants worked in various industries, including marketing and finance. Appendix 5.b offers more detail on the individual characteristics of participants, including their age, gender, industry and years of experience.

The researcher offered remote interviews via Zoom at participants' preferred times and sent confirmation emails and Google Calendar invitations with a Zoom meeting link, to reduce non-response bias (Colombo, 2000). Participant's emails were voluntarily provided to the researcher by participants. Each participant was emailed an information sheet before the interview and voluntarily provided their

written consent via email (see Appendix 4.c). Participants used their own computers to partake and all interviews were recorded and transcribed to facilitate analysis, with the verbal permission of participants. The researcher minimised social desirability bias by building rapport with participants through humour, providing clear explanations of the study's purpose and confidentiality, and reassuring participants that their opinions were valued (Bergen & Labonté, 2020; Grimm, 2010).

Data collection began after permission from the University of Cape Town ethics committee was attained and the following reference number was issued: REC 2020/08/010. The researcher adhered to several ethical principles throughout the research process. Participants were informed of their right to withdraw at any time, assured of the confidentiality of their information, and provided with accurate details about the study (Carson *et al.*, 2001; Polonsky & Waller, 2018). In light of the COVID-19 pandemic, which heightened the vulnerability of consumers, interviews were conducted online to mitigate health risks, thereby ensuring the well-being of both participants and the researcher (Scott, Martin & Wiener, 2020; Bell, Bryman, dos Santos, du Toit, Hirschsohn, Masenge, van Aardt, Wagner, 2014). In line with the research questions from Section 1.4, the interview questions explored: (i) participants' expectations of their bank's service experiences; (ii) participants' perceptions of their banks and chatbots in internet banking; (iii) participants' motives and concerns about dealing with a chatbot in internet banking; (iv) scenarios in which participants prefer a human service agent over a chatbot; and (v) strategies for banks to enhance chatbots' effectiveness in meeting participants' needs and expectations.

The interpretation of findings followed a phenomenological analysis, focusing on participants' experiences and providing insight through dense descriptions (Starks & Brown Trinidad, 2007; Daymon & Holloway, 2010; Holloway & Todres, 2003). This approach revealed the intended meaning behind participants' experiences (Lichtman, 2013; Daymon & Holloway, 2010; Eberle, 2014; Starks & Brown Trinidad, 2007; Holloway & Todres, 2003). Despite the growing use of software like Atlas.ti for qualitative analysis (Gupta, 2024), qualitative research demands a depth of understanding that may be compromised by relying on software (Merriam and Tisdell, 2016). Thus, to gain a more in-depth understanding of chatbots in financial services, manual coding over qualitative analysis software was used. Resource constraints, including the financial and training costs associated with Atlas.ti further informed this decision (Polonsky & Waller, 2018; Gupta, 2024). The methodology added to the relevant quality criteria and ethical considerations. This chapter introduced the study, outlining the research problem and two associated questions, as well as an overview of the methodology. The next section justifies the research in terms of theoretical, managerial, and methodological contributions.

1.6 JUSTIFICATION OF RESEARCH

This study added to existing knowledge of chatbots in marketing across various dimensions. The following subsections explain these contributions in terms of the theoretical, managerial, and methodological aspects, beginning with their theoretical contributions.

1.6.1 Theoretical contributions

This study contributed theoretically by applying social exchange theory, which posits that consumers participate in relationships based on exchanges to maximise advantages and minimise costs (Molm, 1997). This theory was applied in this study as it provided a framework to answer both research questions by focusing on the perceived costs and benefits of interactions between customers and chatbots. In addressing Research Question 1, "What are the implications of financial service providers using chatbots versus human service employees on customer relationships?", social exchange theory facilitated an understanding of how customers evaluate these interactions based on the rewards and

costs they anticipate from the exchange (Blau, 1964; Bagozzi, 1975). This theory was particularly suitable as it emphasises how individuals engage in relationships when the perceived benefits outweigh the costs (Blau, 1964). This allowed this study to analyse whether customers perceive interactions with chatbots as beneficial or detrimental to their relationship with a service provider. Given that social exchange theory has been widely used to study customer relationships in services (Palmatier Jarvis, Bechkoff & Kardes, 2009; Cambra-Fierro, Melero-Polo, Sese, & van Doorn, 2018), it also provided a well-established foundation to explore how customers weigh interactions with chatbots in comparison to human service employees. This theory was also highly relevant for Research Question 2, “How can financial service providers overcome customer resistance to chatbots to improve their customer relationships?”, due its focus on reciprocal exchanges. This focus enabled an examination of customer resistance stemming from perceived imbalances between the costs and benefits associated with using chatbots (Blau, 1964). Previous research indicates that customers resist chatbots when the perceived costs, such as lack of personalisation or service quality, outweigh the benefits (Bock *et al.*, 2020; Stafford & Kuiper, 2021). Applying this theory helped this study to identify specific perceived costs that contribute to resistance and to suggest strategies financial service providers can use to mitigate this (Obeng, Nakhata & Kuo, 2019; Cloarec, Meyer-Waarden & Munzel, 2022). Based on this discussion, social exchange theory was suitable for answering both research questions as it offered a structured lens to explore customer evaluations of chatbot interactions and to investigate strategies for overcoming resistance.

In exploring the theoretical foundations for understanding customer resistance to chatbots and how to overcome this, social exchange theory was identified as the most appropriate framework. While theories such as justice theory and equity theory provide insights into fairness and perceived value in exchanges, they mainly focus on customer satisfaction and loyalty instead of resistance (Blodgett, Hill & Tax, 1997; Huppertz, Arenson & Evans, 1978). Resource dependence theory examines interdependence but does not explain motivations behind customers’ reluctance to engage with new technologies (Dabholkar, Johnston & Cathey, 1994). Innovation resistance theory, although useful in uncovering barriers to adopting innovations, focuses solely on negative perceptions and overlooks potential benefits (Ram & Sheth, 1989). In contrast, social exchange theory provides a comprehensive framework for analysing customer resistance by considering both the anticipated costs and benefits associated with chatbot interactions (Blau, 1964). The theory’s ability to account for both positive and negative perceptions of AI interactions (Wulf & Odekerken-Schröder, 2001; Cambra-Fierro *et al.*, 2018) made it an appropriate choice for understanding and improving customer relationships in the context of financial service chatbots.

Furthermore, social exchange theory was utilised to provide a conceptual viewpoint and contribute to the literature regarding perceived costs and benefits. Previous studies have primarily extended theories other than social exchange theory to investigate AI in services (De Keyser & Kunz, 2022; Bock *et al.*, 2020). Theories commonly used in a service robot context include uncanny valley theory, social response theory, social impact theory, social presence theory, anthropomorphism theory, technology acceptance model theory, service robot acceptance model theory and attribution theory, among others (De Keyser & Kunz, 2022). Therefore, this study added to the service robot literature by applying social exchange theory to investigate customers’ perceived costs and benefits of chatbots, thereby contributing a theoretical perspective relatively uncommon in the literature (De Keyser & Kunz, 2022; Bock *et al.*, 2020; Meyer-Waarden *et al.*, 2020).

In addition, scholars suggested that the impact of AI technology on the social exchange process between customers and the firm was unclear in the literature (Bock *et al.*, 2020). Specifically, it was uncertain if the traditional ways in which a consumer evaluates the costs and benefits of interacting with a firm would be applicable when AI technology, such as a chatbot, is heavily involved (Bock *et al.*, 2020). Thus, the applicability of social exchange theory in an AI context was uncertain (Fatima *et al.*, 2024; Bock *et al.*, 2020; Meyer-Waarden *et al.*, 2020). This study extended the social exchange theory literature by demonstrating its applicability in the context of AI and chatbots (Fatima *et al.*, 2024). By extending social exchange theory, this study showed that this traditional theory could explain customer relationships with chatbots (Meyer-Waarden *et al.*, 2020), particularly in terms of perceived benefits and perceived costs. Based on social exchange theory, this study specifically showed how financial service providers could improve customer relationships by increasing the perceived benefits and mitigating the perceived costs of chatbots, so as to overcome customer resistance to chatbots. To build long-term relationships with customers in the banking sector, financial institutions must first address consumer resistance to chatbot adoption (Ram & Sheth, 1989). A key strategy to overcome resistance is to enhance customers' perceptions of the benefits associated with chatbot interactions (Li & Zhang, 2023). By implementing various strategies, such as educating customers about data security and transparency to alleviate fears regarding privacy (Cloarec *et al.*, 2022), banks can effectively overcome resistance and encourage long-term customer relationships with chatbots.

Moreover, although chatbots are increasingly implemented, research on AI and chatbots is still developing (Li & Zhang, 2023; Tran, Strizhakova, Usrey & Johnson, 2022; Crolc *et al.*, 2022; Huang & Dootson, 2022). Therefore, this study's results opened up research avenues to enhance the comprehension of how different chatbots can be used in services and their influence on customer relationship management (Blazevic & Sidaoui, 2022). In addition, this study responded to calls for additional research into how consumers respond to chatbots compared to humans (Crolc *et al.*, 2022). Specifically, this study provided valuable insights by comparing the roles of AI and human service employees in financial service interactions and exploring their marketing implications. Thus, this study addressed the need for investigation into AI versus human service employee service delivery in various settings (Blut *et al.*, 2021), including financial services (Mogaji & Nguyen, 2022). The research area investigating where customers prefer to use a chatbot and how chatbots impact their relationship with the firm has been highlighted as a key research area (Blazevic & Sidaoui, 2022). To differentiate this study from others in the literature, Appendix 1.a includes a table comparing similar studies investigating customer resistance to chatbots in the literature, specifically examining their key findings and limitations.

As shown in the table (see Appendix 1.a), previous studies investigating customer resistance to chatbots were conducted in various contexts, including healthcare (e.g., Müller *et al.*, 2019), personalised advertising (e.g., Kim *et al.*, 2023), e-commerce (e.g., Cheng *et al.*, 2021), and community-enterprise (e.g., Kwangsawad & Jattamart, 2022). These studies employed different theories and frameworks, such as cognitive appraisal theory (Wang *et al.*, 2023) and the stimulus-organism-response (SOR) framework (Cheng *et al.*, 2021). Specifically, Kim *et al.* (2023) did not explore consumers' positive and negative motivations to use chatbots, a gap addressed in this study. In addition, when investigating customer resistance to chatbots, Yang *et al.* (2023) focused on distrust and empathy. However, most participants in their study had significant experience using chatbots, potentially influencing their responses concerning chatbot drawbacks compared to consumers with limited experience. Hence, it remains uncertain if the findings can be generalised to other populations, such as consumers less familiar with AI and chatbots (Yang *et al.*, 2023). This differs from this study's findings, which include participants with no prior experience using chatbots. Based on this discussion, this study

diverges from prior research investigating customer resistance to chatbots, by focusing on a financial services context, specifically internet banking, and by adopting social exchange theory, allowing it to contribute to the literature on customer resistance to chatbots in financial services by paying particular attention to customers' perceived costs and benefits.

While the table in Appendix 1.a examines previous studies on customer resistance to chatbots, the table in Appendix 1.b examines research focused on chatbots in the financial services industry. As depicted in the table in Appendix 1.b, previous studies on chatbots in financial services have focused on various areas. In particular, both Mogaji and Nguyen (2022) and Jang, Jung and Kim (2021) studied chatbots in financial services from managers' perspectives, whereas this study focused on customers' perceptions of chatbots only. The increasing integration of chatbots into customer service strategies highlights the need to understand their impact from the customer's perspective specifically (Huang *et al.*, 2024). It should be noted that Jang *et al.*'s (2021) study was limited to the Korean financial services industry, and the understanding of chatbots may vary in other countries due to differences in infrastructure and regulations. Similarly, Soetan *et al.*'s (2021) findings are limited to Nigeria, and Sugumar and Chandra's (2021) findings are limited to the Asian population. Sugumar and Chandra (2021) also applied different theories, namely the unified theory of acceptance and use of technology 2 (UTAUT2) model and the belief-desire-intention (BDI) model, to investigate factors for chatbot adoption. Additionally, Rajaobelina and Ricard (2021) focused solely on the home insurance sector. Therefore, this study differs from prior research investigating chatbots in financial services by adopting the social exchange theory and employing this to investigate chatbots in an internet banking context specifically. This study focused on an internet banking context due to the increase in popularity of online banking transactions, which has led to a greater reliance on internet banking platforms (Park, Yoo, Cho & Park, 2024). As such, this study aims to contribute to the literature on internet banking innovations while emphasising the importance of being customer-focused when implementing chatbots. Thus, this table (see Appendix 1.b) serves to differentiate this study from those undertaken previously. This study's managerial contributions are discussed next.

1.6.2 Managerial contributions

This study's findings offer insights into how financial service providers can leverage chatbots to enhance their marketing practices. To overcome customer resistance to chatbots, financial service providers must address the key factors that lead to negative customer perceptions (Kallel *et al.*, 2023). This study provides practical strategies to help banks and other financial institutions mitigate these concerns, ensuring chatbots can be effectively integrated into day-to-day operations while enhancing customer satisfaction. To overcome resistance stemming from a lack of trust in chatbots, financial service providers should prioritise transparency. Customers often resist interacting with chatbots due to uncertainty about who or what they are interacting with (Thomaz *et al.*, 2020). To mitigate this resistance, banks should ensure that chatbots clearly disclose their non-human identity at the outset of the interaction. For example, ABSA Bank's chatbot begins by explicitly stating, "I am not a human," which sets clear expectations and reduces any feelings of deception (ABSA Bank). Customer education is another vital strategy for reducing resistance to chatbots. Many customers resist chatbots due to a lack of understanding of how they work (Rai, 2020). To address this, financial service providers should explain the functionality and limitations of chatbots through user-friendly channels like short videos or educational emails. By explaining the technology, firms can increase user confidence and engagement, thereby reducing resistance (Thomaz *et al.*, 2020). For instance, offering short privacy notices within chatbot interactions that explain data usage and security measures can help alleviate privacy concerns

(Bouhia *et al.*, 2022; Niu & Movondo, 2024). This proactive communication builds trust and reassures customers that their information is being handled responsibly.

Another key aspect of customer resistance relates to the perception that chatbots are impersonal and robotic. To mitigate this, financial service providers should personalise chatbot interactions. By using a warm, friendly tone and greeting customers by name, chatbots can create a more engaging and personal experience. For example, a bank's chatbot could introduce itself with, "Hi John, I'm Max, and I'm here to assist you with your banking needs." This small but significant step can humanise the chatbot, making the interaction feel more connected and less robotic, which reduces the feeling of coldness (Kull *et al.*, 2021). Lastly, providing customers with the option to interact with either a human or a chatbot can alleviate feelings of reduced autonomy (Puntoni *et al.*, 2021). This option should be presented at the beginning of an interaction, empowering customers to make an informed choice based on their preferences and the complexity of their query (Huang & Dootson, 2022). For example, Commonwealth Bank Australia's chatbot, Ceba, escalates more complex issues to human service employees when needed (Cummins, 2022). This flexibility allows customers to feel in control of the interaction and reduces resistance to chatbots in situations where they might feel forced to use AI. As such, through focusing on increasing chatbot transparency, educating customers and offering personalised experiences, financial service providers can mitigate customer resistances to chatbots. By implementing these strategies, financial service providers can not only reduce customer resistance to chatbots but also enhance day-to-day operations. In this way, these practical contributions directly support the operational goals of banks.

1.6.3 Methodological contributions

This study employed an exploratory research design, utilising qualitative methods, specifically semi-structured interviews. Its qualitative research design facilitated an extensive exploration of participants' perceptions of chatbots (Barker *et al.*, 2015; Creswell & Poth, 2016). Qualitative techniques provide a nuanced understanding of complex issues, allowing for richer insights than quantitative studies (De Ruyter & Scholl, 1998; Flick, 2007; Carson *et al.*, 2001). Semi-structured interviews, an established method in qualitative research, enabled participants to express their perspectives freely, generating fresh insights untainted by pre-existing literature (Flick, 2007; Daymon & Holloway, 2010; Merriam & Tisdell, 2016). The semi-structured format permitted probing questions, fostering deeper dialogue and allowed participants to reflect critically on their experiences with chatbots in internet banking (McGregor, 2017; Gavin, 2008). This approach enhanced the integrity of the findings by capturing a more authentic representation of participant experiences (Mollenkopf *et al.*, 2011; Plewa *et al.*, 2015). The study's sampling strategy further contributes to its methodological thoroughness. Utilising quota sampling ensured that the sample was representative of the target population, South African internet banking users, based on age and gender (Daniel, 2011). The deliberate selection of a sample size of 20, justified by previous literature (Soetan *et al.*, 2021; Tynan *et al.*, 2014), allowed for a balance between depth and manageability. The diversity of participants across various industries, including marketing and finance, enriches the data, offering varied perspectives and enhancing the study's validity. The analytical framework employed in this study further strengthens its methodological contributions. Phenomenological analysis was utilised to interpret the findings, focusing on participants' experiences and revealing deeper meanings through rich descriptions (Starks & Brown Trinidad, 2007; Daymon & Holloway, 2010).

Notably, the majority of studies in the chatbot literature have typically employed quantitative methodologies, with the experimental method being the most common. In contrast, qualitative research,

particularly studies utilising interview methods, is less prevalent in service robot literature. Therefore, it is strongly recommended that studies adopt qualitative methods to gain a more comprehensive understanding of human interactions with service robots, such as chatbots (De Keyser & Kunz, 2022). As qualitative research has been identified as underdeveloped in service robot literature, this study adds value by contributing to the number of studies employing qualitative methods, specifically interviews. Therefore, by adopting qualitative techniques, this study contributes to the literature on chatbots, demonstrating a broader adoption of qualitative methodologies to deepen our understanding of these technologies in service settings. Furthermore, this study’s use of online interviews via Zoom significantly enhanced this study’s research design and data collection methods. Conducting interviews remotely offered logistical advantages, allowing participants to engage from their own environments, which reduced anxiety and encouraged openness, thus leading to richer insights into participants’ experiences (Creswell & Poth, 2016). Additionally, the use of video-based online interviews represents a unique research design. While many studies have relied on traditional methods of data collection, the innovative use of digital platforms for semi-structured interviews in this study highlights the adaptability of qualitative methodologies to contemporary challenges, such as the need for social distancing during the COVID-19 pandemic (Dodds & Hess, 2020; Libai *et al.*, 2020). This chapter introduced the research problem, questions, and objectives, provided a summary of its methodology, and outlined its various theoretical, managerial, and methodological contributions. The next section delineates this study’s layout.

1.7 DEMARCATION OF STUDY

This section outlines this study’s layout. The remaining five chapters delve into the theory, methodology, findings, and conclusions. Figure 1.1 below illustrates the study’s organisation.

Figure 1.1: Demarcation of this study

Chapter 1	Introduction	
Chapter 2	Review of the theoretical foundations of the study	
	Role of AI in marketing	Social exchange theory
Chapter 3	Review of the theoretical foundations of the study	
	Role of chatbots in services marketing	Development of the two research questions
Chapter 4	Methodology	
Chapter 5	Results	
Chapter 6	Conclusions and Recommendations	

This study comprises six chapters: Chapter 1, the current section, serves as an introduction. Chapter 2 explores AI’s role in marketing and evaluates the chosen theoretical framework, social exchange theory, against other theoretical frameworks. Building on this, Chapter 3 explores the theoretical foundations, focusing on chatbots’ role in services marketing and outlining the two research questions. Chapter 4

outlines the research design and methodology employed. Chapter 5 involves the interpretation of findings resulting from the implemented methodology. Finally, Chapter 6 encapsulates the conclusions, implications, and recommendations for future research and acknowledges the study's limitations.

1.8 CONCLUSION

This chapter clarified this study's primary aim: to investigate how chatbots can be used more effectively in financial services to overcome customer resistance. The research questions and objectives (refer to Section 1.3) are explicitly designed to address this central aim. The study employed an exploratory and qualitative research methodology to address these research questions and objectives, utilising semi-structured interviews. The e upcoming chapters cover the theoretical foundations, methodology, results and conclusions. Chapter 2 situates the study within the broader context of relationship marketing and AI, specifically introducing social exchange theory.

CHAPTER 2: RELATIONSHIP MARKETING, AI IN MARKETING, AND THEORETICAL PERSPECTIVES

2.1 INTRODUCTION

This study contributes to existing knowledge on AI in services marketing by investigating the effective utilisation of chatbots by service providers, particularly in the financial sector, to overcome resistance. This chapter commences with a literature review of customer relationships in services marketing, followed by an analysis of customer relationship management (CRM) in financial services. This is followed by a literature review of artificial intelligence (AI) in marketing, specifically services marketing. The chapter then explores the literature on justice theory, equity theory, resource dependence theory, innovation resistance theory and social exchange theory. The chapter concludes with a summary of the chosen theoretical framework.

2.2 RELATIONSHIP MARKETING

Relationship marketing was primarily developed by Philip Kotler, a prominent marketing scholar and author and was mainly born out of the field of marketing and business management (Kotler & Armstrong, 2010; Berry, 1983). Relationship marketing is critical for firms to withstand competition (Morgan & Hunt, 1994; Sharma & Sheth, 1997). It is important to consider, as scholars emphasise the benefits and importance of developing long-term customer relationships (Berry, 1983; Grönroos, 1990; Dwyer, Schurr & Oh, 1987). Therefore, this study focuses on relationship marketing. Its various facets are discussed in this first section, beginning with its definition.

2.2.1 What is Relationship Marketing?

Due to the complex nature of relationships (Gummesson, 1994), relationship marketing lacks a simple definition (Coviello, Brodie & Munro, 1997; Peterson, 1995; Blois, 1996). The various definitions focus on different types of relationships (Palmer, 1995). Broadly speaking, relationship marketing refers to “all marketing activities directed toward establishing, developing and maintaining successful relational exchanges” (Morgan & Hunt, 1994:22). Relationship marketing represents a significant shift in marketing, focusing on relationships over singular transactions (Jones *et al.*, 2018; Grönroos, 1994; Palmer, 1994). While transaction marketing focuses on acquiring customers, relationship marketing seeks to acquire and retain customers (Grönroos, 1994). Technological advances have played a crucial role in shaping the evolution of relationship marketing, as marketing became more direct and tailored to the customer, particularly in internet banking (Sheth & Parvatiyar, 2002). Relationship marketing is said to be deeply rooted in services marketing (Bejou, 1997; Möller & Halinen, 2000). In services marketing, relationship marketing is defined as “the attracting, maintaining and – in multi-service organizations - enhancing of customer relationships” (Berry, 1983:25). As this dissertation studied relationships in financial services, the following paragraphs discuss relationship marketing in the services context.

2.2.2 Relationship Marketing in Services

Relationship marketing has become pivotal in service marketing (Jones *et al.*, 2018). Service providers have direct contact with customers, allowing relationships to be formed (Grönroos, 1995). Customers form relationships with their service provider through a series of service encounters, which describes any interaction between the two parties (Bitner, 1990; Voorhees *et al.*, 2017). Service encounters are deemed social encounters (McCallum & Harrison, 1985). They allow service providers and customers to

socially interact and begin a relationship (Bitner, 1995; Czepiel, 1990). Service encounters are important to understand, as each encounter contributes to the customer's general evaluation of the firm and impacts their desire to continue the relationship (Bitner & Wang, 2014; Bitner, Brown & Meuter, 2000; Bitner, 1990). If a service encounter is handled inefficiently, the firm can suffer significant consequences, including reduced profits, loss of customers, and negative word of mouth (Tax *et al.*, 1998; Bitner *et al.*, 1994). Service encounters impact customer satisfaction, customer loyalty, repurchase rates, and relationship quality (Gremler & Brown, 1999; Czepiel, 1990; Bitner, 1995; Parasuraman *et al.*, 1985; Tax *et al.*, 1998).

Service encounters must be distinguished from service experiences, the latter of which is more holistic (Voorhees *et al.*, 2017; Bitner & Wang, 2014). Service experience is defined as the time frame within which all service encounters with a particular service provider occur (Voorhees *et al.*, 2017). Within the service experience are three stages that assist in organising related research: (1) pre-core service encounter, where customers research and make contact with the service provider; (2) core service encounter, where customers experience the service directly from employees, technology, or other customers; and (3) post-core service encounter, where customers evaluate and take action after the service, for example, making a complaint (Voorhees *et al.*, 2017; Bitner 1995). While every encounter is significant and has the potential to either frustrate or please customers (Bitner *et al.*, 2000), those occurring in the early stages of the service experience are particularly important in promoting loyalty (Bitner, 1995; Voorhees *et al.*, 2017).

Customers form perceptions of their service provider based on service encounter quality (Bitner, 1995; Rust & Chung, 2006). Service quality is a key construct in services (Bock *et al.*, 2020). Its meaning and how it is measured are largely contested in the literature (Brady & Cronin, 2001; Zeithaml, 2000; Zins, 2001; Rust & Oliver, 2000) due to its subjectivity (Caruana, Money & Berthon, 2000; Parasuraman *et al.*, 1985; Asubonteng, McCleary & Swan, 1996; Smith, 1999). Service providers must offer customers a superior quality of service to remain competitive (Parasuraman *et al.*, 1985; Reichheld & Sasser, 1990; Zeithaml, 2000). Customers' perceptions of service quality depend on their perceived value (Berry, 1995; Grönroos, 1995). Customer perceived value represents a customer's holistic assessment of the relationship, considering their perceptions of both the benefits and costs involved (Zeithaml, 2000; Ruiz, Gremler, Washburn & Carrión, 2008; Palmatier, Dant, Grewal & Evans, 2006). Therefore, customers' perceptions of service quality are determined by their opinion of how the service met their expectations (Grönroos, 1984; Parasuraman *et al.*, 1985).

Services are distinguished by four characteristics: perishability, heterogeneity, inseparability, and intangibility (Zeithaml, Parasuraman & Berry, 1985; Edgett & Parkinson, 1993; Moeller, 2010). These are explained individually to demonstrate the importance of relationship marketing for services. Firstly, perishability refers to the inability for services to be used later. For example, a bank will lose revenue for an unrented safety deposit box (Edgett & Parkinson, 1993; Moeller, 2010). Heterogeneity refers to the inability of services to be produced identically (Zeithaml *et al.*, 1985; Moeller, 2010), making consistency challenging (Edgett & Parkinson, 1993). Inseparability refers to the inability to distinguish the service from the service provider (Edgett & Parkinson, 1993; Zeithaml *et al.*, 1985; Moeller, 2010). The absence of a middleman increases the potential for an emotional attachment between the service provider and its customer, emphasising the importance of relationship marketing in services (Sheth & Parvatiyar, 2002; Grönroos, 1995; Bitner, 1995; Crosby, Evans & Cowles, 1990).

Intangibility refers to the non-physical, abstract nature of services and is arguably the most critical characteristic, as it is prevalent in all services (Zeithaml *et al.*, 1985; Edgett & Parkinson, 1993). Due to

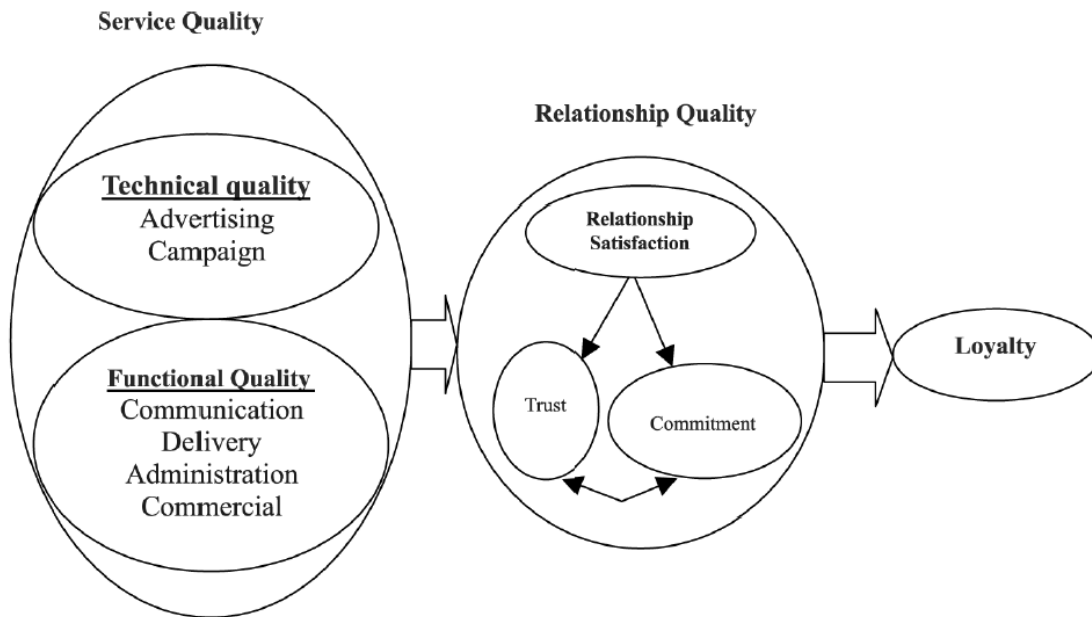
their intangibility, customers are unsure of what to expect from a service until it is delivered. This poses risks for unmet customer expectations, resulting in service failures (Sivakumar, Li & Dong, 2014; Smith, Bolton & Wagner, 1999; Dong, Evans & Zou, 2008; Hazée, Vaerenbergh & Armirotto, 2017; Hess, Ganesan & Klein, 2003). Service failures lead to adverse word-of-mouth, reduced revenue, and customer switching behaviour (You, Yang, Wang & Deng, 2020; de Matos, Henrique & de Rosa, 2013; McCollough, Berry & Yadav, 2000; Evanschitzky, Ramaseshan, Brady, Rabbanee, Brock & Pokorska-Zare, 2020). Therefore, relationship marketing is essential for service providers to promote satisfaction, manage customer expectations, and enhance customer relationships, thus making it an important focus for this study (Hennig-Thurau, Gwinner & Gremler, 2002; Keller, 2012; Reichheld, 1993; Berry, 1995; Day & Wensley, 1983; Borah, Prakhya & Sharma, 2020).

Service failures are critical points in relationships, often leading to their discontinuation (e.g., Harmeling, Palmatier, Houston, Arnold & Samaha, 2015; Keaveney, 1995; Anderson, Fornell & Lehmann, 1994; Grönroos, 1990). However, even without service failures and with limited customer dissatisfaction, customer relationships fade over time (Evanschitzky *et al.*, 2020). Relationship fading is described as a slow process in which a customer's desire to continue their relationship with the firm diminishes, resulting in unfavourable behaviour (Evanschitzky *et al.*, 2020; Dwyer *et al.*, 1987). This inevitable relationship weakening emphasises the importance of service providers maintaining and enhancing their customer relationships (Evanschitzky *et al.*, 2020; Hennig-Thurau *et al.*, 2002; Berry, 1995). Based on this discussion, relationship marketing is important for service providers to improve and extend their customer relationships (Hennig-Thurau *et al.*, 2002; Keller, 2012; Reichheld, 1993; Berry, 1995; Day & Wensley 1983). By applying the principles of relationship marketing, this study demonstrates how chatbots can enhance customer experiences in internet banking, ultimately promoting long-term relationships between financial service providers and their customers.

2.2.3 Maintaining and Enhancing Customer Relationships

Ensuring strong customer relationships is critical in marketing, specifically in services (Bejou, 1995). Strong relationships are generally defined as “the psychological connections customers perceive that they have with firms” (Voorhees *et al.*, 2017:276). A key construct in relationship marketing literature is relationship quality (Gremler *et al.*, 2020; Jones *et al.*, 2018). Relationship quality refers to customers' overall evaluation of the relationship (Garbarino & Johnson 1999; Hennig-Thurau *et al.*, 2002), and is argued to best reflect a relationship's strength (De Wulf, Odekerken-Schröder & Iacobucci, 2001). The literature debates facets determining relationship quality (Dorsch, Swanson & Kelley, 1998; Kumar, Scheer & Steenkamp, 1995; Bejou, Ennew & Palmer, 1998; Hennig-Thurau *et al.*, 2002; Gremler *et al.*, 2020). Scholars generally agree that trust and relationship satisfaction are key determiners of this construct (Crosby *et al.*, 1990; Dwyer *et al.*, 1987; Hennig-Thurau, Langer & Hansen, 2001). Other scholars emphasise the influence of relationship commitment on relationship quality (Dorsch *et al.*, 1998; Hennig-Thurau *et al.*, 2002; Roberts, Varki & Brodie, 2003). Thus, trust, relationship satisfaction and commitment can be considered the three facets determining relationship quality (De Wulf *et al.*, 2001; Berry & Worthington, 2001). Figure 2.1 below depicts the facets of relationship quality.

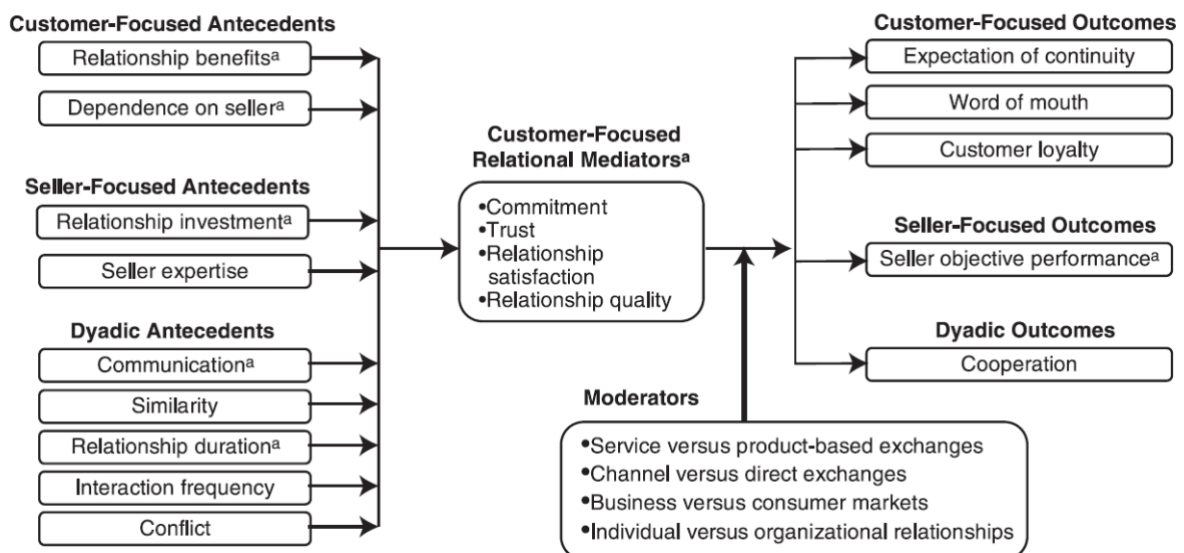
Figure 2.1: Effects of Service Quality on Relationship Quality Dimensions



SOURCE: Adopted from Caceres and Paparoidamis (2007:838)

Figure 2.1 above indicates the connection between service quality and relationship quality and how both ultimately determine a customer’s loyalty. Scholars agree that relationships are facilitated by at least one of the constructs, namely relationship quality, relationship satisfaction, trust, and commitment (Dwyer *et al.*, 1987; Crosby *et al.*, 1990; Morgan & Hunt, 2004; Palmatier *et al.*, 2006). In the model shown in Figure 2.2 below, these constructs are referred to as relational mediators, as they express the relationship between the customer and the firm from the customer’s perspective.

Figure 2.2: Relational Mediator Meta-Analytic Framework



SOURCE: Adopted from Palmatier *et al.* (2006:137)

Relationship satisfaction is a precondition for relationship quality (Caceres & Paparoidamis, 2007; Jones *et al.*, 2018). Relationship satisfaction is defined as the customer’s emotional state toward the relationship (Palmatier *et al.*, 2006; Verhoef, 2003). It is further defined in the literature as pleasurable

feelings (Hansen, Sandvik & Selnes, 2003). Relationship satisfaction develops over time, not from a single interaction (Caceres & Paparoidamis, 2007; Palmatier *et al.*, 2006). It is important to understand that relationship satisfaction deals only with the customer's satisfaction with the relationship and not general satisfaction (Palmatier *et al.*, 2006). Relationship satisfaction is highlighted as a pivotal element in relationship marketing due to its distinct characteristics and must, therefore, be included in this review (Selness, 1998; Jones *et al.*, 2018).

Two additional constructs central to relationship marketing are trust and commitment (Jones *et al.*, 2018; Morgan & Hunt, 2004). Both are key to strong relationships, making them both equally important to consider (Morgan & Hunt, 1994). Several scholars disagree and posit that only trust (e.g., Doney & Cannon, 1997; Sirdeshmukh, Singh & Sabol, 2002) or only commitment (Anderson & Weitz, 1992; Gruen, Summers & Acito, 2000; Jap & Ganesan, 2000) is important for developing strong, long-term relationships. Relationship commitment is defined as a lasting preference to continue a relationship (Moorman, Zallmam & Deshpande, 1992). It requires that at least one party values the relationship sufficiently to promote its continuation (Morgan & Hunt, 1994; Caceres & Paparoidamis, 2007). Trust is a key determinant of relationship commitment (Morgan & Hunt, 1994). Trust is defined as having sufficient confidence in the other relationship partner to depend on them (Moorman *et al.*, 1992; Morgan & Hunt, 1994). This confidence in the other party is underpinned by perceptions of that party being trustworthy and honest (Morgan & Hunt, 1994; Crosby *et al.*, 1990). Trust is specifically important in services due to their intangibility (Parasuraman *et al.*, 1985; Berry, 1995; Rust & Chung, 2006). For complex, personal, or high-involvement services such as financial services, where customers are especially hesitant, gaining their trust can promote extended relationships (Berry, 1995).

Berry (1995) highlights building trust as the most critical strategy for enhancing relationships. However, other scholars emphasise the role of communication in enhancing relationships (Murphy & Sashi, 2018; Duncan & Moriarty, 1998). Communication facilitates exchanges and ultimately forms relationships (Duncan & Moriarty, 1998). Effective communication assists firms in being more competitive (Ramani & Kumar, 2008). Firms can solve customer issues and set customer expectations through communication (Morgan & Trust, 1994; Palmatier *et al.*, 2006). The possibility of deeper customer relationships is increased in services due to technology enhancing firms' communication with customers (Rust, 2020; Rust & Huang, 2014). Customer satisfaction has been shown to depend on quality communication (Chung *et al.*, 2020). A recent study highlighted the importance of actively improving communications to retain customers and combat relationship fading (Evanschitzky *et al.*, 2020). It is crucial to communicate honestly, openly, and regularly to foster trust in service relationships, making communication a prerequisite for trust (Berry, 1995; Morgan & Hunt, 1994). A study interviewing automobile insurance customers revealed that customers felt misled due to the insurance provider not being transparent concerning price and policy changes. This demonstrates the importance of communicating honestly, frequently, and tactfully (Parasuraman, Berry & Zeithaml, 1991).

Customers' perceptions of relational benefits are noted as key contributors to enhancing relationships (Gremler *et al.*, 2020). Relational benefits refer to what customers gain from the relationship with their service provider besides the service provided (Gwinner, Gremler & Bitner, 1998). They encompass three main types: (1) confidence benefits, indicating reduced apprehension or risk; (2) social benefits, meaning the customer feels valued or recognised (Barlow, 1992), and (3) special treatment benefits, implying that customers benefit from personalised treatment that can also be economically advantageous, for example, loyalty programmes. Together, these benefits enhance relationship quality and are, therefore, important to understand when investigating how relationships can be maintained and

enhanced (Gwinner *et al.*, 1998; Gremler *et al.*, 2020). For services that are particularly complicated or require more involvement and investment than others, such as financial services, customers wish to enter into long-term relationships (Berry, 1983; Bitner, 1995), from which customers benefit from increased comfort and assurance, known as confidence benefits (Bitner, 1995; Gwinner *et al.*, 1998; Gremler *et al.*, 2020). As confidence benefits are particularly significant to customers in financial services, they were important to consider in this study (Ruiz *et al.*, 2008).

The relationship marketing strategies discussed range in their effectiveness in enhancing relationships. Communication and seller expertise were strategies found to be the most effective in building relationships (Palmatier *et al.*, 2006). Other scholars emphasise service providers' ability to uphold their service promises as key to enhancing customer relationships (Grönroos, 1990; Berry, 1983). This is confirmed by a recent study revealing that over-promising contributes to customer relationships fading (Evanschitzky *et al.*, 2020). Another study indicates that in the event of service failures, showing appreciation is more effective than apologising to customers, as it deflects blame from the firm (You *et al.*, 2020). As this study focused on customer relationships, the following section discusses customer relationship management (CRM) as a facet of relationship marketing.

2.2.4 Customer Relationship Management (CRM)

CRM is closely related to relationship marketing (Zablah, Danny & Wesley, 2003). However, relationship marketing adopts a holistic view of stakeholder relationships, while CRM focuses on customer relationships (Frow & Payne, 2009; Gummesson, 2002). CRM can be defined as a strategy that strives to enhance shareholder value by creating strong relationships with customers. CRM utilises relationship marketing strategies and technology to establish valuable and long-lasting relationships with customers. CRM also leverages data to better understand customers' wants and needs and generate value (Payne & Frow, 2005; Parvatiyar & Sheth, 2001). CRM not only enhances firm performance (Boulding, Staelin, Ehret & Johnston, 2005) but also promotes using data to enhance a firm's relationship marketing strategies (Ryals & Payne, 2001). CRM's significance is further proved by the common justification in the literature that it requires significantly less money to maintain existing customer relationships than to create new relationships (Rosenberg & Czepiel, 1984; Blattberg & Deighton, 1996; Fites, 1996; Filiatrault & Lapierre, 1997). A customer relationship's profitability increases with its duration (Reichheld, 1996). This study sought to understand how service providers can effectively maintain and enhance their customer relationships. CRM requires a firm to effectively manage customers across various channels (Payne & Frow, 2005; Ryals & Payne, 2001; Peppers, Rogers & Dorf, 1999). This relies on consistently delivering a superior customer experience for each channel (Payne & Frow, 2005). Firms must consider how all channels, or customer touchpoints, work as a whole (Becker & Jaakkola, 2020). For example, a banking customer may interact with a bank's call centre, visit the physical outlet, and use internet banking on the same day and firms require information on customers across all channels to effectively manage all these interactions and the customer relationship (Ryals & Payne, 2001). This information can be used to enhance customer relationships (Grönroos, 1997). An industry in which CRM is particularly advanced and that has significant customer data is the financial services industry (Ryals & Payne, 2001). Customer relationships in financial services are discussed next.

2.2.5 Customer relationships in financial services

When reviewing all industries, the financial services industry comes across as the most concerned about customer relationships (Gao *et al.*, 2020; Barnes, 1997). The literature indicates the financial services industry relies heavily on relationship marketing research (Chiu, Hsieh, Li, & Lee, 2005; Liang

& Wang, 2006). Customer relationships in financial services are particularly uncertain and constantly evolving and are, therefore, important to consider (Heinonen, 2014). Developing strong customer relationships is particularly challenging in banking (Chai & Dibb, 2018). As it is becoming more difficult for banks to differentiate themselves, there is more pressure to enhance service quality and employ innovative methods (Gao *et al.*, 2020; Sayil *et al.*, 2019; Chai & Dibb, 2018; Khare, 2010). Due to increased access to information, customers are becoming more knowledgeable about the industry and more critical of banks (Civera, Casalegno, Mosca & Maple, 2018). Consequently, trust is crucial in banking (van Esterik-Plasmeijer & Van Raaij, 2017). Banks, therefore, utilise CRM strategies to maintain and enhance customer relationships to remain competitive and profitable (Ballantyne, 2005; Dibb & Meadows, 2004).

Financial service providers can develop beneficial relationships with customers through prompt, tailored, and cohesive communication (Maas & Graf, 2008; Soureli, Lewis & Karantinou, 2008). Financial service providers can also offer economic benefits, such as reduced transaction costs to enhance existing customer relationships (Lin, Weng & Hsieh, 2003). Another strategy to enhance customer relationships is through customer education (Eisingerich & Bell, 2006). As financial services are perceived to be complicated and abstract (Berry, 1995), customers may lack confidence when accessing service providers. This lack of confidence can be reduced through customer education, which can when conducted sincerely, enhance relationships (Eisingerich & Bell, 2006). In this context, customer education involves the financial service employee being prepared to simplify financial terms and explain the advantages and disadvantages of financial products to customers (Sharma & Patterson, 1999; Eisingerich & Bell, 2006). Moreover, how a financial service provider addresses customer issues can enhance the relationship (Eisingerich & Bell, 2006). Issues should be dealt with promptly, respectfully, and with empathy (Smith *et al.*, 1999; Tax *et al.*, 1998; Eisingerich & Bell, 2006). Strategies for strong and sustainable customer relationships require insight into how financial actions and encounters fit into customers' lives (Heinonen, 2014). Financial service providers should also integrate new technologies, as this can assist firms in managing customer data in ways that will enhance relationship marketing strategies (Ryals & Payne, 2001). This is important to consider because when banks incorporate technology into their service delivery, customer relationships change (Barnes, 1997).

Advancements in banking technologies have led to customers having not only more options when choosing a bank but also heightened expectations (Civera *et al.*, 2018; Khare, 2010). Technology is imperative for enhancing banking services and adding value to service encounters (Czepiel, 1990; Rexha, Kingshott & Aw, 2003). Advances in technology and data analytics enhance communication across various channels. This allows service providers to offer increased personalisation and enhance their customer relationships (Gupta, Leszkiewicz, Kumar, Bijmolt, & Potapov, 2020; Rust & Huang, 2014; Grewal, Hulland, Kopalle & Karahanna, 2020). As online relationships differ significantly from those occurring offline, knowing how to maintain and enhance online relationships is a concern for both marketers and scholars (Kozlenkova, Palmatier, Fang, Xiao & Huang, 2017; Verma, Sharma & Sheth, 2016; Steinhoff *et al.*, 2019). Discussions of the differences between online and offline customer relationships follow.

2.2.6 Online relationships

As customers most often interact with firms online, managing online relationships, in which customers and firms engage with each other via the internet, is critical (Steinhoff *et al.*, 2019). Advances in technology continue to enhance relationship marketing strategies and support firms in developing intimate relationships with customers (Berry, 1995; Bock *et al.*, 2020). In an online context, all points of

contact between the customer and the service provider have the power to shape customers' perceptions of the benefits they receive (Liang & Chen, 2009). Enhancing service quality is critical to an online service provider's success (Wang & Zhang, 2018).

Online relationship marketing includes relational exchanges occurring through e-commerce, social media platforms, mobile applications, augmented reality, and artificial intelligence (Lemon & Verhoef, 2016). Two key relationship principles are repeated interactions and two-way communication. These are both facilitated by the internet, proving the connection between managing relationships and the internet (Srirojanant & Thirkell, 1998). Past research indicates that customers regard encounters with computers as social encounters and, for instance, attach personalities to websites. Customers, therefore, are perceived to have the same expectations of online interactions (Ovans, 1999). However, online relationships differ from those occurring offline. Offline customer relationships are distinguished by interactions between humans, while relationships occurring online depend on interactions between humans and technology (Yadav & Pavlou, 2014; Steinhoff *et al.*, 2019). Online customer relationships are characterised as instant, free from geographical limitations, leveraging data for increased personalisation, and seamless (Novak, Hoffman & Yung, 2000; Steinhoff *et al.*, 2019; Kozlenkova *et al.*, 2017). Table 2.1 below presents the differences between online and offline services.

Table 2.1: Comparison of Online and Offline Services

Online services	Offline services
Less time-consuming	More time-consuming (Liang & Chen, 2009)
More convenient	Less convenient (Day & Montgomery, 1999)
More control	Less control (Dabholkar, 1996)
Encouraging loyalty may be easier	Encouraging loyalty may be more challenging (Mols, 1998; Shankar, Smith & Rangaswamy, 2003)
Service is less transparent	Service is more transparent (Rust & Chung, 2006)
Less human-to-human interaction means bonds are more difficult to form	More human-to-human interaction means bonds are easier to form (Meuter, Ostrom, Roundtree & Bitner, 2000; Harden, 2002; Liang & Chen, 2009)

As shown in Table 2.1 above, online service encounters are typically less time-consuming and provide the customer with added convenience and control (Liang & Chen, 2009; Day & Montgomery, 1999; Dabholkar, 1996). Encouraging loyalty may be easier in online versus offline contexts (Mols, 1998; Shankar, Smith & Rangaswamy, 2003). However, online relationships can make it more difficult for firms to establish a bond with customers due to the lack of human-to-human interaction (Meuter, Ostrom, Roundtree & Bitner, 2000; Harden, 2002; Liang & Chen, 2009). A firm's online reputation is especially critical due to aspects of the service being hidden (Rust & Chung, 2006). For this reason, customers in online relationships have an increased desire for clear and factual information (Liang & Chen, 2009).

Offline and online relationships are similar in the sense that both types of relationship develop on the foundation that both parties believe they stand to benefit in some way (Gwinner *et al.*, 1998; Mathwick, 2002; Kozlenkova *et al.*, 2017). Both types of relationships have the potential to feel equally as personal to the customer (Mathwick, 2002). As with traditional service failures, online service failures can adversely affect the customer, with significant repercussions for the firm (Chen & Lee, 2018; Wang & Zhang, 2018). As customer relationships are typically a combination of online and offline, both are important when discussing customer relationships (Palmatier *et al.*, 2006; Steinhoff *et al.*, 2019). Libai *et*

al. (2020) highlights the importance of firms understanding the implications of emerging technologies for customer relationships. The focus of these technologies for marketers is AI (Libai *et al.*, 2020; Kaplan & Haenlein, 2019). Therefore, the ensuing section discusses AI in marketing.

2.3 AI IN MARKETING

Emerging technologies such as artificial intelligence (AI) are predicted to disrupt the realm of marketing, particularly customer behaviour (Campbell *et al.*, 2020; Bock *et al.*, 2020). It is important to understand AI, as it will significantly impact future marketing strategies (Chintalapati & Pandey, 2022; Davenport *et al.*, 2020; Rust, 2020; Bock *et al.*, 2020). Although not a new technology, recent developments in AI technologies have been noteworthy and, therefore, this section examines the literature on AI in marketing (Chintalapati & Pandey, 2022; Tong, Luo & Xu, 2020).

2.3.1 What is AI?

Explicit definitions of emerging topics are important for a field of study's growth and sustainability (Yadav, 2018). The table in Appendix 2.a examines various definitions of AI in the literature. Shankar's (2018) definition, see definition 1 (Appendix 2.a), is important to include as AI is commonly defined in the literature as machine technology that collects and uses data in ways that mimic human intelligence (Kumar, Ramachandran & Kumar, 2021; Canhoto & Clear, 2020; Rust, 2020; Syam & Sharma, 2018). AI is described as intelligent due to its ability to constantly improve and update its information (Kumar *et al.*, 2021). Similarly, Paschen, Wilson and Ferreira (2020) and Puntoni *et al.* (2021) (refer to definitions 5 and 6 respectively in Appendix 2.a) define AI in terms of human intelligence. However, Kaplan and Haenlein (2019) and Bock *et al.* (2020) argue that definitions describing AI in terms of human intelligence are problematic, as machines do not duplicate human intelligence but rather focus on what is logical to exceed what is humanly possible (Paschen *et al.*, 2020). Bock *et al.* (2020), see definition 3 (Appendix 2.a) take into account the nature of services. As this dissertation investigated AI in the context of services marketing, Bock *et al.*'s (2020) definition was applicable.

AI can be either virtual, which is its disembodied form, or robotic, known as its embodied form (Grewal *et al.*, 2020; Yadav & Pavlou, 2020). It should be noted that these forms should not be considered as two separate categories but rather as points on a spectrum (Davenport *et al.*, 2020). Both forms are predicted to significantly influence customer interactions with firms and, therefore, both are important to understand (Yadav & Pavlou, 2020). Although robotic AI features in recent literature (Mende *et al.*, 2019; Thomaz *et al.*, 2020; van Doorn, Mende, Noble, Hulland, Ostrom, Grewal & Petersen, 2017), the majority of AI is currently in virtual form (Davenport *et al.*, 2020). AI can be classified into three types as it progresses from mechanical to thinking and feeling. Each type can be utilised in different ways to support service activities (Huang & Rust, 2021). Table 2.2 below depicts the different types of AI.

Table 2.2: Three different types of AI: mechanical, thinking, and feeling

Type	Function	Service Tasks	AI Examples
Mechanical	Automation of service functions	Shipping, delivery, and payments	Robot self-service, and automated service processes
Thinking	Prediction and personalisation of services	Developing new services, identifying new markets, and personalising services	Data mining, and predictive analytics
Feeling	Personalisation of relationships	Interacting with customers, customer service, and customer care	Chatbots, and speech and emotion recognition (e.g., Siri and Alexa)

SOURCE: Huang and Rust (2021)

Table 2.2 above presents the different types of AI and their relevant functions, service tasks, and specific examples. Currently, mechanical AI is used to automate production, service functions, and standardisation, whereas thinking AI is used for research purposes and personalising services (Huang & Rust, 2021; Huang & Rust, 2020). The most advanced of types, feeling AI, can be employed to personalise customer relationships and, therefore, can enhance relational benefits (Huang & Rust, 2020). However, AI has yet to evolve to the point where feeling AI can be employed effectively in services and is often unsuitably replaced by mechanical or thinking AI (Huang & Rust, 2021). At present, AI is significantly impacting marketing and is predicted to have an even more profound impact in the future (Grewal *et al.*, 2020; Bock *et al.*, 2020). AI's marketing implications are examined in the ensuing section.

2.3.2 Implications of AI in Marketing

AI is progressively being employed in marketing practice (Huang & Dootson, 2022; Chintalapati & Pandey, 2022; Cronic *et al.*, 2022; Campbell *et al.*, 2020; Grewal *et al.*, 2020; Davenport, 2018). Due to advances in AI technology, marketers now have unprecedented insight into customer behaviour (Tong *et al.*, 2020). AI improves marketing strategies through increased personalisation and increased customer engagement (Davenport *et al.*, 2020; Grewal *et al.*, 2020; Tong *et al.*, 2020). Firms benefit from an in-depth understanding of customer needs, faster, more accurate processing, and the ability to manage numerous customers simultaneously (Campbell *et al.*, 2020; Luo *et al.*, 2019; Libai *et al.*, 2020; Kumar *et al.*, 2019). AI is used in a variety of marketing contexts, including healthcare, self-driving cars, retailing, and customer services (Grewal *et al.*, 2020). Within these contexts, AI allows firms to reduce costs by automating particular marketing functions, such as customer service, leading to improved profitability (Davenport *et al.*, 2020). Ultimately, AI allows marketers to deliver enhanced and seamless customer experiences (Grewal *et al.*, 2020). AI has had more influence in some industries than others (Rai, 2020). Its impact has been the most significant in industries requiring large volumes of customer data, such as retail, consumer packaged goods, travel, and banking (Davenport *et al.*, 2020; Rai, 2020).

Within CRM, AI's impact can be considered as small advances in a firm's technological processes (Libai *et al.*, 2020). AI-CRM systems are technologies which utilise machine learning to better predict customer behaviour based on vast amounts of data (Agrawal, Gans & Goldfarb, 2019). AI-CRM is used for CRM activities including acquiring, developing, and retaining customers (Libai *et al.*, 2020). In the literature, the consensus is that AI has had positive effects on customer relationship processes (West,

2018; Libai *et al.*, 2020; Kumar *et al.*, 2019; Gupta *et al.*, 2020). Recent studies seek ways in which AI can be applied to enhance the customer experience (Ciechanowski, Przegalinska, Magnuski & Gloor, 2019; Huang & Rust, 2018; Leung, Paolacci & Puntoni, 2018; Tong *et al.*, 2020). However, there is limited knowledge about how AI will alter customer relationships (Crollic *et al.*, 2022; Kull *et al.*, 2021). This is critical for firms to understand as competition increases (Kull *et al.*, 2021; Libai *et al.*, 2020). As AI continues to advance, customers' hesitation about AI intensifies, reducing their willingness to adopt it (Huang & Dootson, 2022; Longoni, Bonezzi & Morewedge, 2019). The ensuing section addresses customer resistance to AI.

2.3.3 Customer resistance to AI

Generally, customers perceive AI negatively, which makes them resistant to engaging with AI (Davenport *et al.*, 2020). Therefore, the reasons behind customers' negative perceptions need to be considered. Factors such as performance, ease of use, enjoyment, human-like attributes, trustworthiness, and external influences have been shown to positively influence consumers' attitudes towards AI, increasing their acceptance thereof. In contrast, perceived risk has been shown to have a significant adverse effect on consumers' attitudes towards AI (Mehta, Jebarajakirthy, Maseeh, Anubha, Saha & Dhanda, 2022). Perceived risk represents the concerns customers have regarding the likelihood of undesirable consequences (Zhang & Liu, 2022; Matiza & Kruger, 2021). Regarding AI specifically, perceived risk refers to consumers' lack of confidence or feelings of uncertainty when trying new products or technologies (Chen, 2019). In particular, scholars have suggested that consumer concerns about how companies gather and utilise their personal information may cause their resistance to AI technologies (Querci, Barbarossa, Romani & Ricotta, 2022). Therefore, customers' perceived risk associated with AI can be a reason for their resistance to AI (Mehta *et al.*, 2022; Ayyash, 2021).

Expanding on the reasons explaining customer resistance to AI, Gray (2017) utilises the case of self-driving cars to illustrate consumers hold higher standards for AI. This scepticism arises from a lack of trust in AI's ability for conscious decision-making or emotional experiences (Gray, 2017). Similarly, Yang *et al.* (2023) showed that AI's lack of empathy has three impacts on customer resistance: a direct effect, an indirect effect, and a moderating effect. Additionally, Luo *et al.* (2019) found that customer purchases decreased by 79.7% upon discovering they were engaging with AI technology instead of a human. The decline in purchasing rates was attributed to customers perceiving AI as less empathetic and knowledgeable than humans. Rai (2020) suggests customers' distrust towards AI stems from not understanding its intentions and frustration caused by overly technical explanations.

In the context of medicine, customer resistance stems from the belief that AI cannot recognise and relate to their unique characteristics (Longoni *et al.*, 2019). Customers' feelings towards technology and the degree to which they feel threatened by AI's impact on society further influence their resistance to AI (Robinson *et al.*, 2020). Considering these factors, researching ways in which firms can address and effectively reduce customer resistance to AI becomes a critical area of study (Kallel *et al.*, 2023; Crollic *et al.*, 2022; Huang & Dootson, 2022; Davenport *et al.*, 2020). Expanding on possible reasons for customer resistance to AI, the role of anthropomorphism is discussed next.

2.3.4 Role of Anthropomorphism in AI

Anthropomorphism is an important construct in explaining customers' responses to AI (Crollic *et al.*, 2022; Schmitt, 2019). Anthropomorphism is defined as "perceiving human-like traits in nonhuman agents" (Epley, 2018:591). Based on the uncanny valley effect, customers will respond differently to a robot based on how human it seems (Schmitt, 2019; Kim, Schmitt & Thalmann, 2019). The more human

a robot appears, the more discomfort a customer may experience (Schmitt, 2019). Mende *et al.* (2019) confirm this theory. While Puntoni *et al.* (2021) suggest that the increased use of humanised AI in more developed markets is increasing customers' desire for human-like AI, Kim *et al.* (2019) found that anthropomorphism has varied impacts on the customer. It increases feelings of warmth but also intensifies customer resistance due to perceiving the robot as unnatural. Additionally, if robots seem too warm or human-like, this can cause discomfort (Kim *et al.*, 2019). Thus, the literature posits a conflict between technology and human quality (Castelo, Schmitt & Sarvary, 2019).

In the past, AI has been designed on the belief that if it is more human-like, it will enhance customer relationships (Kim, Chen & Zhang, 2016). Thomaz *et al.* (2020) suggest that humanised technology can encourage customers to divulge more due to increased social signals. However, other scholars implore firms to develop AI less akin to humans (Puntoni *et al.*, 2021; Kim *et al.*, 2019; Mende *et al.*, 2019). For instance, genderless voices are being considered in the use of AI voice assistants (Puntoni *et al.*, 2021). Mende *et al.* (2019) confirm this notion as they urge firms to carefully consider robots' form. Similarly, Kim *et al.* (2019) urge practitioners to ensure robots are not too similar to humans to reduce customers' negative perceptions of robots. Managers and researchers should discover the most favourable degree of anthropomorphism from the customer's perspective (Kim *et al.*, 2019). To expand on the customer perspective of AI, the ensuing section examines customers' perceived costs and benefits of AI.

2.3.5 Customers' perceived costs and benefits of AI

As established previously, customers judge service quality based on their perceived values, which are derived from their perceptions of the various benefits and costs experienced (Zeithaml, 2000; Ruiz *et al.*, 2008; Palmatier *et al.*, 2006; Parasuraman *et al.*, 1985; Grönroos, 1984). Therefore, when examining customers' evaluations of AI, it is important to consider the perceived costs and benefits. There are four experiences of AI from which customers experience costs and benefits: (1) data capture, in which AI listens to and gathers data from customers; (2) classification, in which customers receive personalised recommendations from AI; (3) delegation, in which, AI is used to undertake tasks previously performed by the customer and lastly; (4) social, in which customers engage and communicate with AI (Puntoni *et al.*, 2021).

In the data capture experience, customers benefit from perceiving that AI is serving them as it enables services to be tailored to their specific needs (Puntoni *et al.*, 2021; Kumar *et al.*, 2019). Tailored services allow customers to benefit from self-improvement. For example, customers have access to personalised health assistance from wearables and smartphones (Puntoni *et al.*, 2021). However, customers may feel used by firms as they improve their profitability at customers' expense, losing private access to their data (Puntoni *et al.*, 2021; Rai, 2020). The perception of being exploited can lead to customers feeling less in control, which adversely affects their psyche (Botti & Iyengar, 2006; Puntoni *et al.*, 2021).

In the classification experience, AI makes advanced predictions to customers, for example, Netflix utilising video thumbnails to appeal to particular customer types (Longoni & Cian, 2022; Kumar *et al.*, 2019; Puntoni *et al.*, 2021). Customers stand to benefit as it makes them feel better understood. However, it may make them feel misunderstood when they perceive these predictions as inaccurate. They may feel either confined to a group with which they do not identify or excluded from a particular group. For instance, in banking, where AI algorithms can be employed to select customers deserving of loans, customers can be excluded due to residing in an area with low credit scores (Puntoni *et al.*,

2021). Feeling discriminated against by AI adversely affects customers and increases their vulnerability (Hill & Sharma, 2020; Puntoni *et al.*, 2021).

In the delegation experience, customers may feel empowered when AI completes tasks for them as they can spend their time in preferred ways, positively impacting their psyche (Fishbach & Choi, 2012; Puntoni *et al.*, 2021). However, these experiences can lead to customers feeling replaced by AI (Puntoni *et al.*, 2021). When AI predicts customer preferences and completes tasks for them, they may perceive losing their decision-making ability (Davenport *et al.*, 2020; André, Carmon, Wertenbroch, Crum, Frank, Goldstein, Huber, Van Boven, Weber & Yang, 2018). They may attempt to reclaim their power by purposefully selecting an option they do not prefer (André *et al.*, 2018).

Lastly, in the social experience, customers benefit when they can engage with AI in a way that feels natural (Puntoni *et al.*, 2021). However, there is potential for these experiences to make customers perceive being excluded and alone. Therefore, although these experiences can enhance customer relationships, they can also cause psychological damage to customers by making them feel alienated (Puntoni *et al.*, 2021). AI is not only dramatically impacting customer relationships but also service encounters (Blazevic & Sidaoui, 2022; Huang & Dootson, 2022; Robinson *et al.*, 2020; Bock *et al.*, 2020). The following section examines the implications of AI in services.

2.3.6 Implications of AI in Services Marketing

Due to advances in automation and the widespread use of AI in services, all types of service encounters across all sectors are predicted to experience unprecedented change (Huang & Dootson, 2022; Paluch & Wirtz, 2020; Bock *et al.*, 2020; Robinson *et al.*, 2020; Davenport *et al.*, 2020). AI is predicted to fundamentally change how service providers engage with customers (Larivière, Bowen, Andreassen, Kunz, Sirianni, Voss, Wunderlich & De Keyser, 2017; Paluch & Wirtz, 2020). Therefore, it is important to research the influence of AI on services (Huang & Dootson, 2022; Robinson *et al.*, 2020). AI enables service encounters to be automated, allowing for superior levels of service and service providers to meet unique customer needs (Huang & Rust, 2018). AI improves services' cost-effective scalability (Wirtz *et al.*, 2018). Significantly, AI allows service employees to be supported and is predicted to assume their role in future (Huang & Rust, 2018; Davenport *et al.*, 2020; Davenport & Ronanki, 2018). However, the effective use of AI still depends on human intelligence (Campbell *et al.*, 2020). As both AI and human intelligence present sets of costs and benefits, a combination of the two is ultimately recommended (Huang & Rust, 2021; Paluch & Wirtz, 2020; Campbell *et al.*, 2020).

One of the most common ways AI and human service employees are utilised is in customer service (Campbell *et al.*, 2020). Utilising AI in customer services enables customer issues to be addressed at any time of day, more rapidly than before and allows service employees to focus on handling more complex issues (Kumar *et al.*, 2021; Campbell *et al.*, 2020). Firms are also increasingly using AI to respond to online customer complaints, as it enables both instant and personalised responses (Canhoto & Clear, 2020; Kietzmann, Paschen & Treen, 2018). AI reduces the negative impacts of customer complaints and encourages customers to direct their complaints to the firm itself instead of online (Istanbulluoglu, Leek & Szmigin, 2017). However, having AI handle customer complaints may not be ideal, as customers may crave empathy (Huang & Rust, 2018).

Service robots are increasingly being utilised to automate customer service tasks and are predicted to significantly impact how customers perceive service quality (Holthöwer & van Doorn, 2023; Paluch & Wirtz, 2020). In recent literature, service robots have been frequently considered (Holthöwer & van Doorn, 2023; Meyer, Roth & Gutknecht, 2023; Merdin-Uygur & Ozturkcan, 2023; Lu, Wirtz, Kunz,

Paluch, Gruber, Martins & Patterson, 2020; Ivanov, Dolgui, & Sokolov, 2019; Jörling *et al.*, 2019; Mende *et al.*, 2019; Čaić, Mahr & Oderkerken-Schröder, 2019). Wirtz *et al.* (2018:909) define service robots as “system-based autonomous and adaptable interfaces that interact, communicate, and deliver service to an organisation’s customers.” Service robots are further described as “system-based, autonomous, adaptable, physically represented machines that provide service to an organisation’s customers” and employees by engaging socially (Meyer *et al.*, 2020:24). Service robots include not only physical robots but virtual robots, such as voice or text-based chatbots (Wirtz *et al.*, 2018; Paluch & Wirtz, 2020). As this dissertation studied the use of chatbots in maintaining and enhancing customer relationships, chatbots are addressed in detail in Chapter 3.

In customer service settings where service robots engage directly with customers, service robots are regarded as social robots (Čaić *et al.*, 2019; Wirtz *et al.*, 2018). The recent use of service robots focuses on simple tasks in which service robots use scripts to offer customer support (Paluch & Wirtz, 2020). They can provide superior, cost-efficient service but are limited in their ability to show real emotion and interpret humour (Paluch & Wirtz, 2020). This highlights the primary difference between service robots and service employees (Lu *et al.*, 2020; Wirtz *et al.*, 2018).

Service employees, both human and robotic, are not only the face of the firm but impact customer relationships and how customers perceive the firm (Robinson *et al.*, 2020; Mende *et al.*, 2019). The most ground-breaking feature of AI is its ability to not only take over human tasks but perform them better than humans (Huang & Rust, 2021). As such, it is becoming more common for an AI service employee to be utilised in service encounters across various industries (Huang *et al.*, 2024; Li & Zhang, 2023; Robinson *et al.*, 2020). Thus, research is required to understand the implications of AI service employees replacing human service employees (Li & Zhang, 2023; Kull *et al.*, 2021; Crolc *et al.*, 2022; Lu *et al.*, 2020; Larivière *et al.*, 2017; Robinson *et al.*, 2020). It is particularly important to understand customers’ responses to the use of AI in replacing human service employees (Huang *et al.*, 2024; Li & Zhang, 2023; Huang & Dootson, 2022; Mende *et al.*, 2019). Table 2.3 below presents the differences between human and AI service employees.

Table 2.3: Human service employees versus AI service employees

Human Service Employees	AI Service Employees
More costly	Less costly
Slower response time	Quicker response time
Limited in how many customers can be dealt with simultaneously	Can handle numerous customers simultaneously
Human error is common	Void of human error
Less accuracy	More accuracy
Requires time to access and assess relevant data	Can access vast amounts of data instantly
Can display genuine emotion and empathy	Cannot display genuine emotion and empathy
Can handle nuanced customer issues effectively	Lacks the human instinct required to handle nuanced customer issues

SOURCE: Robinson *et al.* (2020) and Bock *et al.* (2020)

Table 2.3 above indicates that both AI and human service employees offer advantages and disadvantages. AI service employees can enhance customers’ experiences as they can process and respond to issues more rapidly than humans (Robinson *et al.*, 2020). The use of AI service employees

has also made the concept of faultless service a reality, as AI is more accurate than humans (Bock *et al.*, 2020; Robinson *et al.*, 2020). Human service employees are unable to grasp a customer's complete history with the firm instantly, as can AI (Robinson *et al.*, 2020). However, humans remain necessary, as they can address nuanced customer issues instinctively, which is critical for developing customer relationships (Paschen *et al.*, 2020). Firms risk adversely affecting customer perceptions if an AI service employee is utilised in circumstances where customers seek genuine emotion and empathy (Lu *et al.*, 2020; Robinson *et al.*, 2020; Paluch & Wirtz, 2020; Wirtz *et al.*, 2018). AI may not always satisfy the customer, for instance, a chatbot may respond in ways that do not reflect the firm's image or personality (Canhoto & Clear, 2020). Considering this shortcoming, both AI service employees and human service employees are beneficial when used in suitable circumstances. For enhanced customer relationships, firms should find an appropriate combination of the two to leverage their specific strengths (Yadav & Pavlou, 2020; Paschen *et al.*, 2020; Paluch & Wirtz, 2020). Firms must assess in which circumstances customers would be willing to benefit from error-free service at the expense of losing an authentic human connection (Bock *et al.*, 2020; Robinson *et al.*, 2020).

As AI advances, it is becoming progressively more difficult for customers to distinguish AI from human service employees (Mozafari *et al.*, 2022; Campbell *et al.*, 2020; Robinson *et al.*, 2020; Wilson & Daugherty, 2018). The hidden aspect of AI can increase users' willingness to engage with AI (Canhoto & Clear, 2020). Interestingly, customers alter how they interact when they know it is an AI instead of a human service employee. For instance, they typically use shorter sentences or act disrespectfully (Robinson *et al.*, 2020; Canhoto & Clear, 2020). Customers may experience negativity after these interactions and may go on to treat human service employees with the same disrespect (Robinson *et al.*, 2020). Firms are not legally required to disclose the use of an AI service employee to customers (Mozafari *et al.*, 2022). These types of hidden service encounters can adversely affect customer trust and, therefore, more research is required into the impacts of concealed AI on unwitting customers (Mozafari *et al.*, 2022; Robinson *et al.*, 2020). The following section discusses the dark side of AI in marketing to address the negative implications thereof.

2.3.7 The Dark Side of AI in Marketing

Despite its positive implications in marketing, AI remains an emerging technology requiring firms to know how to use it effectively to benefit from its use (Campbell *et al.*, 2020; Rai, 2020). Without a thorough understanding of how to use AI effectively, firms face unprecedented risks (Yadav & Pavlou, 2020; Rai, 2020). Firms should not underestimate the potential negative implications of AI (Mikalef, Conboy, Lundström & Popovič, 2022; Canhoto & Clear, 2020). As AI replaces humans in various roles, both customers and firms face threats of AI going too far. This can lead to humans losing control while technology holds all the power to make decisions. AI should not be loosely trusted to fully take over tasks previously performed by humans. Therefore, it is important to consider which AI technologies can optimally automate service interactions (Yadav & Pavlou, 2020).

AI cannot fulfil its promises (Davenport *et al.*, 2020). This is significant because whether or not a service provider upholds its service promises is key to enhancing customer relationships (Grönroos, 1990; Berry, 1983). A noteworthy example of AI failing to deliver on its promises is the case of Uber's driverless vehicles taking a civilian's life (Levin & Wong, 2018). Such instances can significantly damage a firm's reputation (Canhoto & Clear, 2020). AI algorithms have associated privacy risks and ethical issues (Grewal *et al.*, 2020; Puntoni *et al.*, 2021; Kumar *et al.*, 2019). Due to AI's hidden quality, these technologies remain undisputed, which perpetuates these risks, specifically their ethical and reputational threats (Puntoni *et al.*, 2021). An additional concern arises from AI biases (Huang & Rust,

2021). For instance, in determining eligible recipients for loans in the banking sector, specific customers may be excluded due to the system being programmed solely for profit-driven purposes (Ukanwa & Rust, 2020).

Employing AI in service interactions can enhance customer relationships, but if used ineffectively, it can drive a wedge between customers and the firm (Puntoni *et al.*, 2021). Hence the need for research exploring AI's adverse effects (Mikalef *et al.*, 2022). Customers can also experience negative perceptions after interacting with AI (Mende *et al.*, 2019), driving them away (Puntoni *et al.*, 2021). In light of the foregoing discussion, firms require a thorough understanding of how to implement AI effectively – an area that is relatively untapped in the literature (Mikalef *et al.*, 2022; Davenport *et al.*, 2020; Huang & Rust, 2021; Canhoto & Clear, 2020; Bock *et al.*, 2020; Libai *et al.*, 2020; Yadav & Pavlou, 2020). This study applied a theoretical framework to explain how AI can be utilised to effectively maintain and enhance customer relationships (Stewart & Zinkhan, 2006; Sutton & Staw, 1995). The ensuing section presents a review of the literature concerning relevant theoretical perspectives.

2.4 THEORETICAL PERSPECTIVES

Theories, unlike hypotheses, describe how concepts are related and help make sense of phenomena (Stewart & Zinkhan, 2006; Sutton & Staw, 1995). A theory can explain the reasons behind occurrences (Stewart & Zinkhan, 2006). Therefore, it is beneficial to adopt a theoretical perspective to explain the relationships between customers and AI service employees in financial services. While various theories are used in relationship marketing to study customer relationships, it is neither advantageous nor practical to discuss all relevant marketing theories in a single study. In the following section, the suitability of four relevant theories used to explain customer relationships and exchanges are evaluated in turn: justice theory, equity theory, resource dependence theory, innovation resistance theory, and social exchange theory.

2.4.1 Justice Theory

Justice theory emphasises the impact of perceived fairness on customer satisfaction and loyalty and is based on three perspectives: distributive, procedural, and interactional justice (Blodgett, Hill & Tax, 1997; McColl-Kennedy & Sparks, 2003; Wetsch, 2006). Distributive justice involves fairness in tangible items such as discounts, procedural justice focuses on the fairness in how the firm handles situations and interactional justice concerns the fairness in customer management, including apologies (Tax *et al.*, 1998; McColl-Kennedy & Sparks, 2003). Utilised in service and CRM literature, justice theory evaluates transaction-specific exchanges rather than offering a comprehensive perspective of all interactions between the customer and the firm (Olsen & Johnson, 2003; Kwon & Jang, 2012). Understanding all customer interactions with the firm is crucial in comprehending customer satisfaction and behaviour (Andreassen & Lervik, 1999; Olsen & Johnson, 2003; Grégoire & Fisher, 2006). However, justice theory falls short in accounting for the depth of customer relationships (Tax *et al.*, 1998; Kwon & Jang, 2012). Due to these limitations, additional theories, including equity theory, were considered in the study.

2.4.2 Equity Theory

Equity theory posits that consumers perceive a relationship as fair based on the ratio of perceived benefits and costs, influencing satisfaction and trust levels (Huppertz *et al.*, 1978; Adams, 1965; Houston & Gassenheimer, 1987; Oliver & Swan, 1989; Wulf & Odekerken-Schröder, 2001). The theory's relevance in marketing aligns with the notion that exchange relationships are mutually beneficial (Bagozzi, 1975; Olsen & Johnson, 2003), and it is considered critical in service-related literature (Bock *et al.*, 2020). When applied to customer relationships in services, equity theory posits that these relationships evolve with continued interactions (Olsen & Johnson, 2003; Kwoon & Jang, 2012). In contrast to justice theory, equity theory accounts for overall customer value and the entire relationship, also impacting loyalty (Leone, Rao, Keller, Luo, McAlister & Srivastava, 2006; Raimondo, "Nino" Miceli & Costabile, 2008). However, equity theory has faced criticism for assuming that parties desire fair relationships universally, not considering individual customer characteristics (Miles, Hatfield & Huseman, 1989; Wulf & Odekerken-Schröder, 2001). This limitation led to the exploration of additional theories, including resource dependence theory.

2.4.3 Resource Dependence Theory

Resource dependence theory, relevant in understanding various types of exchanges, explores dependence as the extent to which each partner's benefits rely on the benefits received by the other partner (Dabholkar *et al.*, 1994). Examining power and dependence levels in exchange relationships assesses their impact on satisfaction (Pandya & Dholakia, 1992). Relationships often involve interdependence, where partners controlling critical resources hold the power (Dwyer *et al.*, 1987; Ganesan, 1994; Wilson, 1995). However, resource dependence theory has limitations: it does not explain how and why exchange relationships are formed and struggles to account for the assessment of partners' exchanges (Dabholkar *et al.*, 1994). It also falls short in explaining long-term relationships built on trust and commitment, focusing solely on power and control (Morgan & Hunt, 1994; Wulf & Odekerken-Schröder, 2001). Given this study's focus on developing customer relationships, in which trust and commitment are crucial (Morgan & Hunt, 1994), resource dependence theory was deemed unsuitable.

2.4.4 Innovation Resistance Theory

Innovation resistance theory offers a framework for understanding why customers may resist new innovations (Ram & Sheth, 1989). This theory focuses on negative perceptions to examine why consumers reject certain innovations, suggesting that consumers encounter specific barriers when adopting innovations that can be classified as functional or psychological barriers (Chen, Chang & Hsiao, 2022; Ram & Sheth, 1989). It is relevant to consider as it has been widely employed to investigate resistance towards various innovations, such as mobile banking (Gupta & Arora, 2017), online shopping (Lian & Yen, 2014), blockchain (Dwivedi, Balakrishnan, Das & Dutot, 2023) and chatbots (Kwangsawad & Jattamart, 2022; Chang & Hsiao, 2024). Despite its widespread use, this theory was not deemed suitable for this study due to its sole focus on reasons for resistance, thereby not considering the positive aspects of the innovation (Ram & Sheth, 1989). By focusing on resistance alone, this theory may neglect elements of relationship building and mutual benefit, which social exchange theory, presented in the ensuing section, does consider due its focus on the both the positive and negative aspects of exchanges (Blau, 1964). As such, innovation resistance theory was deemed unsuitable as this study seeks to discover ways in which chatbots can be used more effectively to

improve customer relationships, instead of solely focusing on the reasons for customer resistance to chatbots. This discussion leads to the final theory reviewed.

2.4.5 Social Exchange Theory

In relationship marketing literature, social exchange theory is utilised to “explain why customers engage in relationships with firms” and is, therefore, an important consideration (Bock *et al.*, 2020:323; Palmatier *et al.*, 2009; Palmatier, Dant & Grewal, 2007; Wetzel, Hammerschmidt & Zablah, 2014). Social exchange theory’s foundational premise in marketing is reciprocity (Bagozzi, 1975; Bowman & Narayandas, 2001; De Wulf *et al.*, 2001; Groth, 2005). This means that if one relationship partner receives benefits from the other, they will act more desirably towards them (Adams, 1965; Blau, 1964). When one partner invests particular resources, for example, time, it bonds them to each other. This generates a sense of mutual commitment, trust, satisfaction, and understanding (De Wulf *et al.*, 2001; Gwinner *et al.*, 1998; Palmatier *et al.*, 2009). Based on the social exchange theory, if firms invest in their customer relationships, customers will return the favour in the future (Bagozzi, 1975; Cambra-Fierro *et al.*, 2018; Groth, 2005). In services, this implies that service providers generate relationship satisfaction through trust and commitment, which inspires customer loyalty (Ndubisi & Natarajan, 2018).

According to this theory, relationships are formed and maintained based on the expectation that the benefits will outweigh the costs (Blau, 1964; Bagozzi, 1975), both of which can be tangible or intangible (Blau, 1964). With each interaction or social exchange, customers evaluate the firm (Cambra-Fierro *et al.*, 2018). Therefore, social exchange theory, unlike justice theory, offers a holistic view of the customer relationship. It explains why and how relationships form and factors in trust and commitment, unlike resource dependence theory (Dwyer *et al.*, 1987; Metcalf, Frear & Krishnan, 1992). Usefully, social exchange theory recognises both positive and negative motivations as to why one party enters into a relationship with the other (Wulf & Odekerken-Schröder, 2001; Stanley & Markman, 1992), unlike innovation resistance theory (Ram & Sheth, 1989). It is important to account for both types to better understand why relationships are formed and maintained (Morgan & Hunt, 1994; Ganesan, 1994). Despite the positive facets, social exchange theory is not without limitations. Dwyer *et al.* (1987) indicate social exchange theory’s inability to explain why relationships terminate. Moreover, this theory assumes parties intentionally assess the benefits versus costs, which may not always be true (Wulf & Odekerken-Schröder, 2001).

Despite its limitations, social exchange theory was ultimately deemed most appropriate due to its suitability in addressing the research questions of this study (see Section 1.4). This theory suggests that customers resist interactions when they perceive an imbalance between costs and benefits (Blau, 1964). Previous research indicates that customer resistance to chatbots often stems from perceived costs, such as reduced service quality or less personalisation (Bock *et al.*, 2020; Stafford & Kuiper, 2021). Social exchange theory enabled this study to identify the specific perceived costs contributing to customer resistance and to propose strategies for addressing these concerns (Obeng *et al.*, 2019; Cloarec *et al.*, 2022). As such, this theory offers a valuable lens to assess how financial service providers can mitigate customer resistance to chatbots by enhancing the perceived benefits of chatbot interactions and minimising the associated costs, thereby improving customer relationships. According to social exchange theory, the more value a customer perceives in a chatbot, the more likely they are to engage with it (Stafford & Kuiper, 2021). Therefore, social exchange theory aligns with the study’s aim of understanding how customers navigate their interactions with chatbots and how these evaluations impact their willingness to engage.

Enhancing its relevance, social exchange theory has frequently been applied to investigate customer relationships within services (e.g., Sierra & McQuitty, 2005; Nguyen, Groth, Walsh & Hennig-Thurau, 2014; Cambra-Fierro *et al.*, 2018). In customer relationships with service providers, customers incur various benefits and costs, both intangible and tangible (Gremler *et al.*, 2020; Gwinner *et al.*, 1998; Bitner, 1995; Barlow, 1992). Although customers incur various costs and receive various benefits from AI experiences, as discussed in Section 2.3.2.4. (Puntoni *et al.*, 2021), limited research has been conducted into utilising social exchange theory to investigate AI service exchanges (Bock *et al.*, 2020). Table 2.4 Below indicates the theoretical frameworks employed by studies on AI in services.

Table 2.4: Studies on AI in services and their theoretical frameworks

Author	Date	Title	Theory
van Doorn, Mende, Noble, Hulland, Ostrom, Grewal and Petersen	2017	Emergence of automated social presence in organizational frontlines and customers' service experiences	Social presence theory and automated social presence
Wirtz, Patterson, Kunz, Gruber, Lu, Paluch and Martins	2018	Brave new world: service robots in the frontline	Technology acceptance model, role theory, and needs congruency
Beane	2019	Learning to work with intelligent machines	Shadow learning concept
Mende, Scott, van Doorn, Grewal and Shanks	2019	Service robots rising: How humanoid robots influence service experiences and elicit compensatory consumer responses	Uncanny valley theory
Čaić, Mahr and Oderkerken-Schröder	2019	Value of social robots in services: social cognition perspective	Social cognition perspective
Jörling, Böhm and Paluch	2019	Service robots: Drivers of perceived responsibility for service outcome	Attribution theory
Van Pinxteren, Wetzels, Rüger, Pluymaekers and Wetzels	2019	Trust in humanoid robots: implications for services marketing	Anthropomorphism theory
Sands, Ferraro, Campbell and Tsao	2021	Managing the human–chatbot divide: how service scripts influence service experience	Social impact theory and social exchange theory

Wirtz *et al.*'s (2018) study mentioned in Table 2.4 above draws on various theories, including the technology acceptance model (TAM), to explain why customers use and accept service robots. TAM is commonly applied to explain the acceptance of technology but lacks detailed insight into how technology is utilised (Meyer *et al.*, 2020). Van Doorn *et al.* (2017) introduced automated social presence theory to assess the extent to which customers feel robots' presence. Sands, Ferraro,

Campbell and Tsao (2021) draw from social impact theory and social exchange theory to investigate the effects of service scripts in chatbot service encounters. As shown in Table 2.4, most studies extend theories other than social exchange theory to investigate AI in services. This indicates a lack of research in this area (Bock *et al.*, 2020). Research is recommended in this area as customers “tend to treat virtual assistants like humans” (Bock *et al.*, 2020:319). It is further recommended that traditional theories such as social exchange theory be applied to examine if such theories can be used to explain customer relationships with service robots as these relationships become more common (Meyer-Waarden *et al.*, 2020). Huang & Rust (2021) recommend that when investigating how AI can be used more effectively in customer relationships, customers’ perceived benefits and perceived costs should be evaluated. As customers determine problems they perceive as significant, they weigh the benefits and costs of service delivered by an AI versus a human (Li & Zhang, 2023). This further justifies the usefulness of social exchange theory in analysing customer concerns regarding chatbots. Based on this discussion, this study relied on social exchange theory to offer insight into customers’ perceived benefits and costs associated with chatbots and how these can be mitigated or exploited to overcome chatbot resistance in the financial services industry.

2.5 CONCLUSION

This chapter established the critical importance of maintaining and enhancing customer relationships in services marketing, particularly in financial services (Sayil *et al.*, 2019; Bejou, 1995; Heninoen, 2014; Chai & Dibb, 2018). It is evident that within the services sector, AI is predicted to have noteworthy effects, as it is increasingly used to replace employees in service delivery (Huang & Dootson, 2022; Bock *et al.*, 2020; Robinson *et al.*, 2020). However, as outlined in the initial literature review in this chapter, AI presents various challenges to marketers, with scholars warning against the potential costs associated with its implementation (Puntoni *et al.*, 2021; Canhoto & Clear, 2020; Yadav & Pavlou, 2020; Rai, 2020). Consequently, further research is needed to explore how firms can utilise AI more effectively (Crolc *et al.*, 2022; Davenport *et al.*, 2020; Huang & Rust, 2021). This study applied social exchange theory to explain the benefits and drawbacks that customers may experience in their social exchanges with AI To address the identified gap (Huang & Rust, 2021). Understanding AI’s role in marketing and its various implications in services provides insight into the next chapter. Chapter 3 introduces chatbots in financial services as this study’s specific context, and based on this, the study’s research questions are introduced.

CHAPTER 3: UNDERSTANDING CHATBOTS, CHATBOTS IN SERVICES, AND DEVELOPING THE RESEARCH QUESTIONS

3.1 INTRODUCTION

As firms increasingly employ chatbots, they bear significant implications for customer relationships (Murtarelli *et al.*, 2021; Kull *et al.*, 2021; Nam & Kannan, 2020; Steinhoff *et al.*, 2019). The preceding chapter delved into the role of AI in marketing, particularly in services marketing. It also examined customer relationships in services marketing with a focus on financial services. As this study aimed to understand how chatbots can be used more effectively in financial services to overcome customer resistance to them, this chapter provides a theoretical background to chatbots and examines their role in services. The chapter includes a description of how the research questions were developed and begins by developing an understanding of chatbots.

3.2 UNDERSTANDING CHATBOTS

Chatbots are a noteworthy example of AI service technology (Henkel *et al.*, 2020) and must be understood. This section aims to explain chatbots by examining the varying definitions in the literature, the terms used synonymously with chatbots, and thereafter, chatbots' ability to converse with customers. It begins by defining chatbots.

3.2.1 Defining Chatbots

Chatbots are a type of service robot (Blut *et al.*, 2021). Service robots are self-ruled agents providing service to a firm's customers through a social exchange (Meyer *et al.*, 2020; Wirtz *et al.*, 2018; Blut *et al.*, 2021; Jörling *et al.*, 2019). A service robot is defined as "an automated computer program that is able to sense, comprehend, and act in response to certain requests" (Xiao & Kumar, 2021:10). Chatbots are described as a type of service robot (Blut *et al.*, 2021). Table 3.1 below presents the varying definitions of chatbots found in the literature.

Table 3.1: Five definitions of chatbots, as found in the literature

	Author	Year	Definition of AI
1	Luo, Tong, Fang and Quc	2019:937	"Computer programs that simulate human conversations through voice commands or text chats and serve as virtual assistants to users."
2	Paschen, Wilson and Ferreira	2020:7	"A computer program that can engage in a conversation with a person."
3	Bock, Wolter and Ferrel	2020:318	"Automated programs that interact with humans through textual or auditory means, typically through a chat platform."
4	Chung, Ko, Joung and Kim	2020:588	"An example of a virtual conversational service robot that can provide human-computer interaction."
5	Murtarelli, Gregory and Romenti	2021:928	"E-service agent that represents a technological evolution of the traditional service agent involved in direct firm-customer exchanges."

As shown in Table 3.1 above, a common theme across chatbot definitions is that they are digital entities that can interact and converse with humans (Murtarelli *et al.*, 2021; Bock *et al.*, 2020; Thomaz *et al.*, 2020; Paschen *et al.*, 2020; Luo *et al.*, 2019; Chung *et al.*, 2020). Therefore, a key factor distinguishing chatbots from other AI-enabled technologies is their ability to imitate human conversation enabled by natural language processing (Hildebrand & Bergner, 2021; Murtarelli *et al.*, 2021). Their ability to use natural language is a common feature across chatbot definitions in the literature (Syvänen & Valentini, 2020). Definitions 1 and 3 notably distinguish chatbots as being either text-based or voice-based (Crollic *et al.*, 2022). Text-based chatbots typically handle simple customer requests, while voice-based chatbots can have more human-like conversations due to voice pitch and tone (Luo *et al.*, 2019). However, chatbots are known to primarily communicate via text (Adam *et al.*, 2021), and therefore, this study refers exclusively to text-based chatbots.

Chatbots' primary purpose is to enhance customer interactions and service experiences (Thomaz *et al.*, 2020). Murtarelli *et al.*'s (2021) definition recognises chatbots for their essential role in managing customer relationships as modern service employees (Chung *et al.*, 2020; Larivière *et al.*, 2017). This was significant to this study, which investigated chatbots' implications for services, particularly their effect on customer relationships. Therefore, this study adopted Murtarelli *et al.*'s (2021: 928) definition that a chatbot is an "E-service agent that represents a technological evolution of the traditional service agent involved in direct firm–customer exchanges". Terms used interchangeably with chatbots in the literature are examined next.

3.2.2 Terms Used Synonymously with Chatbots

Amongst the diverse definitions, the literature utilises various terms to refer to chatbots (Thomaz *et al.*, 2020). Therefore, to further clarify what is meant by the term "chatbots" in this study, Table 3.2 below presents the terms that are used interchangeably with it.

Table 3.2: Terms that are used synonymously with chatbots

	Term	Definition
1	Conversational agents	"Natural language computer programs designed to approximate human speech (written or oral) and interact with people via a digital interface" (Thomaz <i>et al.</i> , 2020:49).
2	Virtual agents	"A computer-generated character designed to function as a customer service representative" (Bock <i>et al.</i> , 2020:318).
3	Virtual assistants	"A digital assistant that responds to voice commands and can perform tasks such as creating to-do lists, managing schedules and placing phone calls" (Bock <i>et al.</i> , 2020:318).

The terms shown in Table 3.2 above have all been used to refer to chatbots in the literature. Chatbots can be considered a type of conversational agent, see term 1, that can have real-time conversations with customers (Thomaz *et al.*, 2020). Despite being visually represented by an avatar or profile picture, chatbots are considered disembodied conversational agents as they lack a physical body (Blut *et al.*, 2021; De Keyser *et al.*, 2019; Adam *et al.*, 2021). Although chatbots can be considered conversational agents, this term is broad and includes numerous types of entities (Pizzi *et al.*, 2021), including both digital and physical entities existing offline (Thomaz *et al.*, 2020). This differs from the definition of chatbots adopted by this study, which exclusively defines chatbots in a digital context (Murtarelli *et al.*, 2021).

Chatbots can also be considered virtual agents, see term 2 (Bock *et al.*, 2020). However, this definition is not as specific as the one adopted by this study, as it neglects their ability to directly interact with humans (Murtarelli *et al.*, 2021; Bock *et al.*, 2020). Virtual agents have also been distinguished from chatbots by having a more human-like quality (Steinhoff *et al.*, 2019). Chatbots should also be distinguished from virtual assistants, see term 3, as they typically interpret textual rather than voice data. An example of a virtual assistant that processes voice-based data is Siri, created by Apple (Bock *et al.*, 2020). Considering the broad nature of terms 1-3 (Pizzi *et al.*, 2021; Bock *et al.*, 2020), the term “chatbot” is used for the remainder of this dissertation. Chatbots’ ability to converse with customers and the importance thereof is discussed next (Murtarelli *et al.*, 2021; Bock *et al.*, 2020).

3.2.3 Chatbots’ Ability to Converse with Customers

It has been established that chatbots can have conversations with a firm’s customers (Paschen *et al.*, 2020; Adam *et al.*, 2021; Hildebrand & Bergner, 2021). These conversations facilitate information exchanges and a shared experience with customers (Mengis & Eppler, 2008). Thus, chatbots represent a shift from e-commerce to conversational commerce (Thomaz *et al.*, 2020). Conversations are important in chatbot literature, as they allow data to be collected (Murtarelli *et al.*, 2021; Thomaz *et al.*, 2020). Firms can enhance the quality of customer interactions and inspire customer decision-making via conversations. Conversations can persuade customers to participate and begin relationships with the firm (Murtarelli *et al.*, 2021).

Chatbots communicate via turn-taking (Adam *et al.*, 2021; Hildebrand & Bergner, 2021). This back-and-forth exchange is an essential quality in human conversations and trust-building (Hildebrand & Bergner, 2021). Chatbots’ ability to imitate human conversation and thus be human-like gains customers’ trust and encourages them to reveal information that is aggregated over time. Chatbots utilise the gathered data to provide personalised experiences that meet customers’ specific needs, thereby enhancing customer experiences (Murtarelli *et al.*, 2021; Adam *et al.*, 2021). Considering the foregoing discussion, chatbots play an important role in managing customer relationships (Murtarelli *et al.*, 2021). As chatbots also play a key role in ensuring successful service experiences (De Keyser *et al.*, 2019; Adam *et al.*, 2021), their role in services is examined in the following section.

3.3 CHATBOTS IN SERVICES

Chatbots are increasingly used in services and are rapidly transforming service encounters (Blazevic & Sidaoui, 2022; Mozafari *et al.*, 2022; Mcleay, Osburg, Yoganathan & Patterson, 2021). Therefore, it is important to understand their role in service delivery. AI technologies, particularly chatbots, are drastically changing the organisational frontline (Belanche *et al.*, 2020; Mozafari *et al.*, 2022; Robinson *et al.*, 2020; Bock *et al.*, 2020). The organisational frontline refers to the direct exchanges between a service provider and its customers (Singh, Brady, Arnold & Brown, 2017). Chatbots are a particular type of frontline service technology (FST), which are “any combination of hardware, software, information, and/or networks that supports the co-creation of value between a service provider and customer at the organizational frontline” (De Keyser *et al.*, 2019:158). This means that chatbots not only add value to the exchange process but play a key role in service interactions, as they can interact with customers alone (Novak & Hoffman, 2019; De Keyser *et al.*, 2019). This section examines the important role of chatbots in services, beginning by examining their role in frontline service technology encounters.

3.3.1 Types of Frontline Service Technology Encounters

To contextualise chatbots' role in services, Table 3.3 below classifies frontline service technology based on their role in service encounters to facilitate an understanding of the various ways customers interact with a firm's technologies (Singh *et al.*, 2017). As service encounters without technology involved are becoming increasingly uncommon, Table 3.3 below includes only the types of service encounters involving technology. For specificity, "employee" refers to service employees who interact directly with customers (De Keyser *et al.*, 2019).

Table 3.3: Types of Frontline Service Technology Encounters

Type	Illustration	Examples
1 Customer/technology-assisted employee encounter		Computerised check-in, emotion-recognition software
2 Technology-assisted customer/employee encounter		Price comparison mobile applications, image recognition software (e.g., Google Lens)
3 Customer/employee technology-facilitated encounter		Assisted self-check-in, augmented reality
4 Customer/employee technology-mediated encounter		Phone-assisted bookings, emails, live chat
5 Technology-substituted customer/employee encounter		Smart locks, virtual assistants (e.g., Google Duplex)
6 Customer/employee-substituted employee encounter		ATMs, internet banking, chatbots, virtual assistants (e.g., Siri and Alexa)
7 Full technology encounter		Automated shopping or banking services

SOURCE: Adopted from De Keyser, Köcher, Alkire, Verbeeck and Kandampully (2019:159)

Notes: — direct interaction, <---> indirect interaction augmented by technology, [-----] interaction substituted by technology

Table 3.3 above depicts the various roles technology performs in service encounters. For Types 1-4, technology plays a supporting role, while for Types 5-6, technology entirely substitutes either the employee, customer, or both. The various types of encounters are explained in turn. A customer/technology-assisted employee encounter, see Type 1, is when an employee physically interacts with a customer and utilises technology to add value, for example, a banking employee assisting a customer in updating their online transaction limits and hotel check-ins (De Keyser *et al.*, 2019; Huang & Rust, 2018). This is unlike a technology-assisted customer/employee encounter, see Type 2, in which customers are supported by technology. A customer/employee technology-facilitated encounter, see Type 3, is when both the customer and the employee are supported by technology in real-time. The final type in which technology plays a supporting role is a customer/employee technology-

mediated encounter, see Type 4. This is when technology facilitates the exchange, and the employee and customer are not physically together, for example, a customer being assisted by their bank via phone, email and live chat (De Keyser *et al.*, 2019).

The remainder of the encounter types shown in Table 3.3 are when technology does not merely support the exchange but replaces the customer or employee's role entirely. Thus, a technology-substituted customer/employee encounter, see Type 5, is when technology assumes the customer's role, for example, a virtual banking assistant making a payment for the customer or Google Duplex calling restaurants to make reservations (De Keyser *et al.*, 2019; Steinhoff *et al.*, 2019; Kietzmann *et al.*, 2018). A customer/employee-substituted employee encounter, see Type 6, is when only the customer engages with technology. This type of service encounter was most relevant to this study and occurs most frequently, as human service employees are increasingly replaced by technology (De Keyser *et al.*, 2019; Robinson *et al.*, 2020; Bock *et al.*, 2020). Examples include chatbots, online banking, ATMs, and voice assistants such as Siri (De Keyser *et al.*, 2019).

Within this type, chatbots replace human service employees in the service encounter, thereby taking an active role in services (De Keyser *et al.*, 2019). Unlike ATMs, chatbots can interact on a deeper level with customers and in a variety of service interactions (Meyer-Waarden *et al.*, 2020). The final type, a full technology encounter, see Type 7, is when technology replaces both the customer and employee, for example, automated shopping or banking services requiring no human involvement (Robinson *et al.*, 2020; De Keyser *et al.*, 2019). These types of encounters are limited but are predicted to significantly impact customer interactions (Robinson *et al.*, 2020). As firms frequently utilise chatbots to substitute human service employees (Crolc *et al.*, 2022; Sands *et al.*, 2021; Robinson *et al.*, 2020; Adam *et al.*, 2021), chatbots' role as service employees is discussed next.

3.3.2. Chatbots as Service Employees

Chatbots represent the transformation of the traditional service employee (Murtarelli *et al.*, 2021). Traditionally, customers interacted with employees to save time, obtain information, feel valued, and for ease and enjoyment (Holzwarth, Janiszewski & Neumann, 2006). Customers seek quality communication and desire quick, efficient, and precise service from employees (Mohr & Sohi, 1995; Emmers-Sommer, 2004). Chatbots should be able to comprehend a customer's issue and provide a solution that satisfies the customer (Chung *et al.*, 2020).

The differences between human service employees and chatbots are depicted in Appendix 3.a. As shown in the table in Appendix 3.a, chatbots are service employees that are uniquely, always available to customers (Chung *et al.*, 2020; Adam *et al.*, 2021). Unlike human service employees, chatbots can better satisfy customers through their ability to provide personalised information, access a customer's entire history instantly, and respond more rapidly (Murtarelli *et al.*, 2021; Chung *et al.*, 2020). Chatbots offer functional benefits, such as quicker responses, but, like human service employees, also provide customers with social benefits, such as feeling valued when interacting directly with firms (Pizzi *et al.*, 2021; Wirtz *et al.*, 2018). Customers prefer chatbots over human service employees for several reasons: they enable hands-free interaction, allow avoidance of dealing with other people, and offer increased convenience and personalisation (De Keyser *et al.*, 2019). However, customers tend to prefer human service employees for complex issues (Campbell *et al.*, 2020).

In contrast to human service employees, chatbots differ in their service delivery in several ways: they are easier to scale, significantly less costly, more reliable, and devoid of human error (Huang & Rust, 2018; Meyer-Waarden *et al.*, 2020). Chatbots also deliver a more homogenous service compared to

human service employees, who vary in their unique perceptions, weaknesses, and abilities (Meyer-Waarden *et al.*, 2020). This diversity among human employees can lead to a lack of emotion and social value in service encounters with chatbots (Sands *et al.*, 2021). Therefore, developing an emotional connection and building rapport with customers is more challenging in chatbot service encounters (Wirtz *et al.*, 2018; Sands *et al.*, 2021).

Chatbot service encounters further differ regarding physical distance as these interactions occur online rather than face-to-face (Sands *et al.*, 2021). Physical closeness encourages communication, information exchange, and increased interaction. It also helps customers feel a sense of trust and warmth when in proximity to a service employee (Rafaeli, 1989). Thus, when chatbots are utilised instead of human service employees, distance can contribute to a weaker bond between the employee and the service provider (Hess, 2002; Trope, Liberman & Wakslak, 2007). With chatbots increasingly assuming service employees' roles in customer services (Crolic *et al.*, 2022; Murtarelli *et al.*, 2021), scholars call for more research investigating chatbots as service employees (Chung *et al.*, 2020; Adam *et al.*, 2021). The role of chatbots in customer services is examined next.

3.3.3 Chatbots in Customer Services

Chatbots' unique benefits are widely felt in customer services (Sheehan *et al.*, 2020; Luo *et al.*, 2019). They can handle numerous customers simultaneously (Pizzi *et al.*, 2021; Luo *et al.*, 2019), make sense of large amounts of customer behaviour data (Murtarelli *et al.*, 2021), and reduce service costs (Xiao & Kumar, 2021; Campbell *et al.*, 2020). In addition, they can deliver customer service at any time of the day (Mostafa & Kasamani, 2022; Thomaz *et al.*, 2020; Luo *et al.*, 2019), significantly reducing customer response times, for example, from 1.5 days to an average of five minutes (Kietzmann *et al.*, 2018; Carmon, Schrift, Wertenbroch & Yang, 2019), gather data quickly and widely through CRM systems to generate enhanced solutions (Meyer-Waarden *et al.*, 2020; Luo *et al.*, 2019), they are unaffected by mood changes, and can consistently handle customers in a friendly manner, thereby delivering consistent and reliable customer service (Luo *et al.*, 2019; Huang & Rust, 2018; Meyer-Waarden *et al.*, 2020).

Chatbots are frequently used in customer services to handle simple issues (Carmon *et al.*, 2019; Campbell *et al.*, 2020). Text-based chatbots can simultaneously attend to significantly large volumes of simple customer issues, exemplifying mechanical AI as detailed in the previous chapter (Huang & Rust, 2021). These less advanced chatbots are frequently used for standardised customer service (Huang & Rust, 2020). However, they lack intuition, unlike more sophisticated chatbots (Huang & Rust, 2018). Sophisticated chatbots, described as a form of "feeling AI", can address complex customer issues with care and humour (Wilson, Daugherty & Bianzino, 2017; Huang & Rust, 2018). They can mimic a customer's way of communicating to provide emotional support and are, therefore, better suited to handle customer complaints (Huang & Rust, 2021; Huang & Rust, 2020). For example, Replika, used by mental health support platforms, is a chatbot that can have emotional and personal conversations with customers and display empathy (Steinhoff *et al.*, 2019; Huang & Rust, 2020). As this type of advanced AI is uncommon, many service providers ineffectively utilise text-based chatbots to address emotionally charged customer complaints (Huang & Rust, 2020). Consequently, replacing human service employees with service robots is a complex issue in customer services, where customer interactions can be intense (Xiao & Kumar, 2021).

Despite chatbots' limitations in customer services, they can encourage customers to willingly share personal data with the firm to personalise interactions. However, as customers become increasingly

private and data becomes more coveted, providing personalised service to customers is expected to become increasingly challenging (Thomaz *et al.*, 2020). This is problematic because personalisation is necessary to enhance customer relationships, as it heightens customer satisfaction and allows customers' unique needs to be discovered (Huang & Rust, 2018; Thomaz *et al.*, 2020). An example is Mattel's "Hello Barbie" chatbot, which leverages data from prior customer interactions and uses personal details such as favourite colour to develop a close relationship with customers. This is an example of how chatbots can be utilised to enhance customer relationships (Thomaz *et al.*, 2020). The context in which a service encounter between a chatbot and a human occurs can significantly affect how the two parties interact (Blazevic & Sidaoui, 2022). Chatbots' role in various service contexts is discussed next.

3.3.4 Chatbots in Different Service Contexts

Various service contexts, specifically search services, credence services, and experience services, significantly influence a customer's interaction with a firm's chatbot due to differing levels of information, uncertainty, and service expectations (Blazevic & Sidaoui, 2022). Search services entail the least perceived risk, as customers can easily assess service outcomes before using the service (Park, Tung & Lee, 2021). For example, a customer can easily anticipate the interaction with a bank's chatbot about opening hours (Blazevic & Sidaoui, 2022). Compared to search services, experience services involve increased perceived risk as relevant information about the service and its characteristics cannot be ascertained until after utilisation (Hsieh, Chiu & Chiang, 2005). For example, a customer may struggle to evaluate a service provided by Pepper, a humanoid service robot that entertains customers at a restaurant before experiencing the service (Mende *et al.*, 2019). Credence services represent the highest perceived risk because these services are difficult for customers to evaluate both before and after consumption (Park *et al.*, 2021), such as a service provided by an insurance firm (Keh & Sun, 2018).

Therefore, one type of credence service is financial services, in which the provided services are highly complex and intangible, making it challenging for customers to assess (Eisingerich & Bell, 2007). This contributes to customers' uncertainty and heightened perceptions of risk within this industry (Fernandes & Pinto, 2019). This emphasises the importance of customer interactions with employees in financial services, as the more technical aspects of the service are challenging for customers to evaluate, making customer-employee interactions critical to their evaluation of the service (O'Loughlin, Szmigin & Turnbull, 2004; Eisingerich & Bell, 2007). Considering this, for credence services, such as financial services, it is especially critical for firms to consider the interaction between chatbots and customers, as they increasingly replace human service employees, and to invest in resources to prevent chatbot service failures (Blazevic & Sidaoui, 2022). It is, therefore, imperative to understand customers' responses to AI, such as chatbots, in financial services (Riedel *et al.*, 2022). Chatbots' role in financial services is discussed in more detail in the ensuing section.

3.3.5 Chatbots in Financial Services

Chatbots are a key application of AI in the financial services industry, particularly for customer services. Financial institutions are actively adopting chatbots because they serve as a valuable tool for digital innovation (Mogaji & Nguyen, 2022). Chatbots in financial services promote self-service technology adoption, aiming to enhance customer-technology interactions without service providers' direct involvement (Jang *et al.*, 2021). Self-service technology adoption enables customer services via chatbots in various financial services sectors, including insurance and banking (Mogaji & Nguyen, 2022). As chatbots continue to change the financial industry and offer banks new ways to interact with customers, it is essential to understand their role, specifically in banking (Payne *et al.*, 2021; Gummerus *et al.*, 2019), as banks focus heavily on their customer relationships (Payne *et al.*, 2021; Fernandes & Pinto, 2019).

In banking, chatbots are increasingly used to assist customers with routine inquiries (Hentzen *et al.*, 2022; Adam *et al.*, 2021). For example, Amy, an HSBC Commercial Banking chatbot for a major bank in Hong Kong, assists customers in answering questions about products and services (Olson, 2019). Chatbots communicate with customers on behalf of the bank, providing important information to customers via real-time sales notifications. They also inform internet banking users about specific bank services and provide informative recommendations (Belanche, Casalo & Flavián, 2019). Furthermore, chatbots can assist customers with checking account information and transactions and making payments (Mogaji & Nguyen, 2022). Chatbots are utilised for various purposes, including product inquiries, facilitating funding for purchases and repurchases, offering consultations, and enabling overseas transactions (Jang *et al.*, 2021). Thus, by using chatbots in customer services, financial service managers expect to improve the customer experience. Although chatbots are commonly utilised to deliver services in this realm, they are one of several digital tools enabling customers to engage with their bank (Mogaji & Nguyen, 2022).

Another significant area of AI research in financial services revolves around providing financial and investment advice through AI robo-advisors (Hentzen *et al.*, 2022). Robo-advisors are digital interfaces that provide investment advice without the intervention of a human financial advisor (Hildebrand & Bergner, 2021). Despite the various advantages robo-advisors offer, such as reduced service fees and round-the-clock consumer access, their adoption by consumers has been gradual (Hentzen *et al.*, 2022; Jung, Dorner, Weinhardt & Puzmaz, 2018), differing from chatbots (Mogaji & Nguyen, 2022). For example, Betterment, a robo-advisor, uses algorithms to provide financial advice and manage investment portfolios for customers (Reiners, 2024).

A study investigating chatbots in banking found that although customers' initial concerns can lower satisfaction, customers' perceived trust in a bank's chatbot can have positive effects on customer satisfaction (Eren, 2021). Customers expect chatbots in banking to be easy to use, reliable, always available and respond swiftly. Reliability is particularly important to customers when conducting financial transactions (Trivedi, 2019). Upadhyay and Kamble (2023) investigated consumers' brand love for mobile banking chatbots and how factors like anthropomorphism, smart features and user engagement influence this. Their findings indicated that these factors positively affect customers' perceptions of chatbots, which in turn increases their brand attachment (Upadhyay & Kamble, 2023). In an auto insurance context, Dekkal, Arcand, Prom Tep, Rajaobelina and Ricard (2023) explored factors that encourage or discourage trust and chatbot adoption. Their findings show that functionality and enjoyment are key to building trust and increasing adoption intention, while creepiness significantly reduces trust and adoption (Dekkal *et al.*, 2023). Furthermore, Lappeman, Marlie, Johnson and

Poggenpoel (2023) examined digital privacy concerns regarding chatbots used in internet banking and their findings revealed a significantly negative relationship between privacy concerns and user self-disclosure. As chatbots eliminate the need for a banking employee (Payne *et al.*, 2021; Gummerus *et al.*, 2019), they are particularly useful when banking services are restricted, as seen during the COVID-19 pandemic (Eren, 2021). However, customer resistance towards chatbots limits their usefulness to service providers (Mozafari *et al.*, 2022; Luo *et al.*, 2019). Thus, customer resistance to chatbots is discussed next.

3.3.6 Customer Resistance to Chatbots

Although chatbot use is increasing, customers are often left dissatisfied by service encounters with chatbots (Crolc *et al.*, 2022; Adam *et al.*, 2021; Meyer-Waarden *et al.*, 2020). Chatbots can frustrate customers when they are unable to solve complex problems (Trivedi, 2019). Due to following service scripts, chatbots often fail to adequately answer customers' questions (Meyer-Waarden *et al.*, 2020). Chatbots lack human traits such as empathy, judgement, and discretion (Murtarelli *et al.*, 2021). Therefore, they tend to miscommunicate with customers (Sheehan *et al.*, 2020). An example is a chatbot asking a consumer how they would describe the term "bot" to a relative. Thereafter, the consumer informs the chatbot that their relative has passed away, only to receive an insensitive response thanking them for their feedback (Puntoni *et al.*, 2021). Such service failures cause resistance to chatbots (Adam *et al.*, 2021). Overcoming such resistance presents a challenge for companies despite the numerous advantages they offer (Kallel *et al.*, 2023). Prior research into customer evaluations of chatbots has primarily focused on customers' acceptance or intent to utilise chatbots (Schuetzler, Grimes & Scott Giboney, 2020; Sheehan *et al.*, 2020; Wirtz *et al.*, 2018). Despite customer resistance significantly impacting a firm's revenue by hindering usage, limited studies have focused specifically on customer resistance related to AI-based chatbots (Yang *et al.*, 2023; Cheng *et al.*, 2022; Longoni *et al.*, 2019; Pizzi *et al.*, 2021). There is also limited research examining the relationship between marketing in financial services and the adoption of chatbots (Lappeman *et al.*, 2023).

Regarding the reasons for customer resistance to chatbots, in healthcare, chatbots often fail to consider customers' traits and unique wants and needs, leading to resistance (Longoni *et al.*, 2019). Specifically, patients' resistance to using chatbots for medication stems from their fear of future regret (Müller *et al.*, 2019). In an online customer service context, consumers have been shown to trust chatbots less than humans, especially when they have to make personal decisions, and have been shown to experience negative emotions when interacting with chatbots (Wang *et al.*, 2023). Kwangsawad and Jattamart (2022) indicate that perceived privacy and time-related risks influence consumer attitudes and intentions to use chatbots. Moreover, technological anxiety negatively influences consumer attitudes toward using chatbots, while perceived information quality indirectly encourages ongoing chatbot use (Kwangsawad & Jattamart, 2022). Mostafa and Kasamani (2022) highlight the role of social influence, indicating that the opinions of one's close social circle can influence their perceptions of chatbots. Customer resistance to chatbots can also be explained by research showing customers viewing chatbots as less competent and empathetic than humans (Mozafari *et al.*, 2022; Luo *et al.*, 2019). Furthermore, whether a customer will reuse a chatbot strongly depends on how useful the chatbot was to them and how fulfilling the interaction was (Meyer-Waarden *et al.*, 2020).

Within financial services specifically, previous research has investigated the role of gender in relation to chatbot resistance (Chaouali, Souiden, Aloui, Ben Dahmane Mouelhi, Woodside & Ben Abdelaziz, 2024). Chaouali *et al.* (2024) focused on barriers to innovation to explain customer resistance and found that males and females have varying concerns regarding barriers to adopting chatbot banking services.

Males were found to be more concerned about risk than females (Chaouali *et al.*, 2024). In addition, customer resistance to chatbots in banking often arises from fears about data privacy (Bouhia *et al.*, 2022). While, Yadav, Gupta, Rai, Naik and Kasip (2023) emphasise the significant role of factors such as interface design and user trust in influencing customers' intention to adopt chatbots within the banking sector. Chatbot anthropomorphism is discussed next to expand on possible reasons for customer resistance towards chatbots.

3.3.7 Chatbot Anthropomorphism

Two theoretical perspectives have primarily been employed to study customers' interactions with chatbots: (1) a technological perspective focusing on their function and design (Messinger, Ge, Smirnov, Stroulia & Lyons, 2019); and (2) an anthropomorphic perspective focusing on a chatbot's ability to humanise customer interactions by adopting human traits, such as a name, voice, or appearance, known as anthropomorphism (Murtarelli *et al.*, 2021; Crolc *et al.*, 2022; van Doorn *et al.*, 2017; Roy & Naidoo, 2021). The latter perspective emphasises the importance of examining the role of chatbots as social actors because of their ability to imitate humans (Murtarelli *et al.*, 2021; Ho, Hancock & Miner, 2018). Thus, when evaluating customers' interactions with chatbots, researchers should pay attention to chatbot anthropomorphism (Murtarelli *et al.*, 2021; Blut *et al.*, 2021).

Despite debates in the literature, chatbot anthropomorphism significantly increases social presence (Blut *et al.*, 2021; Thomaz *et al.*, 2020). This is the degree to which consumers feel another "being" is truly present (van Doorn *et al.*, 2017). The positive impact of anthropomorphism is commonly supported in the literature, as it allows customers to feel socially satisfied with chatbots (Blut *et al.*, 2021; Thomaz *et al.*, 2020). Thus, humanising chatbots can increase customers' perceived benefits derived from chatbots (Thomaz *et al.*, 2020). However, additional research is needed to examine how human traits can be applied most effectively to chatbots to increase customer acceptance and trust (Wirtz *et al.*, 2018; Pantano & Pizzi, 2020).

The impact of chatbot anthropomorphism on customer acceptance is a subject of debate in service literature (Crolc *et al.*, 2022; Pizzi *et al.*, 2021). Blut *et al.* (2021) emphasise the positive impacts of anthropomorphism, asserting that it enables customers to engage more comfortably and adhere to typical social rules. Roy and Naidoo (2021) indicate that humanised chatbots, characterised by traits such as warmth and competence, enhance customer experiences. Adam *et al.* (2021) reveal that humanised chatbots with traits including empathy, small talk, and identity positively impact a customer's willingness to engage. Similarly, Sheehan *et al.* (2020) explain that humanised chatbots are better received by customers as they imitate human service employees and, therefore, appear easier to use. Steinhoff *et al.* (2019) posit that humanised chatbots may enhance customer relationships due to the chatbot's humanness inspiring a stronger bond.

In contrast to these studies, Crolc *et al.* (2022) indicate that when dealing with frustrated customers, humanised chatbots negatively impact customer satisfaction, customer perceptions of the firm, and desire to purchase. This is caused by inflated customer expectations when dealing with a humanised chatbot versus a non-humanised chatbot (Crolc *et al.*, 2022). The negative impact of humanised chatbots is further demonstrated by IKEA's Anna chatbot, whose human-like appearance led to customers asking inappropriate questions, such as male customers asking about sex (Steinhoff *et al.*, 2019). As such, negative implications of chatbots have been identified in marketing (Grewal *et al.*, 2021; Murtarelli *et al.*, 2021; Steinhoff *et al.*, 2019). The dark side of chatbots is discussed next.

3.3.8 The Dark Side of Chatbots in Marketing

It is essential to understand the negative implications of service robots in marketing as they affect customer relationships (Grewal *et al.*, 2021; Mcleay *et al.*, 2021; Puntoni *et al.*, 2021). Using chatbots in online exchanges with customers raises three important ethical concerns (Murtarelli *et al.*, 2021). First, although humanising chatbots may improve customer perceptions of their trustworthiness, it concurrently diminishes their perceptions of risk (Kaplan & Haenlein, 2019; Thomaz *et al.*, 2020), leading customers to incorrectly assume that chatbots have the same moral values as humans (Murtarelli *et al.*, 2021). Second, chatbots collect personal information from customers, which causes concern for their privacy and data protection (Murtarelli *et al.*, 2021; Puntoni *et al.*, 2021; Thomaz *et al.*, 2020). Third, chatbots' abilities to collect and process data cause information asymmetry, meaning the party with less information and less sophisticated data available to them is unable to make the same informed choices as the other party in the exchange. This imbalance in power can have detrimental effects (Murtarelli *et al.*, 2021). Furthermore, relationship marketing literature identifies power imbalances as detrimental to relationship quality, as they can reduce trust (Grewal *et al.*, 2021; Chen, Chen & Wu, 2017).

Chatbot disclosure, wherein the non-human identity of the chatbot is made known to the customer, has been found to adversely affect customer perceptions and retention (Mozafari *et al.*, 2022; Luo *et al.*, 2019; Sangle-Ferriere & Voyer, 2019). Luo *et al.* (2019) demonstrate that chatbot disclosure reduces purchase rates by 80% and significantly reduces customer call lengths. These unfavourable service encounters with chatbots drive customers away, adversely affecting customer retention and relationships (Puntoni *et al.*, 2021). However, Mozafari *et al.* (2022) found that disclosure can be beneficial when a customer's problem cannot be solved in an online chat, resulting in a service failure.

In online service encounters, customers' distrust of chatbots has damaging effects on relationship quality. While customers may relate to a human service employee, they may perceive chatbot interactions as impersonal and thus perceive their experience in a negative light (Grewal *et al.*, 2021). An example of a chatbot's ability to drive customers away and cause negative perceptions of the firm is Microsoft's Twitter chatbot, Tay, which produced highly offensive and racist responses to customers after being asked race-related questions. This adversely affected Microsoft's reputation (Puntoni *et al.*, 2021). Thus, although chatbots represent a key opportunity for establishing and managing customer relationships (Kull *et al.*, 2021), the dark side of chatbots and their negative implications for customer relationships require more investigation in marketing (Mostafa & Kasamani, 2022; Grewal *et al.*, 2021). After examining the relevant literature, two research questions were developed to address the research problem. The following section explains each research question, beginning with Research Question 1.

3.4 DEVELOPMENT OF RESEARCH QUESTIONS

This dissertation's research problem was formulated as follows: How can financial service providers overcome customer resistance to chatbots? In light of the literature, this research problem was divided into two research questions. This section explains how each of these was formulated, beginning with Research Question 1.

3.4.1 Formulation of Research Question 1

As established, AI, including chatbots, continues to have noteworthy effects on services, changing the way firms interact with customers and impacting customer relationships in turn (Hollebeek, Sprott & Brady, 2021; Choi, Mattila & Bolton, 2021; Mostafa & Kasamani, 2022). However, the marketing literature examining the impact of chatbots in financial services is scarce (Mogaji & Nguyen, 2022; Lappeman *et al.*, 2023), particularly literature focused on its negative implications in financial services (Ho & Chow, 2023). The deficit of studies investigating chatbots in financial services is a key gap to be explored due to their widespread use in the industry (Chaouali *et al.*, 2024; Yadav *et al.*, 2023; Dekkal *et al.*, 2023; Riedel *et al.*, 2022; Mogaji & Nguyen, 2022). The existing literature has not provided a comprehensive understanding of customers' perceptions of financial service providers using human service employees versus chatbots to deliver services and the effect this has on marketing results (Riedel *et al.*, 2022). This is problematic as chatbots and human employees have become the primary methods of online customer service (Chen, Li, Liu & Wang, 2023).

However, although less costly than a human service employee, chatbots may provide poor service and frustrate customers, which could negatively impact customer relationships (Crolic *et al.*, 2022; Libai *et al.*, 2020). Numerous firms, such as Frontier Airlines, are attempting to save costs by replacing human service employees with chatbots without considering how this may harm customer experience and customer relationships (Westfall, 2022). For example, Meta's recent chatbot failures serve as examples of how negative chatbot experiences can damage a brand (Kulkarni, 2023). After Meta launched its BlenderBot chatbot in August 2022, it made false statements and denounced Facebook (The Guardian, 2022). In October 2023, Meta then introduced a series of chatbots which were assigned various celebrity faces, causing discomfort and confusion for consumers (Chafkin, 2023).

Moreover, customer satisfaction with automated services is declining, with more customers avoiding self-service options like chatbots or attempting to use them but subsequently turning to human service employees when the chatbot fails to meet their needs. This leads to customer frustration. For example, if a chatbot misunderstands a customer's issue and persists in providing the same answers, the customer will become frustrated and be less likely to try chatbots in the future (Beasley, 2023), thereby fuelling chatbot resistance. Within financial services specifically, if consumers are unable to engage with a human service employee when needed, their trust and confidence in their financial institution can be adversely affected (Consumer Financial Protection Bureau, 2023). Thus, due to its strong managerial and theoretical implications, scholars call for additional research investigating when a chatbot versus a human service employee should be used in service encounters (Li & Zhang, 2023; Crolic *et al.*, 2022).

In light of the foregoing discussion, this dissertation's first research question was formulated as presented hereunder.

Research Question 1: What are the implications of financial service providers using chatbots versus human service employees on customer relationships?

3.4.2 Formulation of Research Question 2

Chatbots offer a valuable opportunity for maintaining and enhancing customer relationships (Kull *et al.*, 2021; Mostafa & Kasamani, 2022). However, the adoption and implementation of chatbots in services are uncertain, with firms often struggling to implement chatbots effectively (Blazevic & Sidaoui, 2022; Bouhia *et al.*, 2022). This is a key issue due to chatbots' negative implications and their potential to weaken customer relationships (Crolic *et al.*, 2022). In addition, customer resistance towards chatbots is

prevalent (Huang & Dootson, 2022; Mostafa & Kasamani, 2022; Adam *et al.*, 2021), particularly within financial services (Priya & Sharma, 2023). Firms face a substantial challenge in overcoming resistance to chatbots (Kallel *et al.*, 2023). This is an important challenge to consider because an innovation's success relies on customer adoption. If resistance is not addressed, innovations are likely to fail (Mani & Chouk, 2018).

Within the banking sector, the Consumer Financial Protection Bureau raised concerns about how poorly implemented chatbots can cause customer frustration, reduced trust, and legal violations. As the banking industry predominantly employs simple chatbots that provide customers with predetermined, limited responses, this can cause customer frustration, with the Consumer Financial Protection Bureau receiving numerous customer complaints regarding chatbots (Yahoo Finance, 2023). These service failures cause customer resistance towards chatbots (Adam *et al.*, 2021). The recent development and implementation of advanced AI chatbots, such as ChatGPT, have raised widespread privacy concerns, leading to the platform's temporary ban in Italy (Thorbecke, 2023). Furthermore, customer expectations for chatbots have intensified due to their increasing advancement. Traditional banking chatbots may no longer satisfy customers' enhanced expectations for personalisation, relevance, and speed, brought on by advanced AI chatbots such as ChatGPT. For example, if consumers regularly use ChatGPT and then engage with their bank's chatbot, they are likely to be dissatisfied (Johnson, 2023), further highlighting this study's relevance.

While prior research has primarily focused on customers' acceptance of or intent to use chatbots (Schuetzler *et al.*, 2020; Sheehan *et al.*, 2020; Wirtz *et al.*, 2018), customer resistance, particularly concerning chatbots, remains relatively underexplored (Yang *et al.*, 2023; Cheng *et al.*, 2022; Longoni *et al.*, 2019; Pizzi *et al.*, 2021). Moreover, research on the effective use of chatbots in financial services is sparse (Mogaji & Nguyen, 2022; Riedel *et al.*, 2022).

In light of the foregoing discussion, this dissertation's second research question was formulated as presented hereunder.

Research Question 2: *How can financial service providers overcome customer resistance to chatbots to improve customer relationships?*

3.4.3 Social Exchange Theory Applied to This Study

Social exchange theory emphasises the role of anticipated rewards and costs in shaping an individual's willingness to engage in social interactions (Blau, 1964; Cloarec *et al.*, 2022). When individuals anticipate significant rewards, such as enhanced privacy and security (Cloarec *et al.*, 2022), they are more likely to have their reciprocal expectations met, which, in turn, increases their willingness to engage in future social exchanges with the provider (Obeng *et al.*, 2019; Cloarec *et al.*, 2022). Thus, in line with this theory, this study posits that the more value a customer perceives in a financial service provider's chatbot in terms of benefits, the more willing the customer will be to engage with the service provider's chatbot (Stafford & Kuiper, 2021). Therefore, in the context of financial services and chatbots, social exchange theory assists in understanding how customers weigh the advantages and disadvantages of using chatbots and how these evaluations influence their resistance. As such, this study relied on social exchange theory to gain insight into customers' perceived benefits and costs of chatbots and how these can be mitigated or exploited to overcome chatbot resistance in the financial services industry.

3.5 CONCLUSION

As this study aimed to gain insight into how chatbots can be used more effectively in financial services to overcome customer resistance, this chapter provided a theoretical background to chatbots and examined their role in services. In financial services specifically, financial institutions' common adoption of chatbots was highlighted (Mogaji & Nguyen, 2022). For credence services, such as financial services, the relationship between chatbots and customers is key as chatbots increasingly replace human service employees (Blazevic & Sidaoui, 2022). It is, therefore, imperative to understand how customers respond to AI, such as chatbots, in financial services (Riedel *et al.*, 2022).

In examining the literature on chatbots, several gaps were identified. The first gap concerned the implications of using a chatbot versus a human service employee in service interactions (Crollic *et al.*, 2022; Robinson *et al.*, 2020; Steinhoff *et al.*, 2019; De Keyser *et al.*, 2019). The second gap related to how AI, specifically chatbots, could be employed effectively (Blazevic & Sidaoui, 2022; Crollic *et al.*, 2022; Davenport *et al.*, 2020; Huang & Rust, 2021). This chapter discussed the formulation of this study's research questions, which were designed to address these gaps. The next chapter, Chapter 4, describes the methodology used to investigate the research questions.

CHAPTER 4: METHODOLOGY

4.1 INTRODUCTION

This chapter describes the methodology employed to investigate the research questions stated in Chapter 3. As explained in Chapter 2, additional research is required to understand how AI, specifically chatbots, impacts services marketing (Huang & Dootson, 2022; Cronic *et al.*, 2022). This study questioned how financial service providers can utilise chatbots to overcome customer resistance and, thereby, improve customer relationships. As explained in Chapter 3, the two research questions are: (1) What are the implications of financial service providers using chatbots versus human service employees on customer relationships? and (2) How can financial service providers overcome customer resistance to chatbots to improve their customer relationships? This chapter discusses how these questions were addressed.

An exploratory research design was adopted as it allowed for the topic to be explored in more depth (Creswell & Poth, 2016; Elliott & Timulak, 2005; Barker *et al.*, 2015; Hackley, 2019). In exploratory studies, qualitative research is deemed appropriate as it investigates participants' experiences in detail (Barker *et al.*, 2015; Hackley, 2019). Qualitative methods were used as these techniques allow for richer insights than quantitative studies (De Ruyter & Scholl, 1998; Flick, 2007; Carson *et al.*, 2001). To further support the exploratory nature of the study, semi-structured interviews were conducted online to ensure in-depth findings (Daymon & Holloway, 2010; Polonsky & Waller, 2018; Merriam & Tisdell, 2016), ensure participants' comfort (Creswell & Poth, 2016), and to adhere to "social distancing" policies during the COVID-19 pandemic (Dodds & Hess, 2020).

The study's target population consisted of internet banking users in South Africa, both males and females, ranging between the ages of 20 to 59 years old. Quota sampling was utilised to ensure a representative sample of the target population was selected (Bell *et al.*, 2014; Daniel, 2011). Following the sampling process, the data collection process is explained. Thereafter, the use of phenomenological analysis to interpret data collected is discussed. Finally, the study's quality criteria and ethical issues are addressed.

This chapter commences with an examination of the research design (see Section 4.2), followed by a description of the target population and the sampling design (see Section 4.3). The data collection procedures (see Section 4.4) and the data-analysis method (see Section 4.5) are discussed. The quality criteria and ethical considerations are discussed (see Sections 4.6 and 4.7), and a conclusion (see Section 4.8) is provided.

4.2 RESEARCH DESIGN AND METHOD

A research design outlines how the research method is applied and how data is analysed (Bell *et al.*, 2014). The research design assists in answering the research questions (Flick, 2007). This section describes the research design, qualitative research, and semi-structured interviews, beginning with the exploratory research design.

4.2.1 Exploratory Research Design

This section explains the research design selected for this study. It begins by defining exploratory research and discusses its advantages, disadvantages, and its application in similar studies.

4.2.1.1 What is exploratory research?

Exploratory research is utilised to develop a deeper understanding of a topic requiring further definition (Mariampolski, 2001; Barker *et al.*, 2015; McGregor, 2017; Polonsky & Waller, 2018). It aims to produce scientific explanations based on everyday knowledge (Calder, 1997). Scientific explanations in exploratory research involve the formulation of hypotheses and theories based on observed patterns and relationships within the data (Bell *et al.*, 2014). Additionally, exploratory research aims to generate new ideas by applying inductive reasoning, as insights are derived from the data collected, moving from specific observations to broader generalisations (Barker *et al.*, 2015). This method allows researchers to identify trends and generate new ideas, ultimately contributing to the development of theory. Unlike conclusive research, exploratory research is less controlled and more comprehensive in its design, enabling a holistic understanding of a topic (Elliott & Timulak, 2005; Bell *et al.*, 2014). The research paradigm guiding this study is qualitative, emphasising the exploration of meanings and experiences, which is well-suited for examining topics where little prior knowledge exists (Bell *et al.*, 2014). The specific advantages of exploratory research are outlined below.

4.2.1.2 Advantages of exploratory research

Exploratory research enables a deeper understanding of a topic of interest and assists in identifying key aspects of practice or testing a new research method (McGregor, 2017). Exploratory research is guided by strictly defined research questions while maintaining a focus on collecting and analysing data (Barker *et al.*, 2015). However, it still provides the researcher with the flexibility required to fully explore a topic (Polonsky & Waller, 2018). This research design ensures a narrow and feasible scope of investigation (Barker *et al.*, 2015). Despite these advantages, exploratory research also has disadvantages, as discussed below.

4.2.1.3 Disadvantages of exploratory research

Exploratory studies apply qualitative data analysis based on narrow samples (Calder, 1997). In contrast, conclusive studies apply quantitative analysis and are based on larger, more representative samples (Malhotra, 2010). Thus, conclusive research studies' findings can be considered more reliable than exploratory studies (Shukla, 2008). Exploratory research does not always lead to conclusive answers, although it does establish a foundation for future studies (McGregor, 2017). Exploratory research is further limited by the poor generalisability of the findings (Calder, 1997). However, generalisability is said to be less significant in exploratory research where the primary concern is to discover new ideas (Calder, 1997; Malhotra, 2010; McGregor, 2017; Mariampolski, 2001). As this study sought to investigate the implications of chatbots on customer relationships and how customer resistance to chatbots can be mitigated to improve customer relationships, an exploratory research design was deemed suitable. Additional justifications for applying an exploratory research design follow.

4.2.1.4 Why exploratory research was applied

Based on the foregoing discussion and in light of the advantages mentioned in Section 4.2.1.2, exploratory research was applied due to its benefits when a topic is not well understood or when there is insufficient knowledge on a topic (Creswell & Poth, 2016; Elliott & Timulak, 2005; Barker *et al.*, 2015; Polonsky & Waller, 2018). Exploratory research was deemed suitable as marketing literature examining AI is scarce (Davenport *et al.*, 2020), and few empirical studies focus on AI in services marketing (Bock *et al.*, 2020). Moreover, exploratory studies investigate a topic without assuming the results. This ensures that an analytical process is used to build a complex and profound understanding of the topic

(Hackley, 2019). Considering this, adopting an exploratory research design was beneficial to this study as it allowed for this topic to be comprehensively explored (Creswell & Poth, 2016; Elliott & Timulak, 2005; Barker *et al.*, 2015; Hackley, 2019). Previous researchers studying chatbots in financial services adopted an exploratory approach (e.g., Mogaji & Nguyen, 2022; Sangle-Ferriere & Voyer, 2019). Similar studies examining customers' relationships with financial services, such as internet banking, also applied exploratory research designs (e.g., Koivunen & Tuorila, 2015; Chai & Dibb, 2018). Thus, in keeping with similar past studies, an exploratory research design was deemed suitable for this study. Qualitative research is a specific type of exploratory research design (Hackley, 2019). This is discussed in the following section.

4.2.2 Qualitative Research

A qualitative approach is well-suited to exploratory research due to its flexibility and focus on discovery when investigating research topics (Mariampolski, 2001; Barker *et al.*, 2015; Hackley, 2019). This section explains how qualitative research was applied to this study, beginning with an understanding of qualitative research.

4.2.2.1 What is qualitative research?

Qualitative research cannot simply be deduced as research that is not quantitative. Its definition is said to be less definitive and is open to argument (Calder, 1997; Flick, 2007). Instead, qualitative research can be identified by its features (Flick, 2007; Merriam & Tisdell, 2016). Scholars note four fundamental characteristics of qualitative research: (1) an emphasis on meaning, understanding, and process; (2) an inductive process; (3) a highly descriptive result; and (4) the researcher is the primary tool for data collection and analysis (Merriam & Tisdell, 2016). In essence, qualitative research uses words as opposed to numbers and is concerned with participants' experiences (Braun & Clarke, 2013; Polonsky & Waller, 2018; Merriam & Tisdell, 2016; McGregor, 2017; Flick 2007). This approach lies at the other end of the spectrum as quantitative research (Newman, Benz & Ridenour, 1998). The differences between qualitative and quantitative research are presented in Table 4.1 below.

Table 4.1: Comparison between Qualitative and Quantitative Research

Qualitative Research	Quantitative Research
Aims to understand human behaviour	Aims to predict human behaviour
Extensively examines a topic or concept	Precisely tests specific hypotheses
Explores and understands perspectives	Predicts and provides causal explanations
Reports participants' understanding of the world	Reports social facts without context
Embraces complexity	Seeks a single truth
Power in rich description and detail	Power in statistics
Thematic, patterned data analysis	Statistical data analysis

SOURCE: McGregor (2017)

Table 4.1 above shows that in comparison to quantitative research, qualitative research aims to understand, examine, and explore rather than predict and test. While quantitative research provides limited and statistical information, qualitative research's strength is in providing complex and comprehensive information (McGregor, 2017). Weighing up the differences summarised in Table 4.1 above, the evidence supports the contention that qualitative research was suitable for this study as it is more exploratory and provides the type of information sought by this study (McGregor, 2017; Hackley, 2019; Mariampolski, 2001). The following section discusses the specific advantages of qualitative research.

4.2.2.2 Advantages of qualitative research

The primary advantage of qualitative research is that it enables detailed descriptions and unlimited data (Barker *et al.*, 2015; Creswell & Poth, 2016), leading to a deep understanding of a problem, such as how to overcome customer resistance to chatbots in financial services (De Ruyter & Scholl, 1998; Flick, 2007; Carson *et al.*, 2001). Due to the researcher being the primary investigator, their perspective is included (Merriam & Tisdell, 2016; Flick, 2007; McGregor, 2017). This results in a more complete account of the problem under investigation (Creswell & Poth, 2016; McGregor, 2017).

Qualitative research provides further advantages. Its flexibility and openness to ambiguity permit new information to arise during the process (Carson *et al.*, 2001; Merriam & Tisdell, 2016). Due to its exploratory nature, qualitative research is useful for generating new insights into developing areas, such as marketing (McGregor, 2017; De Ruyter & Scholl, 1998; Carson *et al.*, 2001). Despite these advantages, there are also disadvantages. The disadvantages of qualitative research and how they were addressed in this study are discussed in the ensuing section.

4.2.2.3 Disadvantages of qualitative research

The first disadvantage of qualitative research relates to ensuring the quality of findings. This is due to a less controlled and less overt research process limiting its accuracy (Flick, 2007; McGregor, 2017).

Secondly, qualitative studies' findings can be difficult to replicate (De Ruyter & Scholl, 1998; Daymon & Holloway, 2010). This is due to unclear reliability testing in qualitative research (De Ruyter & Scholl, 1998). Thirdly, successful qualitative research depends on participants' unguaranteed willingness to engage in detailed discussions and their ability to express themselves freely (Gummesson, 2005; Hogg & Maclaran, 2008). This has proved to be a challenge in financial services studies where participants were reluctant to elaborate and felt loyal to their financial institution (Kapoulas & Mitic, 2012). Finally, as the researcher is the primary investigator, this exposes a qualitative study to researcher bias (Merriam & Tisdell, 2016).

These disadvantages were addressed in the following ways. To address the lack of quality in the findings, the researcher took great care in the planning, conducting, and reporting phases of the research (Flick, 2007). This study referenced established theories, such as social exchange theory, and carefully articulated the research steps to address criticism concerning reliability (De Ruyter & Scholl, 1998). Participants in this study were interviewed with their consent, participated voluntarily, and were assured of their anonymity to mitigate possible reluctance to share in-depth information. Finally, to reduce researcher bias, the researcher identified and monitored possible prejudices and known influences (Merriam & Tisdell, 2016). The justification for adopting qualitative research is presented in the ensuing section.

4.2.2.4 Why qualitative research was applied

Based on this discussion and in light of the advantages mentioned in Section 4.2.2.2, a qualitative approach was ultimately chosen due to its power to develop a comprehensive and complex understanding of a research topic (Mariampolski, 2001; McGregor, 2017; Merriam & Tisdell, 2016), such as customer resistance to chatbots (Yang *et al.*, 2023; Cheng *et al.*, 2022). This complexity can only be achieved because qualitative research enables direct conversations with participants whose perspectives are unaffected by the literature (Creswell & Poth, 2016). Thus, qualitative research was deemed most appropriate to examine the area of chatbots in financial services (Brock *et al.*, 2020). Furthermore, qualitative research proves beneficial when the problem does not call for a numerical analysis and when a study such as this one investigates relationships (Creswell & Poth, 2016; Daymon & Holloway, 2010).

Previous studies examining customers' relationships with internet banking adopted a qualitative approach (e.g., Koivunen & Tuorila, 2015; Chai & Dibb, 2018). Previous researchers studying chatbots in financial services also applied a qualitative method (e.g. Mogaji & Nguyen, 2022; Sangle-Ferriere & Voyer, 2019). A similar study noted this approach's suitability for exploring customer perceptions of chatbots due to qualitative research providing a complete understanding of customers in an assistance context (Sangle-Ferriere & Voyer, 2019). As such, qualitative research is suitable to apply in this study's context. Despite past studies investigating chatbots in financial services, more research investigating chatbots in financial services is needed due to their widespread use in the industry (Chaouali *et al.*, 2024; Yadav *et al.*, 2023; Dekkal *et al.*, 2023). Customer resistance, particularly concerning chatbots, remains relatively underexplored (Yang *et al.*, 2023; Cheng *et al.*, 2022; Longoni *et al.*, 2019; Pizzi *et al.*, 2021). As qualitative research can be conducted utilising semi-structured interviews (Belk, 2017; McGregor, 2017), a discussion of semi-structured interviews follows.

4.2.3 Semi-Structured Interviews

This section describes semi-structured interviews as a qualitative data-gathering method, beginning with a definition of semi-structured interviews.

4.2.3.1 What are semi-structured interviews?

Interviews are a widely chosen method for gathering data in qualitative research (Flick, 2007; Carson *et al.*, 2001; McGregor, 2017; Merriam & Tisdell, 2016). Interviews are useful for gathering data from participants' unique perspectives and generating new insights uninfluenced by existing literature (Flick, 2007; Daymon & Holloway, 2010; Merriam & Tisdell, 2016). Interviews occur in a variety of forms, including unstructured, structured and semi-structured interviews (Polonsky & Waller, 2018; Barker *et al.*, 2015; Carson *et al.*, 2001; Merriam & Tisdell, 2016). The semi-structured interview is the most commonly chosen of these techniques (Deakin & Wakefield, 2014; Flick, 2007; Barker *et al.*, 2015; Merriam & Tisdell, 2016). Semi-structured interviews are largely open-ended (Elliott & Timulak, 2005; Polonsky & Waller, 2018; Merriam & Tisdell, 2016). They are conducted using a set of broad pre-determined questions known as an interview guide, which includes probing questions to uncover unforeseen insights (Gavin, 2008; Polonsky & Waller, 2018; McGregor, 2017; Merriam & Tisdell, 2016). They differ from structured interviews which are more restrictive. They also differ from unstructured interviews, which tend to produce irrelevant information (Gavin, 2008; Polonsky & Waller, 2018; Merriam & Tisdell, 2016). In-depth interviews are a form of semi-structured interview focused on obtaining detailed information about a specific topic or experience. They are often conducted one-on-one and can last for extended periods (Bell *et al.*, 2014). Therefore, this study conducted in-depth semi-structured interviews as interviews were conducted one-on-one and included an in-depth discussion of chatbots in banking. The advantages of applying semi-structured interviews are discussed next.

4.2.3.2 Advantages of applying semi-structured interviews

The open-ended nature of semi-structured interviews is advantageous because it allows for elaboration and clarification from participants, resulting in rich data (Zikmund *et al.*, 2013; Barker *et al.*, 2015). This style of interview encourages the flow of conversation with participants, unlike interviews consisting of closed questions (Silverman, 2006; Barker *et al.*, 2015). The researcher can also adjust questions depending on the participant or how the study is progressing (Flick, 2007; Gavin, 2008; Zikmund *et al.*, 2013; Bell *et al.*, 2014). This interview type allows the researcher to ask additional questions not included in the interview guide based on information provided by participants (Elliott & Timulak, 2005). Due to a central focus driven by the interview guide, semi-structured interviews assist the researcher in addressing specific issues (Silverman, 2006; Elliott & Timulak, 2005). The interview guide promotes consistency in the data and enhances the replicability of the study (Perez, Whitelock & Florin, 2013). It also ensures flexibility while promoting the collection of relevant data (Perez *et al.*, 2013; Polonsky & Waller, 2018). Despite these advantages, there are also various disadvantages to applying semi-structured interviews, as addressed in the following section.

4.2.3.3 Disadvantages of applying semi-structured interviews

The first disadvantage is that conducting semi-structured interviews is a prolonged process requiring the transcription of vast amounts of data (Polonsky & Waller, 2018; Creswell & Poth, 2016; Daymon & Holloway, 2010; Silverman, 2010; Flick, 2007). Due to the high volumes of unstandardised data, analysing and reporting the collected data is challenging (Barker *et al.*, 2015; Roulston, 2014). Moreover, the quality of collected data depends on the researcher's level of skill in guiding the

discussion in order to uncover relevant and useful insights (Daymon & Holloway, 2010). Finally, when using semi-structured interviews, researchers cannot directly observe participants' experiences and are, therefore, restricted to their accounts of these experiences (Flick, 2007).

The number of interviews was limited to ensure feasibility and sufficient time for transcribing the interviews to address the disadvantages associated with semi-structured interviews (Bell *et al.*, 2014; Barker *et al.*, 2015). Furthermore, how the quality of findings was assured is addressed in detail in Section 4.6 of this chapter. The following section justifies the use of semi-structured interviews in this study.

4.2.3.4 Why semi-structured interviews were applied

Based on the foregoing discussion and the advantages mentioned in Section 4.2.3.2, semi-structured interviews were utilised because they enabled a focused yet explorative exchange with participants (Silverman, 2006; Zikmund *et al.*, 2013). This supported the exploratory nature of this study. This specific technique further facilitated the collection of in-depth insights (Polonsky & Waller, 2018; Merriam & Tisdell, 2016). Although explorative exchanges with participants can be challenge in financial services studies where participants may be reluctant to elaborate and feel loyal to their financial institution (Kapoulas & Mitic, 2012), this study mitigated this by ensuring participants felt comfortable and were assured that their responses would remain anonymous and confidential (see Section 4.4)

Similar studies attest to the suitability of applying semi-structured interviews: Sangle-Ferriere and Voyer (2019) conducted semi-structured interviews to investigate customer perceptions of service channels, such as live chat and virtual agents; Mogaji and Nguyen (2022) used semi-structured interviews to investigate manager perceptions of AI in financial services; and Soetan *et al.* (2021) successfully employed semi-structured interviews to investigate customer perceptions of financial services in Nigeria. Semi-structured interviews can be conducted in various ways (Flick, 2007; Desai, 2002). The way chosen for this study is discussed hereunder.

4.2.3.5 Online interviews

It has become more common for qualitative interviews to take place online due to technological advancements (Deakin & Wakefield, 2014; Desai, 2002; Merriam & Tisdell, 2016). Online qualitative interviews can be text-based, audio-based, or video-based (Barker *et al.*, 2015). Video-based online interviews emulate face-to-face interviews and allow participants in distant locations to be included (Deakin & Wakefield, 2014; Bell *et al.*, 2014).

Online interviews are less costly than in-person interviews and allow for samples that are widespread geographically (Bell *et al.*, 2014; Desai, 2002; Merriam & Tisdell, 2016). This enhances a sample's representativeness (Desai, 2002). Online interviews allow participants to be interviewed in their natural environment (Barker *et al.*, 2015). As qualitative interviews require participants to speak freely, selecting a setting conducive to this is crucial (Creswell & Poth, 2016). The disadvantages of online interviews were considered and are discussed in the following paragraph.

The disadvantages of conducting semi-structured interviews online are that the researcher is limited to participants with internet access and those who know how to navigate the required internet tools (Bell *et al.*, 2014; Merriam & Tisdell, 2016). Online interviews are also susceptible to audio loss or connection issues, which cause disruption and possible frustration (Deakin & Wakefield, 2014; Bell *et al.*, 2014; Merriam & Tisdell, 2016). However, a recent study found that the benefits of using video-based online

platforms such as Zoom to conduct interviews outweighed the challenges (Archibald, Ambagtsheer, Casey, & Lawless, 2019).

Based on this discussion and in light of the mentioned advantages, video-based semi-structured interviews were conducted online: (1) to address the before-mentioned cost disadvantage of semi-structured interviews (see Section 4.2.3.3); (2) to ensure participants' comfort; and (3) to allow those in distant locations to be included in the sample (Creswell & Poth, 2016; Desia, 2002; Bell *et al.*, 2014; Merriam & Tisdell, 2016). Due to the COVID-19 crisis, recent studies opted for video-based online interviews rather than face-to-face interviews to respect social distancing protocols (e.g., Dodds & Hess, 2020; Libai *et al.*, 2020). As this study was conducted during the COVID-19 pandemic, video-based online interviews were deemed suitable. The approaches employed to identify participants for the semi-structured interviews are discussed in the next section.

4.3 TARGET POPULATION AND SAMPLING DESIGN

This section discusses the study's target population and sampling design. It begins by detailing the characteristics of the target population from which this study drew a sample.

4.3.1 Target Population

In sampling, the first issue that needs to be addressed is specifying the study's target population (Barker *et al.*, 2015). This study's target population consisted of internet banking users in South Africa due to the relationship between consumers and chatbots being facilitated by the internet (Steinhoff *et al.*, 2019). Moreover, the target population included both consumers with no prior chatbot experience and consumers with prior chatbot experience, considering this study was interested in customer resistance to chatbots, thus making previous chatbot experience unnecessary. The target population included both males and females, from 20 years old to 59 years old, in order to incorporate a diverse range of perspectives (Sangle-Ferriere & Voyer, 2019).

AI has become critical for banks, with numerous banks around the world integrating AI (Ho & Chow, 2023). The banking sector in South Africa has intense competition with the four major players being Standard Bank, Nedbank, Absa and First National Bank. All of these banks offer internet banking services (PwC, 2024; Lappeman *et al.*, 2023). The migration of customers to internet banking platforms in South Africa has increased with major banks seeing consistent growth in internet banking customers. Since the second half of 2019, South Africa's leading banks have steadily increased their digital client base, which now stands at approximately 20 million users. Enhancing customer experiences remains a top priority for these banks, as they are investing heavily into improving online services to meet evolving customer needs (PwC, 2024).

Banks play a crucial role as the primary financial service providers accessible to the wider population. They are increasingly depending on AI to enhance customers' experiences and are expanding their use of AI, specifically through chatbots (Hentzen *et al.*, 2022). Within South Africa, chatbots have become popular amongst customer-facing businesses. Companies are increasingly using chatbots across various industries, including financial services (Gavaza, 2022). South Africa's total investment in AI is substantial, with US\$1.6 billion invested over the last decade (BusinessTech, 2019). Microsoft developed a report to gain a deeper understanding of how South African firms currently engage with AI. Their research showed that although 46% of South African firms are actively engaging with AI, there is a lack of understanding concerning effective implementation (BusinessTech, 2019).

The following statistics of individuals are based on a secondary source covering estimations of the population of South Africa, published in July 2020. The estimates include all individuals in South Africa at the 2020 mid-year point, relying on the most recent available information (Statistics South Africa, 2020). For 2020, the total population was estimated at 59,622,350 South Africans. Approximately 51,10% (approximately 30,5 million) of the population was female (Statistics South Africa, 2020). Thus, the proportion of females and males in the population are 51,10% and 48,90%, respectively. Regarding age, the dominant age groups in South Africa have been identified by Statistics South Africa (2020) and are shown in Table 4.2 below.

Table 4.2: Age groups in South Africa

Age group	Population estimates	Percent of population
20-29	10,244,121	31.65
30-39	10,440,043	32.25
40-49	6,903,590	21.33
50-59	4,782,572	14.77
Total	32,370,326	100

SOURCE: Statistics South Africa (2020)

Table 4.2 above indicates the majority of South Africa's population to be between the ages of 20 and 39, comprising approximately 63% of the total population. The smallest age group is South Africans between the ages of 50 and 59. As the target population has been specified, discussions of the sampling design and procedures used in this study follow.

4.3.2 Sampling

As the target population has been specified, the next issues for consideration are the sampling design, sampling approach, and sample size (Barker *et al.*, 2015). These decisions should be based on the study's purpose, research questions, available resources, and limitations (Patton, 2002) and decisions are accounted for in the following sections, beginning with the sampling design.

4.3.2.1 Sampling design

In selecting the sampling design, the initial choice to be made is determining if all the units of the target population will be included in the study or if only a subsection of the target population will be included (Polonsky & Waller, 2018; Daniel, 2011). The sampling frame, identifying all units in the population (Bell *et al.*, 2014), was unavailable for this study. However, using a subsection of the target population for the sample allowed the researcher to obtain in-depth insights from a limited number of participants (Polonsky & Waller, 2018; Daniel, 2011). Therefore, for exploratory studies such as this one, including a subsection of the target population is preferred. However, when utilising only a sample of the target population, the researcher must address the issue of sampling error (Daniel, 2011).

Sampling error occurs when the sample is inconsistent with the population defined by the researcher (Polonsky & Waller, 2018; Bell *et al.*, 2014). The researcher should screen participants to ensure they are suitable to limit this potential error (Malhotra, 2010). This will assist in ensuring a homogenous

sample, which minimises sampling error (Daniel, 2011). In this study, the researcher screened participants according to their age, gender, and location to promote sample homogeneity and avoid sampling error. Limiting sampling error is important when utilising non-probability sampling, as it is likely to occur when the sample has not been selected randomly (Bell *et al.*, 2014; Polonsky & Waller, 2018). A discussion of non-probability sampling follows.

4.3.2.2 Sampling approach and procedure

In non-probability sampling, participants do not have an equal chance of being selected, unlike probability sampling (Bell *et al.*, 2014; Polonsky & Waller, 2018). A non-probability sampling approach is preferred when (1) the study is exploratory (Malhotra, 2010), (2) when conducting qualitative research, (3) when the sampling frame is unavailable, and (4) when resources are limited (Daniel, 2011). As the sampling frame was unavailable to the researcher and resources were limited, non-probability sampling was used to support the exploratory nature of this study (Malhotra, 2010). The following paragraphs discuss the specific non-probability sampling technique applied in this study, beginning with its definition.

Quota sampling is a non-probability sampling technique where the researcher pre-determines how many participants are needed to meet identified characteristics and portions of the target population (Patton, 2014; McGregor, 2017; Polonsky & Waller, 2018). This technique ensures that specific characteristics are included in the sample irrespective of the size of the population (Patton, 2014). It is a non-probability sampling technique, as the researcher ultimately determines who is included in the sample (Hauser & Hansen, 1944). In this way, quota sampling applies convenience sampling in its second stage (Polonsky & Waller, 2018).

Quota sampling is an advantageous technique as it increases the sample's representativeness (Daniel, 2011). It has been identified as the most accurate of the non-probability sampling techniques and is frequently employed in market research (Bell *et al.*, 2014). It is simple to apply (Hauser & Hansen, 1944). It can be flexible concerning size and supports qualitative research because of its flexibility (Patton, 2014). This technique is also useful when the researcher does not have access to a sampling frame and when resources are limited (Bell *et al.*, 2014). Despite these advantages, quota sampling remains a non-probability sampling technique, meaning the population's representation cannot be certain (Daniel, 2011; Shukla, 2008). It further requires the researcher to have access to recent and accurate information about the population's relevant characteristics (Daniel, 2011).

Based on the previous discussion, quota sampling was selected because it aims to accurately represent the population and proves useful in exploratory research (Daniel, 2011; Bell *et al.*, 2014). Among the previously mentioned advantages, in this study, quota sampling allowed for sample manipulation to include the target population's relevant characteristics (Polonsky & Waller, 2018). A similar study applying social exchange theory to investigate customer relationships in financial services utilised quota sampling to ensure a representative sample (see Roy, Devlin & Sekhon, 2015). Thus, applying quota sampling was beneficial to this study. An explanation follows of how this technique is typically applied.

Quota sampling is applied utilising the following steps: (1) identify the estimated composition of the target population using secondary sources; (2) select the relevant characteristics, known as quota controls, to be used; (3) determine the proportion each quota control needs to fill the sample size based on the composition of the target population; and (4) select the number of participants needed according to the proportions of each quota control using convenience sampling (Hauser & Hansen, 1944; Daniel, 2011; Bell *et al.*, 2014; Polonsky & Waller, 2018). A maximum of three quota controls ensures

manageability (Daniel, 2011). The following paragraphs explain how quota sampling was specifically applied in this study, beginning with the justification for the chosen quota controls.

After estimating the composition of the target population in Section 4.3.1, this study was concerned with the characteristics of age and gender. These are beneficial criteria to distinguish between participants (Cameron & Galloway, 2005). The inclusion of age was necessary to ensure that older individuals who grew up without the internet shared their perspectives (Sangle-Ferriere & Voyer, 2019). A similar study investigating customer relationships used age and gender as quota controls to ensure a representative sample (see Gong & Yi, 2018). Age and gender were selected as suitable quota controls. An explanation of how the proportions of each quota control were determined follows.

In quota sampling, the number of participants selected for each quota control is based on the proportions found in the target population (Polonsky & Waller, 2018; Daniel, 2011). This ensures the sample’s proportions mirror the population’s proportions, relevant to the selected quota controls (Hauser & Hansen, 1944; Daniel, 2011; Polonsky & Waller, 2018). For instance, quotas are determined to ensure the same proportion of males are in the sample by multiplying the proportion of males in the population by the determined sample size (Daniel, 2011). The percentage of the population was multiplied by the selected sample size of 20 to calculate the ratio (justified in section 4.3.2.3). This yielded the number of units to be included in the sample. The following tables indicate how these calculations were completed for each quota individually (Daniel, 2011).

Table 4.3: Ratio concerning individuals’ gender in South Africa

Gender	Percentage of population (Statistics SA, 2020)	Units in the sample (rounded to the nearest 1)
Females	51.10	10 (51.10% x 20)
Males	48.90	10 (48.90% x 20)
Total	100	20

With regard to gender, Table 4.3 above shows that for the sample to mirror the proportions of males to females in South Africa, the sample needs to include ten females and ten males.

Table 4.4: Ratio concerning individuals’ age in South Africa

Age group	Percentage of total population (Statistics SA, 2020)	Units in the sample (rounded to the nearest 1)
20-29	31.65	6 (31.65% x 20)
30-39	32.35	7 (32.25% x 20)
40-49	21.33	4 (21.33% x 20)
50-59	14.77	3 (14.77% x 20)
Total	100	20

With regard to age, Table 4.4 above shows how many participants had to be included in each age group for the sample to mirror the proportions of the identified age groups in South Africa. Participants selected for the semi-structured interviews met the quotas shown in Tables 4.3 and 4.4. The sample size used to determine these quotas is explained next.

4.3.2.3 Sample size

The sample size is based on the research problem, available resources, and the number of participants required to gather information without redundancy (Silverman, 2013; Patton, 2002; McGregor, 2017). In qualitative research, the sample size is typically smaller than in quantitative research due to the type of data collected and the time required to interpret the data (Elliot & Timulak, 2005; Polonsky & Waller, 2018). A smaller sample size is acceptable in qualitative research as its strength lies in its rich descriptions (McGregor, 2017; Hackley, 2019). A large sample size would not offer the same level of depth (Wolcott, 2009). Thus, in qualitative studies, more weight is given to the depth of information gathered than the sample size (Patton, 2002; Polonsky & Waller, 2018). Similar studies were consulted and found to be based on sample sizes of 27 (Castillo, Canhoto & Said, 2021), 23 (Sangle-Ferriere & Voyer, 2019), and 26 (Plewa *et al.*, 2015). Furthermore, it is suggested that data collection should cease in one of these situations: (1) when sufficient data has been gathered to address the research questions – data saturation has been reached, (2) when there are no more data sources available, (3) when patterns and integration in the data are achieved, or (4) when there is an “overextension”, meaning new information goes beyond what is required for the research question (Lincoln & Guba, 1985).

Subsequently, after completing 20 interviews, data collection concluded because conditions 1, 3, and 4 were satisfied. In addition, the researcher communicated the ability to conduct interviews remotely via Zoom at participants’ preferred time to reduce non-response bias. After participant’s emails were voluntarily provided to the researcher by participants themselves, confirmation emails and Google Calendar invitations, with a Zoom meeting link, were sent to prospective participants to encourage their participation and invite them to the interview (Colombo, 2000). The following section explains how data was collected from the identified sample.

4.4 DATA COLLECTION

In terms of how participants were recruited for this study, following a convenience sampling method, the researcher asked individuals within their social network to participate (Polonsky & Waller, 2018). These individuals were informed about the study’s purpose and were given the opportunity to voluntarily participate if they were South Africans between the ages of 20-59 and had internet banking (Bell *et al.*, 2014). Various participants of this study were also recruited through a LinkedIn status update, where the researcher posted a message explaining the research being conducted and inviting those who met the inclusion criteria to participate. The message briefly outlined the study’s purpose and invited interested individuals to express their willingness to participate via a direct LinkedIn message. After initial contact was made, participants voluntarily provided their emails. LinkedIn was chosen as a recruitment platform because it provided access to a range of professionals, encouraging diverse perspectives on the topic (Sangle-Ferriere & Voyer, 2019).

After contacting the identified participants, they were informed of the following: (i) the purpose of the interview; (ii) no distinguishable information would be asked; (iii) their responses would remain anonymous and confidential; (iv) the interview demanded approximately 45 minutes of their time; and (v) they could withdraw from the study at any point (Creswell & Poth, 2016; Carson *et al.*, 2001; Mariampolski, 2001). Each participant was emailed an information sheet before the interview and voluntarily provided their written consent (see Appendix 4.c). Participants were screened to ensure they were regular internet banking users to encourage exposure to chatbots used in internet banking. Both participants who had prior chatbot experience and had no prior chatbot experience were included as both experiences offer valuable insights into customer perceptions of chatbots (Sangle-Ferriere & Voyer, 2019). Interviews commenced after approval from the University of Cape Town Ethics

Committee was attained and the following reference number was issued: REC 2020/08/010. The manner in which the interviews were conducted is detailed in the following paragraphs.

All interviews were conducted online via Zoom, a widely used video communication platform (Cannivet, 2020). A previous study identifies Zoom as an effective way to conduct qualitative interviews (Archibald *et al.*, 2019). The majority of the participants expressed a preference for Zoom over face-to-face interviews, the telephone, and other video communication platforms such as Skype. A brief Zoom user guide was sent beforehand to prepare participants and assist those unfamiliar with Zoom.

It was crucial to pre-test the interview questions and recording to ensure successful interviews (Silverman, 2010; Polonsky & Waller, 2018; Hackley, 2019). In qualitative research, Guest, Bunce and Johnson (2006) suggest that a sample size of approximately five participants is often enough to achieve data saturation for pre-testing purposes. Therefore, the pre-test was conducted on a sample consisting of five South Africans who had internet banking. Semi-structured interview was employed. The pre-test assisted in refining the research questions and allowed for improvements to be made to the interview questions (Creswell & Poth, 2016; Barker *et al.*, 2015; Hackley, 2019). For instance, it revealed certain questions that were either redundant or could be better worded for increased clarity. The wording of questions was vital in soliciting relevant information (Merriam & Tisdell, 2016). After the pre-test was conducted, and the necessary revisions were made to improve the effectiveness of the questions, data collection began. A discussion of the study's sampling frame follows.

The sampling frame extended to Cape Town, Durban, and Johannesburg, South Africa. These major cities account for the three provinces with the largest share of the population (Statistics South Africa, 2020). Interviews were conducted between 10 December 2020 and 15 January 2021. The interviews ranged from 22 to 68 minutes in length, depending on the richness of the insights the participants provided. The average interview length was 39 minutes, and the total time taken for all 20 interviews was 781 minutes. Relevant literature was consulted to identify best practices to ensure data was collected effectively. The following suggestions were identified by Gavin (2008) and applied by the researcher: (1) the researcher should collect data themselves; (2) data should be collected consistently across all participants; and (3) the researcher determines the credibility of the findings based on their interpretation. Considering these points, the interviews were conducted by the researcher, following the same procedure. This procedure is explained in the following paragraphs.

All interviews began with introductions to ensure the participants were comfortable and the interviews were consistent. This promoted the collection of enhanced data (Hackley, 2019; Gavin, 2008; Carson *et al.*, 2001). The introduction phase included reiterating what was said in the consent form and putting the participants at ease. The interview guide (see Appendix 4.b), including key areas to be addressed and possible probing questions, was used in all the interviews (Flick, 2007; Plewa *et al.*, 2015; Carson *et al.*, 2001; Polonsky & Waller, 2018). As it is effective to ask for everyday and descriptive information at the beginning of an interview (Merriam & Tisdell, 2016), all interviews opened with the general question: "Can you talk me through your average day?" Following the participant's response to this first question, the researcher probed for more information about their interaction with the internet and then specifically internet banking using "what", "why", "when" and "how" questions to dig deeper (Carson *et al.*, 2001; Flick, 2007). Using open-ended questions allowed participants to reflect on their experiences with internet banking, enhancing the findings' integrity (Mollenkopf *et al.*, 2011; Plewa *et al.*, 2015).

As data collection should be structured to address the research questions (Silverman, 2010), the interview guide was developed based on the research questions and objectives (Carson *et al.*, 2001). In

light of the research questions presented in Section 4.1, the interview questions probed (i) participants' expectations of service experiences provided by their banks, (ii) participants' perceptions of their banks and chatbots in internet banking, (iii) participants' motives and concerns about dealing with a chatbot in internet banking, (iv) scenarios in which they would prefer a human service agent versus a chatbot, and (v) how banks can use chatbots to better meet customers' needs and expectations. An explanation of what the participants were asked to solicit this information follows.

The participants who had no previous chatbot experience were asked what would encourage them to engage with a chatbot. Those who had previous experience with a chatbot were asked to compare their exchanges with chatbots to their exchanges with human service employees via telephone, in-person, or written text. As the semi-structured interviews were conducted during the COVID-19 pandemic, participants were asked how banks offering chatbot services could better meet their needs during that time. Participants were also presented with ideal scenario questions, requiring them to describe optimal situations related to the topic. These types of questions elicited both positive and negative information about the topic (Merriam & Tisdell, 2016). Due to qualitative research's flexibility, the researcher was able to ask additional questions based on specific information provided by the participants (Elliott & Timulak, 2005; Polonsky & Waller, 2018). When concluding each interview, the researcher asked the participants for their final thoughts and thanked them for their participation (Gavin, 2008; Carson *et al.*, 2001; Hackley, 2019). All interviews were recorded and transcribed to facilitate analysis (Plewa *et al.*, 2015; Carson *et al.*, 2001). Recording the interviews prevented misinformation and omissions (Creswell & Poth, 2016). Recordings were generated through Zoom, which allowed for interviews to be securely recorded without third-party software access. This facilitated data management and security (Archibald *et al.*, 2019). The transcripts totalled 178 pages. The next section describes the data analysis.

4.5 INTERPRETATION OF THE FINDINGS

The preceding sections detailed the collection of data. This section explains how data was analysed. Data analysis generally involves arranging and preparing the data, identifying themes through the use of codes, and finally reporting the data (Creswell & Poth, 2016). As data analysis methods vary (Creswell & Poth, 2016), identifying the method best suited to this study was crucial to attaining the preferred results (Starks & Brown Trinidad, 2007). This section explains the selection and application of phenomenological analysis, the chosen method, beginning with its description.

4.5.1 Phenomenological analysis

At its core, phenomenology attempts to make sense of individuals' lived experiences (Lichtman, 2013; Eberle, 2014; Sokolowski, 2000; Stewart & Mickunas, 1990; Hycner, 1985). Phenomenological analysis focuses on participants' experiences and aims to lend insight into the meaning of experiences through dense descriptions (Starks & Brown Trinidad, 2007; Daymon & Holloway, 2010; Holloway & Todres, 2003). This type of analysis aims to address the "what" and "how" within participants' accounts of their experiences (Willig, 2013). Ultimately, phenomenological analysis aims to locate and reveal the essence and context of participants' experiences (Lichtman, 2013; Daymon & Holloway, 2010; Eberle, 2014; Starks & Brown Trinidad, 2007; Holloway & Todres, 2003).

Applying a phenomenological analysis provided the following advantages. It enabled a deeper understanding of the phenomenon by emphasising experiences' context and by discovering unlikely meanings and assumptions (Starks & Brown Trinidad, 2007). Phenomenological analysis is further identified as one of the most detailed and explicit data analysis methods (Creswell & Poth, 2016). However, this method presents certain issues when analysing interviews (Hycner, 1985). This type of

analysis relies heavily on participants' descriptions of their experiences which they may struggle to articulate fully, therefore limiting the depth of analysis (Daymon & Holloway, 2010; Hycner, 1985). The result's generalisability is limited due to a small sample and the results being participant-specific. Despite criticism about the lack of generalisability, analysing an individual's distinctive experience remains highly informative of human nature (Hycner, 1985). Due to the subjective nature of the phenomenological analysis, the objectivity of findings is contested (Eberle, 2014; Hycner, 1985; Daymon & Holloway, 2010). Thus, the researcher paid attention to any preconceptions that could impact the results by checking with the participants that the findings reflected their perspectives (Daymon & Holloway, 2010; Eberle, 2014). This is expanded on in Section 4.6.

Based on this discussion and in light of the mentioned advantages, phenomenological analysis was identified as most conducive to obtaining the desired results for the following reasons. Beneficially, this method of data analysis brought out the deeper, intended meaning of participants' experiences by focusing on the essential aspects. It did so by delving into the data and not settling for superficial meanings (Lichtman, 2013; Daymon & Holloway, 2010; Eberle, 2014; Starks & Brown Trinidad, 2007; Holloway & Todres, 2003). Thus, phenomenological analysis was utilised to fully interpret participants' experiences with chatbots in financial services. Similar studies successfully adopted a phenomenological approach to data analysis (see Tynan *et al.*, 2014; Meyer *et al.*, 2020).

Phenomenological analysis was evaluated against alternative data analysis methods and was preferred over thematic analysis, whose process is not as clearly defined in the literature (Nowell, Norris, White & Moules, 2017). It was also favoured over grounded theory, which requires constant comparison, making it a particularly exhaustive, impractical data analysis method (Bell *et al.*, 2014). Ethnography interprets social settings from a cultural perspective by relying on extensive fieldwork (Holloway & Todres, 2003; Flick, 2013). While software programmes, such as Atlas.ti, have become increasingly popular for qualitative analysis (Gupta, 2024), qualitative research demands a depth of understanding that may be compromised by relying on software (Merriam and Tisdell, 2016). As such, to allow for a more in-depth understanding of chatbots in financial services, qualitative analysis software was not used to analyse the data collected. This decision was also influenced by resource constraints, including the significant financial investment required for software licenses and the necessary training for effective usage of Atlas.ti (Polonsky & Waller, 2018). By opting for a manual approach, facilitated by phenomenological analysis, the researcher aimed to engage more deeply with the data, allowing for greater flexibility and insight during the analysis process. Therefore, in comparison to other data analysis methods, phenomenological analysis was identified as most suitable for this study's objectives. The application of the analysis is explained in the following section.

4.5.2 Application of phenomenological analysis

Although approaches to phenomenological analysis vary, particular features employed are common in the literature (Moustakas, 1994; van Manen, 2016; Daymon & Holloway, 2010; Roulston, 2014; Hycner, 1985). Scholars emphasise (1) setting the researcher's assumptions and previous knowledge aside – known as bracketing to reduce bias and enhance the integrity of the analysis; (2) reflecting on the data as a whole and in fragments to generate meanings; (3) condensing data into units of meaning according to a participant's experience; and (4) generating findings by writing and re-writing (Gearing, 2004; Moustakas, 1994; van Manen, 2016; Daymon & Holloway, 2010; Roulston, 2014; Hycner, 1985; Starks & Brown Trinidad, 2007). Incorporating these key features, the applied process of analysis is outlined in the following paragraph.

The following process was followed to reveal the essence of the phenomenon being studied (Daymon & Holloway, 2010; Hycner 1985). Drawing from the identified themes, the researcher discussed both “what” individual participants’ experiences were regarding the phenomenon and “how” they experienced it (Creswell, 2013; Willig, 2013). Specifically, the phenomenon under investigation was customer resistance to chatbots in internet banking. The analysis began with the transcription of interviews (Hycner, 1985). The interviews were transcribed individually shortly after being conducted to ensure accurate data (Silverman, 2010; Hackley, 2019). The researcher transcribed the interviews to reinforce familiarity with the data (Merriam & Tisdell, 2016; Hackley, 2019). The transcriptions were revisited constantly throughout the study to ensure that participants’ views led to the interpretation (Willig, 2014; Hycner, 1985). The transcripts are available from the researcher upon request.

When reading the transcripts, the researcher bracketed their assumptions as much as possible to maintain an open mind, so as to reduce bias (Daymon & Holloway, 2010; Roulston, 2014; Hycner, 1985; Starks & Brown Trinidad, 2007). Transcripts were read several times to gain a sense of each interview as a whole. Thereafter, the researcher dissected the data by identifying phrases and sentences relevant to the research questions (Daymon & Holloway, 2010; Hycner, 1985). Attention was paid to statements’ frequency and context (Hycner, 1985). The researcher proceeded to examine each of these statements to determine their essential meaning from the participants’ perspectives (Daymon & Holloway, 2010; Hycner, 1985). In doing so, hidden meanings were uncovered (Daymon & Holloway, 2010). After applying these steps to each interview, the researcher arranged the attached meanings into themes. Thus, data was reduced to a limited and feasible set of themes that captured the essence of the phenomenon (Creswell & Poth, 2016; Hycner, 1985). The criteria followed for quality assurance follow.

4.6 QUALITY CRITERIA

Ensuring the quality of findings is a challenge in qualitative research due to its limited accuracy (Flick, 2007; McGregor, 2017). This section presents relevant strategies employed to ensure the quality of this study’s findings, beginning with the following validation strategies. Validity in qualitative research pertains to the accuracy, trustworthiness, credibility, and authenticity of the findings (Creswell, 2017). To promote valid findings, the researcher first identified personal biases, assumptions, and past experiences. Once these had been identified, their impact on this study was reduced (Creswell & Poth, 2016; Merriam & Tisdell, 2016). As reliability in qualitative research is concerned with the consistency of findings with the data collected (Lincoln & Guba, 1985; Merriam & Tisdell, 2016), interviews were recorded and transcribed verbatim. (Creswell & Poth, 2016). Reliability was further established by acknowledging existing theories, such as social exchange theory, and by explaining the research process in detail (De Ruyter & Scholl, 1998).

Social desirability bias was also addressed in this study. This type of bias occurs when individuals portray themselves and their social circumstances in a manner that conforms to social norms, even if it does not truly represent their situation. In research, this bias signifies a disconnect between how participants perceive reality and how they present it to researchers (Bergen & Labonté, 2020). Social desirability bias is common in research when studying topics that participants perceive as sensitive or controversial (Grimm, 2010). The researcher in this study utilised various strategies to reduce social desirability bias. These included establishing a rapport with the participants at the beginning of the interviews. The researcher achieved this with humour and asking about their day to make them feel relaxed and at ease. The researcher also provided participants with clear explanations about the study, including its purpose and how the data would be used, and assured confidentiality and anonymity.

Furthermore, the researcher reassured participants that their opinions were valued and encouraged them to express themselves openly when they appeared to be apprehensive (Bergen & Labonté, 2020).

Lastly, Perner and Skjølsvik's (2019) measures to conduct trustworthy research, depicted in Appendix 4.a, were followed. As shown in the table (see Appendix 4.a), to promote credibility, 20 interviews were conducted across different age groups. Member checking was used, in which participants were provided with summaries of the findings and were asked if these reasonably reflected their accounts (Lincoln & Guba, 1985; Merriam & Tisdell, 2016). Confirming findings with participants was a critical step in ensuring a credible study (Lincoln & Guba, 1985). To promote transferability, participants' descriptions were rich in detail and context, enabling a deeper understanding of the relevance of concepts across participants (Perner & Skjølsvik, 2019). To enhance dependability, participants reflected on events over the past three to five years and provided in-depth descriptions. Furthermore, to enhance confirmability and integrity within the research methodology, open-ended questions were employed during interviews to mitigate the potential influence of priming or leading effects. Concurrently, stringent measures were implemented to assure the confidentiality and anonymity of each participant. As enhancing this study's validity and reliability also depended on conducting the research ethically (Merriam & Tisdell, 2016), the next section discusses how ethical standards were met.

4.7 ETHICAL CONSIDERATIONS

The researcher must address all ethical issues for a qualitative study to be regarded as credible (Polonsky & Waller, 2018; Merriam & Tisdell, 2016). The key areas of ethical concern include harm to participants, lack of informed consent, deception, and invasion of privacy (Bell *et al.*, 2014). This research was approved by the Commerce Faculty Ethics in Research Committee. This study addressed the relevant ethical issues in the following manner. When conducting this study, the researcher applied the following suggestions based on the principles of ethical research: (i) participants were told that they could withdraw at any time; (ii) participants were not given any incorrect information about the study; (iii) the researcher respected the participants' privacy and assured them their information would remain confidential; (iv) no data was omitted or used fraudulently; and (v) the researcher respected participants' well-being (Flick, 2007; Merriam & Tisdell, 2016). To ensure informed consent, an information sheet and consent form (see Appendix 4.c) were signed by each participant before their interview (Carson *et al.*, 2001; Mariampolski, 2001; Flick, 2007; Polonsky & Waller, 2018).

A key ethical issue was ensuring that participants were not exposed to any harm, risk, or burden by participating in the study (Mariampolski, 2001; Bell *et al.*, 2014; Polonsky & Waller, 2018). Due to the COVID-19 pandemic occurring within the same time frame in which this study was conducted, consumers were particularly vulnerable and online experiences were deemed a safe option to reduce the risk of infection (Scott *et al.*, 2020; Dodds & Hess, 2020; Libai *et al.*, 2020). Thus, to minimise the possibility of harm to both the researcher and participants (Bell *et al.*, 2014), interviews were conducted online. The next section concludes this chapter.

4.8 CONCLUSION

In this exploratory study utilising qualitative research, the methodology aimed to gain in-depth insights into chatbots' implications in financial services. Semi-structured interviews, with both broad pre-determined and probing questions, were conducted online to ensure participant comfort and adhere to social distancing policies (McGregor, 2017; Gavin, 2008; Dodds & Hess, 2020; Libai *et al.*, 2020). The target population consisted of internet banking users in South Africa, and quota sampling, incorporating age and gender quotas, followed by convenience sampling, was employed to select 20 participants, justified by past literature (Castillo *et al.*, 2021; Sangle-Ferriere & Voyer, 2019; Plewa *et al.*, 2015). Data collection began after obtaining approval from the University of Cape Town ethics committee and revising interview questions after a pre-test (Silverman, 2010; Creswell & Poth, 2016). The interpretation of findings utilised phenomenological analysis, uncovering the deeper meaning of participants' experiences (Lichtman, 2013; Daymon & Holloway, 2010; Eberle, 2014; Starks & Brown Trinidad, 2007; Holloway & Todres, 2003). The methodology adhered to quality criteria and ethical considerations, describing how the researcher collected and interpreted findings. The next chapter presents the findings (see Sections 4.4 and 4.5).

CHAPTER 5: RESULTS

5.1 INTRODUCTION

Semi-structured interviews were employed to gain insights into the implications of chatbots on customer relationships and how customer resistance to chatbots can be overcome so as to improve these relationships in financial services. Quota sampling, derived from age and gender, was utilised to draw conclusions about internet banking users in South Africa. This chapter discusses the findings that emerged after processing data gathered from the semi-structured interviews. The chapter begins by discussing the fieldwork and sample size, followed by a summary of the analysis. The findings are discussed in alignment with the research questions. A concluding section brings this chapter to a close.

5.2 FIELD WORK AND SAMPLE SIZE

Before presenting the study's findings, this section discusses the fieldwork and sample size for the semi-structured interviews. Approval to conduct these interviews was obtained from the University of Cape Town (UCT) Commerce Faculty Ethics in Research Committee (see Appendix 5.a). The researcher conducted the semi-structured interviews from December 10 2020 to January 15 2021.

A total of 20 participants were interviewed. This was in line with similar studies, namely Sangle-Ferriere & Voyer's (2019) study, in which 23 interviews were conducted, Castillo *et al.*'s (2021) study, which included 27 participants, and Plewa *et al.*'s (2015) study, which had 26 interviewees. In this report, the participants in the semi-structured interviews are referred to as P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P18, P19, and P20 (see Appendix 5.b). Their characteristics, such as age, gender, industry, and years of experience, are provided in Appendix 5.b.

Prior to the semi-structured interviews, a pre-test was conducted to test the recording of the interviews on Zoom and the efficiency of the interview questions. Five participants were selected for the pre-test based on convenience and were presented with the questions listed in the interview guide (see Appendix 4.b). The pre-test revealed redundant and ambiguous questions, which were addressed (Merriam & Tisdell, 2016) before data collection began. The final questions used in the semi-structured interviews are provided in Appendix 4.b. Although the same interview guide was used for all participants (see Appendix 4.b), semi-structured interviews' flexibility allowed for additional questions relating to participants' unique experiences (Elliott & Timulak, 2005).

In line with this study's sampling approach and procedure explained in Chapter 4 (see Section 4.3.2.2), participants were selected based on their age, gender, and location. Due to the study's context, when approaching potential participants, it was confirmed that they were South African and had internet banking. Participants were informed about the purpose of the interview and assured that no distinguishable information would be asked, their responses would be anonymous and confidential, they could withdraw at any time, and the interview would be approximately 45 minutes (see Appendix 4.b). No incentives were offered to the participants. After volunteering to participate, their written consent was obtained (see Appendix 4.c). All interviews were conducted online via Zoom and the same procedure specified in Chapter 4 (see Section 4.4) was followed for each interview.

Twenty participants were interviewed. The quota (see Section 4.3.2.2) was met for age (31.65% between 20 and 29; 32.25% between 30 and 39; 21.33% between 40 and 49; and 14.77% between 50 and 59 years old), as well as for gender (50% male and 50% female). To better explain the research sample, Table 5.1 below indicates the number of participants belonging to each age and gender group, according to the quotas utilised for the quota sampling method (see Section 4.3.2.2).

Table 5.1: Number of participants belonging to each age and gender group

Group	Age	Number	Males	Females	Target
A	20-29	6	3	3	6
B	30-39	7	4	3	7
C	40-49	4	2	2	4
D	50-59	3	1	2	3
Total		20	10	10	20

Table 5.1 above indicates the number of semi-structured interview participants belonging to each age and gender group and shows the “target” specified in the quota sampling method. As indicated, there were six semi-structured interview participants from Group A, seven from Group B, four from Group C, and three from Group D. The determined sample size of 20 participants explained in Chapter 4 (see Section 4.3.2.3) was reached.

This study conducted semi-structured interviews with internet banking customers to determine how financial service providers can overcome customer resistance to chatbots. The aim was to investigate existing customer relationships and better understand the implications of using chatbots compared to human service employees on these relationships. The research problem addressed in this dissertation by asking: ***How can financial service providers overcome customer resistance to chatbots to improve their customer relationships?*** To address this issue, the remainder of this chapter delves into the study’s findings, beginning with a summary of the analysis.

5.3 SUMMARY OF ANALYSIS

Using phenomenological analysis, as discussed in Chapter 4 (see Section 4.5), the researcher gained insight into participants’ experiences with internet banking and chatbots. The phenomenon under investigation was customer resistance to chatbots in internet banking. The analysis revealed three global themes that speak to what customers perceived as benefits and costs of chatbot interactions, what their concerns are about chatbots, and how they would prefer their experiences with chatbots to be. Together, these themes assisted in understanding how financial services can mitigate customer resistance to chatbots, through a better understanding of how to use chatbots more effectively. These themes are the following: (1) chatbots versus human service employees, (2) relational drawbacks of chatbots, and (3) customer preferences for chatbots. Appendix 5.c details the codes and themes that emerged from the analysis of the semi-structured interview data and offers supporting quotations to justify the themes. The remainder of this chapter expands on these themes. The first global theme, chatbots versus human service employees, relates to Research Question 1. The findings of this research question follow.

5.4 CHATBOTS VERSUS HUMAN SERVICE EMPLOYEES

This section presents the findings related to the first research question: *What are the implications of financial service providers using chatbots versus human service employees on customer relationships?* The researcher applied social exchange theory, discussed in Chapter 2 (see Section 2.4.5), to assist in answering the research questions. According to social exchange theory, consumers engage in exchange-based relationships to maximise benefits and minimise costs (Molm, 1997; Blau, 1964); consumers weigh their perceived benefits and costs of engaging in an exchange (Hollebeek, 2011). This study applied social exchange theory by comparing the perceived benefits and costs of interacting

with chatbots versus human service employees. For example, in terms of rewards, consumers are motivated to engage with chatbots for added convenience and immediate assistance, while the identified perceived costs associated with chatbot interactions include increased risk and not feeling understood, for example. Therefore, by investigating participants' perceived benefits and perceived costs of chatbots relative to human service employees, the researcher was able to gain insight into the implications of using chatbots versus human service employees in service encounters. This resulted in the first global theme of this study: chatbots versus human service employees. The perceived benefits and costs emerged as codes and were organised into two subordinate themes. These themes are presented in this section, beginning with the perceived benefits of chatbots versus human service employees.

5.4.1 Perceived Benefits of Chatbots versus Human Service Employees

Four perceived benefits emerged from the data as codes. These perceived benefits can also be referred to as the relative advantages of chatbots described by participants. Relative advantages are defined as "The degree to which service robots are perceived as being better than human service staff" (Xiao & Kumar, 2021:16). They are explained in turn, beginning with immediate assistance.

5.4.1.1 Immediate assistance

Six participants (P1, P3, P7, P13, P17, and P18) found chatbots to be helpful due to their ability to provide immediate assistance through instant responses, saying "So, to have a chatbot that gives an instant response would be nice" (P1), "[A chatbot] would be helpful because then I don't have to wait on a person. Like I know that I can ask a question immediately and I'm gonna get a response" (P3), "If the chatbot can be able to help me with those basic queries, then that will be amazing because now I'm not just waiting for the agent" (P7), and "Unlike a consultant, a chatbot is going to get back to me immediately" (P17). When asked if she thinks chatbots are important in banking, P13 said: "I think they're here to stay in any service because I can't imagine if I noticed something that was wrong at 10 o'clock at night with my bank. I would want to be able to immediately escalate that and to have that reassurance immediately is far better than needing to wait until morning" (P13). A participant from Group D (age 50-59) who demonstrated less familiarity with chatbots said: "As much as I'm not fully in favour of [chatbots] because I'm still old school in that way, I have to embrace this new technology that may help to resolve issues quickly. Instead of me being on hold for 15/20 minutes, I can get an instant answer." (P18). These statements speak to the significance of this perceived benefit. Thus, receiving immediate assistance, particularly when encountering internet banking issues, is valued by customers.

5.4.1.2 Added convenience

The benefit of convenience was widely mentioned. Three participants (P7, P18, and P19) perceived chatbots as more convenient than human service employees because they are available at all times, saying "At least in the middle of the night or during the day when I'm failing to do something, I can use a chatbot" (P7), "Chatbots are 24/7, right? So, I think that's the big plus" (P18), and "On a Sunday for instance if something like that happens, [a chatbot] would be convenient because you can't go into the bank." (P19). Six participants (P3, P4, P5, P7, P10, and P16) perceived chatbots to be more convenient than human service employees due to saving them time, saying "I want a robot. I want to just get to the point of asking the question and getting my answer. It's quicker" (P3), "I think it just takes a lot longer to communicate with a normal person directly" (P4), "If I was on a phone call, I would wait for an hour to speak with the agent. So, for me, with the chatbot, I think I really appreciate it because it makes things quite quick" (P7), "The bots are quicker to respond" (P10), and "The chatbot is quicker. I find emails

quite long and time-consuming" (P16). In contrast, P20 found it more time-consuming, saying *"I've now got to think and say, okay, how do I formalise my query? I have to construct sentences, which takes more time"*.

Although not directly referring to chatbots, 15 participants (P1, P2, P3, P4, P7, P8, P9, P10, P11, P12, P13, P14, P17, P18, and P19) expressed dislike for the inconvenience of going to their banks. For example, P8 said *"It's a bit inconvenient for me"* and P10 said, *"It's always a hassle"*. Ten of these participants (P2, P3, P4, P7, P8, P9, P10, P11, P12, and P14) expressed dissatisfaction with having to wait in queues. For example, P2 said *"It's the inconvenience of that 15/20-minute wait to possibly see somebody."* P5 expressed dissatisfaction with long waiting times when wanting to speak to a human service employee via his mobile banking application saying, *"I have had times where I was probably like around 100th/200th in the queue."*

Specifically relating to chatbots, four participants (P9, P10, P12, and P18) perceived chatbots as more convenient than phone calls with human service employees. P18 specifically notes the *"ease of [chatbots]"* and explains that *"You don't need to phone someone and wait for that person to answer or go through all that authentication."* Similarly, P9 said *"[A chatbot] saves you the hassle of calling the call centre"*, and P10 said, *"A chatbot is like a nicer version of me sitting on the phone and pressing one for this, press two for this..."* Finally, P12 said, *"It's too much effort to phone somebody and ask them a simple question"*. In light of the foregoing responses, it can be stated that customers perceive chatbots as beneficial due to their constant availability and their ability to reduce time and effort costs spent in-branch, on emails, or phone calls with human service employees.

5.4.1.3 Avoidance of human interaction

Eight participants (P1, P2, P3, P5, P9, P10, P11, and P12) expressed a desire to be able to do more online and therefore have less contact with their bank, saying *"Ideally, I wouldn't have to go into a bank, so I don't have to queue or speak to a teller"* (P2), *"It's annoying to me that there's some things you still have to go in for ... I don't want to interact with my bank any more than I need to, right? I prefer to just do everything on the app"* (P10), *"Whatever I can do online, I try to do online"* (P11). When asked to describe the ideal service from his bank, P9 said *"The less I see the bank, the better"*. Similarly, P12 prefers limited human interaction, saying *"The more advanced internet banking has become, the more I don't want to go into the branch. If I can find my way to an answer quickly, I'll take [a chatbot] over engaging with a person."* When asked about his relationship with his bank, P5 expressed relationship satisfaction due to less human interaction, saying *"I guess the key part is that because I use the app so frequently, it cuts out the need for human interaction, so my relationship [with my bank] is positive because of that."* P1 and P3 expressed the desire to avoid contact with human service employees entirely, saying *"I don't have to deal with talking to anyone. There's no miscommunication. I know exactly what I have to do"* (P1) and *"It's not that I don't wanna see people, but I don't really care for it"* (P3). Both P1 and P2 are in Group A (ages 20-29).

In contrast, human interaction, specifically face-to-face contact, remained important to P18 and P19, who are both from Group D (ages 50-59), with P19 saying *"I'm old school. I want to go in, see somebody in front me, chat one and one"* and P20 saying *"I like talking to someone face-to-face rather than on the phone because that's the way I feel you develop a relationship."* Therefore, age is a factor affecting the extent to which customers wish to interact online versus offline and, therefore, may affect their willingness to engage with chatbots.

The benefit of chatbots in reducing the need for human interaction is particularly important due to the COVID-19 pandemic, with participants saying *“It’s like having your bank teller at home”* (P1), *“Even with corona, I don’t want to catch diseases or something. I would appreciate no human contact right now”* (P3), *“It’s easier just to do it at home and not to deal with someone because everyone’s so isolated with distance”* (P6), and *“... especially during this time of COVID, where we have to minimise a lot of human interaction so [chatbots] will definitely help”* (P11). When asked if chatbots could be helpful during the COVID-19 pandemic, P7 said: *“Going to the bank is not great, and then we’re all panicking and we’re scared. Like, it is kind of scary. Just having to chat on the live chat is a huge deal.”* Therefore, the use of chatbots could provide customers with psychological benefits by reducing anxiety surrounding human contact.

5.4.1.4 Avoidance of negative attitude

Numerous participants described unpleasant encounters with human service employees. P6 described employees as getting *“quite personal”* and *“pushy”* over the phone. P10 expressed a desire to leave his bank due to unfriendly customer service, saying another bank was *“friendlier”* and more *“hospitable”* towards him. P1 notes the negative *“attitude”* sometimes encountered in human service employees and says that *“Dealing with human emotions especially over the phone with someone you don’t know, and you don’t know what they’re feeling or what their headspace is, is just a turnoff.”* Similarly, P9 expressed a preference for chatbots due to not having to deal with *“unfriendly”* human service employees and explained that *“[With] human employees, sometimes there’s a lot of emotions, you may find them stressed. They might have been ticked off by the previous customer or they’re just having a bad day. So, with a machine, they’re able to close off all those things and it’s mostly professional.”*

Two participants in Group A (P3, P4) specifically mentioned experiences of feeling disrespected by human service employees due to being younger, saying *“[The human service employees] were rude to me, it was almost as if they were belittling me for my age. I was like I’m so over this bank.”* (P3), and *“I always kind of felt a little bit anxious because I’m young and I felt like the way that some of the staff would talk to me or treat me was a little bit condescending. I certainly had a lot of experiences where I felt like this person is not respecting me as a customer.”* (P4). Significantly, P3’s feelings of being disrespected led to her feeling negative about her bank, indicating such treatment can have adverse implications for customer relationships. The second theme, perceived costs of chatbots versus human service employees, follows.

5.4.2 Perceived Costs of Chatbots versus Human Service Employees

Five perceived costs emerged from the data as codes. They are explained in turn, beginning with a perceived lack of competence.

5.4.2.1 Perceived lack of competence

When compared to human service employees, ten participants (P1, P2, P6, P7, P9, P10, P11, P12, P14, and P16) viewed chatbots as limited in their ability to assist and, therefore, less helpful than human service employees, saying *“I’d like to speak to an actual person because you can’t exactly word it in such a way that AI can actually help you with the entire solution to solve the problem”* (P1), *“[Chatbots] are not going to give me the detailed answer that I want”* (P2), *“[A chatbot] has its limits”*, (P7), *“I don’t expect [chatbots] to resolve technical stuff ... I don’t think they can do many things”* (P9), *“The functionality seems quite limited at the moment, from the bots that I’ve used.”* (P10), and *“Let’s say you’ve got a suspicious transaction on your account; a bot can’t help you with that so I don’t know how*

useful it can be in an internet banking scenario" (P14). However, P4 and P5, who had heightened knowledge of AI, showed more confidence in chatbots' abilities, saying *"Because [the chatbot] is an AI, it's had experience where other customers have had the same issue and so there's a high probability that [the issue] will be resolved"* (P4) and *"If it's run by AI algorithms, it's probably going to get smarter. It could be smarter than the employee and it might even be able to identify the cause of the issue faster"* (P5). This implies that increased knowledge of AI and chatbots could mitigate chatbots' perceived lack of competence.

5.4.2.2 Not feeling understood

Four participants (P8, P10, P15, and P16) expressed not feeling as understood by chatbots as by human service employees, saying *"I just don't see the need for [a chatbot]. I'd rather speak to a human so they can understand my frustration with their company or the issue that I'm having"* (P8), *"At least it's possible [that a human service employee] could understand me but the bot is never going to understand me"* (P10), *"I needed to speak to a person that was listening to me and you don't feel that experience of being listened to by a bot"* (P15), and *"I don't know if I would feel that [the chatbot] gets me ..."* (P16). The negative implication of not feeling understood is that it can cause frustration for customers, with P16 saying *"I feel [chatbots] don't get the gist of what your problem is and it's difficult because you're saying the same thing over and over and they keep asking you questions. So, I think in a banking world, I'd find it frustrating. I'd like to be able to speak to someone and know that they understand what I'm asking and we're on the same page"* (P16). P10 explains that he prefers a human service employee when in a "crisis", saying *"I want to know that the person understands what I'm saying."* Thus, feeling understood is particularly important to customers when dealing with pressing issues.

5.4.2.3 Lack of human emotion

Five participants (P1, P7, P10, P16, and P18) described chatbots as lacking emotion compared to human service employees, saying *"A phone call [with a human service employee] is very different because you get to hear emotion"* (P1), *"[A chatbot is] quite quick but it has no emotion. With a person, there's an emotion in the text but with a chatbot, it's set to say certain things. When you're speaking with a person, they can relate to you on a human level"* (P7) and, *"There's a potential for [human service employees] to read your emotion, whereas a bot's never going to do that"* (P10). When asked what concerns them about chatbots, P16 and P18 noted chatbots' lack of emotion to be concerning, saying *"[Chatbots] are so devoid of any emotion"* (P16) and *"[Their] inhuman nature, the coldness ... it's that personal touch [that is missing]"* (P18). However, P3 and P9 perceived chatbots' lack of emotion as beneficial, saying *"I do feel the robot would be better at solving your problem only because it won't be emotional"* (P3) and *"I prefer the machine. They have less emotions compared to humans"* (P9).

Chatbots' lack of emotion is specifically a disadvantage when dealing with pressing issues, as P10 explains: *"There's a hope that a human being will hear that you're in a panicked state and they'll try and reassure. So, I guess if you were in a heightened state of panic or anxiety, a human being might be an advantage there over a bot"* (P10). Similarly, P1 expressed a desire for reassurance when encountering issues, saying *"If it's a serious problem, then yes, I'd like to know that somebody's doing something about it with a sense of urgency behind their tone"* (P1). Thus, customers may feel dissatisfied during service encounters with chatbots versus human service employees due to not relating to them on an emotional level.

5.4.2.4 Decreased certainty

Six participants (P6, P13, P14, P15, P17, and P19) conveyed uncertainty when interacting with chatbots versus human service employees, saying *“With technology, I never really know if I'm actually being dealt with or not”* (P6), *“I find talking to chatbots, kind of immediately frustrating, whereas when talking to people, I feel like I know how to do that”* (P13), and *“There's a [sense of] reassurance in talking to a person and knowing that a human has dealt with my query”* (P17). Thus, customers feel less certainty when interacting with chatbots versus human service employees. Specifically, three participants (P14, P15, and P19) expressed dissatisfaction with having no certainty about whom they are dealing with, saying *“You don't know exactly who you're speaking to [when talking to a chatbot]”* (P19), *“When you're speaking to somebody on the phone, you ask who I am speaking to, you get their name. How are you going to get the chatbot's name and then write a complaint to the bank?”* (P15), and *“Now with a bot, it tells you yes, it's done and then nothing happens. How are you going to complain? There's no paper trail”* (P14). Therefore, when chatbots are used, customers may feel uncertain if their issue was dealt with and be dissatisfied with not being able to follow up after a service encounter.

5.4.2.5 Increased perceived risk

Ten participants (P1, P3, P6, P8, P11, P12, P13, P14, P15, and P17) perceived increased risk when dealing with chatbots, saying *“I'm just very sceptical of using chatbots because it just doesn't look like a very safe tool to use”* (P6) and *“If I give a card number to a chatbot, that card number is getting stored into a database so it could be a security risk”* (P8). P14 indicated resistance to chatbots due to perceived increased risk and explained: *“Security [is what concerns me] and the fact that they can go and analyse my spend analysis, which banks already do in any event. But when it comes to anything more than that, I wouldn't use a chatbot”* (P14). Conversely, P2 and P16 did not perceive chatbots as heightening risk, saying *“I want it to rather be a chatbot and not an employee, from a security perspective”* (P2) and *“I've got no concerns about security breaches or anything like that, so I don't see it as a greater risk to engage with a chatbot”* (P16).

Of the ten participants who did perceive increased risk, eight (P1, P3, P4, P8, P11, P12, P13, and P17) related this to privacy concerns. Privacy concerns are defined as “individuals' beliefs about the risks and potential negative consequences associated with the collection and sharing of personal information” (Rajaobelina, Prom Tep, Arcand & Ricard, 2021: 2342). When asked what concerns them about chatbots, participants provided the following responses: *“The chatbot stores the conversation so that it can be distributed amongst people that have access to the database”* (P8); *“I never want to give a chatbot like an ID number”* (P12); *“When the bank needs to confirm that it's you, I would be wary about giving that information to a chatbot because it would be, I think, a more easily corruptible piece of tech ... so, the security of my data, that would be a concern”* (P13); and *“Are you going to trust [the chatbot] with your code? Like we're living in a world of hackers and whatever”* (P15). Thus, this study found privacy concerns and perceptions of risk to be related. In support of this finding, Rajaobelina *et al.* (2021) investigated chatbots in a car insurance context and found perceptions of risk and privacy concerns to be related.

Three participants' (P1, P3, and P11) privacy concerns resulted from a lack of knowledge about chatbots, saying *“I don't think I'll divulge any personal information [to the chatbot]. I don't know where it lands up or how it works”* (P1), *“I wouldn't want to give out my information [to the chatbot]. I don't know where that information is going. If I'm going to be giving out my ID, they can steal my identity”* (P3), *“Maybe [the chatbot] would require your personal information and I'm really not sure who I'm talking to, so I don't know if I really trust it”* (P11). This implies that educating customers about chatbots may

reduce their perceptions of increased risk. The next section presents the findings related to Research Question 1.

5.5 RELATIONAL DRAWBACKS OF CHATBOTS

This section presents further findings related to the first research question of this study: *What are the implications of financial service providers using chatbots versus human service employees on customer relationships?* After applying social exchange theory when analysing the data gathered from the semi-structured interviews, potential costs of chatbot service encounters that were relational emerged as codes. This resulted in the second global theme: the relational drawbacks of chatbots. This section presents this theme and its subordinate themes, beginning with chatbots' obscure nature.

5.5.1. Chatbots' Obscure Nature

Eight participants (P1, P4, P6, P8, P14, P18, P19, and P20) described chatbots as having an obscure nature, conveying this quality in a negative light. For example, P6 said “[Chatbots are] something that's just out of the blue. It's just there. I don't understand how it works ... I don't know if it's a legit thing” and P18 said, “Here, you're talking to three dots and those three dots are ... What the hell is three dots, you know?” Specifically, three of these eight participants (P1, P6, and P8) demonstrated a lack of knowledge about where information given to the chatbot goes and how it is used. For example, P8, who showed more resistance to chatbots than others, explained: “Because with a chatbot, to my knowledge, whatever answer I give them that's just being stored in a database. They can store the data, but who's actually gonna be looking at it? Who's going to be reviewing it? If I'm having a chat with a chatbot, and my query is not getting resolved, where's that going?” (P8). The potential costs of chatbots' obscure nature, emerging as codes, follow.

5.5.1.1 Feelings of discomfort and creepiness

The obscure nature of chatbots caused four participants (P1, P2, P12, and P18) to experience undesirable feelings, such as discomfort or creepiness. P18 and P2 describe service encounters where the identity of the chatbot is not disclosed as “uncomfortable.” Two participants, P1 and P12, use the word “creepy” to describe chatbot service encounters. Creepiness can be understood as a potential emotional reaction that may be discomforting and unfavourable, accompanied by feelings of uncertainty directed at an individual, technology, or a specific circumstance (Langer & König, 2018). P12 said, “When they tried to do bots in such a way where they were hiding the fact that it was a bot, it was like very creepy.” P1 also expressed discomfort, saying “[Chatbots are] a bit creepy in a way. It's like you're talking to like this thing in the universe. Um, I don't think I'll divulge any personal information. I don't know where it lands up, you know, how it works. I'm a bit sceptical” (P1). Therefore, per Rajaobelina *et al.* (2021), this study found privacy concerns and perceptions regarding chatbots as creepy, to be related. Similarly, Bouhia *et al.* (2022) showed that privacy concerns are influenced largely by creepiness when investigating chatbots in banking.

When asked to describe her relationship with her bank, P19 conveys the importance of feeling comfortable for relationship satisfaction, saying “I feel really comfortable going in [my bank] because I know the employees there for a while already so [there are] familiar faces. I can chat to them normally and not feel uncomfortable or anything like that so I'm quite happy with them” (P19). Thus, feeling comfortable is arguably important for relationship satisfaction. Chatbots' obscure nature causing customers to feel discomfort and feelings of creepiness can, therefore, have negative implications for customer relationships.

5.5.1.2 Feeling deceived

Chatbots' obscure nature can also cause customers to feel deceived. For example, ten participants (P3, P1, P4, P5, P6, P7, P12, P13, P16, and P17) were unsure if past service encounters were with a chatbot or a human service employee, saying *"I don't know if that was a chatbot, but I remember just like seeing the feature at the bottom, like a chat feature and then ... ummm, I think it was a person. I feel like it was a person"* (P3), *"I'm pretty sure that that was maybe a chatbot"* (P4), *"I'm not entirely sure if it's actually a real person that is using these things, or if it's all just a computer that's answering your questions which also can sometimes be confusing in that sense"* (P6), and *"The chatbot said ... I don't even think it was a chatbot. Actually, I think it was somebody there."* (P12). Thus, the chatbot's identity is often unclear to customers. Relating to this, four participants (P3, P7, P10, and P14) described feeling deceived when the chatbot's identity is concealed, saying *"Just tell me, like I don't want to be tricked into something where I think I'm talking to someone"* (P3), *"I think it can get quite misleading when you speak with a chatbot for the first time and you think there is a human behind it. Then I chat with the chatbot thinking I'm speaking with the human and then I get frustrated."* (P7), and *"[With] some of the bots I've used, they're sort of trying to trick you ..."* (P10). Thus, not being transparent in disclosing a chatbot's identity can cause customers to feel deceived. It also creates information asymmetry, meaning the party with less information than the other party in the exchange cannot make informed choices, resulting in an imbalance of power in the relationship (Murtarelli *et al.*, 2021). The second subordinate theme, chatbot service failures, follows.

5.5.2 Chatbot Service Failures

To recap, service failures are service encounters that fail to meet customers' expectations (Sivakumar *et al.*, 2014; Smith *et al.*, 1999; Dong *et al.*, 2008; Hazée *et al.*, 2017). The potential costs of chatbot service failures, emerging as codes, follow.

5.5.2.1. Feeling frustrated

Seven participants (P2, P8, P9, P11, P13, P14, and P16) expressed frustration with non-banking-related chatbot experiences that failed to meet their expectations. For example, P2 said *"[The chatbot] didn't give me what I wanted so then in my mind, I was like, I wasted time. I might as well have just phoned. So yeah, [I was] a bit frustrated."* P11 and P16 specifically attribute their frustration to miscommunication, saying *"[A chatbot] keeps on asking things that are not relevant because it is computed that way"* (P11) and *"I just felt like we were going around in circles"* (P16). Whereas P14 and P9 attribute their frustration to having received computer-generated responses, saying *"If it's mainly automated, [the chatbot] frustrates me"* (P9) and *"I didn't find it useful at all because its computer-generated responses"* (P14). Although not chatbot related, P15 described frustration with her mobile banking application repeatedly failing to work and described having negative feelings towards her bank following this, saying *"Like yesterday I swore [at] my phone so many times and at my bank."* This highlights how service failures can cause customers to have negative feelings towards their bank.

When asked to describe their ideal chatbot, seven participants (P2, P3, P5, P7, P12, P13, and P17) described wanting a chatbot to redirect them to a human service employee in the event of service failure, saying *"I think those are the best bots, the ones that get that if I'm still getting lost after two or three questions, direct me to a real person"* (P12) and *"I'm always optimistic that it will be the dream chatbot that I've spoken about that will say, sorry, this chatbot has reached the end of its capabilities. This is how you can like escalate your query ..."* (P13). Thus, in support of Huang and Dootson (2022),

this study found that human service employee intervention could help mitigate potential frustration caused by chatbot service failures.

5.5.2.2 Lack of personalisation

When describing service failures to chatbots, six participants (P1, P7, P8, P9, P11, and P14) expressed dissatisfaction with the perceived lack of personalisation saying, "*[The conversation with the chatbot] was just so generic*" (P1), and "*When [the conversation] is generated, then it gives generic answers, so it's not really helpful*" (P11). Due to the lack of personalisation, three participants (P7, P11, and P14) expressed a lack of connection, saying "*I felt like I'm chatting to a machine*" (P14), "*It's a machine ...*" (P7), "*You're not speaking to a person, like it's just a robot*" (P11). Similarly, P15 said, "*You're not going to have a connection with the bot.*" Thus, due to impersonal responses, customers may feel less of a connection or bond in chatbot service encounters which could adversely affect customer relationships. However, P7 did express feeling "*a human touch element*" when his banking chatbot greets him by name, saying "*Even though I know that it's not a human that I'm speaking with, the fact that [the chatbot is] saying hi [P7's name] just makes me feel nice*" (P7). Conversely, P3 described service failures with human service employees, in which she felt employees were "*robotic*" and described a lack of personalisation in their responses, saying: "*I feel like they read from a teleprompter. They're not really being a human. They say something but it sounds very robotic. It just takes away the human element. It's almost like they're not listening. They're thinking it's one type of situation, that everyone has the same problem*" (P3). Similarly, P3 described a service failure with a human service employee and a perceived lack of personalisation, saying "*It was almost as if they were sticking to a script.*" Thus, like chatbots, human service employees can fail to acknowledge customers' uniqueness, resulting in dissatisfaction.

5.5.2.3 Not feeling cared for or valued

In service failures with chatbots, P6 and P8, both demonstrating increased resistance to chatbots, described not feeling valued or cared for as customers. P6 described not feeling valued as a customer when firms use chatbots, saying, "*I feel like it's quite data-run ... it's not really about you as a user or a banker. It's more about you as a number than anything else ... I'd still like to be treated as a fair and valued client*" (P6). P6 and P8 also described feeling discarded when banks utilise chatbots, saying "*It feels like they're not taking me into consideration and just saying like, take your problems elsewhere kind of thing, or I'm just going to let the system help you out*" (P6). Referring specifically to fraud-related issues, P8 said: "*I don't want to talk to a bot. It's like they're just handing me to an AI.*" When probed on how this makes him feel, P8 said: "*Like they don't care.*" Interestingly, P8 explained: "*I think [using chatbots] is just an easy way for a company to set up something that makes it look like they're assisting their clients, that they're providing the support necessary for their clients, when it's not actually helping*" (P8). Customers may perceive a firm's use of chatbots as a sign of not caring about their customers and not being willing to invest in their customer relationships.

5.5.2.4 Absence of choice

When recounting experiences concerning chatbot service failures, four participants (P2, P8, P13, and P15) described dissatisfaction with not being presented with the choice to interact with the chatbot or not, saying *“I want to be the one to actually speak to [the chatbot]. I don't want it to necessarily prompt me to speak to it”* (P2), *“The bank should have the option to talk to a chatbot. They shouldn't just hand it to you.”* (P8), *“Like giving someone a way out at an appropriate time is useful, rather than just trapping them in an endless loop of talking to a robot”* (P13), and *“I think for me, the experience was that I wanted the choice, and [the chatbot] was like taking away that choice. I would like the choice when I want to go through an automated thing, and when I want to speak to somebody. I want [the bank] to offer me an actual choice and not con me into it”* (P15). Thus, when not presented with the choice to interact with a chatbot or not, customers may experience decreased autonomy in their relationship with the firm. Autonomy is defined as “consumers’ ability to make and enact decisions on their own, free from external influences imposed by other agents” (Wertenbroch, Schrift, Alba, Barasch, Bhattacharjee, Giesler, Knobe, Lehmann, Matz, Nave & Parker, 2020: 430). The next section presents the findings related to the final research question.

5.6. CUSTOMER PREFERENCES FOR CHATBOTS

This section presents the findings related to the second research question: *How can financial service providers overcome customer resistance to chatbots to improve their customer relationships?* In applying social exchange theory, ways to enhance chatbots’ perceived benefits and reduce their perceived costs were discovered, resulting in a third theme: customer preferences for chatbots. In particular, this theme addresses how financial service providers can utilise chatbots more effectively to overcome customer resistance. By gaining insights into customer preferences, financial service providers can implement chatbots more successfully, ultimately increasing customer willingness to adopt this technology. This section presents this theme and its corresponding codes, beginning with the need for human interaction.

5.6.1 Need for Human Interaction

The need for human interaction can be defined as the “propensity of individuals to value interpersonal contact with a service employee instead of a machine when receiving a service” (Rajaobelina *et al.*, 2021:2343). Participants indicated a preference for human service employees versus chatbots in various contexts. For situations of a more personal or sensitive nature, four participants (P4, P6, P7, and P17) conveyed wanting a human service employee versus a chatbot, saying *“I wouldn't want a chatbot for things that are say personal, you know”* (P6), *“I don't really want to share my personal matters with a chatbot or any machine”* (P17), and *“... obviously there are more personal things that an agent would need to help with”* (P7). P4 explained *“If I was closing the account on behalf of a deceased relative, I definitely want a human experience. But if I was just closing an account because I wanted to move to another bank, I want a chatbot.”* Similarly, four participants (P8, P9, P10, and P16) expressed wanting to deal with human service employees instead of chatbots when facing pressing issues, such as fraudulent transactions, saying *“If fraudulent activity had taken place, I mean, at that time, you need a real human to be dealing with it”* (P9) and *“For things I need more urgently, I'd rather contact the person at my bank that I normally deal with”* (P16). Whether customers desire to interact with a chatbot or human service employee largely depends on the context of the situation.

When asked when chatbots would be helpful in internet banking, 16 participants (P1, P2, P3, P4, P6, P7, P8, P9, P10, P12, P13, P14, P16, P17, P18, and P20) felt that chatbots would be helpful for simple and

common queries, saying “If it's something that's generic, like losing a bank card, and you don't know what to do then a generated response would be most efficient. If it isn't, and it's a more complicated issue, I'd like to speak to an actual person” (P1), “I think if it's a basic query ...” (P2), “...like just day-to-day things that are like frequently asked questions, like if I have a question, then I can just type it on [the chatbot]” (P3), “If it's a trivial issue, if it's something very small ...” (P5), and “I'm quite happy using the chatbot for minor issues” (P18). Thus, customers will respond more positively to the use of chatbots for simple issues, while human service employees remain important for more complex issues.

Eight participants (P1, P2, P5, P6, P10, P14, P17, and P20) felt that chatbots would be helpful when they are seeking information of an educational nature, saying “If I want to find more information about different banking options, then I would use a chatbot” (P1), “It would be just nice to be like, how do you do this? And then [the chatbot can] be like, hey, here's a step by step [guide] showing how to do it” (P6), “I would like if there was a chatbot on [my bank's] app that it could explain to me the fees that I'm paying every month. It would be a hassle to go into the bank just to find that out” (P10), and “The times that I'll use a bot is because I'm trying to understand something. You know, maybe tomorrow, I decide I'm going to buy a house and I need to get a bond. I'd be happy to ask a bot about what a bond is like” (P17). Therefore, although not suited for urgent, personal, or complex issues, chatbots could be more effective when customers require information.

5.6.2 Anthropomorphism of Chatbots

Within the context of chatbots, anthropomorphism refers to chatbots' ability to humanise customer interactions after being given human traits such as a name, voice, or appearance (Murtarelli *et al.*, 2021; Crolic *et al.*, 2022; van Doorn *et al.*, 2017; Roy & Naidoo, 2021). Five participants (P1, P3, P4, P6, and P18) conveyed dissatisfaction with the current presentation of chatbots, saying “It's just the whole way [chatbots are] formatted and how it looks. When it pops up in the corner, sort of like Facebook Messenger. So maybe it's the look and feel of it that makes me think that I'm not speaking to someone real” (P1), “Right now it's very robotic. It's like a little chat thing and I don't know why it looks like that. Like, it doesn't look like a button sometimes. It doesn't even look like something...I don't know what it does” (P3), and “I never really know if [the chatbot] is real or not. They always look like ads.” (P6). When asked what would make chatbots more appealing, three participants (P1, P3, and P4) described wanting the chatbot to appear as a character. For example, P3 said “Maybe [the chatbot] could look like a little cartoon character with a speech bubble saying I'm always here to help”, and P4 said: “I think [the chatbot] should look like a cute character because I feel like mostly when you deal with chatbots it's just a random AI entity so it's very impersonal.” Five participants (P2, P4, P7, P8, and P18) wanted the chatbot to have a name. For example, P18 said: “...even a name of a person or something like that, will make [the chatbot interaction] a bit more personal.” Thus, increased anthropomorphism could mitigate the lack of personalisation felt by customers. In addition, P1 expressed she would feel more comfortable and perceive the chatbot as less “creepy” if it had “a profile photo of a flying little robot” and “features” she can relate to. Thus, increased anthropomorphism could reduce feelings of discomfort or creepiness caused by chatbots' obscure nature.

This study also found that customers can have differing reactions based on the extent of chatbots' anthropomorphism. For example, P1 and P18 expressed not wanting the chatbot to have a human face, saying “I think being AI, I don't think they can give it a human face” (P18) and “So, it [wouldn't look like] an actual person, like me, cos that would be weird” (P1). These statements imply that if overly humanised, chatbots can have the opposite effect on customers. Similarly, when asked what they think about chatbots asking them how they are, five participants (P1, P3, P8, P13, and P20) did not like this

idea. Three of the five participants perceived it as inauthentic, saying “[A chatbot] don’t really care about your response” (P3), “What’s the bot gonna say if you’re just like I’m good thanks and you? There’s no point in that” (P8) and “No, no, that feels silly because a chatbot doesn’t care” (P13). Thus, overly humanising chatbots could cause uneasiness for customers or come across as inauthentic. Notably, P15, who has worked in the marketing industry for 22 years, explained “We are trying to make bots become human. And that’s where the confusion lies because in our efforts to humanise the bot, the person is expecting a human interaction and a bot is never going to give you that so don’t pretend or don’t try to humanise your bot” (P15). Thus, similar to Crolic *et al.* (2022), this study found that overly humanising chatbots can potentially cause confusion and heighten customer expectations.

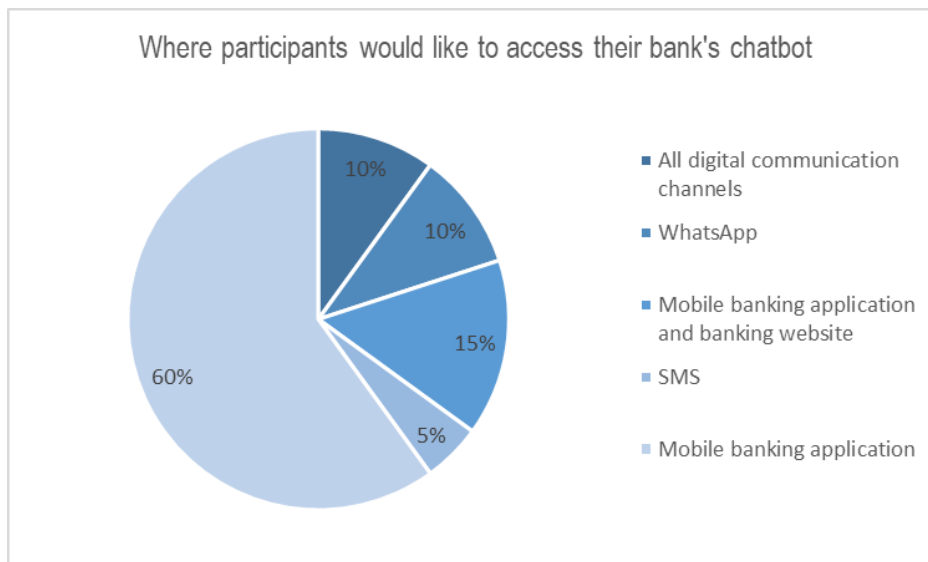
5.6.3 Chatbot Disclosure

When asked if they would like to know upfront if they are dealing with a chatbot versus a human service employee, numerous participants expressed wanting the chatbot’s identity to be disclosed. Six participants (P1, P3, P7, P11, P13, and P16) expressed wanting to know the chatbot’s identity, saying “If it’s a chatbot then I know I can just ask exactly what I want but if it’s a person, then I have to do the formalities” (P3), “[Chatbot disclosure] is very important, so that I can make a choice to either contact an employee or continue with the chatbot” (P11) and “It would change my perception of whether I want to actually use [the chatbot]” (P1). When describing her ideal chatbot, P13 said: “I think there should be transparency about the fact that you’re talking to a bot because you phrase a question differently if you’re talking to a human that’s gonna understand your answer and kind of use language in that way” (P13). Similarly, when asked why chatbot disclosure is important to her, P16 explained “... because I think it would contextualise my expectations around what I could get from a chatbot” (P16). P7 said “You need to have an idea that it’s not really human because if there are specific things that you need to ask, a chatbot can’t help. So, it will make it much better if I know [about the chatbot’s identity], then I won’t be as frustrated ... I’ll be a little bit lenient.” This study found that chatbot disclosure can potentially decrease customers’ frustration with chatbot service failures due to customers having heightened expectations and advanced understanding.

5.6.4 Accessibility of Chatbots

Participants expressed wanting to access a chatbot offered by their bank on various communication channels. Thus, Figure 5.1 below depicts the findings obtained related to where participants would ideally like to access their bank’s chatbot.

Figure 5.1: Percentages of participants and their preferred communication channels for accessing their bank’s chatbot



As shown in Figure 5.1 above, this study found that 60% of the participants (P1, P3, P5, P7, P8, P10, P13, P16, P17, P18, P19, and P20) would like to access their bank's chatbot on their mobile banking application, saying *"I really like the functionality of the app. It's simple. It's easy to get what you need"* (P13) and *"I'd want the chatbot on an app because it's just like you're using your phone, it's quicker, it's easier"* (P20). Thus, this study found that customers prefer to access chatbots via a mobile application for convenience and ease of use.

Fifteen per cent of the participants (P9, P12, and P14) would like to access their bank's chatbot on both their mobile banking application and their bank's website, whereas 10% of the participants (P6 and P11) would like it to be accessed on WhatsApp. P11 explained that *"WhatsApp feels more personal."* An additional 10% of the participants (P4 and P15) would like to access their bank's chatbot on all digital communication channels, which includes social media platforms as described by P4 and P15. P4 specifically notes that he'd like to access his bank's chatbot on his phone first and foremost, saying *"I think across any platform that I use for banking sites, most immediately on my phone because that's where I do all of my messaging and stuff mostly ... but certainly, carried across, onto like, browsers, PC format, all of that stuff, and social media as well."* The remaining 5% accounts for P2's preference to access her bank's chatbot via SMS (Short Message Service). P2 explains: *"For me personally, SMS will work because it's a kind of mail trail almost so it's just easier and it's immediate."*

When thinking about what channel on which they would like to access their bank's chatbot, three participants (P3, P12, and P18) perceived increased risk if they were to access the chatbot on WhatsApp, saying *"there's not even like a code to get into WhatsApp ... it's just a security thing, if someone steals my phone"* (P3), and *"... not WhatsApp, because I'm worried about safety"* (P18). Interestingly, P12 said, *"I don't want [my bank] to talk to me via WhatsApp ... I don't want my bank to be so integrated with other tools that would essentially take my data."* This study found that perceptions of risk influence customers' preferred access to chatbots. The ensuing section concludes this chapter.

5.7 CONCLUSION

This chapter presented the study's findings in relation to its two research questions. Participants were asked questions during semi-structured interviews to gain an understanding of how financial service providers can utilise chatbots to overcome customers' resistance to their application. Regarding the research questions, the analysis revealed three global themes: (1) chatbots versus human service

employees; (2) relational drawbacks of chatbots; and (3) customer preferences for chatbots. Notably, it was found that customers' desire to interact with a chatbot or human service employee largely depends on the context of the situation. When compared to human service employees, participants perceived chatbots positively in terms of increased convenience, amongst other benefits. However, participants associated chatbots with being less competent, lacking human emotion, posing increased risk, decreasing certainty, and not conveying understanding. The relational drawbacks of chatbots included participants feeling frustrated, undervalued, deceived, uncomfortable, experiencing creepiness, and feeling as if they had no choice but to engage with the chatbot. These drawbacks have negative implications for customer relationships. In terms of how customers prefer chatbots to be used, providing insight into possible strategies to mitigate customer resistance, participants suggested chatbots' increased anthropomorphism and disclosing the chatbot's identity, among other recommendations. In the upcoming Chapter 6, the implications derived from the presented findings are discussed, and the study's conclusions are summarised. Building on these conclusions, the subsequent chapter delves into the managerial implications and study limitations, and offers recommendations for future research. Serving as the concluding chapter, Chapter 6 marks the end of this study.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

Brands across various industries are using chatbots to automate a large part of their communications with customers (Fatima *et al.*, 2024; Li & Zhang, 2023). As chatbots become increasingly common in services (Yang *et al.*, 2023; Mozafari *et al.*, 2022), it is crucial to consider their role in customer relationships in this context (Li & Zhang, 2023; Crolc *et al.*, 2022; Kull *et al.*, 2021; Grewal *et al.*, 2021). In particular, the financial services sector has been one of the earliest adopters of AI, and its role is well established (Priya & Sharma, 2023; Ho & Chow, 2023; Marr, 2022). This study analysed chatbots in financial services from a social exchange theory perspective to explore how chatbots can be used more effectively in this industry to overcome customer resistance.

Chapter 2 discussed relationship marketing in a service context, focusing on CRM. As AI continues to have noteworthy effects in the services industry and is changing how firms interact with customers (Hollebeek *et al.*, 2021; Choi *et al.*, 2021; Mostafa & Kasamani, 2022), additional research is required to understand AI's role in this sphere (Crolc *et al.*, 2022). Chapter 2 went on to discuss the various definitions and types of AI, for example, mechanical, thinking, and feeling AI (Huang & Rust, 2021). The chapter then addressed the role AI plays in services marketing, specifically the effects of human versus AI service employees, and addressed the dark side of AI in marketing (see Section 2.3). The chapter also introduced the social exchange theory (see Section 2.4.5), which posits that consumers participate in relationships based on exchanges to maximise benefits and minimise costs (Molm, 1997).

Chapter 3 focused on defining chatbots and their synonymous terms, namely conversational agents, virtual agents, and virtual assistants (see Section 3.2). This study adopted Murtaelli *et al.*'s (2021: 928) definition, which states that a chatbot is an "E-service agent that represents a technological evolution of the traditional service agent involved in direct firm–customer exchanges". This chapter then addressed chatbots' role in services (see Section 3.3), before arguing that chatbots can be considered a type of service employee. The differences between chatbots and human service employees were then discussed (see Section 3.3.2), as well as customer acceptance of chatbots and chatbot anthropomorphism.

Considering the theoretical background, Chapter 3 clarified how the two research questions addressed the research problem, which asked: **How can financial service providers overcome customer resistance to chatbots to improve their customer relationships?** Despite chatbots' increased use, there is a notable gap in the marketing literature, particularly in the context of financial services, concerning chatbots' negative implications (Ho & Chow, 2023; Mogaji & Nguyen, 2022). Specifically, there is a lack of research examining customer perceptions of service encounters involving chatbots versus human service employees and the effects of this on marketing results (Riedel *et al.*, 2022). This presents a key issue as chatbots can cause customer frustration, potentially harming customer relationships (Crolc *et al.*, 2022).

Firms such as Frontier Airlines are replacing human service employees with chatbots to save costs without considering the potential negative implications on customer experience and relationships (Westfall, 2022). For example, Meta's recent chatbot failures illustrate how negative chatbot experiences can harm a brand (Kulkarni, 2023). After Meta launched its BlenderBot chatbot in August 2022, it made many false statements and criticised Facebook (The Guardian, 2022). In October 2023, Meta introduced a series of chatbots with different celebrity faces, causing discomfort and confusion for consumers (Chafkin, 2023). Customer satisfaction with automated services, including chatbots, is

declining, with more customers avoiding chatbots or resorting to human service employees when the chatbot fails. Such service failures cause customers to resist future chatbot interactions (Beasley, 2023). In financial services specifically, if consumers are unable to reach a human service employee when desired, their trust in their financial institution can be reduced (Consumer Financial Protection Bureau, 2023). In light of this, additional research is needed to determine the appropriate contexts in which chatbots or human service employees should be utilised in service interactions (Li & Zhang, 2023; Crolic *et al.*, 2022). Hence, the first research question sought to ascertain the implications of financial service providers using chatbots versus human service employees on customer relationships (see Section 3.4.1).

In addition, widespread customer resistance towards chatbots presents a substantial challenge for firms (Kallel *et al.*, 2023; Meng *et al.*, 2023). This is problematic, as resistance to chatbots limits their usefulness to service providers (Kreger, 2023; Meng *et al.*, 2023; Mozafari *et al.*, 2022). Additionally, an innovation's success depends on customer adoption, and unaddressed resistance can lead to an innovation's failure (Mani & Chouk, 2018). In banking, poorly implemented chatbots can frustrate customers, diminish trust, and lead to legal issues, as per the Consumer Financial Protection Bureau (Yahoo Finance, 2023). As chatbots have become more advanced, customer expectations have intensified. Traditional banking chatbots may no longer meet heightened customer expectations for personalisation, relevance, and speed brought on by advanced AI chatbots such as ChatGPT (Johnson, 2023), further highlighting this study's relevance. While research has primarily focused on acceptance or intent to use chatbots (Schuetzler *et al.*, 2020; Wirtz *et al.*, 2018; Sheehan *et al.*, 2020), exploring customer resistance, especially in the context of chatbots, is underexplored (Yang *et al.*, 2023; Cheng *et al.*, 2022; Longoni *et al.*, 2019; Pizzi *et al.*, 2021). Research on chatbot use in financial services is also sparse (Mogaji & Nguyen, 2022), requiring further guidance for effective integration (Riedel *et al.*, 2022). Hence, the second research question sought to explore how financial service providers can overcome customer resistance to chatbots to improve customer relationships (see Section 3.4.2).

As customers have the same expectations and apply the same social rules and norms to their interactions with chatbots as they do with humans (Blut *et al.*, 2021; Meyer-Waarden *et al.*, 2020), social exchange theory was deemed suitable to apply to examine customer interactions with chatbots (Meyer-Waarden *et al.*, 2020). Social exchange theory was, therefore, utilised to effectively address these research questions and to better understand how chatbots can be used in financial services. Chapter 4 detailed the methodology employed in this exploratory study to address these research questions. The primary objective was to explore and gain insights into the implications of chatbots on customer relationships in the financial services industry and how financial service providers can overcome customer resistance to chatbots. Qualitative research was employed, as it investigates participants' experiences in detail (Barker *et al.*, 2015; Hackley, 2019).

Chapter 4 also explained the semi-structured interviews that were conducted, in which participants were asked about their internet banking experiences and their opinions on chatbots, with a focus on their relationship with their bank. Quota sampling, guided by the participants' age and gender was employed to ensure a true representation of internet banking users in South Africa (Bell *et al.*, 2014). Following data collection (see Section 4.4) and interpretation (see Section 4.5), Chapter 5 discussed the findings in relation to the two research questions. The analysis revealed three global themes: (1) chatbots versus human service employees; (2) chatbots' relational drawbacks; and (3) customer preferences for chatbots (see Section 5.3). This chapter provides conclusions derived from the findings (see Section 6.2). Building upon these conclusions, Section 6.3 explores managerial implications for marketers. This

exploration aims to offer marketers an improved understanding of how chatbots can effectively address customer resistance, thereby enhancing customer relationships. Subsequently, the chapter presents the theoretical implications of this study (see Section 6.4), followed by an examination of the limitations encountered (see Section 6.5) and recommendations for future research (see Section 6.6). Following this overview, the ensuing section delves into the overall conclusions derived from this study.

6.2 THE OVERALL CONCLUSIONS

Research aims to draw valid conclusions based on the data collected and analysed (Marczyk, DeMatteo & Festinger, 2010). Therefore, based on this study's findings, the table in Appendix 6.a presents a summary of this study's overall conclusions relevant to each research question (see Appendix 6.a). This section discusses these conclusions in detail according to each research question, beginning with Research Question 1.

6.2.1 What are the implications of financial service providers using chatbots versus human service employees on customer relationships?

Enhancing service quality is critical to an online service provider's success (Wang & Zhang, 2018), and understanding how chatbots can add value to service interactions is important. This study's findings suggest that customers may prefer chatbots over human service employees to avoid negative attitudes. Financial service providers can mitigate the negative impact of unpredictable employees by offering chatbots as an alternative. This is important to consider because service employees represent the firm and can, therefore, influence customer perceptions of the firm (Hartline, Maxham & McKee, 2000). The findings also suggest that customers perceive chatbots as limited in their ability to assist compared to human service employees. The results further indicate that having increased knowledge of how AI works could mitigate this perceived lack of competence and result in customers having more confidence in chatbots. This is important to understand, as customer perceptions of chatbots affect their willingness to engage (Rajaobelina *et al.*, 2021; Luo *et al.*, 2019).

It was further suggested that customers feel less understood by chatbots compared to human service employees, which can often result in frustration. The findings suggest that a chatbot is not suited to handle interactions wherein customers may seek reassurance and empathy. This is worth considering, as chatbots often fail to understand customers and cannot meet their expectations (Sheehan *et al.*, 2020). The findings further suggest that chatbots' lack of emotion compared to human service employees is a particular disadvantage when customers are dealing with emotional or sensitive issues. This is important to consider, as the inappropriate use of chatbots can result in adverse customer experiences (Rajaobelina *et al.*, 2021).

The results further indicated that customers are more sceptical about chatbots than human service employees, perceiving them as posing higher risks. Moreover, customers' perceptions of risk and privacy concerns correlate. This finding is in line with Rajaobelina *et al.* (2021), who examined chatbots in financial services in the particular context of car insurance. This study's findings suggest that customers' privacy concerns stem from a lack of knowledge about how chatbots work. This study concludes that by educating customers about how chatbots work, their perceptions of increased risk may be reduced, as any fears or uncertainties are addressed. This finding differs from that of Song *et al.* (2022), which suggest that customers perceive a higher privacy risk when using human service employees instead of chatbots. Research Question 2, which follows, addresses how financial service providers can overcome customer resistance to chatbots.

6.2.2 How can financial service providers overcome customer resistance to chatbots to improve their customer relationships?

This research question relates to ways in which chatbots can be utilised more effectively to meet customer needs and preferences, thereby assisting financial service providers in overcoming customer resistance to chatbots. The findings suggest that whether customers desire to interact with a chatbot or not largely depends on the context of the situation. Customers will respond more positively to the use of chatbots for simple issues and although not suited for more urgent, personal, or complex issues, chatbots can be utilised effectively when customers are seeking information. This finding is in line with past research, which indicates that customers' behaviour in the context of chatbots versus humans in banking is influenced by the varying levels of importance customers attach to certain tasks (Li & Zhang, 2023). Thus, this study concludes that banks must assess the context of the situation when deciding to deploy a chatbot versus a human service employee. This is worth considering because if a customer is unable to interact with a human when needed, this can result in frustration and adverse consequences (Huang & Dootson, 2022). This is in line with Tsai, Lun, Carcioppolo and Chuan's (2021) findings that customers are less satisfied with chatbots than with human employees when angry.

This study also found that customers perceive chatbots as being ambiguous. The findings imply that this obscurity can have negative implications, specifically causing feelings of discomfort and creepiness. Results further indicate that these negative feelings stem from a lack of knowledge about chatbots and their hidden identity. Similar to the findings of Rajaobelina *et al.* (2021) and Bouhia *et al.* (2022), feelings of creepiness were shown to be related to privacy concerns. This is important to understand, as creepiness has been found to have negative impacts on customer loyalty (Rajaobelina *et al.*, 2021). Therefore, this study finds that the obscure nature of chatbots can lead to feelings of discomfort and creepiness for the customer. Anthropomorphism in chatbots can potentially have harmful effects, such as causing discomfort for customers (Mende *et al.*, 2019). Customers respond differently to a robot based on how human it seems in line with the uncanny valley effect (Kim *et al.*, 2019). This study finds that customers can feel dissatisfied with chatbots' obscure presentation and desire increased anthropomorphism to reduce feelings of discomfort and creepiness. However, the findings also indicate that customers do not wish chatbots to be overly humanised in the sense of having a human face assigned to them or asking them how they are, as this can be perceived as inauthentic. This study also found that overly humanising chatbots can potentially confuse customers and cause inflated expectations. This finding is in accordance with that of Crolc *et al.* (2022), who found that chatbot anthropomorphism leads to higher expectations of their effectiveness. Therefore, financial service providers need to carefully consider the extent to which a chatbot is humanised as this can influence their perceived creepiness, as well as customer expectations.

The findings further suggest that customers feel dissatisfied with the lack of personalisation in chatbot responses. Due to less personalised responses, customers can perceive a lack of connection. This must be taken into consideration, as emotional connection is important for customer loyalty (Mostafa & Kasamani, 2021). Relating to this, the study found that chatbot interactions can be perceived as more personal to customers if the chatbot is humanised (Kull *et al.*, 2021). Thus, this study concludes that personalisation plays a key role in how firms can employ chatbots to establish a connection with customers, and financial service providers should utilise chatbot anthropomorphism to address the lack of personalisation in chatbot responses.

As AI advances, it is becoming progressively more difficult for customers to distinguish AI service employees, such as chatbots, from human service employees (Campbell *et al.*, 2020; Robinson *et al.*,

2020). This presents financial service providers with the challenge of whether or not to make the chatbot's identity known (Mozafari *et al.*, 2022). This study's findings suggest that chatbot disclosure can potentially decrease customers' frustration with chatbot service failures due to customers having more realistic expectations and increased understanding. According to the notion of a "zone of tolerance", a customer's service expectations impact their perception of service quality and satisfaction. This includes two categories: desired service expectations (the ideal service) and adequate service expectations (the minimum acceptable level) (Zeithaml, Berry & Parasuraman, 1993). The "zone of tolerance" lies between a customer's desired and adequate service expectations, indicating satisfaction. Falling below results in frustration, while exceeding leads to increased loyalty and satisfaction (Zeithaml *et al.*, 1993; Nadiri, Kandampully & Hussain, 2009). For instance, in banking, if a customer desires a cheque to be cashed in three minutes (desired) but accepts up to ten minutes (adequate), satisfaction occurs within this "zone of tolerance" (Berry & Parasuraman, 1991; Nadiri *et al.*, 2009). In line with this discussion and previous research on chatbots (Crolic *et al.*, 2022), this study concludes that financial service providers should inform customers of chatbots' potential flaws before the interaction begins to lower their expectations and reduce potential frustration.

Similarly, the findings suggest that not being transparent in disclosing a chatbot's identity can cause customers to feel misled by the firm. This finding agrees with Sangle-Ferriere & Voyer (2019). This is significant because when customers are unaware of the chatbot's identity, this creates information asymmetry resulting in an imbalance of power in the relationship (Murtarelli *et al.*, 2021). Relationship marketing literature identifies a power imbalance as damaging to relationship quality as it can reduce trust (Grewal *et al.*, 2021; Chen *et al.*, 2017). Therefore, this study concludes that financial service providers should not conceal the chatbot's identity as doing so can cause customers to feel misled by the firm, which can damage their relationship with the firm. Further highlighting the importance of chatbot disclosure, the findings suggest that customers desire transparency so they can be more informed when interacting with chatbots. As such, this study finds that disclosing a chatbot's identity to the customer can have numerous positive effects, specifically relating to the firm's perceived transparency, and more realistic customer expectations. These findings differ from those of Luo *et al.* (2019), whose study revealed that chatbot disclosure has adverse effects on customer purchase rates.

This study also found that customers can feel dissatisfied when not presented with the choice to interact with a bank's chatbot or not. In particular, the findings suggest that when not presented with the choice, customers may experience decreased autonomy in their relationship with the firm. This study, therefore, indicates that the use of chatbots in service encounters can negatively impact a customer's perceived autonomy. This is in line with past research, which states that AI technologies can result in customers having perceived decreased autonomy (Puntoni *et al.*, 2021; Davenport *et al.*, 2020). In light of this discussion, this study concludes that financial service providers should present customers with the choice to interact with a bank's chatbot or not. Considering these conclusions, the following section presents the findings' managerial implications.

6.3 MANAGERIAL IMPLICATIONS

Service providers lack knowledge on how to use chatbots strategically to establish strong customer relationships (Crolic *et al.*, 2022; Kull *et al.*, 2021; De Keyser *et al.*, 2019). Utilising chatbots effectively is important for firms to retain customers (Mozafari *et al.*, 2022). This is particularly true for financial service providers (Riedel *et al.*, 2022). Based on the aforementioned conclusions, this section discusses the managerial implications for financial service providers to consider when implementing chatbots. It is important to note that these managerial implications also offer general guidance for chatbots' implementation.

6.3.1 Appropriate use of chatbots

In line with social exchange theory, for chatbots to effectively enhance customer relationships, financial service providers need to maximise their benefits and reduce their costs from the customer's perspective (Molm, 1997; Stafford & Kuiper, 2021; Cloarec *et al.*, 2022). In this way, chatbots can add value to service interactions. The following suggestions account for how practitioners can leverage chatbots' benefits and provides several actionable strategies that managers can implement. To meet evolving customer expectations, financial service providers should invest in improving their chatbots' technical capabilities. Current banking chatbots like HDFC Bank's Eva already assist customers in applying for loans without human intervention (Cummins, 2022). However, to remain competitive, banks need to further enhance chatbot functionalities to handle more complex financial services, such as managing investment portfolios or setting up retirement accounts. For example, a bank could implement a chatbot feature that allows customers to get real-time financial advice based on their account data and spending patterns, similar to AI-driven financial advisors. This can include personalised alerts, such as "Based on your transaction history, consider contributing more to your savings account this month to meet your financial goals." To achieve this, banks can partner with AI developers and should allocate budget to research and development in chatbot technologies. This will ensure that a bank's chatbot is competitive and able to offer more value that can increase customer satisfaction and loyalty.

While chatbots are useful, particularly for customers who prefer minimal human interaction, such as during pandemics (Huang & Koa, 2021), banks should avoid replacing human service employees entirely. Instead, chatbots should be positioned as an additional support channel, particularly for customers who value human interaction, such as older consumers. By offering a mixed approach, where customers have access to both chatbots and human service employees, banks can cater to varied customer preferences. For example, banks can provide electronic kiosks within its branches where customers can choose to interact with their chatbot for simple queries, such as checking account balances or finding out loan eligibility, while still having the option to speak with a human service employee for more complex issues. This gives customers control over their preferred service channel, reducing negative experiences caused by unpredictable human service employees and enhancing customer autonomy.

One critical challenge to chatbot adoption is negative customer perceptions. Financial service providers must actively educate customers on the benefits of using chatbots to prevent feelings of being undervalued or underserved. Banks could run marketing campaigns that highlight how chatbots save time, offer convenience, and provide instant access to services without queuing. Specifically, a bank could create a series of educational videos and blog posts that show customers how to use their chatbot to perform tasks like transferring money between accounts, checking transaction history, or reporting a lost card. These educational materials could be shared through the bank's social media channels, email

newsletters, as well as integrated into the mobile banking application as tutorials. Sangle-Ferriere and Voyer (2019) further emphasise the importance of educating customers to mitigate negative perceptions and increase acceptance of chatbot technologies. Banks could also create user guides on how to interact with chatbots efficiently, such as a “chatbot dos and don’ts” guide, which could be included in onboarding emails for new customers or available as a download on a bank’s website. AI developments, such as ChatGPT, have already started releasing such guides (Cook, 2023). This can serve as a blueprint for financial service providers aiming to improve customer engagement with chatbots.

Moreover, this study highlights the growing preference for accessing chatbots through mobile banking applications due to their convenience (Souiden *et al.*, 2021). To capitalise on this, financial service providers should prioritise their mobile banking application as the primary platform for chatbot deployment, ensuring seamless integration and constant updates to enhance user experience. Banks must allocate resources to regularly update and optimise their chatbot services used in their mobile applications. For example, banks could enhance its mobile application chatbot by offering real-time spending information and tailored financial advice based on a customer's transactions. For example, the chatbot could say, "You've spent 20% more on eating out this month compared to last month. Consider setting an eating out budget to save more." This personalised experience strengthens the customer's connection with the bank and positions the chatbot as a valuable service tool. By doing this, financial service providers can ensure that their chatbots remain relevant and effective in meeting customer needs, thus fostering long-term loyalty and engagement.

It is also crucial for banks to carefully select the channels through which they deploy chatbots. This study found that customers associate certain platforms, such as WhatsApp, with increased security risks. Therefore, banks should invest fewer resources in chatbots for these perceived unsafe channels and instead focus on more trusted platforms like mobile applications. Chatbots like SilverCloud have shown success by being deployed across multiple digital channels, ensuring wider accessibility for customers (Business Wire, 2020). Prioritising secure and convenient platforms will not only enhance user experience but also reduce customer apprehension about security risks.

Furthermore, as this study concludes that whether customers desire to interact with a chatbot or not largely depends on the context of the situation, financial service providers should pay particular attention to the circumstances in which chatbots are deployed. Table 6.1 indicates the various circumstances in which a chatbot should be used instead of a human service employee.

Table 6.1: Circumstances in which financial services customers would prefer a chatbot over a human service employee

When customers would prefer a chatbot	When customers would prefer a human service employee
Simple and common queries (e.g., frequently asked questions, locating information, navigating a bank’s website or mobile application, checking a loan status)	Complex queries (e.g., balance transfers)
Situations requiring limited reassurance (activating a new card)	Situations requiring reassurance (e.g., losing one’s bank card while overseas, fraudulent transactions)
Enquiries with a limited emotional, personal, or sensitive component that do not require empathy	Emotional, personal, and sensitive queries that require empathy (e.g., enquiring about a deceased family member’s bank accounts or funeral policy)

Table 6.1 above compares the circumstances in which financial service customers would prefer a chatbot versus a human service employee. As shown in Table 6.1, this study recommends using chatbots primarily for simple and routine queries, while reserving human service employees for more complex and emotionally sensitive interactions. For instance, chatbots can be effectively deployed to handle frequently asked questions, such as account balance inquiries, resetting passwords, or locating the nearest ATM. However, for situations where customers may require reassurance, such as resolving a disputed transaction or handling complaints regarding fraud, a human service employee is essential. In these cases, customers are likely to feel more supported when assisted by a human employee who can offer empathy and reassurance. For example, a customer reporting an unauthorised transaction may feel more comforted when a human service employee explains the next steps, reassures them that the issue is being addressed, and expresses understanding of their frustration. As such, financial service providers should ensure that chatbots are used as a first line of support for straightforward queries, while complex and emotional queries are automatically routed to human service employees. This approach not only maximises efficiency but also ensures that customers receive the appropriate level of support based on the type of their request.

6.3.2 Customer education is key

One of the key findings of this study is that customers' perceived risk and lack of trust in the competence of chatbots largely stem from their limited understanding of how chatbots work. To address this, customer education is crucial. Service providers need to focus on explaining AI and chatbot technologies to their customers. As noted by Grewal *et al.* (2021), most AI systems, including chatbots, are perceived as "black boxes," which leads to mistrust. Managers should proactively educate customers by making the inner workings of chatbots more transparent and simplifying this. Banks can achieve this through clear, customer-friendly educational tools. For example, banks can develop short graphic videos that explain in layman's terms how chatbots operate. These videos should be easily accessible through multiple channels, such as the bank's website, mobile apps, and social media platforms. This aligns with recommendations from Rai *et al.* (2020) and Thomaz *et al.* (2020), who advocate for explainable AI to build consumer trust. Furthermore, integrating interactive chatbot tutorials into mobile banking applications can help users understand chatbot functionality in real time, offering hands-on experience. By offering step-by-step guidance, banks can ensure customers feel confident when interacting with chatbots, thereby reducing perceived risk.

A significant concern for many customers when interacting with chatbots is data privacy and security. This study, supported by Rajaobelina *et al.* (2021) and Bouhia *et al.* (2022), highlights the importance of addressing these concerns to encourage chatbot adoption and mitigate resistance. Financial service providers must ensure that their chatbots adhere to strict privacy policies and communicate these policies effectively to customers. For example, banks should incorporate privacy notifications within chatbot conversations, explaining how personal data is stored and protected. A simple message such as, "Your data is encrypted and stored securely to improve your experience," can reassure customers. Additionally, bank managers can implement automated security updates that highlight recent improvements in data protection. These updates can be presented as pop-ups or notifications within the mobile banking application, further reinforcing the bank's commitment to customer data security.

Moreover, financial service providers should create educational content around their privacy and security mechanisms. For example, blog posts that outline how customer data is protected using encryption and multi-factor authentication can build trust. This could be dispersed through email newsletters or featured on the bank's social media platforms. This transparency, as supported by Niu

and Movondo (2024), demonstrates a clear commitment to safeguarding customer data, which is likely to alleviate privacy concerns and mitigate customer resistance to chatbots.

Furthermore, managing customer expectations is an essential strategy for improving chatbot satisfaction. According to Crolic *et al.* (2022), customers are more satisfied when their expectations are exceeded. By setting realistic expectations for chatbot capabilities, financial service providers can reduce dissatisfaction. Service scripts can be designed where chatbots openly acknowledge their limitations. For instance, a chatbot could introduce itself by saying, "I'm here to help with basic questions, but if you need further assistance, I'll connect you with a human representative." ABSA Bank's chatbot employs a similar strategy by informing customers that it is still in development, which helps to set realistic expectations and prevent frustration when the system cannot resolve more complex issues (ABSA Bank). This approach ensures that customers are not over-reliant on chatbots for tasks they are not equipped to handle, thus enhancing overall satisfaction.

In addition to setting realistic expectations, banks can build trust by providing a copy of the chatbot interaction immediately after the conversation. This creates a sense of accountability and gives customers the confidence to follow up on issues. For example, following a customer interaction, the bank could send an automated email summarising the chatbot conversation along with instructions on how to escalate the matter if the issue persists. This step provides transparency and ensures that customers feel supported even after the chatbot interaction has ended.

Policymakers can support these efforts by creating guidelines that encourage transparency and data protection. Regulations that command clear communication of chatbot capabilities, privacy measures, and data usage policies would help to standardise these practices across the banking industry (Bouhia *et al.*, 2022). Additionally, policymakers could offer incentives for banks to invest in explainable AI technologies, such as tax breaks or grants for companies that prioritise customer education and data protection. This could encourage widespread adoption of best practices in AI transparency, fostering greater consumer trust and reducing resistance to chatbot technologies.

6.3.3 Increased transparency

This study highlights the critical role of transparency in addressing customer resistance to chatbots. A lack of transparency in chatbot interactions can lead to feelings of distrust and frustration, contributing to customers' reluctance to engage with these technologies (Marr, 2022; Sangle-Ferriere & Voyer, 2019). To overcome this resistance, managers must focus on proactive transparency strategies that ensure customers understand when they are interacting with AI instead of a human. Financial service providers should implement clear identity announcements at the start of any chatbot interaction. For example, ABSA Bank effectively uses opening messages such as "Good day! I am not a human, but I may be able to help" to inform customers upfront that they are dealing with a chatbot (ABSA Bank). This opening message helps customers adjust their expectations and prevents dissatisfaction that may be caused by thinking they are speaking to a human. By setting reasonable expectations, banks can reduce customer frustration and create more authentic interactions (Rajaobelina *et al.*, 2021). Additionally, communicating a chatbot's identity in a pop-up notification or in its opening dialogue ensures that all customers are always informed, regardless of the channel of interaction, such as a banking website or social media platform.

Encouraging customer feedback is another effective approach to improving trust and reducing resistance. After each interaction, financial service providers should invite users to rate and review their chatbot experience. Transparent ratings and reviews reassure new customers about the quality and

reliability of the chatbot, while also providing valuable feedback to help financial services managers improve the chatbot. Banks can further engage customers by responding to common concerns raised in chatbot reviews, via follow-up emails for example, thereby showing a commitment to improving service quality, which can help to strengthen the customer relationship.

Policymakers also play a crucial role in addressing resistance to chatbots. Currently, firms are not legally required to disclose whether a customer is interacting with an AI or not (Mozafari *et al.*, 2022; Robinson *et al.*, 2020). This study emphasises that public policy should mandate chatbot identity disclosure to ensure more ethical and transparent customer interactions. By enforcing policies that require firms to clearly state when AI is being used, regulators can help set industry standards that prioritise honesty and transparency. This is especially important given that hiding the identity of chatbots raises ethical concerns that could damage customer trust and loyalty (Niu & Movondo, 2024). As such, by promoting such regulations, policymakers can encourage firms to more transparent, which is a key driver of customer trust and satisfaction.

6.3.4 Increased perceived autonomy

To overcome customers' resistance to interacting with chatbots, financial service providers must focus on enhancing customer autonomy and providing clear choices. Research indicates that a perceived loss of autonomy when interacting with AI, such as chatbots, can lead to negative feelings toward the service and reduce customer satisfaction (Puntoni *et al.*, 2021). Therefore, offering customers the ability to make informed choices at the start of a chatbot interaction is critical for overcoming this resistance. Specifically, financial service providers should offer customers the option to opt in or opt out of chatbot interactions before the exchange begins. This strategy ensures that customers feel in control and do not perceive the chatbot as being forced upon them. By clearly presenting the chatbot's identity at the start of the interaction, customers are empowered to decide whether they want to engage with the chatbot or engage with a human service employee instead. For examples, banks can implement a pop-up window that gives customers a clear choice between interacting with the chatbot or opting for human support, as demonstrated by Commonwealth Bank Australia's chatbot, Ceba. Ceba offers customers the flexibility to escalate their issues to human service employees or other service channels based on their unique needs (Cummins, 2022).

Furthermore, financial service providers should integrate a seamless escalation feature that allows customers to transition to a human service employee at any point during the chatbot interaction. This can be achieved by embedding a fixed button within the chat interface that customers can use to be routed directly to a human service employee if they feel dissatisfied or need further assistance. The option to escalate an issue to a human service employee not only provides customers with a sense of autonomy but also prevents frustration in cases where the chatbot is unable to resolve their concerns effectively (Huang & Dootson, 2022). By doing so, banks can ensure that customers do not feel trapped in an unsatisfactory interaction with AI, thus reducing resistance.

6.3.5 Anthropomorphism in chatbots

As an illustration of how different banks across the globe present their chatbots to consumers, the table below compares various banking chatbots. Table 6.2. below specifically compares banking chatbots' various opening lines and levels of anthropomorphism.

Table 6.2: Comparison of Banking Chatbots

	Bank	Country	Chatbot Name	Appearance	Opening Message
1	ABSA	Multiple African Countries	Abby	Animated robot	"Good day! I am not a human, but I may be able to help. This tool is in early development but will get better over time with your help" (ABSA Bank).
2	Nedbank	South Africa	Enbi	Animated robot	"Hello! I'm Enbi, your 24/7 chat assistant. Please type a simple question in the meeting box" (Monzon, 2021).
3	HDFC Bank	India	Eva	Female animated character	"Hi! I'm Eva, your personal assistant to help you with HDFC Bank-related queries" (HDFC Bank).
4	Bank of America	United States	Erica	No virtual appearance	"Hi there! I'm Erica, your virtual financial assistant" (Transform Partner).
5	Capital One	United States	Eno	Speech bubble with only a smile (no eyes, mouth etc).	"I'm Eno, your Capital One assistant. Ask me a question, or try one of these [options]" (Capital One).
6	TD	Canada	Clari	Animated Robot	"What can I help with you today?" (TD).
7	Citi	Singapore	Citi Bot SG	No virtual appearance	"Hello there. I'm Citi Bot SG. Find some of the most common enquiries below. I can also help you with frequently asked banking questions. Send me a message" (Chatbot Guide).
8	CommBank	Australia	Ceba	Speech bubble with only a smile (no eyes, mouth etc.)	"Hi [Name], I'm Ceba, the CommBank assistant" (CommBank).
9	HSBC	Hong Kong	Amy	Female animated human	"I am an HSBC Commercial Banking virtual assistant, here to answer your questions about our products and services" (Olson, 2019).
10	Zenith Bank	Nigeria	ZiVA (Zenith Intelligent Virtual Assistant)	Female animated human	"Hello. I'm ZiVA (Zenith Intelligent Virtual Assistant) your personal banking assistant on WhatsApp" (Zenith Bank).

Table 6.2. above compares various chatbots offered by ten banks across the globe. Of the ten banks, three, namely ABSA, Nedbank, and TD have implemented a chatbot with a simple, animated, robotic appearance, with their only human-like feature being a basic smiling face (see Appendix 6.b, 6.c, and 6.g). Two of the ten banks, namely Citi and Bank of America, have implemented chatbots that lack a virtual appearance entirely (see Appendix 6.e and 6.h). Both of these banks have used their logo to represent their chatbots. In terms of appearance, these chatbots lack any human features. Additionally, two banks, namely CommBank and Capital One, have implemented chatbots that present as speech bubbles with only a smile, thus lacking other facial features (see Appendix 6.f and 6.i). The remaining three banks, namely HSBC, HDFC Bank, and Zenith Bank have implemented chatbots with a more human-like appearance (see Appendix 6.d, 6.j and 6.k). Notably, all three of these chatbots present as female, with HSBC's chatbot appearing the most realistic and human-like (see Appendix 6.j). Both HSBC's and Zenith Bank's chatbot present as female animated humans, whereas HDFC Bank's chatbot presents as a female animated character rather than a human (see Appendix 6.e).

All ten banks listed in Table 6.2 have given their chatbot a name to appeal to customers. This study recommends that financial service providers humanise chatbots to an extent by giving them a name and visual appearance to reduce perceptions of creepiness and make chatbots more appealing to customers. However, financial service providers should exercise caution, as overly humanised chatbots were revealed in this study to have the opposite effect, specifically, increasing perceptions of creepiness. Overly humanising chatbots can also cause inflated customer expectations (Crolic *et al.*, 2022). Considering this potential problem, instead of a human face, this study recommends that chatbots resemble an animated character. For example, HDFC Bank's Eva chatbot has human features (see Appendix 6.d) without being overly humanised or made to look realistic, unlike HSBC's chatbot (see Appendix 6.j), whose realistic human-like appearance could evoke perceptions of creepiness. Therefore, financial service providers can utilise chatbots more effectively by assigning a name and avatar resembling a robot with human-like features. This adds a human touch to the chatbot without overly humanising it in a manner that comes across as inauthentic to the customer. Based on this study's findings, chatbot service scripts should be designed to omit asking customers how they are, as this can lack sincerity. It is further recommended that financial service providers design their chatbots to produce human-like responses that are perceived as natural to the customer, based on the success of ChatGPT's human-like responses which have contributed to the chatbot's popularity (Browne, 2023).

In terms of their opening message, the majority of chatbots mentioned in Table 6.2. greet customers and introduce themselves in a friendly manner. Significantly, CommBank's chatbot, Ceba, although lacking a humanised appearance, greets the customer by name, thus promoting a more personalised interaction with the customer. Thus, this study recommends that chatbots personalise interactions by greeting customers by their names. Kull *et al.* (2021) suggest that a warm opening message rather than a competent message can make customers feel more connected to the brand behind the chatbot and enhance customer relationships. Thus, this study recommends chatbots be equipped with a friendly opening message and greet the customer by name for a personalised interaction. For example, a financial service provider can introduce their chatbot with an initial message saying, "Hi Joel, I'm Freddy Bot. I'm here to help in any way I can." Another example is ATTITUDE, whose chatbot on its e-commerce site successfully uses a warm, welcoming tone and emoticons to appear friendly (Christison, 2022). However, service providers should pay attention to the context in which this is employed, and their customers' expectations and needs (Kull *et al.*, 2021).

6.3.6 How Financial Service Providers Can Effectively Address Customers' Concerns

This section has suggested numerous practical ways for financial service providers to effectively address the negative implications and overcome customer resistance to chatbots. In particular, the numerous concerns customers associate with chatbots have been addressed. To summarise, Figure 6.1 below offers a model depicting customers' various concerns regarding chatbots in relation to the various mitigating strategies this study has identified and explained. The resulting positive outcomes, also previously explained, are also presented in this model.

Figure 6.1 Model indicating how financial service providers can mitigate customers' concerns about chatbots

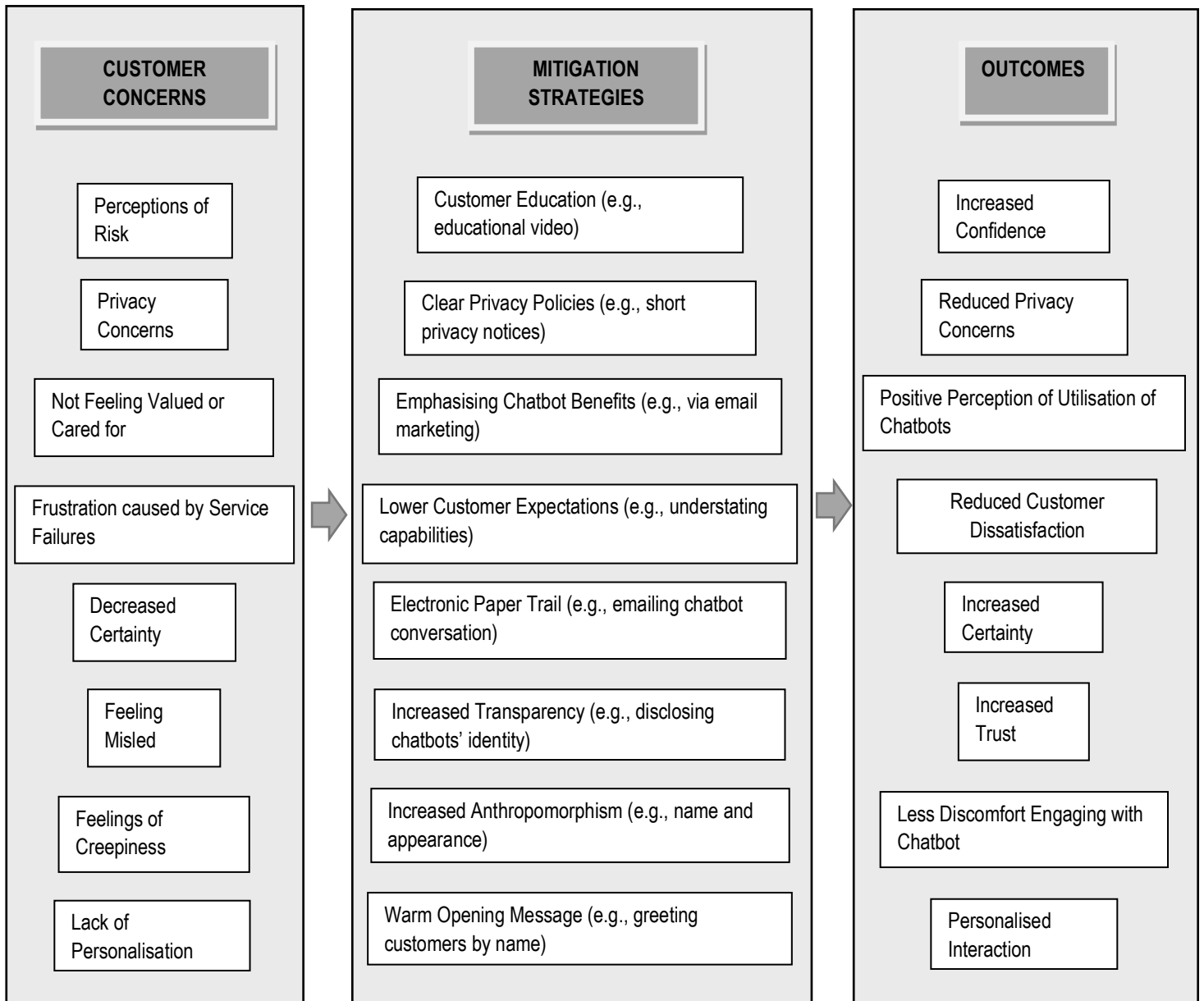


Figure 6.1 above shows the various ways in which financial service providers can address customer concerns about chatbots to ensure positive impacts on customers and customer relationships, enabling the firm to overcome customer resistance to chatbots. The model suggests that to mitigate perceptions

of risk, financial service providers can rely on customer education to increase customers' confidence in chatbots. For example, banks could offer webinars or tutorials that explain how chatbots work, showcasing their capabilities through live demonstrations. Additionally, creating an FAQ section on the bank's website that answers common concerns about chatbot functionality can empower customers through knowledge and a better understanding of chatbots.

In addition, privacy concerns can be mitigated through clear privacy policies, helping to reduce customers' hesitations when engaging with chatbots. Financial service providers can enhance trust by sending proactive communications that outline how customer data is protected and used, such as infographics shared via email or social media. By emphasising chatbots' benefits and educating customers about the value they offer through channels such as email marketing, financial service providers can decrease the likelihood of customers feeling uncared for or undervalued when chatbots are employed. Banks can also create targeted campaigns that highlight success stories where chatbots resolved customer queries effectively, reinforcing their positive role in customer service. This approach ensures that customers develop a more positive perception of why banks use chatbots.

Moreover, frustration caused by chatbot service failures can be mitigated by lowering customer expectations, thereby lessening the likelihood of customers feeling dissatisfied with the chatbot's service performance (Crolic *et al.*, 2022). For example, financial service providers should set clear expectations about the chatbot's capabilities, indicating that while it can handle many inquiries, complex issues may require human assistance. The decreased certainty involved in chatbot interactions can also be mitigated by providing customers with an electronic paper trail, which can reassure them and increase their certainty after these interactions. This could involve sending a summary of the chatbot interaction via email, so customers have a record of what was discussed, enhancing their confidence in the communication.

Financial service providers can also reduce the likelihood of customers feeling misled by being transparent about the identity of their chatbot. For examples, banks could include a brief introduction in the chatbot's initial greeting, stating that it is an AI-driven service, which helps manage expectations from the start. This, in turn, can reduce information asymmetry, resulting in an imbalance of power in the relationship (Murtarelli *et al.*, 2021), thereby promoting trust (Grewal *et al.*, 2021; Chen *et al.*, 2017). Additionally, financial service providers can alleviate feelings of creepiness caused by chatbot obscurity by humanising their chatbots. This can be achieved by using conversational language and friendly emojis to make interactions feel warmer and more engaging. Providing options for customers to switch to a human representative easily if they feel uncomfortable can also help in this regard, leading to customers feeling less discomfort when engaging with the chatbot. Lastly, to address the lack of personalisation associated with chatbot interactions, financial service providers can design their chatbots to include a warm opening message (Kull *et al.*, 2021) that uses the customer's name. Banks could also program the chatbot to remember previous interactions and preferences, allowing for a more personalised experience in future encounters. This will enable a more tailored interaction between the customer and the chatbot. The next section discusses this study's theoretical implications.

6.4 THEORETICAL IMPLICATIONS

Theoretically, social exchange theory was utilised to provide a conceptual perspective and contribute to the literature regarding perceived costs and benefits. Previous studies have primarily extended theories other than social exchange theory to investigate AI in services (De Keyser & Kunz, 2022; Bock *et al.*, 2020). Theories commonly used in a service robot context include uncanny valley theory, social

response theory, social impact theory, social presence theory, anthropomorphism theory, technology acceptance model theory, service robot acceptance model theory, and attribution theory, among others (De Keyser & Kunz, 2022). This study adds to the service robot literature by applying social exchange theory to investigate customers' perceived costs and benefits of chatbots, thereby contributing a theoretical perspective on service robots that is relatively uncommon in the literature (Bock *et al.*, 2020; Meyer-Waarden *et al.*, 2020; De Keyser & Kunz, 2022). Furthermore, Huang and Rust (2021) recommend that when investigating how AI can be used more effectively in customer relationships, customers' perceived benefits and costs should be evaluated.

Scholars also suggest that it is unclear how AI influences the social exchange process between customers and firms and whether the traditional ways in which a customer perceives costs and benefits can be applied in situations where an AI technology, such as a chatbot, is used (Bock *et al.*, 2020). Therefore, to address uncertainty in the literature regarding the application of social exchange theory in an AI context (Fatima *et al.*, 2024; Bock *et al.*, 2020), this study applies this theory to demonstrate its usability in a chatbot context. In this way, this study contributes to the social exchange theory literature by showing this theory's applicability in the context of AI and chatbots. By extending social exchange theory, this study shows that this traditional theory can be used to explain customer relationships with service robots such as chatbots (Meyer-Waarden *et al.*, 2020), particularly through the lens of perceived benefits and costs. Specifically, this study indicates how firms can improve customer relationships by increasing the perceived benefits and mitigating the perceived costs of chatbots.

Notably, this study applies social exchange theory to investigate chatbots in the financial services sector specifically. This context is key to consider as customer relationships in financial services are particularly uncertain and are constantly evolving (Heinonen, 2014), particularly in banking (Chai & Dibb, 2018). Competition in this industry is also heightened, making customer relationships an important asset (Riedel *et al.*, 2022). As such, this study's focus on the perceived costs and benefits of chatbots in this specific setting adds a nuanced understanding of customer interactions. Previous studies extending social exchange theory have been conducted in other contexts, focusing on brand equity for example (Sohaib, Mlynarski & Wu, 2022). Instead of examining chatbots in financial services, past studies have employed social exchange theory to investigate commercial voice assistants and virtual conversational assistants in a broader business context (Bălan, 2023; Fakhimi, Garry & Biggemann, 2023) or have examined ChatGPT specifically (Ma & Huo, 2023). Therefore, this study makes a distinctive contribution to the literature by focusing chatbots in the financial services industry.

Although chatbots are increasingly implemented by practitioners, research on AI and chatbots is still developing (Li & Zhang, 2023; Tran *et al.*, 2022; Crolc *et al.*, 2022; Huang & Dootson, 2022). This study's findings expose research opportunities to further explore how different chatbots can be utilised in service encounters and the effect they have on customer relationship management (Blazevic & Sidaoui, 2022). Previous studies have investigated the effects of chatbot characteristics on consumer responses and perceptions. However, by drawing on social exchange theory, this study extends this knowledge by paying particular attention to perceived costs and benefits. Limited research has explored the application of social exchange theory in examining the impact of chatbots within the realm of financial services. Consequently, this study stands out as it relies on social exchange theory to provide a distinctive perspective on how customers perceive the advantages and drawbacks of chatbots. Furthermore, this study delves into strategies for alleviating or leveraging these perceptions to address customer resistance toward chatbots in the financial services sector. This study also contributes to the literature on customer resistance by investigating the challenges and opportunities of chatbots from the

customer resistance perspective (Yang *et al.*, 2023). Research specifically investigating customer resistance related to AI-based chatbots is lacking in the literature (Yang *et al.*, 2023; Cheng *et al.*, 2022; Pizzi *et al.*, 2021; Longoni *et al.*, 2019). Thus, by presenting strategies that assist in ensuring the effective use of chatbots in financial services, this study offers a unique user perspective on how to overcome resistance to chatbots.

6.5 LIMITATIONS OF THE STUDY

This section outlines the study's limitations concerning its conduct and focus. Due to the specific time frame within which the research was conducted, the researcher faced time limitations that restricted the amount of data that could be collected. Additionally, age and gender were the only demographics measured in the quota sampling method used, limiting the conclusions that could be drawn about the population. This study also relied on statistics from a secondary source published in July 2020 because it represented the latest available information when the quota sampling method was employed.

The research also applied phenomenological analysis. This type of analysis relies heavily on participants' descriptions of their experiences, which they may struggle to fully articulate, limiting the depth of the analysis (Daymon & Holloway, 2010; Hycner, 1985). Moreover, the results' generalisability is limited due to the small sample and the results being specific to this study's participants. However, the researcher used member checking, in which participants were asked if the findings reasonably reflected their accounts (Lincoln & Guba, 1985; Merriam & Tisdell, 2016; Daymon & Holloway, 2010; Hycner, 1985; Carson *et al.*, 2001). Confirming findings with participants was a critical step in ensuring a credible study (Lincoln & Guba, 1985).

In addition, the selection of participants was limited to individuals residing in South Africa. As chatbot popularity varies across cultures and countries (Song *et al.*, 2022) and customer reactions to AI technology may differ across cultures (Puntoni *et al.*, 2021), the results of this study may not be generalisable to other regions. Additionally, customers from other cultures may perceive different benefits and costs when interacting with chatbots compared to human service employees (Lin, Shao & Wang, 2022).

This study examined the implications of chatbots on customer relationships within the financial services sector, focusing on internet banking. It solely examined the distinctions consumers perceive between AI and human financial service delivery. Thus, the generalisability of this study's findings is limited (Song *et al.*, 2022). The effects of AI technologies can vary across industries, as chatbots' features or functions are often tailored to specific sectors (Davenport *et al.*, 2020). For instance, in the hospitality industry, chatbots assist customers in booking hotels and other transactions and in the healthcare sector, chatbots provide symptom-based diagnoses and mental health evaluations (Li & Zhang, 2023). Therefore, as this study focused on the financial industry, it did not consider chatbots' role across various industries and contexts.

Moreover, this study focused on text-based chatbots, thereby excluding more human-like robots, for example, which are increasing in popularity. In addition, when investigating consumer perceptions of chatbots in relation to anthropomorphism, this study did not specify levels of anthropomorphism, which may offer additional insights (Song *et al.*, 2022).

This study is further limited by not differentiating chatbots by specific types. Different types (e.g., human-like versus not human-like) of chatbots may have specific perceived benefits and costs not captured in this study. The discussed implications of chatbot perceived benefits and perceived costs may also vary

across different types of chatbots (Lin *et al.*, 2022). The researcher specifically focused on chatbots to reveal different perceived benefits and costs. Therefore, the specific perceived benefits and costs identified in this study may not apply to other forms of AI. Taking into account the aforementioned limitations, conclusions, and managerial and theoretical implications, the concluding section of this chapter provides recommendations for future researchers interested in expanding on this study's topic or any of its conclusions.

6.6 RECOMMENDATIONS FOR FUTURE RESEARCH

Research highlights AI as the technology that will be most used by marketers in the near future (Hsu & Lin, 2023; Davenport *et al.*, 2020). As such, this section outlines recommendations that future researchers should consider for their studies. As chatbots are used in various industries, including healthcare, hospitality, food and beverages, apparel, and entertainment industries, future research should investigate the role of chatbots across different industries. Future research should clearly identify the perceived benefits and costs relevant to these industries (Lin *et al.*, 2022). While this study considers the financial services industry, particularly internet banking, future research could consider other sectors in this industry in which customers engage with chatbots. Future research could investigate lesser-explored contexts of financial services, namely insurance, pensions, and financial inclusion, areas in which research remains limited (Hentzen *et al.*, 2022). As this study focused on text-based chatbots, future research could investigate voice-based chatbots, which are increasing in popularity (Fotheringham & Wiles, 2023; Moriuchi, 2021). For example, future research could investigate if using a female versus a male voice influences creepiness and privacy concerns (Bouhia *et al.*, 2022).

This study's findings suggest that customers find chatbots less "creepy" and more relatable when they have human-like features. Future research endeavours could delve into customers' responses to chatbots that dynamically alter their appearance, such as ageing alongside customers over time, and evolving communication styles. Investigating whether or not these changes enhance personalisation or potentially alienate the firm, thereby negatively impacting customer relationships, could be a valuable avenue of exploration. In addition, future research could investigate if chatbot anthropomorphism highlights other noteworthy considerations. For example, researchers could examine if overly humanising a chatbot could indicate to customers that the firm has increased its investment into developing its chatbot (Fotheringham & Wiles, 2023). This study explored the role of AI as an employee, but future research could investigate the role of AI as the customer. This may be fruitful, as AI is increasingly replacing the customer when collecting information, negotiating prices, and making purchases (Huang & Rust, 2021).

Moreover, the "metaverse", defined as a "hyper-connected digital universe", represents a rich research area for marketers (Barrera & Shah, 2023:1). Consumers are increasingly interacting in this space and firms are continuing to invest in it. This space offers unique ways in which firms can engage with consumers and is changing how consumers interact with firms and brands. However, the literature lacks a clear understanding of its implications (Barrera & Shah, 2023) regarding chatbots. Firms must understand the implications of the metaverse, specifically its opportunities (Barrera and Shah, 2023), risks (Chohan & Schmidt-Devlin, 2023), and effects on customer relationships. Therefore, future research could investigate how customer resistance in this sphere can be overcome using chatbots. Specifically, AI's role in the metaverse is to create "digital twins" by duplicating actions taken in the virtual world in reality. Additionally, AI enables the addition of chatbots, or computer agents –characters controlled by AI rather than humans – into the metaverse (Lee, Braud, Zhou, Wang, Xu, Lin, Kumar,

Bermejo, & Hui, 2021; Barrera & Shah, 2023). Therefore, future research could investigate chatbots' role within the context of the metaverse, specifically examining customers' responses to chatbots within this space.

This study's findings revealed that customers may perceive chatbots negatively due to associating them with increased risk. Customers were found to be particularly concerned about security and privacy regarding sharing their personal information, especially in the context of banking. To address these concerns, policymakers should consider implementing regulations that command financial service providers to establish clear data protection policies prioritising customer privacy, ensuring customers are informed about how their data is collected and used (Bouhia *et al.*, 2022). As AI continues to grow in the banking sector, and privacy becomes a crucial research topic that needs exploration (Fares, Butt & Lee, 2023), future research could focus on investigating how customers' privacy concerns can be addressed in the financial services context.

This study's findings raised several ethical concerns about the lack of legislation surrounding chatbot disclosure. Policymakers should consider developing comprehensive guidelines that require clear chatbot disclosures when customers interact with chatbots, including information about the nature of the chatbot and the types of data it collects (Mozafari *et al.*, 2022). As companies increase the use of chatbots in customer service roles (Fotheringham & Wiles, 2023), future research should investigate how chatbots can be implemented more ethically and how this may implicate firms' customer relationships. Within financial services specifically, research that focuses on regulations concerning AI is limited, particularly related to third-party AI vendor management and its implications for consumers' financial data protection (Hentzen *et al.*, 2022). Considering this, policymakers should establish strict regulations for third-party AI vendors to ensure the security and integrity of customer data (Bouhia *et al.*, 2022; Thomas *et al.*, 2020).

As this study's findings suggested that internet banking customers are particularly concerned about privacy and the security of their data, future research should explore the ethical use of AI in financial services from a customer's perspective. This exploration should also include regular consultations with stakeholders to ensure that policies reflect the evolving concerns and needs of customers (Thomaz *et al.*, 2020). The ensuing section offers the study's concluding remarks.

6.7 CONCLUSION

Firms integrate technology into the service frontline to facilitate interactions among the organisation, its employees, interfaces, and customers. This integration aims to improve communication and strengthen customer relationships (Li & Zhang, 2023). Within financial services, the highly competitive market, coupled with high customer expectations, makes integrating new technologies imperative (Fares *et al.*, 2023). However, an innovation's success relies on customer adoption, underscoring the significance of addressing customer resistance to chatbots (Mani & Chouk, 2018; Kreger, 2023; Huang *et al.*, 2024).

Using social exchange theory, this study provided insight into customers' perceived benefits and perceived costs of chatbots and how these can be mitigated or exploited to overcome chatbot resistance in the financial services industry. The study revealed important implications for financial service providers and marketers regarding how to use chatbots more effectively to overcome customer resistance. Essentially, customers have more concerns when dealing with chatbots compared to human service employees. These concerns can lead to negative feelings, such as feelings of creepiness or feeling misled by financial service providers and, more significantly, chatbot resistance (Garvey *et al.*, 2023).

This study provided practical ways for how financial service providers can address customer concerns and cater to their preferences to overcome customer resistance to chatbots and their negative implications. As such, this study stands as a valuable guide for integrating AI technologies, particularly chatbots, into the customer service landscape of the financial services industry.

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LIST OF APPENDICES

Appendix 1.a: Overview of the literature on customer resistance to chatbots

The table below compares similar studies investigating customer resistance to chatbots in the literature, specifically looking at their key findings and limitations. The table includes the present study to differences.

Author	Date	Title	Journal	Key findings	Limitations
Müller, Mattke, Maier and Weitzel	2019	Conversational agents in healthcare: using QCA to explain patients' resistance to chatbots for medication. In International Workshop on Chatbot Research and Design	International Workshop on Chatbot Research and Design	<p>Reasons for patients' resistance to chatbots vary and therefore, tailored approaches are required to reduce resistance.</p> <p>Patients' resistance to using chatbots for medication stems from their fear of future regret, highlighting the importance of trust in chatbots.</p>	<p>Limited to healthcare context.</p> <p>Uses an individual perspective to explain why patients' resistance to using a chatbot for medication.</p> <p>Lacks a diverse population and thus generalizability is restricted.</p>
Kwangswad and Jattamart	2022	Overcoming customer innovation resistance to the sustainable adoption of chatbot services: A community-enterprise perspective in Thailand	Journal of Innovation & Knowledge	<p>Perceived privacy and time-related risks influences consumer attitudes and intentions to use chatbots.</p> <p>Consumers who have used chatbots before are primarily concerned about privacy and time limitations.</p> <p>Technological anxiety negatively influences attitudes toward using chatbots, while perceived information quality indirectly encourages ongoing chatbot use.</p>	<p>Limited to community-enterprise perspective.</p> <p>Participants were limited to consumers who had used community-enterprise chatbot services in Prachuap Khiri Khan province, Thailand.</p> <p>Focused on Facebook chatbots only and thus findings cannot explain user behaviour on other platforms.</p>
Cheng, Bao, Zarifis,	2021	Exploring consumers' response	Internet Research	If a consumer perceives a chatbot is empathetic and friendly, it increases their trust.	Uses the stimulus-organism-response (SOR) framework

Gong and Mou		to text-based chatbots in e-commerce: the moderating role of task complexity and chatbot disclosure		As consumers place more trust in a chatbot, they become more reliant on it and are less resistant to using it in future interactions.	Only investigated the chatbot in the e-commerce setting. Only focused on certain customer attributes: empathy and friendliness
Zhu, Zhang, Wu and Liu	2022	AI is better when I'm sure: The influence of certainty of needs on consumers' acceptance of AI chatbots	Journal of Business Research	When consumers are more certain about what they need, they perceive chatbots as more useful, which increases their acceptance of chatbots. When it comes to search products, having a higher level of certainty about their needs enhances consumers' acceptance of chatbots. For experience products, the level of certainty about needs does not majorly impact consumers' acceptance of chatbots.	Focused on investigating the effect of the certainty of consumer needs on consumers' acceptance of chatbots in the prepurchase stage of the online purchase process. Primarily investigated the moderating effect of product type (search vs. experience products).
Kim, Ryoo, Lee and Lee	2023	Chatbot Advertising as a Double-Edged Sword: The Roles of Regulatory Focus and Privacy Concerns	Journal of Advertising	Perception of risks and benefits plays a role in mediating the interplay between ad personalisation, regulatory focus, and privacy concerns. Consumers who focus on promotion react positively to highly personalised chatbot advertising, whereas consumers focused on prevention perceive it more negatively. Consumers who are highly concerned about their privacy dislike highly personalised ads.	Focused on the effect of regulatory focus and privacy concerns on consumers' responses to highly personalised chatbot advertising. Did not explore consumers' positive and negative motivations to use chatbots.
Wang, Li, Fu and Jin	2023	Whether to trust chatbots: Applying the	Journal of Retailing and	Consumers have a negative emotional experience with chatbots rather	Uses cognitive

		event-related approach to understand consumers' emotional experiences in interactions with chatbots in e-commerce	Consumer Services	<p>than humans when interacting.</p> <p>Consumers trust chatbots less than humans, especially when they have to make personal decisions.</p>	<p>appraisal theory and an event-related potential (ERP) approach.</p> <p>Studied chatbots in the context of online customer service.</p> <p>Focused on consumers' emotional experience of chatbots and did not include post-service experience.</p> <p>Participants were limited to college students.</p>
Yang, Sun and Chen	2023	Understanding AI-based customer service resistance: A perspective of defective AI features and tri-dimensional distrusting beliefs	Information Processing and Management	<p>The lack of empathy is a significant aspect of flawed AI, particularly in its emotional aspect.</p> <p>This lack of empathy has three impacts on customer resistance: a direct effect, an indirect effect, and a moderating effect.</p>	<p>Focuses on distrust and empathy when investigating customer resistance to chatbots.</p> <p>Most of interactions participants had with chatbots were concerned shopping on e-commerce platforms.</p> <p>Most participants had significant experience using chatbots, meaning their responses concerning the drawbacks of chatbots and resistance may differ from consumers who have little experience with chatbots.</p>
Present study	2023	Customer Resistance to Chatbots in Financial Services: A Social Exchange Theory Perspective	Present Study	<p>The extent to which a chatbot is humanised can influence chatbots' perceived creepiness, as well as customer expectations of the service interaction.</p> <p>Disclosing a chatbot's identity can have positive effects as it increases</p>	<p>Focused on financial services context, specifically internet banking</p> <p>Age and gender were the only demographics measured in the sampling method.</p>

				<p>perceived transparency and sets reasonable expectations of the interaction.</p> <p>Customers' privacy concerns stem from a lack of knowledge about how chatbots work.</p> <p>Customers' perceptions of increased risk may be reduced through educating customers about chatbots.</p>	<p>Limited to South African population.</p> <p>Focuses on text-based chatbots only.</p> <p>Does not differentiate chatbots by specific types.</p>
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Appendix 1.b: Overview of the literature on chatbots in financial services

The table below examines previous studies that have studied chatbots in the financial services industry, with the inclusion of the present study.

Author	Date	Title	Journal	Key findings	Limitations
Jang, Jung and Kim	2021	Investigating managers' understanding of chatbots in the Korean financial industry	Computers in Human Behaviour	<p>Proposes three main categories of challenges in the adoption of chatbots: technological, organizational, and managerial factors.</p> <p>The need for a substantial investment in chatbots is a managerial challenge in the adoption of chatbots.</p> <p>Chatbots' current capabilities are not meeting customer expectations, and their use in business is still in an experimental phase.</p>	<p>Focused on exploring managers' perception of chatbots</p> <p>Limited to the Korean financial industry.</p>
Rajaobelina and Ricard	2021	Classifying potential users of live chat services and chatbots	Journal of Financial Services Marketing	<p>Uses psychographic/attitudinal variables (interest and past satisfactory experience with company) and sociodemographic (age and gender) variables to uncover four segments in the context of home insurance purchasing.</p>	<p>Focuses on the home insurance sector only.</p> <p>Focused on the interest in using chatbot services rather than the use of chatbot services.</p>
Soetan, Mogaji and Nguyen	2021	Financial services experience and consumption in Nigeria	Journal of Services Marketing	<p>Presents a framework identifying three key factors affecting experiences for consumers and managers: service maintenance, technology, and service dynamics.</p> <p>Banked customers engage fully with technology, while underbanked customers face barriers, due to financial limitations and low tech adoption.</p>	<p>Focused on Nigeria that has a larger banked population than unbanked.</p> <p>Findings may not be generalised and should be applied in the context of Nigeria only.</p>

Sugumar and Chandra	2021	Do I Desire Chatbots to be like Humans? Exploring Factors for Adoption of Chatbots for Financial Services	Journal of International Technology and Information Management	<p>Performance expectancy, habit, likability, and social presence are crucial factors influencing the adoption of chatbots in financial services.</p> <p>Consumers were more willing to adopt chatbots for financial services when they had a positive impression of the machine they were interacting with.</p>	<p>This study uncovered certain variables that impact chatbot adoption and future research may unveil additional factors.</p> <p>Most participants are from the Asian region.</p> <p>Variables such as effort expectancy, hedonic motivation, and anthropomorphism did not show significant influence. However, outcomes may vary when looking at different technologies and regions.</p> <p>Utilised the unified theory of acceptance and use of technology 2 (UTAUT2) model and the Belief Desire Intentions (BDI) model.</p>
Mogaji and Nguyen	2022	Managers' Understanding of Artificial Intelligence in Relation to Marketing Financial Services: Insights from a Cross-Country Study	International Journal of Bank Marketing	<p>Proposes a framework for AI in financial service marketing, which emphasises customer connections, banks, external stakeholders, and regulators.</p> <p>Managers frequently encounter obstacles that hinder the rapid adoption of AI.</p> <p>Although useful, chatbots are not the only type of AI technology needed in financial services marketing.</p>	<p>Focused on managers' perceptions of AI adoption in financial services</p> <p>The theoretical framework created requires additional research and testing to determine if concepts are valid and can be applied to business activities.</p>
Present study	2023	Customer Resistance to Chatbots in Financial	Present Study	The extent to which a chatbot is humanised can influence chatbots' perceived creepiness, as well as	Focused on financial services context, specifically internet banking

		<p>Services: A Social Exchange Theory Perspective</p>		<p>customer expectations of the service interaction.</p> <p>Disclosing a chatbot's identity can have positive effects as it increases perceived transparency and sets reasonable expectations of the interaction.</p> <p>Customers' privacy concerns stem from a lack of knowledge about how chatbots work. Customers' perceptions of increased risk may be reduced through educating customers about chatbots.</p>	<p>Age and gender age were the only demographics measured in the sampling method.</p> <p>Limited to South African population.</p> <p>Focuses on text-based chatbots only.</p> <p>Does not differentiate chatbots by specific types.</p>
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Appendix 2.a: Six definitions of AI, as found in the literature

The table below examines definitions of AI in the literature, specifically offering six relevant definitions from previous studies.

	Author	Year	Definition of AI
1	Shankar	2018:6	“Programs, algorithms, systems and machines that demonstrate intelligence”
2	Kaplan and Haenlein	2019:17	“A system’s ability to interpret external data correctly, to learn from such data and to use those learnings to achieve specific goals and tasks through flexible adaptation”
3	Bock, Wolter and Ferrel	2020:317	“The configuration of technology to provide value in the internal and external service environments through flexible adaptation enabled by sensing, learning, decision-making and actions.”
4	Canhoto and Clear	2020:3	“An assemblage of technological components that collect, process, and act on data in ways that simulate human intelligence”
5	Paschen, Wilson and Ferreira	2020	Information systems that use logic to solve issues
6	Puntoni, Reczek, Giesler and Botti	2021:132	“Ecosystem comprising three fundamental elements - data collection and storage, statistical and computational techniques, and output systems - that enable products and services to perform tasks typically understood as requiring intelligence and autonomous decision making on behalf of humans.”

Appendix 3.a: Human service employees versus chatbots

The table below depicts the differences between human service employees and chatbots.

Human Service Employees	Chatbots
Available during certain times only	Constantly available to customers (Chung <i>et al.</i> , 2020)
Longer response times	Quicker response times (Chung <i>et al.</i> , 2020)
Less personalisation	More personalisation (Murtarelli <i>et al.</i> , 2021)
Takes time to access a customer's history	Can access a customer's history instantly (Murtarelli <i>et al.</i> , 2021)
Less convenient	More convenient (De Keyser <i>et al.</i> , 2019)
More suited to handle complex issues	Less suited to handle complex issues (Campbell <i>et al.</i> , 2020)
More costly	Less costly (Huang & Rust, 2018).
Difficult to scale	Easier to scale (Huang & Rust, 2018).
Less reliable	More reliable (Huang & Rust, 2018).
Delivers a heterogenous service	Delivers a homogenous service (Meyer-Waarden <i>et al.</i> , 2020)
Less difficulty in developing an emotional connection	More difficulty in developing an emotional connection (Sands <i>et al.</i> , 2021)
Less physical distance from customers	Greater physical distance from customers (Sands <i>et al.</i> , 2021)

Appendix 4.a: Measures taken to conduct trustworthy research

The table below depicts Perner and Skjølsvik's (2019) measures to conduct trustworthy research, followed by the researcher of this study.

Trustworthiness criteria	How it was addressed
Credibility: the degree to which the results accurately and faithfully represent the data that has been collected.	<p>20 interviews conducted across different age groups.</p> <p>Summaries of findings provided to participants.</p> <p>Data examined for contradictory evidence to findings.</p>
Transferability: the extent to which findings and results obtained from one study can be applicable and relevant in different contexts or settings.	<p>Participants provided detailed and comprehensive descriptions of the concepts being discussed.</p> <p>Consistent concepts represented in the data from multiple participants.</p>
Dependability: the extent to which the findings and results of a study are stable and consistent over time and across different locations or settings.	<p>Participants reflected on events over the past 3-5 years and included in-depth descriptions.</p>
Confirmability: the extent to which the interpretations and results of a study are based on the respondents' perspectives and the phenomenon being studied rather than influenced by researcher bias.	<p>Open ended questions were used in interviews to avoid priming or leading effects.</p> <p>178 pages of interview transcripts were coded.</p>
Integrity: the extent to which the interpretations of data and findings are not influenced by misinformation or the illusions of the respondents	<p>The confidentiality and anonymity of each participant were guaranteed.</p> <p>Participants were reassured that their data would be securely protected.</p>

SOURCE: Wallendorf and Belk (1989), Beeler, Zablah, and Johnston (2017), and Perner and Skjølsvik (2019)

Appendix 4.b: Questions for the Semi-Structured Interviews



As a **UCT master's** student, I would appreciate your honest feedback on the use of chatbots in financial services, specifically in internet banking. Your participation is voluntary, and you may withdraw from the research at any time. This research has been approved by the Commerce Faculty Ethics in Research Committee. You will not be requested to supply any identifiable information, ensuring **anonymity** of your responses. Your participation will require about 45 minutes of your time, and you can opt out at any time. Your responses will be **confidential**, and only aggregate findings will be given. If you wish to obtain access to the study or have any queries, please email **Kayla**: ptlkay001@myuct.ac.za.

- **Please talk me through your average day...**
 - Probe for the use of internet banking
 - What do you use internet banking for?
 - Probe for what banking needs they have

- **Can you tell me about your bank?**
 - Why did this bank appeal to you?
 - Does it still appeal to you? Why?
 - Have you ever switched banks?
 - If yes, why?
 - Were you satisfied with your new bank's service?
 - Why was their service better/worse?

- **How would you describe your relationship with your bank?**
 - Why is it good/bad?
 - What do you wish they could do to improve their relationship with you?
 - Probe for ways banks can effectively manage their customer relationships

- **How do you currently communicate with your bank?**
 - Why does this appeal to you? Why do you prefer this over other ways of communicating with your bank?
 - Is there anything about this way of communicating with your bank that you dislike?
 - What would be your next alternative? Why?
 - Probe for preferences/ evaluations of other digital channels

- **Have you experienced any issues with internet banking?**
 - If no → What would you do if there was an issue? How would you contact your bank?
 - How would you like your bank to solve the problem?

 - If yes → Can you tell me about it? What did you do when the problem occurred?
 - How was it dealt with by your bank?
 - Were you satisfied? If no → how would you have liked for the issue to be dealt with?

Nowadays, when we have issues with our service providers, we can speak to them through text-based live chats. Sometimes, in these text-chats, we are talking to an actual person and sometimes the chat is computer-generated. In this case, we are talking to an AI chatbot instead of a human employee. I'll be asking you about chatbots.

- **Do you think a chatbot could be helpful when you're experiencing an issue with your internet banking?**
 - Why?

- **Have you had the opportunity to speak to a chatbot when internet banking?**
 - If no:
 - Have you seen spoken to a chatbot in general?
 - If yes → Was it an international site or local site?
 - How was the experience?

- If no → What would encourage you to speak to a chatbot?
 - If yes:
 - What encouraged you to speak to the chatbot?
 - What did you need from the chatbot?
 - Was your problem solved?
 - How did you feel after the conversation?
 - Would you speak to one again? If no, why not?
 - Do you think your bank was at fault here?
 - How did this conversation compare to conversations you've had with employees via written text? (email, SMS, WhatsApp etc.)
 - How did it compare to conversations you've had with employees via phone calls/in-branch?
- **In which situations, would you find a human employee more helpful than a chatbot?**
 - Why?
 - When would you find a chatbot more helpful than a human employee?
 - Why?
- **What concerns you about dealing with a chatbot?**
 - Why?
 - Probe for possible reasons why they would be resistant to a chatbot offered by their bank
 - What would make chatbots more appealing to you?
 - Probe for ways banks can improve their chatbot services
 - If your bank were to offer chatbot services, how would you like to access it? (Website/ WhatsApp/ SMS/ Mobile App)
 - Why?

- **Would you prefer to know you're dealing with a chatbot versus a human employee?**
 - Why?

- **What are your thoughts on your bank using chatbots?**
 - Do you think chatbots are important in banking?
 - Why/ Why not?
 - How do you think banks offering chatbots can help you during the COVID-19 Pandemic?
 - In what ways could they help?

- **If you were to use a chatbot 10 years from now, what do you foresee it being like?**
 - Probe for ways in which the use of chatbots by banks can be enhanced according to the consumer

- **Before we end, any final thoughts?**

Appendix 4.c: Information Sheet and Letter of Consent

INFORMATION SHEET & CONSENT FORM

CUSTOMER RESISTANCE TO CHATBOTS IN FINANCIAL SERVICES: A SOCIAL EXCHANGE THEORY PERSPECTIVE

Hello, my name is Kayla Patel and I am conducting research towards a master's degree. I am researching the use of chatbots in marketing, specifically in internet banking, and would like to invite you to participate in the project.

About the project

I am interested in finding out about people's experience with chatbots. I want to understand how chatbots have changed people's customer service experience and how they would prefer this experience to be. I would like to interview people who have internet banking.

This research has been approved by the Commerce Ethics in Research Committee.

Please understand that you do not have to participate. The choice to participate is yours alone. If you choose not to participate, there will be no negative consequence. If you choose to participate, but later decide you want to withdraw, you are free to do so at any time, without negative consequence. However, I would be grateful if you would assist me by allowing me to interview you.

If you choose to partake in this research, you will be asked to be interviewed online via Zoom, a video communications platform that can be downloaded or used online for free. A link to the interview will be provided to you and it will take about 45 minutes of your time. Interviews will be recorded with your permission.

You will not be requested to supply any identifiable information, ensuring **anonymity** of your responses. Your responses will be **confidential**, and only aggregate findings will be given.

Contact details

Researcher

Kayla Patel

Email: ptlkay001@myuct.ac.za

Cell: 082 7794 801

Supervisor

Dr Raeesah Chohan

Email: raeesah.chohan@uct.ac.za.



I, _____, agree to participate in this interview on this day
_____.

I understand that taking part in the study will include the recording of the interview.

I understand that my words may be quoted in reports, publications and other research outputs anonymously.

I understand that I can withdraw from the study at any time without further question.

Signature of participant: _____

Date:

Signature of interviewer: _____

Date:

Appendix 5.a: Ethics Approval

UCT Faculty of Commerce Ethics in Research Committee's approval letter, confirming that the semi-structured interviews could be conducted for this study.



Faculty of Commerce

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@Commerce UCT



UCT Commerce Faculty Office

Kayla Patel

18/08/2020

School of Management Studies

University of Cape Town

REF: REC 2020/08/010

THE ROLE OF CHATBOTS IN MARKETING: A QUALITATIVE STUDY

We are pleased to inform you that your ethics application has been approved. Unless otherwise specified this ethical clearance is valid until 31-Aug-2021 .

Your clearance may be renewed upon application.

Please be aware that you need to notify the Ethics Committee immediately should any aspect of your study regarding the engagement with participants as approved in this application, change. This may include aspects such as changes to the research design, questionnaires, or choice of participants.

The ongoing ethical conduct throughout the duration of the study remains the responsibility of the principal investigator.

We wish you well for your research.

2020.08.18
20:54:34 +02'00'

Jacques Rousseau
Commerce Research Ethics Chair
University of Cape Town
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Appendix 5.b: Abbreviations and Characteristics of the Semi-Structured Interview Participants

The table below shows the meaning of the abbreviations used for the semi-structured interview participants as well as their individual characteristics.

Abbreviation	Meaning	Gender	Age	Industry	Years of experience
P1	Semi-structured Interview Participant 1	Female	26	Architecture	1
P2	Semi-structured Interview Participant 2	Female	29	Marketing	5
P3	Semi-structured Interview Participant 3	Female	23	Financial Technology (FinTech)	2
P4	Semi-structured Interview Participant 4	Male	27	Film	3
P5	Semi-structured Interview Participant 5	Male	28	Marketing	5
P6	Semi-structured Interview Participant 6	Male	26	Architecture	3
P7	Semi-structured Interview Participant 7	Male	32	Marketing	2
P8	Semi-structured Interview Participant 8	Male	30	Financial Technology (FinTech)	4
P9	Semi-structured Interview Participant 9	Male	35	Marketing	10
P10	Semi-structured Interview Participant 10	Male	33	Film	6
P11	Semi-structured Interview Participant 11	Female	32	Finance	7
P12	Semi-structured Interview Participant 12	Female	34	Marketing	8
P13	Semi-structured Interview Participant 13	Female	33	Educational Technology (EdTech)	9
P14	Semi-structured Interview Participant 14	Male	42	Finance	21
P15	Semi-structured Interview Participant 15	Female	43	Marketing	22

P16	Semi-structured Interview Participant 16	Female	49	Healthcare	24
P17	Semi-structured Interview Participant 17	Male	47	Education	27
P18	Semi-structured Interview Participant 18	Male	59	Healthcare	33
P19	Semi-structured Interview Participant 19	Female	51	Healthcare	27
P20	Semi-structured Interview Participant 20	Female	53	Finance	34

The table above illustrates the meanings of abbreviations employed in this study, with each abbreviation corresponding to a semi-structured interview participant. For example, P1 = “Semi-structured Interview Participant 1.”

For each participant, their gender, age, industry, and years of experience is shown. Participants ages ranged from 23 to 59 years old. Their respective industries included Marketing (6 participants), Finance (3 participants), Healthcare (3 participants), Architecture (2 participants), Film (2 participants), Financial Technology (2 participant), Educational Technology (1 participant) and Education (1 participant).

Appendix 5.c: Summary of analysis

The table below shows all the relevant quotations which support the identified codes and themes revealed in the analysis of the semi-structured interview data.

Global themes	Subordinate themes	Codes	Supporting quotes
Chatbots versus human service employees	Perceived benefits of chatbots versus human service employees	Immediate assistance	<p>“So, to have a chatbot that gives an instant response would be nice.” (P1)</p> <p>“[A chatbot] would be helpful because then I don’t have to wait on a person. Like I know that I can ask a question immediately and I’m gonna get a response.” (P3)</p> <p>“If the chatbot can be able to help me with those basic queries, then that will be amazing because now I’m not just waiting for the agent.” (P7)</p> <p>“Unlike a consultant, a chatbot is going to get back to me immediately.” (P17)</p> <p>“I think they’re here to stay in any service because I can’t imagine if I noticed something that was wrong at 10 o’clock at night with my bank. I would want to be able to immediately escalate that and to have that reassurance immediately is far better than needing to wait until morning.” (P13)</p> <p>“As much as I’m not fully in favour of [chatbots] because I’m still old school in that way, I have to embrace this new technology that may help to resolve issues quickly. Instead of me being on hold for 15/20 minutes, I can get an instant answer.” (P18)</p>
		Added convenience	<p>“At least in the middle of the night or during the day when I’m failing to do something, I can use a chatbot” (P7)</p> <p>“Chatbots are 24/7, right? So, I think that’s the big plus” (P18)</p>

			<p>“On a Sunday for instance if something like that happens, [a chatbot] would be convenient because you can’t go into the bank.” (P19)</p> <p>“I want a robot. I want to just get to the point of asking the question and getting my answer. It’s quicker” (P3)</p> <p>“I think it just takes a lot longer to communicate with a normal person directly” (P4)</p> <p>“If I was on a phone call, I would wait for an hour to speak with the agent. So, for me, with the chatbot, I think I really appreciate it because it makes things quite quick” (P7)</p> <p>“The bots are quicker to respond” (P10)</p> <p>“The chatbot is quicker. I find emails quite long and time consuming” (P16)</p> <p>“You don’t need to phone someone and wait for that person to answer or go through all that authentication.” (P18)</p> <p>“[A chatbot] saves you the hassle of calling the call centre” (P9)</p> <p>“A chatbot is like a nicer version of me sitting on the phone and pressing one for this, press two for this...” (P10)</p> <p>“It’s too much effort to phone somebody and ask them a simple question”. (P12)</p>
		Avoidance of human interaction	<p>“Ideally, I wouldn’t have to go into a bank, so I don’t have to queue or speak to a teller” (P2)</p> <p>“It’s annoying to me that there’s some things you still have to go in for...I don’t want to interact with my bank any more than I need to, right? I prefer to just do everything on the app” (P10)</p>

		<p>“Whatever I can do online, I try to do online” (P11)</p> <p>“The less I see the bank, the better” (P9)</p> <p>“The more advanced internet banking has become, the more I don't want to go into the branch. If I can find my way to an answer quickly, I'll take [a chatbot] over engaging with a person.” (P12)</p> <p>“I guess the key part is that because I use the app so frequently, it cuts out the need for human interaction, so my relationship [with my bank] is positive because of that.” (P5)</p> <p>“I don't have to deal with talking to anyone. There's no miscommunication. I know exactly what I have to do” (P1)</p> <p>“It's not that I don't wanna see people, but I don't really care for it” (P3)</p>
	<p>Avoidance of negative attitude</p>	<p>“Dealing with human emotions especially over the phone with someone you don't know, and you don't know what they're feeling or what their headspace is, is just a turnoff.” (P1)</p> <p>“[With] human employees, sometimes there's a lot of emotions, you may find them stressed. They might have been ticked off by the previous customer or they're just having a bad day. So, with a machine, they're able to close off all those things and it's mostly professional.” (P9)</p> <p>“[The human service employees] were rude to me, it was almost as if they were belittling me for my age. I was like I'm so over this bank.” (P3)</p> <p>“I always kind of felt a little bit anxious because I'm young and I felt like the way that some of the staff would talk to me or treat me was a little bit condescending. I</p>

			certainly had a lot of experiences where I felt like this person is not respecting me as a customer.” (P4)
	Perceived costs of chatbots versus human service employees	Perceived lack of competence	<p>“I’d like to speak to an actual person because you can’t exactly word it in such a way that AI can actually help you with the entire solution to solve the problem” (P1)</p> <p>“[Chatbots] are not going to give me the detailed answer that I want” (P2)</p> <p>“[A chatbot] has its limits” (P7)</p> <p>“I don’t expect [chatbots] to resolve technical stuff... I don’t think they can do many things” (P9)</p> <p>“The functionality seems quite limited at the moment, from the bots that I’ve used.” (P10)</p> <p>“Let’s say you’ve got a suspicious transaction on your account; a bot can’t help you with that so I don’t know how useful it can be in an internet banking scenario” (P14)</p> <p>“A chatbot is useless compared to a real person. I don’t want to waste my time.” (P6)</p> <p>“I don’t think [chatbots] can be of use to me” (P12)</p> <p>“I don’t see [a chatbot] being useful to me because in the past, they couldn’t even understand my issue.” (P11)</p> <p>“A person is more helpful in my eyes. I want to be sure that my issue will be solved.” (P16)</p>
		Not feeling understood	“I just don’t see the need for [a chatbot]. I’d rather speak to a human so they can understand my frustration with their company or the issue that I’m having” (P8)

		<p>“At least it’s possible [that a human service employee] could understand me but the bot is never going to understand me” (P10)</p> <p>“I needed to speak to a person that was listening to me, and you don’t feel that experience of being listened to by a bot” (P15)</p> <p>“I don’t know if I would feel that [the chatbot] gets me...” (P16)</p>
	Lack of human emotion	<p>“A phone call [with a human service employee] is very different because you get to hear emotion” (P1)</p> <p>“[A chatbot is] quite quick but it has no emotion. With a person, there’s an emotion in the text but with a chatbot, it’s set to say certain things. When you’re speaking with a person, they can relate to you on a human level” (P7)</p> <p>“There’s a potential for [human service employees] to read your emotion, whereas a bot’s never going to do that” (P10)</p> <p>“[Chatbots] are so devoid of any emotion” (P16)</p> <p>“[Their] inhuman nature, the coldness...it’s that personal touch [that is missing]” (P18)</p>
	Decreased certainty	<p>“With technology, I never really know if I’m actually being dealt with or not” (P6)</p> <p>“I find talking to chatbots, kind of immediately frustrating, whereas when talking to people, I feel like I know how to do that” (P13)</p> <p>“There’s a [sense of] reassurance in talking to a person and knowing that a human has dealt with my query” (P17)</p> <p>“You don’t know exactly who you’re speaking to [when talking to a chatbot]” (P19)</p>

			<p>“When you’re speaking to somebody on the phone, you ask who I am speaking to, you get their name. How are you going to get the chatbot’s name and then write a complaint to the bank?” (P15)</p> <p>“Now with a bot, it tells you yes, it’s done and then nothing happens. How are you going to complain? There’s no paper trail” (P14)</p>
		<p>Increased perceived risk</p>	<p>“I’m just very sceptical of using chatbots because it just doesn’t look like a very safe tool to use” (P6)</p> <p>“I wouldn’t want to give out my information [to the chatbot]. I don’t know where that information is going. If I’m going to be giving out my ID, they can steal my identity” (P3)</p> <p>“Maybe [the chatbot] would require your personal information and I’m really not sure who I’m talking to, so I don’t know if I really trust it” (P11).</p> <p>“I never want to give a chatbot like an ID number” (P12)</p> <p>“When the bank needs to confirm that it’s you, I would be wary about giving that information to a chatbot because it would be, I think, a more easily corruptible piece of tech, so, the security of my data, that would be a concern” (P13)</p> <p>“Are you going to trust [the chatbot] with your code? Like we’re living in a world of hackers and whatever” (P15)</p> <p>“I don’t think I’ll divulge any personal information [to the chatbot]. I don’t know where it lands up or how it works” (P1)</p>

			<p>"If I give a card number to a chatbot, that card number is getting stored into a database so it could be a security risk" (P8)</p> <p>"Security [is what concerns me] and the fact that they can go and analyse my spend analysis, which banks already do in any event. But when it comes to anything more than that, I wouldn't use a chatbot" (P14)</p> <p>"I just feel that a security breach could happen so easily with a chatbot" (P17)</p>
Relational drawbacks of chatbots	Chatbots' obscure nature	Feelings of discomfort and creepiness	<p>"[Chatbots are] a bit creepy in a way. It's like you're talking to this thing in the universe. Um, I don't think I'll divulge any personal information. I don't know where it lands up, you know, how it works. I'm a bit sceptical." (P1)</p> <p>"It made me feel uncomfortable after I realised that I'm actually talking to a robot and not a person" (P2)</p> <p>"When they tried to do bots in such a way where they were hiding the fact that it was a bot, it was like very creepy." (P12)</p> <p>"It just felt uncomfortable that I was talking to this thing that I thought was a human, but it wasn't" (P18)</p>
		Feeling deceived	<p>"Just tell me, like I don't want to be tricked into something where I think I'm talking to someone" (P3)</p> <p>"I think it can get quite misleading when you speak with a chatbot for the first time and you think there is a human behind it. Then I chat with the chatbot thinking I'm speaking with the human and then I get frustrated." (P7)</p> <p>"[With] some of the bots I've used, they're sort of trying to trick you..." (P10)</p>

			<p>"It's not cool if it's not upfront that I'm choosing to talk to a chatbot. It just makes me feel misled." (P14)</p>
	Chatbot service failures	Feeling frustrated	<p>"[The chatbot] didn't give me what I wanted so then in my mind, I was like, I wasted time. I might as well have just phoned. So yeah, [I was] a bit frustrated." (P2)</p> <p>"There's been so many times where [a chatbot] has just annoyed me" (P8)</p> <p>"[A chatbot] keeps on asking things that are not relevant because it is computed that way" (P11)</p> <p>"I just felt like we were going around in circles" (P16)</p> <p>"If it is mainly automated, [the chatbot] frustrates me" (P9)</p> <p>"It's really frustrating when you're not getting anywhere with [the chatbot]" (P13)</p> <p>"I didn't find it useful at all because its computer generated responses" (P14)</p>
		Lack of personalisation	<p>"[The conversation with the chatbot] was just so generic" (P1)</p> <p>"I found myself leaving the website because it felt like I'm not getting assisted because chatbots are set up to give you generic responses" (P8)</p> <p>"When [the conversation] is generated, then it gives generic answers, so it's not really helpful" (P11)</p> <p>"[The chatbot] just gives these standard answers that don't mean anything" (P9)</p> <p>"The fact that [the chatbot] gives everyone the same answers, no matter how different your issue is, bothers me" (P7)</p>

			<p>"I don't like how a chatbot is unable to customise its answers for me" (P14)</p>
		Not feeling cared for or valued	<p>"I feel like [chatbots are] quite data run... it's not really about you as a user or a banker. It's more about you as a number than anything else... I'd still like to be treated as a fair and valued client" (P6)</p> <p>"I think [using chatbots] is just an easy way for a company to set up something that makes it look like they're assisting their clients, that they're providing the support necessary for their clients, when it's not actually helping" (P8)</p>
		Absence of choice	<p>"I want to be the one to actually speak to [the chatbot]. I don't want it to necessarily prompt me to speak to it" (P2)</p> <p>"The bank should have the option to talk to a chatbot. They shouldn't just hand it to you." (P8)</p> <p>"Like giving someone a way out at an appropriate time is useful, rather than just trapping them in an endless loop of talking to a robot" (P13)</p> <p>"I think for me, the experience was that I wanted the choice, and [the chatbot] was like taking away that choice. I would like the choice when I want to go through an automated thing, and when I want to speak to somebody. I want [the bank] to offer me an actual choice and not con me into it" (P15)</p>
		The need for human interaction	<p>"I wouldn't want a chatbot for things that are say personal, you know" (P6)</p> <p>"I don't really want to share my personal matters with a chatbot or any machine" (P17)</p> <p>"...obviously there are more personal things that an agent would need to help with" (P7)</p>

Customer preferences for chatbots			<p>“If I was closing the account on behalf of a deceased relative, I definitely want a human experience. But if I was just closing an account because I wanted to move to another bank, I want a chatbot.” (P4)</p> <p>“If fraudulent activity had taken place, I mean, at that time, you need a real human to be dealing with it” (P9)</p> <p>“If it’s something urgent, I think I’d want a human” (P8)</p> <p>“For things I need more urgently, I’d rather contact the person at my bank that I normally deal with” (P16)</p> <p>“There was a time when my card was being charged for course fees that I did not take on Udemy and I needed to deal with a person” (P10)</p>
		Anthropomorphism of chatbots	<p>“Maybe [the chatbot] could look like a little cartoon character with a speech bubble saying I’m always here to help.” (P3)</p> <p>“I think [the chatbot] should look like a cute character because I feel like mostly when you deal with chatbots, it’s just a random AI entity so it’s very impersonal.” (P4)</p> <p>“I don’t know, maybe if the [chatbot] had a profile photo of a flying little robot...if it had features that we could relate to, you know” (P1)</p> <p>“...even a name of a person or something like that, will make [the chatbot interaction] a bit more personal.” (P18)</p> <p>“It be nice if [the chatbot] had a name or something” (P2)</p> <p>“It would be cool if [the chatbot] has a name” (P4)</p>

		<p>"I think [chatbots] should have a name instead of just being called [bank's name] chatbot for example" (P8)</p> <p>"Even though I know that it's not a human that I'm speaking with, the fact that [the chatbot is] saying hi [participant's name] just makes me feel nice" (P7)</p>
	Chatbot disclosure	<p>"I think there should be transparency about the fact that you're talking to a bot because you phrase a question differently if you're talking to a human that's gonna understand your answer and kind of use language in that way" (P13)</p> <p>"If it's a chatbot then I know I can just ask exactly what I want but if it's a person, then I have to do the formalities" (P3)</p> <p>"It would change my perception of whether I want to actually use [the chatbot]" (P1)</p> <p>"...because I think it would contextualise my expectations around what I could get from a chatbot" (P16).</p> <p>"You need to have an idea that it's not really human because if there are specific things that you need to ask, a chatbot can't help. So, it will make it much better if I know [about the chatbots identity], then I won't be as frustrated...I'll be a little bit lenient." (P7)</p> <p>"[Chatbot disclosure] is very important, so that I can make a choice to either contact an employee or continue with the chatbot" (P11)</p>
	Accessibility of chatbots	<p>"I really like the functionality of the app. It's simple. It's easy to get what you need" (P13)</p> <p>"I'd want the chatbot on an app because it's just like you're using your phone, it's quicker, it's easier" (P20)</p>

			<p>“Definitely on the app. It’s so much easier” (P1)</p> <p>“The app....it’s more convenient” (P3)</p> <p>“I would use [the chatbot] on the app since I use the app the most. It’s just easier” (P5)</p> <p>“The app, for me” (P7)</p> <p>“I would want [the chatbot] on my app” (P8)</p> <p>“The app would be best” (P10)</p> <p>“The app...” (P16)</p> <p>“Definitely, on my banking app. I love the app. It’s simple.” (P17)</p> <p>“I would want to access the chatbot on my app via my phone” (P18)</p> <p>“I’d want [the chatbot] on my app for sure” (P19)</p> <p>“On the app and the site...” (P9)</p> <p>“I think they should have [the chatbot] on the site and on the app” (P12)</p> <p>“The app and the website” (P14)</p> <p>“I’d want [the chatbot] on my WhatsApp as it’s so much more convenient” (P6)</p> <p>“WhatsApp feels more personal” (P11)</p> <p>“I think across any platform that I use for banking sites, most immediately on my phone because that’s where I do all of my messaging and stuff mostly...but certainly, carried across, onto like, browsers, PC format, all of that stuff, and social media as well.” (P4)</p>
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			<p>“They should just have [the chatbot] on everything, you know. That be best.” (P15)</p> <p>“For me personally, SMS will work because it's a kind of like mail trail almost so it's just easier and it's immediate.” (P2)</p>
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The table above presents the identified themes encapsulating participants' perspectives on chatbots in contrast to human service employees, inclusive of their overarching concerns and perceptions regarding chatbots. This also includes how they would prefer chatbots to be used by their financial service provider. Each of the global themes shown in the table relate to the research questions of this study.

Appendix 6.a: Summary of overall conclusions

The table below summarises this study’s overall conclusions relevant to each research question. These conclusions capture the key findings of this study.

Research Question	Conclusions
<p>What are the implications of financial service providers using chatbots versus human service employees on customer relationships?</p>	<p>Customers may prefer chatbots versus human service employees due to being able to avoid negative attitudes. By offering chatbots as an alternative, financial service providers can mitigate the negative impact of unpredictable employees.</p> <p>Customers perceive chatbots as limited in their ability to assist compared to human service employees. However, having increased knowledge of how AI works, could mitigate this perceived lack of competence and result in customers’ increased confidence.</p> <p>Customers feel less understood by chatbots versus human service employees, which can cause frustration. Feeling understood is particularly imperative for customers due to a desire for reassurance.</p> <p>Customers are more sceptical of chatbots versus human service employees, perceiving them as higher risk. Customers privacy concerns stem from a lack of knowledge about how chatbots work. Their perceptions of increased risk may be reduced through educating customers about chatbots.</p>
<p>How can financial service providers overcome customer resistance to chatbots in order to improve their customer relationships?</p>	<p>Whether customers desire to interact with a chatbot or not is largely dependent on the context of the situation. Customers will respond more positively to the use of chatbots for simpler issues and although not suited for more urgent, personal or complex issues, chatbots can be more effectively used in instances where customers are seeking information.</p> <p>Customers desire increased anthropomorphism of chatbots to reduce feelings of discomfort and creepiness. However, customers do not wish for chatbots to be overly humanised as this can come off as inauthentic, potentially confuse customers or cause inflated expectations. Thus, financial service providers need to carefully consider the extent to which a chatbot is humanised as this can influence chatbots’ perceived creepiness and customer expectations.</p>

	<p>Customers feel dissatisfied with the lack of personalisation in chatbot responses, which can lead to them feeling a lack of connection. Thus, financial service providers should utilise chatbot anthropomorphism to combat the lack of personalisation in chatbot responses.</p> <p>Chatbot disclosure can potentially decrease customers' frustration with chatbot service failures due to customers having improved expectations and increased understanding. Thus, financial service providers should clearly inform customers of the flawed nature of chatbots before the interaction begins, lowering customers' expectations and reducing potential frustration.</p> <p>Financial service providers should not conceal the chatbots' identity as doing so can cause customers to feel misled by the firm or decrease perceived transparency, negatively impact their relationship with the firm.</p> <p>Customers can feel dissatisfied when not presented the choice to interact with a bank's chatbot or not and experience decreased perceived autonomy. Thus, financial service providers should present customers with the choice to engage or not.</p>
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Based on the results of this study, the table above offers the overall conclusions of this study.

Appendix 6.b: ABSA's Abby Chatbot

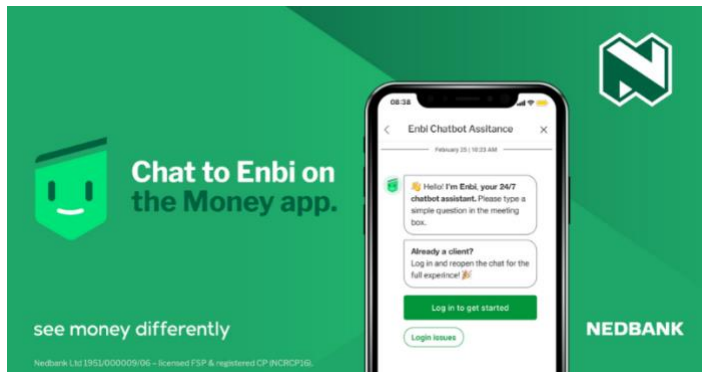
The image below shows ABSA's chatbot, named Abby, who has a non-human, robot-like appearance.



SOURCE: ABSA Bank. *What does Abby Help Me With?* [Online]. Available: <https://www.absa.co.za/self-service/absa-abby/> [2022, December 26].

Appendix 6.c: Nedbank's Enbi Chatbot

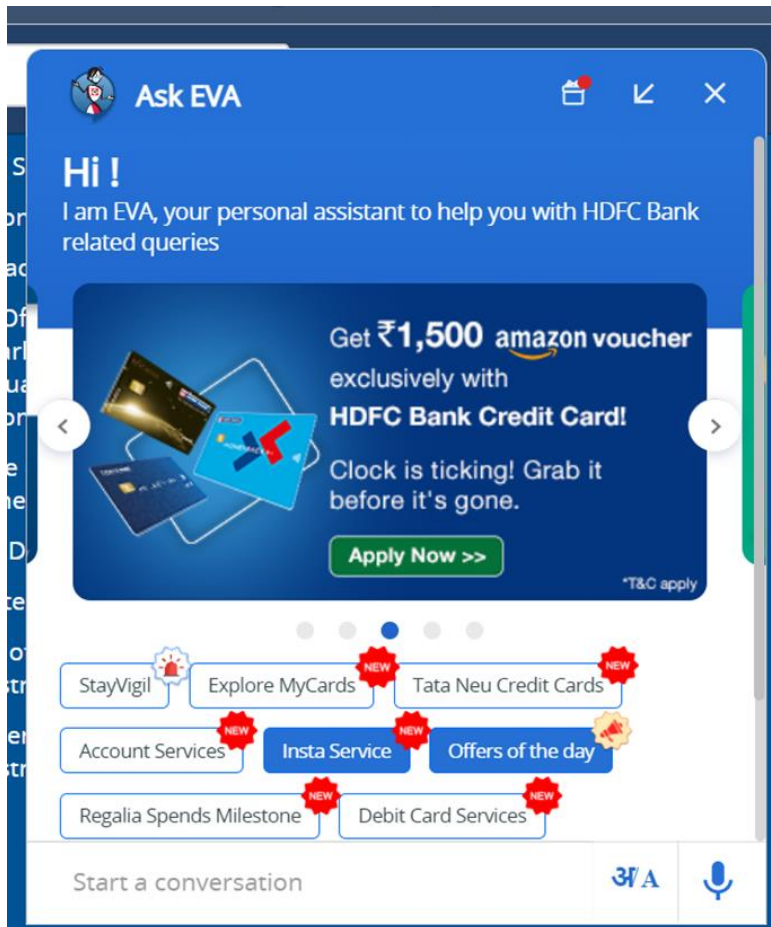
The image below shows Nedbank's chatbot, named Enbi, who has a non-human, robot-like appearance.



SOURCE: Twitter. *I, Enbi, can help you change your profile limits, login issues, downloading your statements and so much more! Whatever your banking needs, #AskEnbiFirst on the Money app* [Online]. Available: <https://twitter.com/nedbank/status/1554724297066815489?lang=bq> [2022, December 23].

Appendix 6.d: HDFC Bank's EVA Chatbot

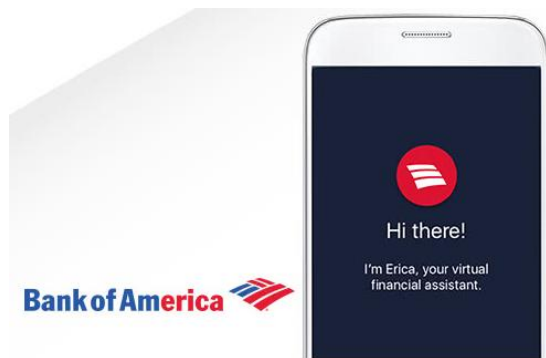
The image below shows HDFC Bank's chatbot, named EVA, who presents as a female animated character.



SOURCE: HDFC Bank. *Eva, Your Personal Assistant* [Online]. Available: <https://www.hdfcbank.com/personal/ways-to-bank/eva> [2022, December 23].

Appendix 6.e: Bank of America's Erica Chatbot

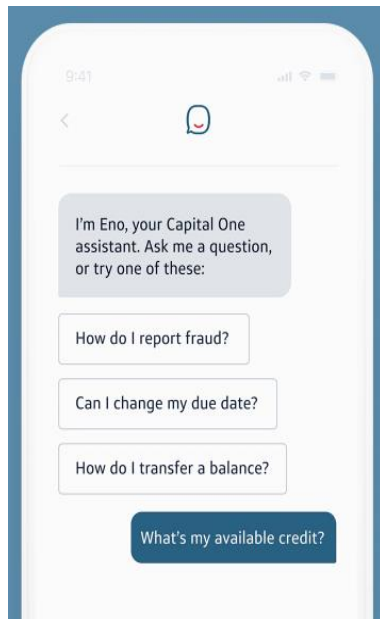
The image below shows Bank of America's chatbot, named Erica. This chatbot has no virtual appearance. Instead, the bank's logo is used to represent the chatbot.



SOURCE: Transform Partner. *Bank of America's AI powered Virtual Assistant Erica* [Online]. Available: <http://www.transformpartner.com/case-story/boa-ai-powered-virtual-assistant-erica/> [2022, December 23].

Appendix 6.f: Capital One's Eno Chatbot

The image below shows Capital One's chatbot, named Eno. This chatbot presents as a speech bubble with a smile.



SOURCE: Capital One. *Hi, I'm Eno, Your Capital One assistant, looking out for you and your money* [Online]. Available: <https://www.capitalone.com/digital/eno/> [2022, December 23].

Appendix 6.g: TD's Clari Chatbot

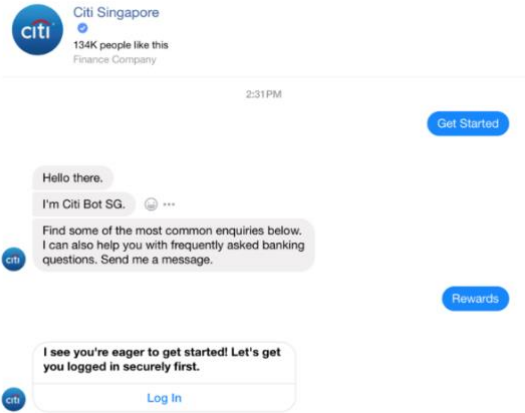
The image below shows TD's chatbot, named Clari, who has a non-human, robot-like appearance.



SOURCE: TD. *Meet Clari* [Online]. Available: <https://www.td.com/ca/en/personal-banking/solutions/ways-to-bank/chatbot> [2022, December 23].

Appendix 6.h: Citi's Citi Bot SG Chatbot

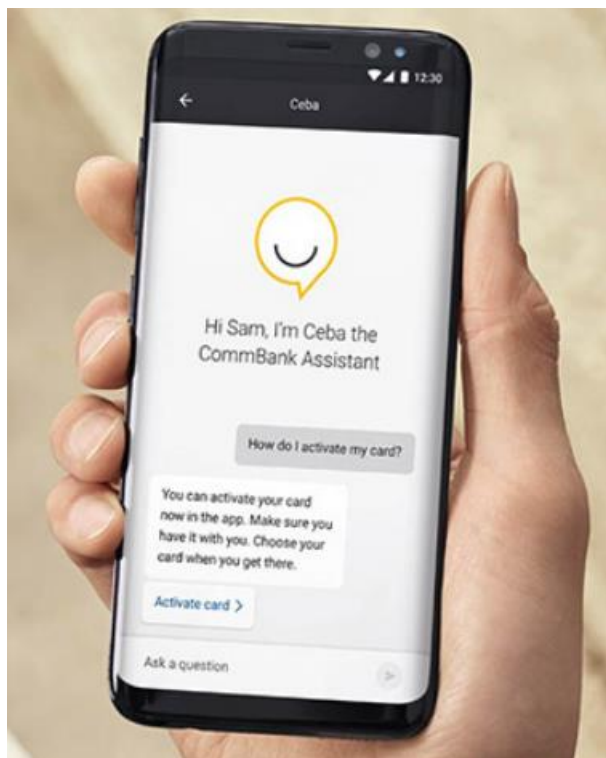
The image below shows Citi's chatbot, named Citi Bot SG. This chatbot has no virtual appearance. Instead, the bank's logo is used to represent the chatbot.



SOURCE: Chatbot Guide. *Citi Web-Based Chatbot* [Online]. Available: <https://www.chatbotguide.org/citibank-in-bot> [2022, December 23].

Appendix 6.i: CommBank's Ceba Chatbot

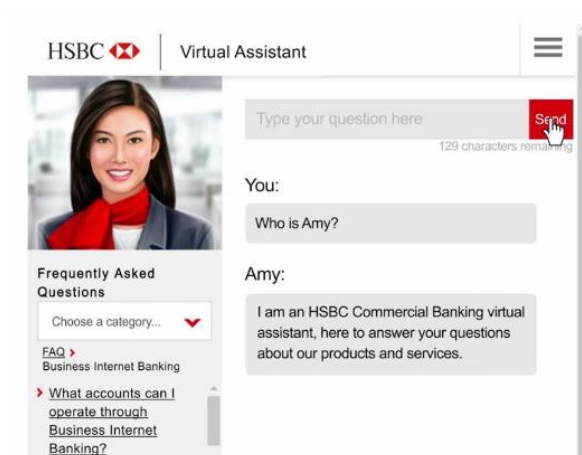
The image below shows CommBank's chatbot, named Ceba. This chatbot presents as a speech bubble with a smile.



SOURCE: CommBank. *Chat to Ceba* [Online]. Available: <https://www.commbank.com.au/support/ceba.html> [2022, December 23].

Appendix 6.j: HSBC's Amy Chatbot

The image below shows HSBC's chatbot, named Amy, who presents as a female animated human.



SOURCE: Olson, P. 2019. *Banks Are Promoting 'Female' Chatbots To Help Customers, Raising Concerns Of Stereotyping* [Online]. Available: <https://www.forbes.com/sites/parmyolson/2019/02/27/banks-are-promoting-female-chatbots-to-help-customers-raising-concerns-of-stereotyping/?sh=675358fd5a8f> [2022, December 26].

Appendix 6.k: Zenith Bank's ZiVA Chatbot

The image below shows Zenith Bank's chatbot, named ZiVA (Zenith Intelligent Virtual Assistant), who presents as an animated human.



SOURCE: Zenith Bank. *Zenith Bank Launches Intelligent Chatbot, ZiVA* [Online]. Available: <https://www.zenithbank.com/media/news/zenith-bank-launches-intelligent-chatbot-ziva/> [2022, December 26].