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The usage of Design Thinking to develop innovative services

A case study of the Swedish banking industry

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Abstract

New entrants in an industry leads to changes and a more competitive landscape and for companies to stay competitive, there is a need for creating innovations which leads to new markets and revenue streams. The methodology Design Thinking can be used to create innovations since it focuses on creating high value for the end user. The Swedish banking industry's competitive landscape has changed due to the entrance of new digital actors. Within the industry it is a growing digitalisation trend and increased focus on creating high customer value. Therefore, this master thesis aims to answer the research question: *How is Design Thinking used in the development of innovative services within the Swedish Banking industry?*

The theory Design Thinking focuses on the user's needs, finding the underlying problem, experimentation, visualisation of ideas and diversity. The model can be divided into three phases: *Customer discovery* where customer research is conducted to empathize with the customer, understand underlying needs and define the real problem. *Idea generation* implies generating ideas within diverse teams. *Testing* involves experimentation of the ideas using prototypes and testing these prototypes. It can be challenging to implement Design Thinking in an organisation if there is a misfit between Design Thinking and current organisational structures and to succeed, support from the entire organisation is needed.

The chosen research design is a qualitative single case study of a Swedish bank. The empirical result shows that the organisation has increased its focus on creating customer value and business developers observe digital behaviours, brainstorm together in diverse groups and conduct in-depth interviews in some projects. Many of the respondents seem to rely on the customer being able to verbally express their needs, limited ideation with the customer is conducted and the organisation is highly risk averse. Some characteristics of Design Thinking can be found within the bank organisation but there are some challenges such as the organisation prioritizing minimisation of risks higher than creating innovations which prevents a full implementation of Design Thinking. This master thesis contributes to a better understanding of the challenges to implement Design Thinking. Suggestions for future research is to observe how Design Thinking is used in practice and research of additional Swedish banks.

Keywords: Design Thinking, innovation, banking industry, service innovation, customer focus

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1. Introduction

This chapter aims to introduce the thesis topic Design Thinking and the identified problem discussion which is the increasing competition within the Swedish banking industry and the demand for a stronger customer focus. Based on this, the following research questions is stated: How is Design Thinking used in the development of innovative services within the Swedish Banking industry? Additionally, delimitations of the study are presented as a case study of one Swedish bank together with an overview of the disposition of the master thesis.

1.1 Background

Today it can be observed that industry landscapes are changing, new competitors are entering the market and creating product and service innovations which change the market structure completely. Therefore, there is of interest to understand how these innovations can be created and their final impact on the competition level within an industry. To begin broad, an innovation is defined as a new service or product which results in a new market or revenue streams according to Gustafsson et al. (2020). An innovation does also contribute to changes in the market rules which affects both competitors and customers. It can be seen that the number of innovations within the service sector is increasing which is the reason for the researcher´s interest in researching how a service innovation is created in an industry with a high competition level. The need for a better understanding of how to create service innovations is supported by Gustafsson et al. (2020) claiming that the development of a service innovations seems to be more complex which reinforce the need for additional research within the field. To define, a service innovation implies a new service which generate value for stakeholders such as customers, employees and suppliers. Two examples of service innovations are Uber within the taxi industry and Airbnb within the hotel industry (Gustafsson et al., 2020).

A methodology which focuses on developing product and service innovations with a high value for customers is Design Thinking according to Bason and Austin (2019). A core principle within Design Thinking is the focus on the customers and their needs and preferences rather than the needs of the business. The procedure of the methodology contains testing different solutions on customers and letting employees of the organisation create and generate innovative

ideas (Bason & Austin, 2019). The Design Thinking approach consists of three different phases according to Liedtka (2018). The first phase is *customer discovery* and entails the interaction with the customers to be able to understand their needs and struggles. Unlike traditional customer surveys, Design Thinking focuses on finding the non-expressed needs of the customers by closely interact and observe their behaviours. The next step is to connect the generated insights from the observations to find common patterns and connections. The second phase of Design Thinking is *idea generation* which implies creating ideas to solve the problems discovered in the customer discovery phase. Different organisational members need to be involved to support a creative brainstorming environment. When the ideas are generated, the next step is to question the assumptions made to challenge the ideas and test their potential chance of succeeding while ensuring no personal bias. The last phase of Design Thinking is the *testing phase*. The team will then construct a simple prototype based upon the idea and test it on the customer. When testing the prototype, potential areas of improvements will be identified to enabling more value for the customer. The reason for a simple prototype is to minimise the costs since the prototype will need to be updated several times before being a finalised product or service (Liedtka, 2018).

1.2 Problem discussion

There has been changes in the Swedish banking industry landscape and as a result, an increased focus on low costs and high-quality of customer service (Swedish Bankers' Association, 2023b). The change in the competitive landscape and a need for increased focus on the customer makes the Swedish banking industry interesting to investigate from a Design Thinking perspective to understand how service innovations are created with the purpose to increase customer value. This interest is supported by Capgemini (2022) claiming that in 2023 it was predicted to be a strong trend of customer focus and a need for delivering a good customer experience in the digital world to ensure customer engagement. By interacting with customers and base offerings on gathered data such as spending patterns and financial behaviour, customised products can be offered to the market (Capgemini, 2022). The banks today are often driven by its business instead of its customers, but EY (2023) argue that when the bank chooses among multiple business opportunities, it should choose the one with the highest customer value rather than the most financially profitable. It is therefore a need to change the thought of financial data being more reliable than customer data and insights (EY, 2023).

With an increasing competition in the banking industry, Design Thinking can be used as an approach to solve complex problems and result in a company achieving a stronger market position according to Diderich (2018). When using Design Thinking, the company has a strong customer focus and the ability to move from idea generation to implementing solutions to increase the company´s profitability. Because of the advancement of fintech companies, there is a need for traditional banks to compete with their own innovations (Diderich, 2018). Fintech companies combine digital services with financial services and its success has increased the competition within the banking industry while also developed new banking services (Swedish Bankers' Association, 2023a). Research shows the importance of involving a large part of the organisation to succeed with innovation according to Liedtka (2018). Innovation often means taking risks and as mentioned by Diderich (2018), banks tend to have a resistance towards risks. As a counterargument, Liedtka (2018) argues that the innovation´s risk can be decreased by the iteration process within Design Thinking.

1.3 Research purpose and question

Because of changes in the Swedish banking industry due to both new market players such as the fintech companies (Swedish Bankers' Association, 2023a) and an increased customer focus in a more digital world (Capgemini, 2022), there is a need for big Swedish banks to find new markets or revenue opportunities. Since there is a need to focus on innovations which provide high customer value based on customer data (Bain, 2023), a methodology with the same focus is required. According to Diedrich (2018) Design Thinking with a strong customer focus is a methodology which can be used to solve complex problems and generate service innovations which will result in increased profitability. Within the banking industry there is a focus on limitation of risks (Diderich, 2018) which is why Design Thinking could be an appropriate methodology to use because of its iterative process (Liedtka, 2018). The purpose of this study is therefore to contribute to a better understanding of how Design Thinking can used in the development of innovative services within the Swedish banking industry and to answer the following research question (RQ):

RQ: How is Design Thinking used in the development of innovative services within the Swedish Banking industry?

1.4 Delimitations

The delimitations of this master thesis are mainly due to restrained time and resources to conduct the research. The first delimitation is to analyse the Swedish retail banking industry which is a geographical delimitation. The reason for this is because of lack of access to respondents in other countries in combination with a strong current focus on innovations within the Swedish banking industry. This consequently result in this master thesis´ result being less applicable on other countries´ bank industries. The second delimitation is to conduct a single comprehensive case study of one Swedish bank which is one of Sweden's largest banks in terms of market share and number of customers. The reason for this delimitation is because of the aim to understanding the bank on a deeper level with several respondents but also due to restrained time resources. Even though this master thesis is only describing the business development setting in one bank, the researcher aims to present a master thesis which can be the basis for assumptions about the entire Swedish banking industry.

1.5 Disposition

This thesis contains eight chapters. The first chapter presents the research topic, identified problem discussion, a research purpose, research question and delimitations of the research. The second chapter presents an overview of the Swedish banking industry and current trends. The third chapter presents an overview of the theoretical framework containing an overview of Design Thinking, the different phases within the methodology, implementation of Design Thinking and Design Thinking in practice. The fourth chapter discusses the chosen methodology which is divided into research strategy, research design, data collection and the quality of the research. The fifth chapter presents the empirical findings collected from the interviews. The sixth chapter contains an analysis of the empirical finds and the seventh chapter the discussion of the empirical findings in comparison with the theoretical framework. The eight chapter contains the conclusion which answers the stated research question followed by the research's implication and suggestions for future research within the topic.

2. Swedish banking industry

This chapter aims to introduce the banking industry both on a global and Swedish level and contains industry data and trends. The increased competition in Sweden is discussed together with opportunities and challenges within the banking industry.

The Swedish banking industry accounts for 2 percent of the total workforce in Sweden and contributes to 4,6 percent of Sweden's GDP according to the Swedish Bankers' Association (2023a). The Swedish banking industry consists of two markets: retail market for private customers and corporate market for companies. This master thesis will focus on the retail market as mentioned in the delimitations section. In Sweden, four banks represent the biggest market share. In 2022 these four banks were Handelsbanken, Swedbank, SEB and Nordea. Recently the smaller banks are increasing their market share and changing the competitive landscape within the industry. The trend of digitalisation has changed the industry and today fintech companies accounts as one of the players on the market. Due to the increase of digitalisation in Sweden, the focus has shifted from physical bank offices towards the bank's digital channels which has resulted in consumer behavioural changes (Swedish Bankers' Association, 2023a).

A characteristic of the Swedish banking industry is that customers often shift between different actors and are price sensitive. (Swedish Bankers' Association, 2023b). When comparing to other EU countries, Sweden is the country with the lowest customer loyalty level within the financial sector. Another characteristic of the industry is the importance of trust between the bank and the customer. Therefore, there is a need of high-quality service within the industry. The industry is also a strictly regulated market based on compliance and laws to ensure stability in the economy and to protect the consumer. The rise of profits in 2022 and 2023 is due to the increase of interest rates made by the Swedish Central Bank as an action to lower the inflation in Sweden (Swedish Bankers' Association, 2023b).

The competition within the Swedish banking industry has increased during the latest years due to increased customer movement and the customers using multiple banks (Konkurrensverket, 2023). The result of this is decreased costs for the customers and decreased margins for the banks. Today, the debt level among Swedish citizens is high which makes them vulnerable for

increases in interest and consequently there is a high competition on mortgage rates among the Swedish banks. With a positive interest rate on savings accounts, it leads to increased competition from smaller actors on the market using aggressive marketing campaigns (Konkurrensverket, 2023).

As mentioned, banks experience competition from fintech companies and research from 2018 shows that the majority of customers trust tech companies more than banks on a global level (Bain, 2018). To strengthen the customer relationship and level of trust, there is a need for a better digital experience within the banking industry and to develop individual offerings and services for customers based on customer data according to Bain (2023). Since customers are used to get tailored offerings from other industries, the customers expect the same from the banking industry (Bain, 2023).

Except for digitalisation, there are several trends identified within the banking industry according to Oliver Wyman and IESE (2017). The first is an increase of regulation and the second is an observed change in customer interactions with the bank based on their demands. The third trend is an increasing competition from new digital actors within the industry and a struggle to cut necessary costs to stay competitive. These trends require banks to continuously develop their business model and generate innovative products and services to ensure future profitability. To prepare for this shift, banks are required to invest in innovations based on customer data to provide competitive offerings which are compliant with extended regulatory frameworks (PWC, 2022). There is a need for digital capabilities at banks within AI and machine learning in combination with a seamless but still personalised customer experience in both physical and digital channels to satisfy the future´s banking customers. There is an increasing trend of banks hiring more IT-competence but there is still a lack of necessary skills and digital resources to execute a Design Thinking working approach within many banks (Oliver Wyman and IESE, 2017).

In Sweden, there are two examples of banking services innovations which have had a large impact on the banking industry during the recent years. The first one being BankID which is a digital identification method used by more than 8 million Swedish citizens (BankID Support, n.d.). BankID was founded in 2002 and is today jointly owned by seven Swedish banks (BankID, 2023). The second one being Swish which is a digital payment system for both private and corporate customers with more than 8 million users (Swish, n.d.). Swish was launched into the market in 2012 and is the result of a collaboration between six of the largest banks in Sweden.

Recently it has been an increased focus on fraud prevention within the Swedish banking industry as a consequence of documentaries like “Bedragarna” which portrays a Swedish group of criminals who conduct financial fraud on elderly people in Sweden via phone (SVT, 2024). The media attention has resulted in the Swedish prime minister putting pressure on the banks to take their responsibility and increase the collaboration among the banks and the police (Regeringen.se, 2024).

To sum up the Swedish banking industry is a big industry in terms of its contribution to Swedish GDP. Recently there are changes within the industry such as the entrance of fintech competitors and the four big banks are facing a higher level of competition and therefore they are in need to create their own service innovations. Trends within the industry is increased need for customer focus and improved digital banking channels in combination with increasing regulatory requirements and focus on fraud prevention. All these aspects make the banking industry complex and due to the increasing demand for customer value, the influence and use of the methodology Design Thinking within the industry is of interest to further investigate.

3. Theoretical Framework

This chapter aims to present the theoretical framework of the master thesis. It begins with an introduction to Design Thinking, followed by the three different phases of Design Thinking, how to implement Design Thinking and finally how Design Thinking is used today and within the service industry.

3.1 Design Thinking

Many companies today fail when creating and launching new innovations into the market which requires a need for an innovation approach which can solve complex and wicked problems (Nakata, 2022). A successful innovation takes the three perspectives into account: the customer's desire for the product, the feasibility of the technology and the financial profit (Magistretti et al., 2022). To ensure a high chance of generating an innovation, the customer's desire for the product should be higher prioritised than the other two perspectives. Design Thinking can be described as an approach containing several elements which are focusing on understanding the customer's need, generating ideas through brainstorming and create prototypes together in diverse teams with different background and skills to test on the customer. When using Design Thinking there is also an opportunity to increase the creativity and innovation culture within the organisation (Auernhammer & Roth, 2021).

Carlgren et al. (2016b) explain the five steps within Design Thinking which are empathize when data on the user is collected. The second step is define when the problem is being framed and understood. The third step is ideate when ideas are suggested as solutions to the problem. The fourth step is prototype when tangible visualisations of the idea is generated. The last step is testing which implies testing the ideas and prototypes on users and stakeholders (Carlgren et al., 2016b). The Design Thinking approach should not be as strict as a cookbook recipe and instead be the opposite with a high level of flexibility to find a solution to the requested problem (Auernhammer & Roth, 2021). The five steps are illustrated in Figure 1 below.

Figure 1. *The Design Thinking model*

The Design Thinking methodology can be divided into the three phases *customer discovery* where empathize and define is included, *idea generation* where ideate is included and *testing* where prototype and testing is included (Carlgren et al., 2022). These three phases will be the following three headlines in the theoretical framework.

Auernhammer and Roth (2021) present an overview of the historical development of Design Thinking from 1957 to 2005. At first Design Thinking was only seen from a design perspective but over the years it became closer connected to innovation management. The combination of the two fields design and innovation was seen as an unusual combination at first stage. Martin Brown released a book about Design Thinking in 2009 which has made the methodology increasingly popular within the field of business and management (Elsbach & Stigliani, 2018). Today, Design Thinking contributes to innovation, generates value and take the perspective of the human into consideration (Auernhammer and Roth, 2021). Dorst (2011) explain that Design Thinking nowadays are used in many different fields to solve complex problems, especially within information technology. Design Thinking is a way of thinking and an appropriate methodology when you know what *value* you want to achieve but have to find *what* to develop and *how* this what can lead to the aspired value (Dorst, 2011). To find what and how, designers use framing to understand the problem and how to tackle it going forward. To achieve the wanted value, the designers have to develop what and how simultaneously which can be seen as a complex process. Carlgren et al. (2022) mean that Design Thinking can be described as a methodology with the human in centre which focuses on providing value for both the user but also stakeholders.

Within Design Thinking, Carlgren et al. (2016) have identified five themes which are illustrated in Figure 2 below.

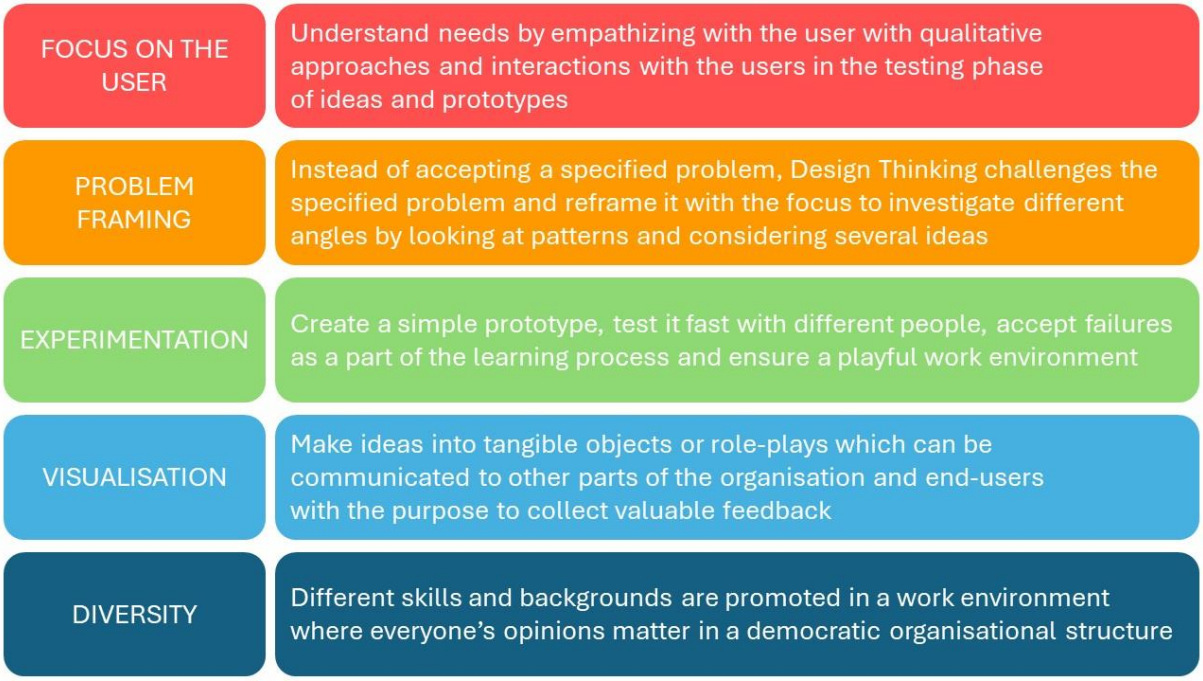

Figure 2. *The five themes in Design Thinking according to Carlgren et al. (2016)*

Design Thinking can be a useful tool for strategic planning within corporate management (Knight et al., 2020). This way of working is conceptualised as design-led strategy and should be used withing portfolio management when identifying products with the highest customer value. By using the customer data gathered from ethnographic studies, the management can gain valuable information for portfolio management decisions when choosing which product or service to launch into the market. To find useful insights from the ethnographic data, it is important that the managers prioritise analysis of the design-data since it requires time to understand the findings and compare it with other employees' insights. Design Thinking on a strategic level increase effectiveness when the methodology is used across different organisational functions and therefore it can impact the company in many ways. It also enables managers to collect valuable insights from the external environment in combinations with internal insights from the company's boardroom (Knight et al., 2020). Liedtka and Kaplan (2019) support the use of Design Thinking to improve the development of a company's strategy. By using Design Thinking, a company will investigate new growth areas and learn while

conducting experiments with prototypes which will enable exploration of incremental or transformative ideas (Liedtka & Kaplan, 2019).

Design Thinking can also be a useful methodology to use within new product development or in renewal of organisations (Carlgren et al., 2016b). Design Thinking can be a useful approach when a company is conducting a digital transformation since it is a complex process containing different stakeholders and changing operations within the firm (Vendraminelli et al., 2023). By using Design Thinking as innovation approach, there is a possibility to attract young new hires to the company. This can be an alternative incentive to monetary incentive to perform on a high level (Jaskyte & Liedtka, 2022). It is important to be open-minded and feeling comfortable with employees with diverse backgrounds to be able to work according to Design Thinking. A designer needs the ability of imagining the world from several perspectives which can be concretised as the perspective of customers, colleagues and external stakeholders (Jaskyte & Liedtka, 2022).

The people applying Design Thinking in their decision making will lead to a more effective outcome since the methodology consider a higher number of possible alternatives based on gathered data from different sources (Frisk & Bannister, 2022). Instead of focusing on the solution, Design Thinking advocates investigating the problem first (Frisk & Bannister, 2022). By using Design Thinking, the decision making is postponed as long as possible to understand and learn about the circumstances and evaluate different scenarios compared to traditional management which often supports a fast-decision-making process. To succeed with Design Thinking, there is a need to avoid cognitive bias which can be exemplified as being too optimistic about the project's potential success, assume that the customer can express their needs and when choices are deprioritised due to insufficient understanding (Liedtka, 2015). Some identified solutions to avoid cognitive bias are to collect an extensive amount of in-depth qualitative data to understand the customers perspective and their aspired needs while also creating diverse design teams with multiple skills and experiences. By using ethnographic research as a tool, the designer understands what the customer does rather than just listening to what the customer says since it seldom represents the true underlying need. Lastly the designer should work with several ideas in parallel to avoid close attachment to one single idea to early in the development process (Liedtka, 2015).

3.2 Customer discovery

The first phase of Design Thinking is customer discovery. Instead of relying on classical customer surveys, ethnographic approaches should be conducted with the focus on understanding the customer's needs, situation, and resources (Jaskyte & Liedtka, 2022). By observing the customer, empathy is built by really understanding the customer on a deeper level with a low number of samples (Jaskyte & Liedtka, 2022). The Design Thinking tools used in the customer discovery phase are ethnographic observations, in-depth interviews with the user and the analysis of customer journeys (Elsbach & Stigliani, 2018). Since the main purpose with an innovation should be to generate value for the end consumer and human, it is important to collect a deep understanding of the user which is gained while using Design Thinking (Magistretti et al., 2022).

Within the research field, Design Thinking is often used in the development of a service or product, but Magistretti et al. (2022) explain that it can be used in the research phase as well. There is a need for better research since several innovations tend to fail due to low quality of the research in the preparation phase. Since the research for innovations needs to analyse and predict something that has not already been done before, the complexity is similar to wicked problems for which Design Thinking can be a useful tool. It can be challenging to analyse something very distant from the market and several vague aspects needs to be take into consideration to create a foundation for the development of the service or product in the later phases. One main difference between using Design Thinking in the research phase compared to the development phase is that the customer and the future market are often absent. This make the process more abstract, and the Design Thinking approach needs to be slightly adjusted to fit into the diffuse problem to solve for a long-term perspective. Since the purpose of using Design Thinking is in an early phase, the researchers need to start with creating potential scenarios, markets and customer and based on that come up with potential product or service innovations. This is different compared to using Design Thinking in the development phase where the surroundings are already established. The skill of imagination is necessary for the researcher to succeed (Magistretti et al., 2022).

3.3 Idea generation

The second phase of Design Thinking is idea generation and Liedtka (2015) mentions mind mapping as a tool to present generated insights from the ethnographic research and gain a collective understanding of the problem across the entire team of designers. Brainstorming is another tool, and the ideation process should not contain judgment towards the ideas or generate debates among colleagues (Liedtka, 2015). The aim should be many different ideas and not solely focusing on one idea to quickly (Elsbach & Stigliani, 2018). Being creative implies creation of the highest number of ideas rather than creation the right idea (Dell'Era et al., 2020). When brainstorming, a good approach is to use post-it papers, write down all ideas and put them up on the wall to enable a shared view of the problem. Another Design Thinking tool is cocreation of solutions together with both stakeholders and end users (Elsbach & Stigliani, 2018). To generate service innovations, the tools roleplay, mapping of events and interview with a set context can be used (Wetter Edman et al., 2018).

It is necessary to develop the skill of visualisation to understand how a solution to a problem or an idea can be, which sometimes is hard to define (Auernhammer & Roth, 2021). There is also a need for high acceptance for failure and to see it as a part of the process. Several bad ideas are needed to generate one good idea. Brainstorming is an important part of creativity and should be conducted in a group to gather as many perspectives and creative minds as possible. To succeed with an effective and creative brainstorming setting, Auernhammer and Roth (2021) mention five rules to take into consideration. Eliminate personal judgement, share and combine each other's ideas, listen actively to one conversation at a time, make sure to stay focus during the brainstorming session and support radical ideas. The environment needs to feel safe in which people can articulate their ideas and are free to explore. This is referred to as psychological safety (Auernhammer & Roth, 2021). The use of idea generation tools can contribute to a higher level of risk taking and collaboration across borders when managing ambiguity problems (Elsbach & Stigliani, 2018).

3.4 Testing

The third phase of Design Thinking is the testing phase and the focus during the testing phase should be on experimentation and learning rather than persuade and display one single solution

(Liedtka, 2015). Prototyping makes very diffuse ideas tangible and easy to communicate. These prototypes aim to generate feedback and act as a conversation starter. When a designer is testing a prototype on external customers or stakeholders, he or she is conducting a field experiment. The usage of testing tools can lead to increased openness to failure and experimentation within the organisation which can result in an increased willingness to try new things and approaches (Elsbach & Stigliani, 2018). The Design Thinking tools used in the testing phase consists of experimentation and rapid prototyping to test both the technical and business aspects of the idea (Elsbach & Stigliani, 2018).

When using Design Thinking in the research phase, diffuse prototypes should be used to keep the spectrum of possible outcomes broad but still give an understanding of what the innovation can be like (Magistretti et al., 2022). The process should be iterative and always with the human and end customer in focus. Technological improvement in visualisation or creation of a prototype has made it easier to create prototypes. Magistretti et al. (2022) mention 3D-printers as an example. There is a risk that the prototype will be a false representation of the future, but it contributes by being a conversation starter for different stakeholders regarding potential future desire that needs to be satisfied (Magistretti et al., 2022). Dell'Era et al. (2020) emphasize the advantage of failing fast when testing a prototype which often result in lower cost and increased organisational learning. Innovations today often imply digital solutions, but it requires a focus on providing value for the end user instead of technical feasibility to be successful (Przybilla et al., 2022). One advantage with creating prototypes of digital products is the low marginal costs compared to creating different physical products. It is also easier to make the digital products personalised which results in higher value for the end customer and can lead to increased proactiveness (Przybilla et al., 2022).

3.5 Implementation of Design Thinking

Today, there is a need for an increased understanding of how to apply the theory of Design Thinking in practice (Dell'Era et al., 2020). To be able to implement Design Thinking in an organisation, there is a need for support from the entire organisation (Wrigley et al., 2020). Other success factors are a powerful leadership, necessary skills, and an open culture towards Design Thinking. Design Thinking is often wanted as a problem-solving tool, but organisations tend to fail when implementing the tool as a process (Wrigley et al., 2020). An organisation can

also use Design Thinking as a competitive advantage towards its competitors (Wrigley et al., 2020). To succeed with implementation of Design Thinking as a competitive advantage within an organisation, an intervention can be held with the purpose to raise awareness, contribute to a higher interest and desire for the Design Thinking process which will lead to actions with design elements. These steps can be seen as an iterative process, and it needs to be constantly repeated for the organisation to succeed with the implementation of Design Thinking. The person in charge of these iterative steps is called design catalyst. The design catalyst's main role is to question the established processes within the organisation and inspire to test new design ideas (Wrigley et al., 2020).

To succeed with implementation of Design Thinking, four factors are needed (Wrigley et al., 2020). The first factor is that the organisation´s strategy needs to be long-term and focus on innovations in combination with being willing to take risks and make changes to grow. The second factor is that the organisation needs to have the necessary facilities such as human and physical resources to conduct Design Thinking processes. It is therefore a need for the organisation to be willing to restructure its current resources, develop them further and treat them as transformable. The third factor is that the organisation needs cultural capital in terms of employees to understand the value of implementing Design Thinking processes within the organisation. The larger group's interest for design is necessary for the implementation to succeed. If only a few individuals practice Design Thinking, their knowledge might disappear from the organisation if they resign. The last factor is that the organisation's directives need to contain Design Thinking which should be visible through the organisation's key performance measurements and clearly stated in the employee's role description (Wrigley et al., 2020).

It is important that the management provide a creative physical environment to ensure a culture where failures are seen as a part of the process and a high level of freedom (Auernhammer & Roth, 2021). The creative work also needs to have a rewarding incitement. When being creative, risks need to be taken into consideration. To overcome potential risks and challenges, the individual needs to be motivated and have a strong self-confidence instead of following the status quo or standardised processes of the organisation (Auernhammer & Roth, 2021).

Problems can occur when integrating Design Thinking into organisational structures (Carlgren et al., 2022). One reason can be differences in organisational culture and values. When these conflicting cultures appear, it can negatively affect the implementation of the new methodology. Design Thinking as an approach should be adjusted to the unique organisations with its own strengths and weaknesses (Ben Mahmoud-Jouini et al., 2019). Factors which are needed to

succeed with the implementation of Design Thinking are to have support from management and a strong leadership who advocates the approach and inspire others. Another success factor is to communicate the contribution of Design Thinking to ensure that everyone is aware of its contribution to innovation outputs (Ben Mahmoud-Jouini et al., 2019). It is important to specify what Design Thinking is and how it should be interpreted in the specific context before using it (Baker & Moukhliss, 2020). It is also important to decide which part of the organisation that should use it and clearly communicate the methodology to all parties involved to establish a foundation of mutual understanding and to avoid confusion (Baker & Moukhliss, 2020). As a next step it is also important to offer training on Design Thinking tools and activities to enable employees to develop their own design toolbox and mindset (Ben Mahmoud-Jouini et al, 2019).

Carlgren et al. (2016) empathizes the struggle of implementing Design Thinking in organisations which often is the case with new management approaches. The identified challenges when implementing Design Thinking in large firms are illustrated in Figure 3 below (Carlgren et al., 2016).

Figure 3. *Challenges when implementing Design Thinking in large firms according to Carlgren et al. (2016).*

Design Thinking is a mix of both exploitation which emphasizes maintain and make already established work processes more efficient but also exploration which focus on investigating

new markets, ideas and external needs (Randhawa et al., 2021). When these two states are achieved, then the organisation reaches the state of ambidexterity which supports generation of innovations. The reach of organisational ambidexterity contributes to increased sales and performance. By using Design Thinking as an approach, it can lead to increased confidence within the organisation. To manage the implementation of Design Thinking, it is important that the implementation occurs step by step for the organisation to adopt to the new way of working and think properly without completely disrupting already established processes (Randhawa et al., 2021). To increase organisational learning, employees have to develop their knowledge together in teams which is line with Design Thinking's approach of using cross-collaboration (Hölzle & Rhinow, 2019). By using Design Thinking, the employees practice several learning styles which increases their learning flexibility (Hölzle & Rhinow, 2019).

There is an opportunity for technical-focused firms to use Design Thinking to be more customer oriented (Eisenbart et al., 2022). In a more technically oriented company with values distant to the human centredness within Design Thinking, it can be hard to implement the methodology. Often technically oriented employees are focused on finding one solution instead of thinking broad and handling multiple options in parallel. In technical firms, Design Thinking is a more valuable approach for complex and undefined problems rather than smaller justifications of already created products. By using Design Thinking, the focus shift from saving costs and resources to increase creativity (Eisenbart et al., 2022). By letting employees practice Design Thinking, the motivation level can increase which motivate the employees to stay with the company (Dell'Era et al., 2020). By involving several stakeholders, their willingness to being involved increase and the collaboration between different parties is better facilitated (Jaskyte & Liedtka, 2022). When collaborating, new skills and resources becomes available which also contributes to a better outcome. It solves for the problem of constraining resources since the different departments use their resources together in a more efficient way. When not using Design Thinking, department can see each other as rivals competing over the same resources instead of joining forces and use the resources together. Design Thinking is also a way to solve for conflicts on several levels both internally and externally of the organisation by aligning different people and make them all work together as a team (Jaskyte & Liedtka, 2022).

3.6 Design Thinking in service innovation

Design Thinking within service innovation is a growing interest within research (Wetter Edman et al., 2018). Due to an increase of the service sector, there is a need to further develop innovative solutions. Since a crucial element of Design Thinking is visualisation and high level of physiological cognition, limitations are identified when applying it to innovations within service. To make it more applicable for service development, habits must be analysed and broken down into parts to generate new ways of working and future habits (Wetter Edman et al., 2018).

When visualising, the employee needs to analyse a setting from different perspectives and imagine different solutions with associated consequences (Auernhammer & Roth, 2021). A solution is to include a physical experience when generating ideas (Wetter Edman et al., 2018). Aesthetic disruption analyses different environments, feelings and circumstances to see how they affect each other and the resulting habits. The second step of aesthetic disruption is to question the environmental factors and identify a potential problem or solution. Instead of only observing the situation, there is a need for physically participating and use all senses to get a better understanding and empathy for the customer. Wetter Edman et al. (2018) illustrate an example of a caregiver who visits a patient, get an understanding of the patient's perception of the service while the patient also get a better understanding of the worker's perspective. While collaborating, more insights are gained and a mutual understanding of each other's perspective is being made. To reach this result, it is necessary to involve the body in a physical experience rather than just thinking and brainstorming for a better solution. It is therefore recommended to include several people in the aesthetic disruption to gain more incentive for change across different departments within the organisation together with external parties (Wetter Edman et al., 2018). Gao and Yu (2023) do also argue that to succeed with a service innovation, there is a need to create a service based on the user needs by co-creating the idea with the end-user. Therefore, the approach Design Thinking with its focus on creating value for the user and the testing phase can support the creation of innovative services Gao and Yu (2023).

3.7 Design Thinking today

The research on the actual outcome of Design Thinking in terms of innovations is limited (Jaskyte & Liedtka, 2022). Despite that, there are several positive organisational outcomes of applying Design Thinking as an approach to generate innovations. These are increased self-confidence and organisational networking, effective use of resources, solutions with higher quality and trust among the involved stakeholders and the organisation. It is difficult to measure the result of using Design Thinking and the number of innovative products or new patents are not portraying Design Thinking properly. One outcome of using Design Thinking is the non-financial contribution to a more creative organisational environment with positive emotions. It reduces self-doubt and criticism towards new ideas and affects the individual's way of thinking and perceive the surrounding environment. This contributes to an increase of the performance and motivation in a team and on an individual level. To manage innovation, an organisation needs to find the right ideas, make active choices and have the ability to transform the ideas into innovative solutions. The presented idea needs to be based on findings from the end customer´s real environment for it to provide value. As a compliment, the iterative process of testing prototypes of the idea with the customer is also important to gain insights to further develop a valuable idea and increase of quality (Jaskyte & Liedtka, 2022).

Fehér and Varga (2019) present a case study of a Hungarian bank using the methodology Design Thinking to get a better understanding of the customer journey and desired needs and values by creating personas. To solve the banking industry's challenges with increased need for customer focus in a digital environment, Design Thinking can be an appropriate methodology. To understand the need of the customer on a deeper level, data on customer's feelings and thoughts was collected. Based on this data, personas were created and can be described as a fictive person representing a group and containing a description of behaviours, motivation values and goals. Personas were used since they are easy to emotionally connect with and understand for an employee which makes the development of services with a high customer value easier. It enabled the possibility to experience the bank's services from the customer´s view and understanding areas of improvement. The use of personas for corporate customers were not as useful as for private persons due to the lack of human characteristics of a corporation (Fehér & Varga, 2019).

Vetterli et al. (2016) present a case study of how Deutsche Bank implemented Design Thinking with the aim to bring the IT department closer to the end customers. Often, banks do not involve

the customer in the product development until the final product or service is introduced on the market. Vetterli et al. (2016) argue that banks can gain valuable insights by involving the customers earlier in the development process. To develop products and services with a high customer value, the IT department at the bank needs to truly understand the customers. This can be done by ensuring interactions between the IT department and the customers to collect feedback to develop a higher value which responds to the customers actual needs. To avoid misunderstandings, the prototypes presented to the customers should be tangible which initiate the conversation about potential improvements. In the case of Deutsche Bank, it was beneficial to implement Design Thinking in small projects as a start but at the same time secure resources over a long-term period to ensure organisational commitment. Presenting unfinished products or services to the customer is in conflict to established ways of working within the bank sector. On the other hand, the success of using prototypes as an enabler for conversation outperformed earlier doubts in combination with a shorter time between idea to market entrance. Another success factor of the implementation at Deutsche bank was to include Design Thinking education within an employee learning program (Vetterli et al., 2016).

Apart from the Hungarian bank and Deutsche Bank, Micheli et al. (2019) mention that Design Thinking is used in several organisations like Bank of America, SAP and Samsung (Micheli et al., 2019). Additionally, the companies Procter & Gamble, Mayo Clinic and Kaiser Permanente do all apply Design Thinking into their business operations (Eisenbart et al., 2022).

3.8 Criticism of Design Thinking

Generally, within the research field, the definition of Design Thinking is a vague which makes it sometimes mistaken for the design practice and causes diffusion (Verganti et al. (2021). It is therefore a need for more clarity on the theory of Design Thinking and its definitions to make it more applicable in practice. Furthermore, the link between Design Thinking and other management studies are not that connected which makes it hard to connect to the rest of the management field. Also, since many complex problems today such as the covid-19 pandemic and environmental changes are involving the future with undefined factors or consequences, Design Thinking´s focus on solving problems in current or past times needs to be adjusted. Another critique towards Design Thinking is its lack of proves success record which Jaskyte and Liedtka (2022) agree upon. Another critique to Design Thinking is that complex problems

of today often have multiple stakeholders and users, which makes it difficult to follow the single user-centric approach within Design Thinking (Verganti et al. (2021). These complex problems have no identified frames like a start or end point which Design Thinking needs to be adjusted to. Likewise, the people affected by the change should be involved at any time to constantly engage with the idea and solution creation (Verganti et al. (2021).

Design Thinking put a lot of emphasis and power to the designer which result in the designer being far away from the people and organisation which the designer serves (Iskander, 2018). The limited participation in innovation result in a gatekeeper and the outcome is fewer innovative ideas. Since the designer conduct the ethnographical research, there is a risk of gaining a subjective view of the problem or surrounding environment. Iskander (2018) does also support the fact that the proven success of Design Thinking is limited and consists of stories rather than measurable data. Another critique towards Design Thinking is its similarities to the rational-experimental approach which is an older model. Iskander (2018) is therefore questioning if Design Thinking is just another name for a previous established theory.

3.9 Key takeaways from the theoretical framework

Design Thinking advocates for values like user-focus, experimentation and diversity which are necessary to create innovations (Carlgren et al., 2016). The approach is structured into different phases with identified tools to generate the necessary insights or final outcome. On the other hand, there seems to be challenges when implementing Design Thinking within an organisation. It is therefore of interest to conduct further research in different organisations to confirm these challenges. Additionally, there is also a need to gain insights into why these challenges appear.

Since a fundamental part of Design Thinking implies being willing to take risks, it is therefore of interest to investigate how Design Thinking is used in a highly risk averse industry such as the Swedish banking industry. Since these organisations are in need for a stronger customer focus it would be of interest to see if Design Thinking can be used in these organisations. Further on, Design Thinking seems to be a more common innovation methodology within product innovation rather than within service innovations. Therefore, there is a need to contribute to more research on how Design Thinking is used within an organisation developing services like a Swedish bank.

As mentioned by Verganti et al. (2021), the definition of Design Thinking is vaguely defined which causes confusion. It is therefore a need to further investigate how Design Thinking can be used applied in a real organisation to get a better understanding of what Design Thinking actually is. Additionally, organisations like Swedish banks have to involve several stakeholders when solving complex problems which is conflicting with only focusing on the end-user. Based on this, it is of interest to investigate what kind of stakeholders the bank takes into consideration when developing service innovations.

To sum up, there is a need for additional understanding on how the methodology Design Thinking, which requires a high level of user focus, experimentation and willingness to take risks, is used within a banking organisation with presumably different values. It is of interest to investigate how this affects the organisation's ability to create successful service innovations.

4. Methodology

This chapter aims to present the chosen research strategy which is a qualitative study with an abductive research approach. A single case study is the chosen research design and the data was collected by a review of the research field and through interviews as a primary data source. The data was analysed by a thematic approach and the research quality is discussed in the end of the chapter.

4.1 Research strategy

This master thesis is following the guidelines of a qualitative study which can be described as focusing on data presented by words and individual stories with a personal perspective rather than a quantitative study which focuses on data presented as numbers and are often closer connected to the natural science field according to Bell et al. (2022). To be able to answer the stated research question "*How is Design Thinking used in the development of innovative services within the Swedish Banking industry?",* there is a need for comprehensive answers based on personal stories from employees working in the Swedish banking industry. This to also be able to understand different perspectives and the underlying factors to why Design Thinking is applied to some extends and to some not. The researcher collected individual perspectives, thoughts, feelings about the theory itself but also on how Design Thinking can be applied within the organisation with the purpose to contribute to the research field within Design Thinking. Since there is no right or wrong answer to how Design Thinking should be implemented or applied in the Swedish banking industry, there is a need for in-depth data gathered from multiple perspectives to be able to generate an understanding for the topic.

The chosen research approach for this master thesis is abductive since the researcher conducted an iterative process between investigating the theory of Design Thinking and observations on how it is used in the Swedish banking industry (Bell et al., 2022). The abductive research approach usage has lately increased within the business research field and is described by a combination of inductive and deductive research approach. The inductive research approach is based on observations which later leads to creation of a theory. The deductive research approach is based on already existing theory which later is being a formulated to hypothesis tested in

observations (Bell et al., 2022). This master thesis investigated how the theory of Design Thinking is being used in the Swedish banking industry which makes the research approach starting with investigating the theory. This has not been done by testing different hypotheses with the purpose to reject or accept a hypothesis, rather it has been investigated through observations which in turn has generated new perspectives to the theory. When the researcher analysed the collected empirical data, the researcher investigated both the collected data in parallel with the theory to find an answer to the stated research question. Therefore, this master thesis followed the abductive research approach.

4.2 Research design

This master thesis is following the research design of a single case study which can be explained as an investigation of one single situation, social setting or a single organisation and is a common research design approach within qualitative research according to Bell et al. (2022). The researcher chose a big Swedish bank as the single organisation which was investigated to understand how Design Thinking can be implemented. Since the chosen organisation is a big Swedish bank, the researcher aims for the discovered insights to be applicable to other big Swedish banks with similar characteristics and therefore also contribute to the research field in Design Thinking. The researcher chose the specific banking organisation due to the knowledge that some business development departments apply the Design Thinking methodology in their work. The choice of a single case study can also be motivated with the aim to investigate how Design Thinking is being used within the bank on a profound level based on insights from employee's and their different perspectives. Due to lack of time resources and the extent of a master thesis, the research design of a multiple case study was not chosen.

The case study investigated employees with different titles and in different areas of business development within the investigated bank to avoid biases based on a single areas approach towards Design Thinking. The respondents were chosen to represent different areas of business development to portray potential similarities or differences within the bank organisation. By using a single case study, this master thesis is able to present profound and detailed insights on how Design Thinking is used within the Swedish banking industry. Previous case studies written by Fehér and Varga (2019) and Vetterli et al. (2016) present how Design Thinking can be used to solve for complex problems and get a better understanding for the customer within

the banking industry but do also present the complexity of applying the methodology within a banking organisation. This level of complexity was captured by the choice of conducting a single case study and therefore, the researcher wants to contribute to the existing research and to research gaps on how to apply Design Thinking in the Swedish banking industry by the conduct of a single-case study.

4.3 Data collection method

The chosen data collection method for this master thesis consists of two parts. The first part being a literature review of existing academical research within the field of Design Thinking. The second part being the primary empirics collection was made through semi-structured interview with employees working at the big Swedish bank.

4.3.1 Literature review

When collecting the data, the researcher conducted a systematic literature review which according to Hiebl (2023) should follow three steps. The first step being to identify the research question which the researcher did early in the research project. The second step being to identify search criteria and keywords when searching for theory within the knowledge area of Design Thinking. The third step is to present the gathered literature with the purpose to being easy to interpret and read while also representing the current state of the research field of Design Thinking (Hiebl, 2023).

This research began with a search for research within the field of Design Thinking by searching for research articles in the databases *Supersök* provided by Gothenburg University and *Google Scholar* to ensure the use of search engines with high reliability. The researcher searched only for peer-reviewed articles and used the following key words: *Design Thinking, innovation, service innovation, Design Thinking banking.* The aim was to include recent research and therefore the researcher made the decision to only include articles from 2016 or later, except for two articles which were published earlier but still provided the theoretical framework with important insights into the research field of Design Thinking. The researcher argues that the majority of articles from earlier than 2016 are not as relevant today since framework and

theories are updated in more recent articles taking today´s business environment into consideration. In the second chapter *Swedish Banking Industry*, only articles and reports were used and with the oldest one from 2017 following the same argument mentioned above, to capture the current trends within the Swedish Banking industry. Only articles in English were included in the literature review to ensure no language barriers.

When the listed research articles from the databases were investigated, the researcher used the snowball technique when looking for additional sources by investigating the reference lists for insightful research articles (Bell et al., 2022). During the primary data collection consisting of interviews, new theoretical insights appeared, and the researcher therefore updated the theoretical framework during the data collection process in accordance with the iterative abductive research approach. It is also important to conduct a comprehensive systematic literature review including all relevant areas within the theory according to Hiebl (2023) which the researcher did by reading articles from different authors with different opinions including critique towards Design Thinking. The researcher decided to stop searching for additional articles when a level of saturation was reached, and no additional insights or perspective were found (Bell et al., 2022). By using a systematic approach when researching a research field and writing the theoretical framework, it is contributing to a high level of research quality according to Bell et al. (2022). Hiebl (2023) explains that it is important to describe the methodology of searching and choosing articles for the systematic literature review to ensure a high level of transparency. By choosing a systematic approach when searching for literature, the researcher ensured that the literature is chosen because of its relevance and not only because of the researcher's prior knowledge within the field.

4.3.2 Primary empirics collection

The empirical result in this master thesis consists of data gathered from interviews which was gathered by the researcher herself and therefore fulfils the requirement of being a primary source according to Bell et al. (2022). Conducting interviews is a common data gathering method to use within qualitative studies (Bell et al., 2022). The chosen structure for the interviews was semi-structured since it implies that the researcher prepares an interview guide with open and broad questions but with the option to change the order of questions in combination with asking follow-up questions for clarifications. Since the research aim of this

study is to understand how Design Thinking is used within the Swedish banking industry the researcher wanted to enable the respondent to tell his or her own story from an individual perspective which requires open questions and sometimes adjustments in the order of questions.

The interview guide was created upon the theoretical framework and the researcher formulated the question to enable the required broadness of answers from the respondents to be able to understand the entire picture of how Design Thinking is used within the Swedish banking industry. The questions were designed to allow for storytelling and sharing of examples to describe how business development is conducted within the organisation. When creating the interview guide, the researcher followed the preparation guidelines stated by Bell et al. (2022). The questions should be placed in an order which contributes to a flow, not ask to specific questions, adjust the language to the respondent and prepare with explanatory examples if needed. Before the interview, the interview guide helped the researcher to prepare and when analysing the gathered data after the interviews, the data was structured in a similar way which generated consistency which made the analysis process easier. The interview guide can be found in Appendix 1.

When conducting an interview, the success is dependent upon the interviewer's skills in handling the situation of an interview ad hoc which can be hard to estimate or practice before the interview. The researcher did therefore an analysis of previously successfully conducted interviews in previous university courses and reflected upon what went good or bad. To ensure successful interviews, the researcher prepared explanations and examples to be prepared to clarify each question if needed.

When selecting the respondents for this research project, the researcher aimed to only interview respondents with knowledge to answer the stated research question which is in accordance with Bell et al. (2019). Therefore, all respondents were required to work within business development and the researcher aimed to interview respondents from different organisational departments to get a broad overview of how Design Thinking is used within the bank. The introduction to the respondents was made through a contact person within business development who provided the researcher with a list of potential respondents with different titles and within different areas of business development within the bank. In conversations with the first list of respondents, the researcher was referred to additional respondents in accordance with the snowball effect where one respondent refers to another one (Flick, 2018). In total, 13 employees within the bank were interviewed and the decision to stop interviewing was due to the achieved level of saturation. An overview of the respondents is presented in Table 1.

Table 1. *Overview of respondents*

Repondent number	Title	Date	Length
R1	Third party cooperation manager	2024-03-01	37 minutes
R2	Business Owner	2024-03-01	30 minutes
R3	Segment manager	2024-03-04	43 minutes
R4	Lead manager extended offering	2024-03-04	34 minutes
R5	Business owner	2024-03-08	39 minutes
R6	Proposition journey manager	2024-03-08	41 minutes
R7	UX designer	2024-03-08	33 minutes
R8	Strategic project manager	2024-03-08	37 minutes
R9	Business developer	2024-03-08	22 minutes
R10	Segment manager	2024-03-11	32 minutes
R11	Service designer	2024-03-15	30 minutes
R12	Portfolio business owner	2024-03-15	32 minutes
R13	Business developer	2024-03-15	54 minutes

The respondents were approached by the researcher via an email in which the master thesis topic was introduced. Since many of the respondents were not based in the same city as the researcher in combination with the respondents preferring digital interviews, all interviews were conducted via Microsoft Teams. Before starting the interview, the researcher ensured a good interview condition by following the guidelines of Bell et al. (2022). It is important to understand the environment, industry and language used by the respondent, prepare a qualitative audio-recorder and choose a quiet location. Bell et al. (2022) argue that the interview should proceed in the language in which the respondent feels the most comfortable to enabling high quality in the data gathered. Since all respondent's mother language is Swedish, all interviews were held in Swedish. If there was a need for clarification, the researcher asked follow-up question to ensure no misunderstandings. In the beginning of the interview, the researcher presented an overview of the master thesis and continued with ensuring the respondent´s and the organisation´s anonymity, asked for the permission to record the audio of the interview with clarifications of not sharing the material with anyone else except for the supervisor. Lastly the researcher finished the interview introduction by informing that this master thesis will be published on the website of Gothenburg University and Luiss University. To fulfil the anonymity of the respondents, the respondents are referred to as R followed by a unique number in the following chapters in this master thesis.

4.4 Data analysis

After conducting the interviews, the researcher transcribed the interviews in accordance with the recommendation from Bell et al. (2022). The dictating tool provided by Microsoft Word was used to transcribe the audio file and afterwards, the researcher made the final necessary changes and ensured that the entire interview was been transcribed in a correct way. By transcribing the interviews, the researcher was prevented from forgetting important information, enabled the possibility to re-read the gathered data and the possibility to share the data with a supervisor if a secondary analysis made by an additional researcher was needed. Since the interviews were conducted in Swedish and later translated into English when analysed in a thematic analysis by the researcher, there was a risk of losing or misinterpret some of the result in the translation. However, the concepts and theories discussed during the interviews were in line with the researcher´s area of studies in combination with the researcher's high level of proficiency in English which therefore decreased the risk of translation mistakes.

When conducting a qualitative analysis, an extensive amount of data is generated according to Bell et al. (2022) which needs to be analysed. One method of analysing a large amount of data is to use a thematic analysis where the researcher codifies the collected data into different themes which will result in several categories of data. To find a theme in the gathered data, Bell et al. (2022) recommends searching for repeated topics, similarities and the words "because" or "since" because they often contain personal opinions or explanations. When conducting a thematic analysis Flick (2018) present six steps of how to conduct a thematic analysis and recommend starting with getting familiar with the gathered data which the researcher did by transcribing the interviews and as a second step created the first theme codes after all the interviews were held. Initially 46 codes were created based on the first overview of the transcriptions manually by the researcher. The next step was to look for themes in the transcription to match them with a theme code. After analysing the themes again, there were 41 identified theme codes which the researcher categorised into different headlines in the empirical result. As a last step the researcher started to write the empirical result based on the identified theme codes.

4.5 Research Quality

A research study´s credibility is defined as being correct and do not include distortion of the reality according to Flick (2018). In other words, the study´s findings need to be a representation of the reality. If needed, the respondent asked for clarification if something was perceived as indistinct. To ensure a high level of credibility it is therefore necessary to take the researchers responsibility of being objective into consideration. Bell et al. (2022) recommend to use triangulation to ensure a high level of credibility which entails including more than one data source when conducting research. Therefore, the respondent interviewed respondents from different business development departments and different professional roles to compare different data sources. To ensure a high level of transparency within the research project, the statements or opinions of the respondents were described in detail in the empirical result chapter.

A research study´s transferability is defined as being able to be applicable to another context such as another industry or organisation according to Bell et al. (2022). Furthermore, the qualitative research needs to be detailed with extensive descriptions for its findings to be transferable to other situations. The respondents who were interviewed in this research project is working in different areas and roles of business development which can be found in other bank organisations which increases the transferability. However, the organisational values, strategies and individuals own experiences cannot be generalised to represent all Swedish banking organisations, which is a well-known critique towards qualitative research according to Bell et al. (2022). To solve for a higher level of transferability, this study included a theoretical framework to add additional theory of how Design Thinking can be used to create innovative services both within and outside of the banking industry.

A research study´s dependability is defined as findings and research material being accessible, such as keeping notes, data analysis framework and transcripts of the interviews according to Bell et al. (2022). To ensure a high level of dependability, the research methodology is described in detail, the interview guide is attached in Appendix 1 and the respondents' opinions and statements are presented in detail in the empirical result section. If desired, the respondents had the possibility to access the transcriptions to confirm it being correctly written. The research project was supervised and discussed by the researcher´s university classmates with the purpose to ensure that the project followed research standards and to discuss each section of the thesis in detail with room for questions.

A research study´s confirmability is defined as the researcher presenting an objective description of a social phenomenon according to Bell et al. (2022). The researcher aimed throughout the research project to keep an open mind and listened to different perspectives and thoughts about the same situation. In the empirical result personal opinions of the researcher were avoided and if desired from the respondents, the empirical result was presented. Worth mentioning is that it is not possible to be fully objective according to Bell et al. (2022). Flick (2018) explains that the background or the interest of the researcher can influence the research when conducting qualitative research. It is therefore important to remember that qualitative research is not about presenting the only truth, it is rather about presenting the truth in a specific situation or context. In this report, the researcher has conducted a single case study of one organisation within the Swedish banking industry which can give an indication of how Design Thinking is used within the entire banking industry, but it is not the only truth of the reality.

5. Empirical Result

This chapter aims to present the collected findings generated from the conducted interviews within the bank organisation. The chapter is structured into seven sub-chapters which are based on themes identified in the thematic analysis. An overview of the themes included in each sub-chapter is presented in the table below.

Table 2. *Overview of themes included in the empirical result´s sub-chapters*

5.1 Business development in the bank	Business development in the respondents´ professional role Three perspectives: Customer focus, technical feasibility and profitability Regulatory requirements
5.2 Customer discovery	Customer needs Customer insights Personas Customer survey In-depth interviews Qualitative vs quantitative data
5.3 Idea generation	Create ideas for business development Brainstorming Ideation together with end-user Visualisation
5.4 Testing phase	Testing Challenges with testing Iteration
5.5 Values within the bank´s organisation	The willingness to create innovations Time horizon for business development Stakeholder management Creativity in business development Freedom in business development Fail fast Regulation and risk
5.6 Design thinking within the bank´s organisation	Previous knowledge of design thinking
5.7 Customer value in conflict with organisational values	Why not working more customer centric within the bank?

5.1 Business development in the bank

The respondents included in the case study do all work with some kind of business development but within different areas and end customers. R1 and R8 work with business development within the partnership collaboration with an external part. R2 and R5 work with business development in a digital channel which implies a long-term project with several smaller deliveries. R3 and R10 work with business development targeting a specific customer segment divided into several projects in parallel. The majority of the respondents describe their role as

broad with many different focus areas. The end users which are the targets of the business development project are both external customers and employees within the bank. 5 out of 13 define themselves as new in their roles and with an experience within business development between 0 to 2 years.

When working with business development, all respondents agree on that the three perspectives: the customer, technological feasibility and financial profitability have an impact on their work. R1 explains that all three perspectives are very relevant and included in business cases. R6 further describes that the aim is to deliver a high customer value and simultaneously high financial profitability. R6 does also state that the customer value and financial profitability does not need to be in conflict with each other. R11 concludes that all three perspectives are taken into consideration within Design Thinking. R13 states that the target state for the bank is to be the best bank for the customer, highly digital with supreme technical solutions and lastly be financially profitable.

R10 explains that the focus on these three perspectives has changed over time and means that the focus on customer value has increased and all respondents agree with this statement. R1 explains this further by saying that some partnerships are mainly created because they contribute to increased customer value. R3 states that one reason for increased customer focus in business development is the aim to reach a high level of customer satisfaction. R5 who works with business development targeting employees, continues to explain that the focus on the end user, the bank´s employees, has also increased. By developing user-friendly systems, the employee's quality in their daily work increases and the time spent on technical support decreases. R6 explains that an increased focus on the customer is enabled by increased amount of customer data extracted from the bank´s digital channels. R10 describes that the bank historically pushed communication on to the customer while today, the bank instead asks the customer what he or she needs. R13 agrees that the customer´s need is crucial but explains that the next step is to consider what the solution´s required cost is and how it can be developed from a technical perspective.

R3 explains that when choosing among different projects, the projects technical feasibility is taken into account to answer the question: what is possible to develop from a technical perspective? R5 tries to not consider the technical aspect, rather challenge IT colleagues in pushing the technology feasibility frontier forward instead. R7 and R8 describe that the technical aspect affects their work within business development since the idea needs to be possible to realise. To conclude, R13 expresses the importance of having the mindset that

everything is possible to solve from a technological perspective. R12 mentions that sometimes the idea for business development can be generated from new IT-systems being implemented which enables new technological functions.

Many of the respondents agree on that satisfied customers lead to increased profitability. R1 explains that the probability of retaining a customer increase when the customer is satisfied. R1 continues to describe that further along in the business development process when management decisions are made for budget and resource approval, the financial profitability aspect get highly prioritised. R4 and R5 continue and mention that their business development projects need to be financially profitable and the needed development investments needs to be covered by future generated income.

A fourth aspect that also affect the business development at the bank, is regulatory requirements according to all respondents. R3 describes that the need for business development can appear due to new regulatory requirements that the bank needs to follow.

5.2 Customer discovery

When initiating a project within business development, the respondents start with identifying the need which they want to fulfil with their solution. Customer insights is data that many of the respondents are looking for. R1 describes that there are several colleagues within the organisation who can assist with customer insights for specific customer segments or share already identified gaps within the bank´s product or service offerings. One source of customer insights that several respondents mention is customer complaints.

R3, in accordance with several respondents, claims that he does not have as good insights about the customers as the customer advisors who meet the customers everyday have. Therefore, R3 has close dialogues with customer advisors and reference groups consisting of advisors which gives a good understanding of what the customers need. R5 who works with business development targeting advisors, visits branches and customer centres to observe advisors when they work. While observing the advisors, R5 takes the opportunity to ask questions regarding needed improvements in the advisory systems and what feature or functionality they would like to include in the advisory tool if they could dream big. When conducting the observations, R5 states the importance of listening to really understand the problem rather than focusing on

finding a solution immediately. R5 and R12 do also stress that the advisor can not always specify what they need which reminds of the story of when customers told Ford that they wanted to have faster horses while Ford instead built a car. R7 maps out the need of the customer with the purpose to really understand the target group. R12 concludes the importance of collecting feedback and insights about customers on an ongoing basis. 4 out of 13 respondents share that they aim to find the underlying and more hidden reason for the problem which the customer might not be able to express. R2 continues to explain that it is important to talk to people and to understand the real problem.

R9 focuses on collecting data on how customers use the bank´s digital channels and R10 continues to explain how adobe analytics is used to analyse customer journey in a digital environment. In addition, extracting web-data and listening to insight forums gives R10 valuable customer insights. R11 focuses on conducting qualitative research to identify the customers challenges, needs and driving forces. In this stage, R11 aims to think in the perspective of the customer to not get biased about the bank´s perspective to try to identify a potential service or product.

The majority of the respondents answer that they use personas to present insights about a group of customers. R3 explains that some colleagues use personas and adds stories to them more frequently than others in their daily work. R5 shares that they are not using personas within their project towards customer advisors within the bank but conclude that it can be a good tool to use since the customer advisors have different technical knowledge and experience in using the working systems, which implies more focus on behaviour and knowledge rather than a personality type. R12 claims that the usage of personas was higher before within the bank. Personally, R12 thinks that personas can be a powerful tool, but it can risk leading to bigotry view of customers and increasing incorrect assumptions. Therefore, R12 agrees with R5 and state that the focus should be on behaviour rather than a specific person. Instead of only focusing on using personas, R11 chooses to focus on groups with similar needs. This is useful in R11's current project which is to develop the internet bank service for corporate customers where different users within a corporation have different needs. For example, a financial assistant has different needs of an internet bank compared to the corporate´s CEO.

Many of the respondents explain that they gather customer insights by looking at customer survey´s. R5 describes further that the plan within the project is to send out an employee survey on a regular basis with the purpose to measure to what extent the advisors feel comfortable with the current advisory system and identify trends over time. R2 and R8 among others analyse the

customer journey. R4 focuses on analysing how customers behave and use the bank´s digital channels with the purpose to understand potential behaviours and needs. R10 explains further that the analysis of the customer journey starts already when a customer is searching for something in Google with the purpose to understand where the first interaction with the bank´s website appear. R12 shares that the bank has a department working with optimising digital customer flows and they do also share their insights with the rest of the organisation. R5 expresses that there is not always possible to extract customer behaviour data from all systems which limit the data on customer advisor´s behaviours. R12 and R11 add that analysis of the physical customer journey is also conducted, both by the bank and by external consultancy firms.

Many of the respondents state that in-depth interviews are conducted within business development projects. R1 describes that in-depth interviews are conducted within specific areas where a need has been identified. R3 agrees and explain that in-depth interviews are conducted in bigger projects and inform that other colleagues within the project often conduct the interviews. R11 often uses in-depth interviews to understand the why to a certain problem and explains that the questions need to be openly asked to not steer the customer in a certain direction. R5 states that in-depth interviews are insightful but not possible to conduct in each project or smaller delivery due to a high cost and demand of resources.

When gathering data with the purpose to understand customer needs, all respondents agree upon that there is a need for both qualitative and quantitative data. R1 states that quantitative data is used in the daily work, but when there is a need to understand a pain point or a need on a deeper level, then there is a need for qualitative data. Generally, the bank organisation is more focused on quantitative data according to R2. R6 tells that there are an extensive amount of customer and transaction data that can be extracted from the bank´s systems. R3 continues to explain that the organisation aims to work and make more data-driven decisions but does also highlight that there is not possible to gather quantitative data from all areas or digital channels. R5 states that the organisation will move away from trusting a gut-feeling. R11 explains that quantitative data is useful when there is a need to get a broad overview of a problem. R12 continues to describe that the usage of quantitative data can lead to indications to a certain problem. R4, together with other respondents, mean that when management is making decisions, quantitative data such as numbers and statistics are taken more into account rather which sometimes can not describe the entire problem and. R7 thinks that quantitative data might be preferable in other parts of the organisation. R3 continues to state that qualitative data is preferable when creating a story

describing a problem. R4 explains that qualitative data is needed to understand the advisors' work situation. R5 agrees upon that qualitative studies are not seen as valuable as quantitative studies but does also mention that qualitative studies are not representative of an entire customer base. R10 continues and state that it is not possible to make conclusions based on few conducted in-depth interviews. R6 explains that when the opportunity arises in terms of time and resources, qualitative data together with UX designers are analysed to understand the customer´s experience in a digital channel.

5.3 Idea generation

All respondents agree that ideas for business development can arise from many different sources and identified customer needs. R1 explains that ideas can arise from colleagues who are responsible for a certain customer segment. R1 continues and say that ideas can arise from private life, friend and family but also from media. There is a need to always be informed about the latest trends and news within the industry and in the world. R13 expresses the importance of keeping track of digital trends which indicates that many bank customers demands digital self-services and prefer to not visit a physical branch office. R1 concludes that there is a risk to be stuck within the internal organisational way of thinking and therefore there is a need to look outside the organisational boundaries. R2 continues to explain that ideas for business development can arise from co-workers but also from conducted analyses of customer journeys. Both R1 and R2 among other respondents think it is important to keep track of competitors and their offerings towards customers. R9 adds that it is important to analyse competitors on a longer time horizon to keep track of upcoming innovations and offerings.

R5 highlights the importance of looking outside of the banking industry to find inspiration for business development from successful digital companies like Netflix or Spotify. For example, these digital nomads do not use the same amount of PDF-file as the bank does according to R5 and highlights the need for digital improvement within the bank. R5 continues to tell that colleagues from the business development department attend workshops and lectures presented by prominent tech-companies. R7 explains that it is important to look within other parts of the organisation to find ideas for business development but does also mention that ideas can be generated based on a new regulatory framework from the European union which currently is focusing on increasing accessibility. R6 describes that some of the bank´s products or services

are continuously exposed to competition, like mortgage which is a driver for continuously develop the bank´s offering towards customers.

When an idea needs to be generated, R1 evaluates if it is possible to internally create the idea or the final service or if there is a need for outsourcing to an external third-party company. R8 discusses further that searching for the latest trends and companies within fintech are conducted to find new ideas for business development. When meeting with potential collaboration partners, R8 gets ideas for business development. R12 explains that the bank is very good at creating strategies but not as good at realising the strategies and therefore it creates a gap in between. Previously the focus has been on generating ideas based on these gaps but now the focus has shifted more towards answering to the question: why is it a gap or a problem? R11 mentions that an opportunity canvas is used as a tool to identify opportunities and ideas based on customer insights and needs. R8 and R12 have created mind maps when generating ideas together with colleagues and R12 highlights the whiteboard tool Figma for structuring ideas based on different insights. R4 continues to describe the tools used in brainstorming and workshops which are PowerPoint, Excel and process maps.

All respondents say that they use brainstorming together with colleagues to generate ideas for business development. One team composition for solving problems is called virtual teams, consisting of members from different parts of the organisation according to R1. In addition, R1 does also brainstorm ideas together with external companies who are current or possible third-party partners. According to R1, brainstorming with external companies might be unique for the respondent's position but want to remind colleagues about looking outside of the organisational structure for ideas. R2 does also participate in brainstorming sessions as workshops together with colleagues and prefer to not invite managers in this process. The reason for this is because in an early stage it is important to understand the details closely located to the customer and senior managers does rarely have this knowledge. Additionally, R2 prefers to invite customer advisors to brainstorming sessions. R3 explains that he often prepares different scenarios and ideas to enabling a productive brainstorming session together with colleagues. R5 adds that the best ideas arise when new people with no previous experience are invited to the project for the first time and share their thoughts while also questioning previously made assumptions. R7 prefers to work in brainstorming sessions together with colleagues but does also highlight the importance of sharing feedback on ideas together with colleagues. R12 describes brainstorming as hanging up additional Christmas balls in a Christmas three to collect more dimensions to a problem. By brainstorming together, it helps to understand how all the

work conducted within different teams and departments at the bank are connected to each other according to R12. Most of the respondents declare that they consider several ideas simultaneously. In some cases, there is a need for a plan A, B and C to be prepared with alternative solutions if needed according to R4 and R5. R7 focuses on several ideas as long as possible to not choose one solution to quickly. In line with this, R12 prefers to consider several ideas simultaneously but do not think that all departments work in the same broad way.

When brainstorming for ideas, the respondents do it together with different kinds of colleagues. R3 brainstorms ideas together with colleagues and customer advisors within the respondent´s business area. Additionally, R1 brainstorms together with colleagues from the entire organisation with focus on customers, product, customer journey expert, brand and marketing. R2 states that there is a need to brainstorm ideas with many different stakeholders. R6 adds UX designers as one close collaboration partner and R7 mentions that ideas arise from legal and marketing colleagues. By involving customer advisor´s from different geographical locations in the brainstorming sessions, the entire Swedish market get represented in combination with these customer advisors being ambassadors for the ideas later in the implementation phase according to R3. R11 aims to include colleagues representing both the technical IT and business perspective in the organisation to increase the team´s understanding of the problem. R13 agrees and describes that IT and business need to work more closely together since business knows the needs while IT knows the best technical solutions. Together they will generate great ideas according to R13.

Ideation together with the end user is limited within the bank according to the respondents. R1 has never brainstormed together with customers but highlights that external collaborators brainstorm together with their customers and ideas generated can be shared with R1. Both R3 and R8 blame their limited ideation together with the customer on their limited direct contact with customers. R11 will start to brainstorm ideas together with the customer as a next step of the project and R9 did it more in a previous role at the bank. R11 wants to see more brainstorming sessions together with the customer within the banking industry.

When brainstorming together with colleagues there is a need to visualise ideas to the rest of the group. Many of the respondents agree that it can be hard to visualise ideas. One reason for this is because the presenter and the audience come from different teams with different backgrounds according to R1. R1 continues to explain that different colleagues do also pay attention to various details which require extensive preparations from the presenter. R11 discusses that visualisations can prevent from communication mistakes when presenting for colleagues from

a very different department such as legal and it is a need to continuously develop visualisation skills. To simplify the visualisation of ideas, UX can be invited early on into the idea generation phase to create pictures according to R5. R5 continues to state the importance of visualisation by giving an example of asking 2 people to draw a dog. Then you will most likely see two different kinds of dogs since the two people are two different people with different ways of thinking. Likewise, it is therefore important to visualise the final product in an early stage to ensure that all team member works toward the same direction according to R5. R12 adds that by explaining the idea by telling an example, it simplifies the visualisation and make it easier to understand. R4 disagrees and do not think that it is hard to visualise ideas or write reports due to previous work experience.

A tool used when brainstorming together with colleagues is Figma according to R3. R1 tells that PowerPoint is another tool frequently used. R2 highlights that there is an aim to work more visual when presenting ideas to colleagues. R9 does also add that showing pictures from Google or Pinterest can be useful when visualising a common target for the idea. To be able to improve visualisations, R9 states that there is need for more time. R10 emphasizes the advantage of visualising the idea in the correct context, for example a digital feature in a digital channel. R11 describes that UX designers can assist with visualisation of ideas in digital channels or creating demos. In line with that, R12 mentions that some colleagues create movies or clickable demos but often later in the ideation phase.

5.4 Testing phase

Further on in the business development phase, the next step is to test the ideas which can be made in several ways according to the respondents. R1 explains that collaboration partners tests pilot version of offerings with a limited number of customers. Usually, the ideas are rather fully developed when tested on customers, but sometimes even more simple prototypes can be presented to the partners´ customers with the purpose to collect insights according to R1. R2 describes that prototypes are created to represent ideas for business development and they are tested on different stakeholders within the bank´s organisation. Further, R2 continues to explain that technical tests are made and UX designers can perform tests on customers. A test conducted on a customer implies presenting a task for the customer and observe how the customer solve it. R2 also adds that AB tests are performed on customers with the purpose of testing several

versions of the same idea but with small differences to see which one the customer prefer the most. R3 describes that he prefers to test the ideas with reference groups consisting of customer advisors. Further on in the business development process, R3 explains that pilot tests are conducted on a smaller number of branches during a limited period of time and afterwards the pilot is evaluated. The ideas being presented to the reference group can be various fully developed and even if it is good to iterate the ideas, R3 mentions that IT can not start over all the time. R7 shares that prototypes are built in the tool Figma and can be clickable. Furthermore, R7 explains that ideas are tested on customers recruited by test companies. R7 state that the prototype can not be to fully developed but still sufficiently developed for the customer to be able to perform at test with the prototype. R9 explains that ideas can be presented as pictures as wireframes which might not be clickable but they are self-explanatory so the customer understands how they are supposed to work. R11 describes that trigger material is created to get a reaction from the customer exposed in the test. Furthermore, R11 would like to test more on colleagues internally, especially towards departments like legal and fraud with the purpose to learn more about their perspective. R12 explains that project teams do not always have the possibility to conduct tests which result in teams releasing products or services and only afterwards, the team can collect customer feedback for future improvements. To conclude, R12 states that the bank conduct tests but not enough, and the respondent would like to see more tests conducted before releasing. One possible area of improvement is to increase the interaction with real customers who meets customer advisors at the branches according to R12.

R1 describes that tests of new ways of working conducted on customer advisors is commonly occurring within the bank but these tests need to follow legal requirements, GDPR and privacy laws. R4 continues to explain that projects tested on customer advisors as pilot projects get evaluated afterwards. Sometimes the pilot gets updated or the time extended with the purpose to collect more feedback and customer insights. R5 states that it can be hard to test on customer advisor because of the reason that the process needs to follow strict regulatory frameworks. Therefore, the protypes created for pilot tests needs to be sufficiently developed to be compliant with regulations according to R5. Another aspect worth mentioning is to respect the customer advisor´s time which implies that the prototypes should be thoughtful and detailed enough. R5 explain that the customer advisors often expect presented ideas which are quiet fully developed. If not, the customer advisors can be questioning the idea. On the other hand, the prototype of the idea can not be completely developed because then the feedback from the reference group will be wasted and not taken into consideration. R9 thinks that the organisation is good at testing

prototypes but does also mention that a presented ways of working structure in a prototype can be very different when released into the business operations. R10 explains that when an upgrade of the bank´s internet bank was released the delivery was divided into smaller parts which enabled the possibility to collect customer feedback and adjust in the digital channel accordingly.

Along the project, development teams iterate the idea or prototype with the purpose to refine the final product or service released into the market. R3 thinks that the bank sometimes iterates to many times which may the bank appear as not brave enough. Sometimes the bank needs to dare more in terms of launching new products or services into the market according to R3. Both R4 and R5 describe that the bank iterates with tests and improvements along the project with the purpose to continue to refine the finished output. There is also a need to follow-up and evaluate released product or services according to R5 to enable continuously refinement work. R7 prefers to iterate and discuss the suggested improvements together with colleagues.

5.5 Values within the bank´s organisation

R2 explains that there is a will within the organisation to create innovations and most of the respondents agree. R2 continues to explain that there is a lack of ability to create innovations because of old technical systems or requirements from a legal or risk perspective. R3 states that the bank is rarely innovative but there is a large amount of project ideas to choose from. The bank has more of the strategy to let another actor test something new first and if it works, the bank can follow according to R3. R4 thinks that the will to create innovations continues to grow but wants to mention that the will depends on the individual department in the organisation. On a higher hierarchical level in the organisation, the will to create innovations is not as big as in R4´s department. R5 explains that the organisation wants to create innovations but in reality, innovations are absent. The example, dreaming of climb a mountain but never book the trip, describes the bank´s innovation culture according to R5. R6 mentions that one reason for not realising innovations is because of the many different departments involved in each project which makes the process even more complex. R8 claims that the will to create innovations can be improved, especially in the higher level of the organisation which often prioritise stability and regulations instead. R9 describes that the fact that the organisation is a bank affects the willingness to create innovations and therefore the regulatory requirement is always being

prioritised. R10 explains the bank´s organisation as slow in its movements and questions regarding ownership over the innovation can slow down the innovation process. R12 agrees and mean that it is very important for employees working with business development to be patient since it can be hard to implement innovations. A recommendation is to focus on the driving force rather than all future challenges along the innovation development process.

The respondents´ time horizon for their business development projects is varying. R1 explains that the time horizon from idea to an implemented partnership can vary between one to three years but along the way, there are often smaller deliveries. R2 works with development of the bank´s virtual assistant on an ongoing basis but the individual development projects require between 6-12 months of work. Hopefully the time needed for each project will be shorter due to a change of platform according to R2. According to R3 the time horizon for the projects can vary very much from a couple of months to several years. R5 does also work with a platform for several years but each smaller delivery requires between six to nine months of work. R6 works with a shorter time horizon on between six to eight weeks. R7 explains that the time planned for business development and UX design work can be too short due to last minute changes and not providing enough time for conducting AB-tests. This failure in planning might depend on the lack of knowledge in how UX designers works according to R7. An UX designer can not quickly put some pictures together and deliver a good result which sometimes is the perception among colleagues according to R7. R8 has a long-time horizon because of the time required to implement a third-party collaboration. R11 has also a long-time horizon of three years but think that it would be interesting to have a longer time horizon and be more forward looking due to occurring trends within digitalisation and AI for example.

All respondents agree upon that they all are required to collaborate with multiple organisational departments when working with business development. R1 experiences some departments harder to collaborate with than others due to internal politics within the organisation and therefore the respondent must work with stakeholder management. Some departments have a hard time to trust other departments and therefore they tend to focus on risks and questioning of the ideas according to R1.

The respondents have different opinions of the level of creativity in their work. R1 thinks that the role description contains a high level of creativity within the given framework in the role. R2 agrees but explain that the level of creativity decreases due to all required stakeholder management work needed to implement the ideas for business development. R3 explains that in the beginning of a project, it is allowed to think broad and about different ideas, but the closer

it gets to a management decision, the level of creativity decreases, which R12 agree upon. R6 describes that employees are supported to think outside of the box and be creative. R8 thinks different and claim that the level of creativity is not as high as he would wish for and R9 agrees and explain the work environment not being creative due to all legal requirements and the banks old technical systems. R11 states that it is important to understand the framework of the role and make sure to stay within it, or else the organisation will not take your work into seriously consideration if you are too creative.

Regarding freedom, the respondents think differently again. R1 thinks that the level of freedom is low due to internal work processes and the chosen strategic direction of the bank which needs to be followed. R3 explains that the freedom to address business development initiatives is big but agrees with the necessity of connecting these initiatives to the chosen business strategy. R4 thinks that the freedom is big in the beginning of the project while it gets more limited closer to a management decision. R6 states that regulatory requirements and technical conditions inhibits the level of freedom. R7 mentions another inhibitor which is decided design guidelines which needs to be followed. On the other hand, the level of freedom is big in R8´s work role.

When working with business development, failures can occur and the attitude towards failures and if employees are encouraged to fail fast and learn are therefore important to investigate. R1 thinks that the acceptance level of mistakes is low and explain that all deliveries towards customers need to be of high quality. R2 would like to see a higher acceptance for mistakes within the organisation which could lead to testing of more new things. As a bank, a mistake can result in a reputational disaster according to R2. R3 and R4 think that there is an acceptance for mistakes within their teams. R5 mentions that mistakes are not praised enough since it is a learning opportunity for the organisation. Today there is a fear of sharing failures and lessons learned with other departments within the organisation and it leads to missed learning opportunities according to R5. R7 shares that phycological safety is discussed within the team with the purpose to communicate that making failures is okay. Since many projects become large, it causes problem if something goes wrong.

All respondents agree upon that regulations and laws influence their daily work with business development and that the bank is highly risk averse. R1 argues that the risk perspective is always being higher prioritised than business development perspective. According to R2 there is a higher tolerance towards risk than before and share an example of previous resistance of storing services in cloud-spaces while several services today are stored in a cloud-space. R9 disagrees and state that the organisation is more risk averse today than before. The legal department has

a strong mandate within the organisation with highly risk averse employees which can cause collaboration resistance according to R2 and other respondents agree. A negative consequence of being a risk averse company is that sometimes there is a fear of making decisions according to R3 and R4 argues that the bank is more risk averse than other banks. R5 mentions that small risks can be necessary, or else the consequence can lead to resignment of employees. Both R8 and R9 explain that the bank does not want to take any risks. The high risk awareness within the bank is a big challenge according to R12 who continues to explain that there is too much focus on potential risks in the beginning of a project before the final target state is decided upon which leads to a very long discovery phase.

5.6 Design Thinking within the bank´s organisation

Eight out of 13 respondents have heard about Design Thinking but few of them work completely according to Design Thinking today. R2 mentions that UX designers within the bank work according to Design Thinking which R7 and R11 confirm. R2 continues to explain that parts of the Design Thinking method go against established processes within the bank but adds that parts of Design Thinking can be found in the organisation. R5 thinks that Design Thinking is mostly used as a buzzword within the organisation but would like to see more influences of Design Thinking in business development by inviting UX designers early on in development projects. There is also a need for a better understanding of what UX actually is and how it can increase the customer experience and satisfaction at the bank according to R5. R8 has experience of Design Thinking from previous employment but can also identify parts of Design Thinking within the bank which R10 supports with explaining that there is a willingness to work more customer centric. R7 and R11 work according to the Design Thinking methodology and R11 explains that the aim is to work explorative with a customer focus before deciding upon a solution. Furthermore, R12 describes that the idea for business development often is based on customer insights and interviews and later tested as multiple prototypes. R13 has been educated in Design Thinking and the double diamond framework at the bank with a focus on finding the underlying reason to an existing problem. There is a need to look broader and understand how different factors and consequences are linked according to R13. Lastly R13 explains that the bank sometimes acts reactively to a certain event and would like to see more proactive work conducted by the bank to find the underlying reason to a problem.

5.7 Customer value in conflict with organisational values

All respondents were asked why the bank doesn´t work more end-user focused, and the majority of the respondents agreed that the low tolerance for risk within the organisation is one of the reasons. R1 explains that as a big bank there is a need to follow regulatory frameworks and maintain stability which requires a lot of resources and leave less room for business development. R4 adds that there are technical limitations in the bank's infrastructure together with a strong cost management focus within the organisation which can limit the business development. Additionally, R4 states that there is sometimes a short-term perspective limiting the customer focus which often needs a more long-term perspective. R3 adds the scarcity of resources since there are several ongoing projects which needs to be delivered and results in less resources available for customer research. R5 agrees and mention the new regulatory frameworks which needs to be followed. There are so many perspectives that needs to be considered, which leads to the bank sometimes forgetting about the customer according to R5. R7 thinks that an UX team with 100 employees signals a high customer focus but does also mention that an older bank with lots of history must be more risk averse than newer digital banks. R9 explains that the bank is a hard organisation to change but if many employees and departments support the change, then great things can happen. The bank is an old organisation with old IT systems which makes it unfair to compare to niche banks who are built upon a digital platform according to R9 and continues to explain that it is not the role of big banks to be the most innovative ones. On the other hand, a more innovative business culture does attract employees with a more innovative mindset.

According to R9, the organisation sometimes gets stuck in internal processes and questions regarding ownership of a service or product instead of focusing on the customer. R11 demands more cross collaboration to work more customer centric which the organisation try to achieve with reorganisations. Currently there are so many resources and time needed to make things happen within the organisation and there is a need to focus on realisation of the many ideas according to R12. R13 mentions that the used language within the organisation can be to technically which limit the overall understanding for issues, products, services and different departments. R13 concludes that the focus on the technical aspect can sometimes be higher than the target state, which is to create customer value.

6. Analysis

This chapter aims to present an analysis of the identified characteristics of Design Thinking found in the bank organisation but also the challenges identified to why the organisation is not working in line with Design Thinking. The purpose of this analysis is to contribute to an understanding of how Design Thinking is used within the Swedish banking industry.

6.1 Design Thinking characteristics within the bank organisation

When analysing the empirical result, several characteristics of the Design Thinking methodology can be found in the bank organisation. The focus on customer value has increased over time and this can be explained with the focus on reaching a high level of customer satisfactions to prevent the bank from increased competition. Another reason for increased focus on customer value is because of the ability to collect more and better customer data from the bank´s digital channels which has not always been possible to do. The data collected can be a basis for an analysis of a customer journey within the bank´s digital environment with the purpose to identify challenges for the customer to fulfil its´ needs. Within the bank organisation, there are several employees working with providing customer insights for specific customer segments. Another characteristic of Design Thinking in the bank´s business development process is the observation of employees, to see how they work and what challenges they have with the purpose to develop an improved working tool. By observing, the respondent is not dependent on the employee being able to verbally express its need. A third characteristic of Design Thinking in the organisation is the use of personas with the aim to group end-users based on their common behaviours. A fourth characteristic of Design Thinking is the use of in-depth interviews to understand why a certain problem has arisen while asking open questions to not steer the customer in a certain direction. This is in line with several respondents saying that there is a need for qualitative data to understand a problem on a deeper level.

When ideating, the shift has focused more on understanding and solving for the underlying problem and understanding the why instead of only solving a gap. The ideation phase is done through brainstorming together with colleagues from different departments, knowledge and background. Moving on to the test phase, respondents explains that the bank sometimes launch

test pilots on a limited scale and conduct user tests on customers with the purpose to collect valuable feedback, iterate and launch an improved version of the service. When launching a big delivery, it can be divided into smaller deliveries with the purpose to gradually launch it on the market while collecting feedback and adjust the delivery accordingly. Finally, the majority of the respondents have heard about Design Thinking before and the UX designers within the bank work according to the Design Thinking methodology.

6.2 Challenges with Design Thinking within the bank organisation

While investigating the use of Design Thinking in the bank organisation, several apparent challenges with applying Design Thinking within the organisation can be found. One of them is that many respondents´ process of collecting customer insights is based on customers being able to verbally express their needs, such as customer complaints. Only four out of 13 respondents expressed that they aimed to find underlying and or hidden reasons for a problem. This results in the respondents missing out of the possibility to find the underlying need which can result in an idea for an innovation. Another challenge is that many of the respondents working with business development is not closely interacting with the customers on a regular basis. The interaction with the customer is often enabled through a customer advisor who observe the situation through its own personal perspective which leads to a less objective perception of the actual situation or customer need.

Generally, the respondents agree on the need for both quantitative and qualitative data but further up in the organisation hierarchy, quantitative data is considered more valuable. Furthermore, several respondents mention limited resources and time as a restriction for not conducting more and better customer research in the beginning of a business development project. Another aspect where the respondents are in contrast with Design Thinking is the limited ideation together with the end users which can be a result of risk averse culture and a history of working more internally with business development rather than inviting external stakeholders into the ideation process. The same argument holds for limitations of conducting tests due to legal requirements, GDPR and privacy laws. On the other hand, some respondents claim the limited tests conducted to be a result of not planning for an iterative test-phase in the business development project.

Another challenge is visualisation difficulties when collaborating with colleagues with different prior knowledge about the topic, different organisational background or limitations in shared knowledge. It can be concluded that the organisation has collaborating barriers between some departments which makes collaboration to create innovations harder. Some respondents see the high number of participants in the organisation´s business development project as a challenge since it makes the project very complex. Through reorganisations, there is an attempt to manage collaboration difficulties and several respondents demand improved collaboration prerequisites.

Several respondents mention that there is a willingness to create innovations within the banking organisation but that the resistance towards new ideas and solutions grows bigger further on in the project when there is a need to execute managerial decisions or approve the financial support. The top of the organisation advocates for stability and compliance rather than innovations. Based on this, the creativity within the organisation is affected. Like the innovative willingness, the creativity is big in the beginning as long as it is within the framework decided by the organisation but decreases the closer the project reaches a managerial decision. In the end, regulatory frameworks influence all respondents daily work with business development in combination with the bank being highly risk averse.

Acceptance for mistakes is needed to create a psychological safety environment where innovations can grow but the respondents' opinions regarding need for a higher acceptance for mistakes describe the opposite. Due to a low trust among colleagues from different departments there is a strong focus on details and the risk of a mistake leading to a reputational disaster is tangible in most of the interviews. Instead of seeing failures as lessons learned which should be shared to increase the organisational learning, there is a fear of sharing failures with colleagues across the organisation which decreases the psychological safety environment even more.

The most apparent challenge for the organisation to work more according to the Design Thinking methodology is the organisations constant focus on minimising risks. This even results in a fear of making any decisions at all which contributes to a passivity within the organisation. Instead of acting proactively and offer solutions for end-users based on an underlying problem, the bank often tends to act reactively to an event such as a new law or increased competition. Another challenge for a bank organisation is the need to take many perspectives into consideration which results in the customer focus losing attention due to increased focus on regulatory compliance.

Even though many respondents express that they do not tend to focus too much on technical limitations, it is evident that the banks obsolete IT-structure limits the bank´s business development ability. In some cases, the technical feasibility aspect gains more attention than the customer value aspect which often initiates the project in the beginning. When comparing older banks to digital competitors with a modern and adjustable IT-structure, the big difference becomes evident, and the question arise if it the older banks can be as innovative as their new digital competitors.

To conclude, respondents can express some characteristics of Design Thinking methodology in their process of developing innovations, but the many challenges identified prevent the methodology from fully being implemented. As one of the respondents mentions, Design Thinking becomes more of a buzzword used within the organisation instead of implementing all its characteristics to enable its full potential to support the creation of innovative services within the Swedish banking industry.

7. Discussion

This chapter aims to present the discussion of this thesis. The collected empirical result will be compared with the theoretical framework to identify similarities and differences between the observed organisation and the published research within Design Thinking. The discussion will constitute an answer to the research question "How is Design Thinking used to create innovative services within the Swedish banking industry?".

7.1 Business development in the bank

Within business development most of the respondents agree upon that the three perspectives: the customer, technological feasibility and financial profitability are all three parts of business development. This is in line with the requirements that needs to be fulfilled to create a successful innovation according to Magistretti et al. (2022). Furthermore, among these three perspectives, the customer focus should be higher prioritised than the other two perspectives in the beginning of the business development process. Over time, the customer value perspective has gained increased focus during the last years according to many of the respondents. Today, some offerings are offered to the bank´s customers because of its contribution to the customer value. The identified increased focus on customer value is based on many of the respondents arguing that satisfied customers lead to increased profitability which is in line with Magistretti et al. (2022), idea of innovations must fulfil the customer´s desire. When the business development process continues further, the focus shift more towards technological feasibility to ensure that the idea is possible to implement, which stands in conflict to Magistretti et al. (2022) and can imply the possibility of creating an innovation negatively. On the other hand, the insight that decreases the chances the most for creating an innovation is the banking organisation´s shifted focus from customer value towards financial profitability closer to a final managerial or budget decision. An assumption can be made that this switch in focus made by the bank results in lower usage of the Design Thinking methodology in the creation of successful innovations.

There is not a requirement to switch from customer focus to financial profitability in the later phase of business development since the outcome of using Design Thinking leads to both high customer value and increased value for other stakeholders according to Carlgren et al. (2022).

Based on this statement, a conclusion can be made that high customer value is not opposed to financial profitability, rather these two perspectives can be fulfilled simultaneously by securing high customer focus which will lead to a profitable result. The banks choice of deprioritising the customer value focus indicates a low usage of Design Thinking within the organisation and a lower probability of creating an innovation. Design Thinking and its focus on customer value should be a tool to use within portfolio management since it is focusing on identifying the project which will generate the highest customer value (Knight et al., 2020). By taking the perspective of customer value into account, a conclusion can be made that the chance of the bank´s managers within portfolio management choosing a project with a high customer value increases and therefore also the chances of creating an innovation (Magistretti et al., 2022).

Most of the respondents claim that there is a fourth aspect affecting the business development process within the bank and that is regulatory requirements which is not mentioned by any of the researchers included in the theoretical framework. The purpose of the theoretical framework is to present a general overview of Design Thinking and not specifically focus on the banking industry. This results in an assumption made that the aspect of regulatory requirements being industry specific for industries which are highly regulated, such as the banking industry is.

7.2 Customer discovery

In the beginning of the business development process, the focus is to identify the end-users´ need within the banking organisation. This is in line with Design Thinking since Carlgren et al. (2016) mention focusing on the user as one of the main themes within the methodology. The customer discovery phase should be conducted through interactions and empathizing with the user using qualitative research approaches. Within the bank, several respondents mention that they have limited direct contact with the customers and end-users since the main interactions occur through customer advisors. This conflicts with Carlgren et al. (2016) who highlights the need of empathizing with the user through interactions to fully understand them. Therefore, an assumption can be made that the distance between the end-user and the business developer makes the understanding of the customer´s needs difficult. Many of the respondents explain that they collect both quantitative and qualitative data to understand the customer needs. Qualitative data is used to fully understand a customer´s need and is in line with Carlgren et al. (2016) recommendation to use qualitative research approaches. A reason for collecting both

quantitative and qualitative data is because qualitative data is rarely representative of an entire group of end-users according to the respondents. This mindset indicates some sort of scepticism towards qualitative data which is in line with the rest of the bank´s mindset of valuing quantitative data higher than qualitative data.

Many of the respondents collect customer data based on customer complaints or customer surveys which implies that the business developer thinks that the customer is able to express its need. A minority of the respondents argue the opposite which is that customer can not always express their needs. Assuming that the end-user can express their needs is a mistake according to Liedtka (2015). The focus when collecting customer insights should instead be on what the customer actually does rather than what the customer verbally expresses since the customer´s verbal version seldom correctly describes the underlying problem (Liedtka, 2015). One of the respondents mentions that observations of employees are made to fully understand how they use the bank´s advisory system rather than what they think about the system. This way of understanding the customer advisor's reality is in line with ethnographic studies which is a tool used within Design Thinking to understand the customer´s needs (Jaskyte & Liedtka, 2022). Another story told by the respondents which is in line with ethnographic studies is one of the respondents who mentions that the aim is always to think like the customer and not in terms of suitable banking products or services when understanding the need. There are limited ethnographic research conducted within the bank and many of the customer insights collected are based on expressed needs of the customer. Therefore, it can be concluded that the bank does not fully apply the methodology of Design Thinking in the customer discovery phase, but some characteristics of the methodology can still be found.

In-depth interviews are conducted within business development at the bank and especially in larger projects to understand why a certain pain point has arisen for the customer. In-depth interview is another tool which should be used in the customer discovery phase when following the methodology of Design Thinking (Elsbach & Stigliani, 2018). Unfortunately, in-depth interviews are not conducted in all or smaller projects which conflicts with Elsbach and Stigliani (2018). Since the bank does not always conduct in-depth interviews and therefore miss out of the opportunity to gather an extensive amount of valuable customer insights, the bank has not applied the full usage of Design Thinking in its business development processes.

A third tool which is used in the customer discovery phase within the bank is analysis of customer journeys which is in line with tools recommended for customer research within Design Thinking according to Elsbach & Stigliani (2018). Today it is not possible to extract

customer journey data from all systems within the bank which makes it harder for the business developer to understand the underlying problem within the bank´s digital channels. When developing future systems within the organisation, it is therefore recommended that the bank ensures the possibility of extracting digital customer behavioural data to support a collection of customer data with a higher level of quality. This is supported by Wetter Edman et al. (2018) saying that when creating service innovations, habits are required to be analysed in detail to be the foundation for future and more innovative customer journeys. The analysis of customer journeys supports the banks usage of Design Thinking within business development.

Out of the 13 respondents, four mention that they aim to identify the underlying needs in the customer discovery phase. This is in line with Carlgren et al. (2016) explaining that reframing the problem based on new customer insights and to observe the problem from different perspectives is another important aspect of Design Thinking. The process of constantly collecting customer insights, which was stated by one of the respondents, can contribute to additional perspectives which should be analysed when framing a problem (Carlgren et al., 2016). To summarise, these four respondents indicate a willingness to find the underlying problem which supports the usage of Design Thinking within the bank.

The respondents mention the usage of personas since not all customers have the same kind of needs, but they all use the same digital banking channels. The usage of personas to represents a group of customers´ shared behaviour to understand this groups´ need is in line with Fehér and Varga (2019) observation of the usage of personas within Design Thinking at a Hungarian bank. The focus on behaviours rather than a specific person is in line with Fehér and Varga (2019) who recommends focussing on the customers behaviours, goals and motivation. An assumption can be made that the usage of personas within the bank which focuses on common behaviours within customer groups provides valuable customer insights and indicates a characteristic of the Design Thinking methodology within the bank´s business development processes.

On a higher hierarchical level within the bank´s organisation, qualitative data is higher valued than quantitative which results in a risk of losing important customer insights from a qualitative perspective. This is in conflict to Knight et al. (2020) explaining that the insights generated from qualitative research and ethnographic studies should not be neglected since it provides valuable insights to which of the projects the management are choosing between to launch. By basing the decision on qualitative data, the decision of which product to launch will result in higher customer value and results in a higher financial profitability. When making important

decision such as deciding which product or service to launch into the market, it is important to take several ideas and data sources into consideration and avoid a too fast decision-making process (Liedtka, 2015). This is not only applicable to the bank´s portfolio management, but rather in all business development phases with the aim to include several perspectives and avoid rushed decisions and miss valuable customer insights. A reason for choosing to not be taking qualitative data into consideration is because of the time required for the analysis to fully understand the customer insights (Knight et al., 2020). If this is the case within the bank, it is still important to conduct proper customer research with a high quality to ensure no failure further on in the business development process (Magistretti et al., 2022).

To conclude, it is important to conduct a proper customer research using different kinds of sources, data and tools to collect an understanding of the customer´s needs and pain points. An important insight is that the customer is not always able to express the real underlying problems needs to solve a certain situation. This supports increased usage of ethnographic studies and collection of qualitative data within the bank to increase the usage of the Design Thinking methodology within the business development processes.

7.3 Idea generation

Historically the bank has focused more on generating ideas which close offering gaps, but today the focus has shifted more towards understanding why there is a gap and base the ideas on the identified need according to one of the respondents. Based on the insights and needs identified, the employees can use an opportunity canvas as an ideation tool to identify opportunities and visualise their ideas. To be able to find what to create and how when the value target is identified, Dorst (2011) means that Design Thinking is an appropriate methodology and especially for solving complex problems. With the shift in the bank´s way of approaching problems to solve, the new approach is more in line with what Design Thinking can contribute to as a methodology according to Dorst (2011). To enabling continuous improvement on generating ideas based on an identified value to achieve, the bank´s business development work might improve with increased usage of the Design Thinking methodology.

Brainstorming together with different colleagues are a commonly used ideation tool within the bank when working with business development. The colleagues invited to the brainstorming sessions represent different organisational departments. R5 highlights the importance of

inviting colleagues with no previous experience to the brainstorming sessions since they often generate the best ideas. Other respondent share that they often invite colleagues working closely with the customers or representing the IT department since they have a better understanding for the technical feasibility. To brainstorm with colleagues with different backgrounds is in line with Jaskyte and Liedtka (2022) who claim that there is a need to imagine the situation from several perspectives. The different perspectives can also be captured by the employees looking for ideas from their private life, competitors from across industries and digital trends. It can be concluded that the employees within the bank follow the principles of Design Thinking when inviting a group of heterogenous colleagues to the brainstorming sessions. Furthermore, in these heterogenous group constellations, it is important for the brainstorming participants to feel comfortable and open-minded to reach the full potential of a brainstorming session according to Jaskyte & Liedtka (2022). To conclude, the bank employees seem to want to invite different participants to the brainstorming sessions, but it is important to secure that they all feel comfortable to mention their ideas in the different group formations.

Several ideas are considered simultaneously according to most of the respondents since the first one might not work and then there is a need to have a plan b or c prepared. This is in line with Auernhammer and Roth (2021) who claims that several bad ideas are needed to generate one really good idea. By considering several ideas simultaneously the employees within the bank can understand potential consequences and evaluate several scenarios which is in line with what Liedtka (2015) claims. It can be assumed that the multiple ideas which are considered are often different versions of the same origin idea, rather than completely different ideas which can limit the creativeness level within the ideation phase. Instead of focusing on finding the one perfect idea, the bank employees should focus on create the highest number of ideas to finally generate a really good one which is supported by Dell'Era et al. (2020).

The respondents explain that ideation together with external stakeholders and end-users are very limited within the banking organisation. One reason for this could be because of the employee's lack of interaction with the end-users. This contrasts with Elsbach and Stigliani (2018) recommendation to involve both stakeholders and users in the ideation phase to enabling cocreation of a solution. Additionally, to exclude end-users and customers is in contradiction to Gao and Yu (2023) arguing that involvement by end-users and customers in the ideation phase are needed to create successful service innovations. It can therefore be concluded that the bank is not fully applying the methodology of Design Thinking in the ideation phase by excluding end-users or customers from the ideation session. There is therefore a risk that the

bank misses the opportunity to capture additional perspectives from the external environment which can bring important insights into the ideation phase.

Employees within business development in the bank seems to support the idea of inviting colleagues with different background to the brainstorming sessions but problems can occur when visualising the idea. Several of the respondents agree that they think that it can be hard to visualise their ideas for colleagues with different organisational belonging. The visualisation skill is crucial to develop to ensure a joint understanding within a group according to Auernhammer and Roth (2021). Therefore, it is recommended that the employees working with business development get the needed educational support to improve their visualisation skills. Specific tools for ideation which facilitate cross-border collaboration can be suitable for ambiguity problems which many of the bank´s business development projects can be assumed to be since they often involve many different stakeholders and are strongly influenced by the organisations high level of risk awareness. The respondents mention the use of a collaboration tool Figma, but it can be concluded that there is a need for educational support into how to use all its features and more time to improve the visualisations as one of the respondents mentioned. It is crucial to visualise to ensure that all members of a project are working towards the same target as one of the respondents mention which is supported by Liedtka (2015) who explain that by writing down all ideas, all members get a shared view of the problem.

To conclude, it is important to invite people with different knowledge and perspectives to the ideation phase, but it is also as important to ensure that all participants understand the ideas. If it is not possible to share ideas among each other, the active listening and focus within the group becomes limited which decreases the level of creativity but also the psychological safety which is crucial to succeed with an ideation session according to (Auernhammer & Roth, 2021). It can therefore be concluded that the bank´s choice to invite heterogenous members to brainstorming sessions is in line with Design Thinking, but improvements in visualisation is needed to ensure generation of great ideas.

7.4 Testing phase

Within the bank´s business development work, several testing methods have been identified. Tests can be conducted on customers, employees as users, internal stakeholders from departments such as legal and in reference groups consisting of customer advisors. This is in

line with Elsbach & Stigliani (2018) description of testing within Design Thinking which needs to both test the technical and business aspect of the idea. The choice to conduct tests will also support a willingness to try new things and approaches within the organisation. It can be concluded that the choice made by the bank´s employee to conduct test will lead to a stronger willingness to try new ideas which will increase the chance of generating innovative banking services. The choice to conduct tests indicates the usage of the Design Thinking methodology within the bank.

When the respondents conduct a pilot test on a limited number of branches, the outcome is evaluated with the purpose to identify areas of improvement. One of the respondents mention the need to discuss the needed improvements together with colleagues. This approach is supported by Liedtka (2015) who claims that the test should be seen as a learning opportunity rather than the perfect solution. An example of a launch who follows the recommendations made by Liedtka (2015) is the launch of the bank´s internet bank which was released in several launches and each part being evaluated based on customer feedback and adjusted accordingly.

One of the respondents highlights the need of testing more on internal stakeholders from legal or fraud departments with the purpose to exchange knowledge. To use prototypes as conversation starters is supported by both Magistretti et al. (2022) and Liedtka (2015). On the other hand, the purpose of the iteration should be because of the need to learn about the users ‘perception of the idea, rather because of the bank not being willing to take risk which one of the respondents implies. This implies that the banks choice to conduct tests, evaluate and iterate with the purpose to learn and improve the final service is in line with Design Thinking. Other reasons for conducting tests, evaluate and iterate is not in line with Design Thinking.

Several of the respondents mention that the prototypes presented for customers or employees needs to be sufficiently developed due to meet legal requirements and being compliant with privacy laws. This is identified as a challenge with testing within the bank since it is conflicting with both Magistretti et al. (2022) who encourages the use of diffuse prototypes and Dell'Era et al. (2020) who claim that prototypes should be created to enable fast failure at a low cost. Even though tests can be conducted, tests are not always planned for or prioritised in all of the bank´ projects which result in services being evaluated after the release. The choice to not prioritise testing is conflicting with Elsbach & Stigliani (2018) and Liedtka (2015) claiming that there is a risk of losing valuable insights by not conducting testing before a launch. It can therefore be concluded that the bank has several opportunities to conduct tests but the decision to not always prioritise testing is not in line with the Design Thinking methodology.

7.5 Organisational values in comparison with Design Thinking values

Within the bank´s business development department it seems to be a willingness to create innovative services but further up in the hierarchy, this willingness is declining. As one of the respondents mentions, the upper part of the organisation prioritises regulations and stability higher than innovations. This is contradictory to Wrigley et al. (2020) explaining the need for support from the entire organisation to implement an increased focus on innovations by using the methodology of Design Thinking. The organisational culture is required to be open to the user-focused methodology and understand its influence on creation of innovations. If the bank organisation wants to change the mindset from focusing on stability to generating innovations by using Design Thinking, it is therefore essential to ensure management support to succeed with change in organisational values and processes of how to create new products and services.

As mentioned by Carlgren et al. (2016) one of the reasons for organisations failing to implement the methodology Design Thinking is because of its misfit with the organisation´s existing processes and structures. As presented in the empirical result, differences in how to create innovations within the bank and according to the Design Thinking methodology have been found. Therefore, there is an urgent need from the bank´s management to promote a stronger focus on innovation and the customer or end-user to succeed with an implementation of Design Thinking within business development processes. In addition to support from management, there is also a need for interest in the Design Thinking methodology from a larger group of employees within the company to ensure that the knowledge and skills in creating innovations does not get lost (Wrigley et al., 2020). To conclude, to implement more of the Design Thinking methodology within the bank, there is a need for support from management and the methodology should be distributed to several colleagues and different departments to prevent from isolated learning.

Based on the respondents' answers, the time horizon for business development within the bank seems to vary among different departments and business roles. From a couple of weeks to several years. As one of the respondents mentioned, to be able to keep the focus on future trends, there is a need for a longer time horizon which can improve the customer focus since it also requires a more long-term perspective. The need for a longer time horizon is in line with Wrigley et al. (2020) to secure the resources needed. It can therefore be concluded that the short time horizons argue for the bank not fully applying Design Thinking. The Design Thinking

methodology does instead promote a longer time horizon for business development to be able to capture future trends and end users' behaviours over time to create successful innovations.

Within the bank´s business development processes, several employees with different background and skills are invited to participate in the creation of innovative services which is in line with Design Thinking. Out of these collaborations, some issues have been identified and several of the respondents mention that they spend much time and resources on stakeholder management in their work. Some departments have also been identified as harder to collaborate which results in trust issues among the employees. By implement the methodology Design Thinking, this rivalry between the banks departments can decrease and instead conflicts can be solved due to an increased understanding of each other's motives and a shared use of resources according to (Jaskyte & Liedtka, 2022). One respondent explains that the solution is increased cross-collaboration among departments to reach a higher level of customer focus and this is an ongoing issue that the organisation attempts to solve with reorganisations. To solve issues in stakeholder management with more collaboration is in line with Jaskyte and Liedtka (2022) who explain that involvement of several stakeholders increases all parties´ willingness to be involved and collaboration better together.

Many of the respondents state that they experience their professional role as creative but within a decided framework. Additionally, several reasons for why the creativity level is not as high as wanted are identified such as regulatory requirements, limited technical feasibility within the bank and the management´s prioritisation of risks and stability when deciding upon a project. This is contradictory to Auernhammer and Roth (2021) who explain that there is a need for a high level of creativity to succeed with creation of innovative services. Also, the increased level of creativity within the bank can decrease the criticism towards different departments ideas, be open to listen and enabling better collaboration prerequisites as stated by Jaskyte & Liedtka (2022). Like creativity, the level of freedom seems to be high in the beginning of the business development projects and gradually declining closer to a management decision within the bank. Once again regulatory requirements and technical feasibility are mentioned as inhibitors of the freedom. To conclude, the limitations in creativity and freedom does not support the usage of Design Thinking within the organisation.

When looking more into the organisation´s view on failures or the possibility to fail fast to increase learning, there is a low acceptance for failure. This contrasts with Auernhammer and Roth (2021) claiming that it is important to ensure an environment where mistakes are seen as a part of the business development process. Additionally, Carlgren et al. (2016) mention that

one of the challenges of implementing Design Thinking within an organisation is that risk averse organisations might not be as tolerant for mistakes. It can therefore be concluded that the bank being highly risk averse negatively affects the business development process and the usage of Design Thinking. The choice of the organisation to be highly risk averse influences all respondents' daily work. Regulations and laws within the banking industry are present which means that there is a natural focus on compliance within banking organisations. Therefore, in organisations with unique conditions like a bank within a highly regulated industry, the Design Thinking approach should be adjusted according to Ben Mahmoud-Jouini et al. (2019). Within the bank, the legal department has a strong mandate, and this can even cause collaboration issues within business development projects. The prioritisation of risks higher than business development is one of the main reasons to why the bank is not working more customer-centric according to many of the respondents. This is in contradiction to Wrigley et al. (2020) claiming that an innovative organisation using Design Thinking needs to be willing to take risks to create innovative products and services. To conclude, the bank needs to overlook its priorities of risks compared to business development and trying new things to be able to increase the chance of creating innovative products and services in accordance with Design Thinking.

It seems to be limited resources available for business development within the banking organisation according to the respondents. One of the respondents mentions that the high number of projects puts pressure on the scarcity of resources which results in less resources available to perform customer research. In organisations like this, it is needed to restructure and distribute resources differently and make them transformable for several purposes for the organisation to manage an implementation of Design Thinking in accordance with Wrigley et al. (2020). To conclude, it is therefore important for the organisation to conduct a change in its distribution of resources to prevent business development projects to be even more negatively affected by scarcity in resources. The use of Design Thinking and the philosophy that the resources can be transferred between different departments and processes within the organisation might be the solution that the bank is looking for.

Another aspect that makes business development processes more challenging within the bank is the usage of a technically focused language which can result in not all employees being able to participate in the discussions. One respondent mentions that the technical focus can get more attention than the actual target value which is to increase customer value. In accordance with Carlgren et al. (2016), these language and communication barriers can cause problems when implementing Design Thinking within an organisation. To ensure that these employees

understanding the more technical language and participate in the business development project, it is important to adjust the language in the ongoing discussions. Once again, it is recommended to develop visualisation and communication skill to be able to present ideas to employees from different departments or backgrounds for the organisation to work more in accordance with Design Thinking.

In the investigated bank organisation, eight out of 13 respondents have heard about Design Thinking before and know the methodology´s fundamental values. This concludes that Design Thinking is not a fundamental business development methodology and the respondents´ perception of Design Thinking might differ. The limited knowledge of Design Thinking in the organisation signals that there is a need to specify what Design Thinking is and how it should be interpreted in the context of the bank´s organisation in accordance with Baker and Moukhliss (2020). If the bank wants to increase the presence of Design Thinking, it is therefore recommended by Baker and Moukhliss (2020) to provide training and tools for the employees to support their skills and knowledge on how to create services in accordance with Design Thinking. A second important factor to increase the usage of Design Thinking is to communicate what it is and how it contributes to innovations in accordance with Ben Mahmoud-Jouini et al. (2019). A conclusion based on this is that the bank today is lacking these tools, education and communication which results in limited presence of Design Thinking within the banking organisation.

One obstacle mentioned by the respondents within business development are the many perspectives which needs to be considered in each project and this results in the bank sometimes forgetting about the customer value which was the initial target aim. Verganti et al. (2021) use the argument of complex problems today having many different stakeholders which needs to be prioritised when criticising the methodology of Design Thinking. Instead of only focusing on the customer value, a bank organisation needs to take other stakeholders such as regulators into account. As described above, the bank is changing towards a higher customer focus but there might be a need to focus on other important stakeholders specific within the banking industry to succeed with the creation of innovative services. Who these stakeholders should be and how they should be prioritised in comparison to users or customers could be of interest for future research to study.

8. Conclusion

This chapter aims to present the main conclusions identified in the discussion chapter. The conclusion aim to present an answer to the stated research question "How is Design Thinking used in the development of innovative services within the Swedish Banking industry?" followed by research and managerial implications and suggestions for future research.

Based on a comparison between the theoretical framework and the empirical findings, it can be concluded that Design Thinking is not a general business development methodology used to create service innovations within the studied banking organisation. On the other hand, some departments work according to the methodology and some characteristics of Design Thinking can be found within the bank´s business development processes.

One of the characteristics of Design Thinking identified in the organisation was the increased customer focus within business development according to the respondents. One of the reasons for this is the increased ability to collect customer data. Focusing on the customer´s needs is supporting the argument of Magistretti et al. (2022) claiming that innovations need to satisfy customers or end-users needs to be successful. This can be done by overall focusing on creating customer value but also within project management by choosing the project which generates the highest customer value.

Another characteristic of Design Thinking found is the use of tools used in ethnographic studies such as in-depth interviews with customers or end users. In-depth interviews are used in bigger projects and the tool is according to Elsbach & Stigliani (2018) commonly used in Design Thinking. Another approach to collect valuable customer data is by observing the end-user which is sometimes conducted within the bank by observing an employee working within a working system. Observations of end-users is a frequently used approach within Design Thinking with the purpose to understand the user´s needs according to (Jaskyte & Liedtka, 2022).

A third characteristic of Design Thinking found in the organisation is that employees with different organisational background and skills are invited to ideation sessions like brainstorming. Carlgren et al. (2016) argue that one of the main themes of Design Thinking is diversity which implies involving employees with different background in the business development process such as the ideation phase.

While some characteristics of Design Thinking can be found within the banking organisation, there are several differences between the values of the organisation and Design Thinking. One difference is that several of the respondents´ methodology to collect customer insights are based on the customer being able to verbally express their needs which is conflicting with Design Thinking since Liedtka (2015) argue that the customer insights should be based on what a customers do rather than verbally express since it is not representative of the underlying need.

Another area where the organisation is not working according to Design Thinking is by excluding end-users and customers from the ideation phase. The bank does not seem to invite customers to brainstorming sessions which is conflicting with Elsbach and Stigliani (2018) explaining the importance of involving users in the creation of an innovative service. Even though there is a willingness to invite different stakeholders to brainstorming sessions within the ideation phase, many of the respondents explain that there are collaboration issues between some departments. This discourages cross-collaborating which is sufficient according to Design Thinking and the argument of ensuring diversity claimed by Carlgren et al. (2016) to create successful innovations.

A third main argument for the organisation not working more in accordance with Design Thinking is because of the lack of organisational support for business development and new ideas. The willingness to create innovations and level of creativity seems high in the beginning of a project but the further the project moves towards a management decision, the creativity level and willingness to create innovations decline. It is of high importance to have support from the management and a strong leadership advocating for the use of Design Thinking for it to be successfully implemented within an organisation. The lack of support from the bank´s management towards innovations compared to support for risk and compliance work is evident. One of the main reasons for why the bank is not working more in accordance with Design Thinking is because of the bank being highly risk averse which conflicts with the Design Thinking where taking risks is a part of the methodology to increase the chances of creating innovations according to Wrigley et al. (2020).

8.1 Theoretical implication

This master thesis contributes to the theory of Design Thinking within four areas. The first area is contribution of practical evidence on how the methodology Design Thinking is applied in an

organisation. As mentioned by Dell'Era et al. (2020), there are limited understanding of how to apply Design Thinking in practice. This master thesis presents a case study of an organisation being able to apply the methodology of Design Thinking partly which contributes to a more nuanced view of Design Thinking by not only presenting organisations which have been implemented Design Thinking to 100%. The second area of contribution is an increased understanding of how to use Design Thinking within service innovation with a strong focus on analysing customer journeys in the ethnographic research. As discussed by Wetter Edman et al. (2018), there is a need to understand how Design Thinking can contribute to innovative services as a consequence of the growing service industry. The third area of contribution is an increased understanding of the struggle to implement Design Thinking in a highly risk averse organisation. This master study aims to explain why the strong focus on minimising risks is opposed to the values of Design Thinking promoting testing and taking risks. As mentioned by Carlgren et al. (2016), the two focuses on either risk or testing and innovations can often be in conflict and one of the main reasons for failing with implementation of Design Thinking within an organisation, which this master study supports. The fourth area of contribution is an increased awareness of the need for more research within multiple stakeholder management and not only focusing on the end-user. Within complex industries such as the banking industry, which is highly regulated on one hand but at the same time facing an increased competition, it seems that only focusing on the customer may not be enough. The perspective of other stakeholders needs to be considered to manage a successful implementation of Design Thinking within this kind of organisation. This supports the argument made by Verganti et al. (2021) to take several stakeholders perspective into considerations when solving complex problems.

8.2 Managerial implication

This master thesis has three managerial implications. The first managerial implication is an increased understanding of how to start to implement Design Thinking partly within an organisation. The more the organisation mature and accept a higher level of risk, Design Thinking can be further implemented as a main methodology to create innovative services and products. The second managerial implication is an increased understanding of which techniques to use when applying Design Thinking within service innovations such as analysis of the customer journey and the possibility to extract data from digital customer and employee usage. The third managerial implication is an increased understanding of how to use Design Thinking

within the banking industry. This master thesis aims to present both opportunities and challenges when implementing Design Thinking in a banking organisation with the purpose to generate a better understanding of the current situation which can be the foundation for future research.

8.3 Future research

This master thesis has presented a case study of an organisation partly using Design Thinking to create innovative services. Based on both identified opportunities and challenges with implementing Design Thinking within a banking industry, several suggestions for future research can be made. The first suggestion is to conduct a similar study but with respondents on a higher hierarchical level within the bank to contribute to a better understanding of their resistance towards risks. The second suggestion is to observe business developers working and participate in both brainstorming and test sessions to get a better understanding of how Design Thinking is conducted in practice. The third suggestion is to conduct a similar study but doing a case study of a digital bank to get a broader understanding of the entire Swedish banking industry. Probably, these niche banks have another risk perspective which can affect their way of using the methodology of Design Thinking when creating innovative services. The last suggestion for future research is to further investigate what kind of stakeholder who are important to take into consideration when solving complex problems. With an increased focus on regulations in combination with an increased competition with the banking sector, there is a need for an increased understanding of additional stakeholders needed to take into consideration in addition to the end-user and customer.

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Appendix 1 – Interview guide

Introduction

1. Can you shortly describe what kind of business development you are working with?
2. When you work with business development, you can consider the three following perspectives: The end-user's desire for the service, the feasibility of the technology and the financial profit. How are these perspectives influencing you when working with business development?
3. Has the prioritisation of these three perspectives changed over time?
4. Have you heard about the methodology Design Thinking before? If yes, is it a methodology used in your organisation and how?

Customer discovery

5. How are you working to explore the end-user's needs?
6. How are you using tools such as deep-interviews, observations, analysis of customer behaviours along the customer journey and personas? Are you using other tools?
7. What is your view on qualitative and quantitative data?
8. How do you experience the organisation's view on qualitative and quantitative data?

Ideation

9. How do you generate ideas for business development?
10. Do you consider multiple ideas simultaneously?
11. How are you using tools such as brainstorming together with colleagues, mindmaps or roleplay to visualise an idea? Are you using other tools?
12. How are you working with visualisation of your ideas with the purpose to communicate them to your colleagues?
13. When you generate ideas, do you do it together with other colleagues. If yes, what kind of colleagues do you involve in the ideation phase?
14. How do you work with idea generation together with the end-user?

Testing

15. How do you experiment and test your ideas?
16. How are you using tools such as prototypes? Are you using other tools?
17. How fully developed is the prototype usually when testing it?

18. On which stakeholders are you testing your ideas?

Implementation of design thinking

19. What is the time horizon for the business development you are working with?
20. How do you experience the organisation's view on risk?
21. How do you experience the willingness to create innovations within your organisation?
22. In your professional role, how would you describe your work environment based on creativity, freedom and acceptance for failure?
23. What do you think is the main reason for your organisation not working more end-user focused?