# Customer Experience in Technology Consulting

Expanding the capabilities of technology consultants through the adoption of a customer-centric approach





# **Customer Experience in Technology Consulting**

Expanding the capabilities of technology consultants through the adoption of a customer-centric approach

#### **Author**

Frédérique Valk

#### Master thesis

MSc. Strategic Product Design Faculty of Industrial Design Engineering Delft University of Technology

#### In collaboration with

Ernst & Young Global Limited

#### **Graduation Committee**

Chair | Dr. Ir. Sylvia Mooij Faculty of Industrial Design Engineering | TU Delft Department of Marketing and Consumer Research

Mentor | MSc. Sijia Bakker-Wu Faculty of Industrial Design Engineering | TU Delft Department of Marketing and Consumer Research

Company mentor | Annalisa Corrà Consultant Technology Transformation | Ernst & Young

September 2023



# **PREFACE**

Dear reader,

In front of you is the final result of my thesis project for the master's program in Strategic Product Design at the Delft University of Technology. After being a student at the faculty of Industrial Design Engineering for five and a half years, I can now reflect on a journey that I am quite proud of. I am happy to present you with my final project, which I could not have finished without the help of many people.

This thesis would not have been possible without the opportunity given by EY. I would like thank the whole Technology Transformation team for making me feel welcome in the team and for all the support throughout the whole process. Thank you, Manuel, for being my thesis mentor. I want to thank you for taking the time to immerse yourself in the field of strategic design and for supporting my efforts to submit the best thesis possible. Thank you, Guy, for being my counsel. Our weekly catch-ups about my thesis and experience at EY were a moment to reflect and relax and always gave me new insights. Thank you, Annalisa, for being the best buddy I could have wished for. You made me feel welcome from the first day by showing me around the office, checking in on me daily, and being my mental support. I could not have imagined doing this project without you. I also would like to thank Bente and Lilly from VODW who took the time to listen to my ideas, share their knowledge with me, and guide me through this process.

Next, I am very thankful for my supervisory team from the TU Delft. Thank you, Sylvia, for giving me the confidence that I sometimes missed during the project. Thank you, Sijia, for always providing me with feedback whenever I needed it. Our meetings with the three of us always provided me with new insights and inspiration. Whether I was struggling with the project or personally, you were always willing to listen and help me wherever I needed it and give constructive feedback which made this thesis possible.

I would like to thank my family and close friends, who not only have been there for me during this project but also during the last six years. Thank you, Dad, for being the first one to bring up Industrial Design Engineering when I couldn't figure out what to study. Thank you, Mom, for always volunteering to be my test subject when I had to test yet another concept. Thank you, to all my friends who supported me, but mostly made my time in Delft unforgettable.

Diederik, Edzard, and Laura, I would like to thank you for your endless support, guidance, feedback, and coffee breaks. Your critical and honest feedback on my project pushed me to delivering a report that I am proud of.

Have fun reading!

Frédérique Valk

# **EXECUTIVE SUMMARY**

Customer experience (CX) is becoming increasingly important for companies in the financial sector. Digital engagement accelerated due to the pandemic, resulting in a higher demand for optimized digital customer experiences and user-friendly IT systems. This includes customers asking for new digital ways to pay, as well as the new Dutch pension law (WTP) giving people more power and risk over pensions. Companies in the financial sector have to keep up with the digital transformation and bring their CX to the next level.

This thesis is done in collaboration with the Technology Transformation (TT) team of Ernst & Young (EY) which navigates its clients through transformations. The team implements the backend of new IT systems for their clients and therefore focuses on the business and technical side of these systems. As the frontend of the IT systems is developed by another company or EY's design team VODW, TT focuses less on the human side and the customer experience.

TT works from a viability and a feasibility point-of-view, overlooking the desirability. The desirability of products and services is important because a negative customer experience leads to customers leaving their service-providing companies. Therefore, it's becoming increasingly important for TT to pay more attention to the CX of the IT systems they implement.

For TT to be able to provide their clients with viable, feasible, and desirable IT systems, the following research question is proposed:

How can the Technology Transformation team's service offering be enhanced by expanding its consulting capabilities through the adoption of a customer-centric approach?

In this thesis, the first step towards a future where CX is incorporated into TT's projects will be created. In order to validate the efficacy of the final concept, the research will use a mixed-methods approach that includes a literature review, semi-structured interviews with consultants, and co-creation workshops.

The ultimate reason for conducting this thesis is to add to the team's growing body of knowledge about CX and offer the team useful insights and suggestions on how to enhance CX in their future projects and provide more value to their clients. The findings of this thesis might also be applicable to other groups and companies trying to improve their CX and gain a competitive edge in today's customer-driven market.

The research phase finds accessibility, communicability, and traceability as key factors in contributing to the desirability of IT, and convenience, usability, security, trust, and personalization as key drivers in the financial sector for enhancing CX.

Expert interviews with consultants from TT and VODW disclose the drivers and barriers within TT, at the client, and when collaborating with VODW. Consultants from TT are motivated to develop CX capabilities but are hindered by the lack of knowledge on CX. TT and VODW are motivated to collaborate and combine their technology and CX



Figure 1: Preview of the CX Guide

capabilities, but collaboration is hindered by internal bureaucratic barriers. CX is becoming increasingly more important for the client but including CX elements in current projects is hindered by regulatory reasons.

By involving a collaborative design approach with co-creation sessions with fellow SPD students and design consultants from VODW, ideas were generated, and concepts were created.

The final concept for TT is The CX Innovator's Guide (Figure 1). The CX Guide serves as a starting point for TT to develop and enhance

its capabilities, and work towards delivering more desirable solutions. The Guide is a tool for the team to get acquainted with the new topic, learn about current CX developments in the market, and how they can include CX in their projects.

Looking back on the project, this thesis aimed to define the next step for TT by discovering the drivers and barriers, sketching a future vision, and designing a guide as a tool for the team. The insights of this thesis contribute to TT's ambition to grow and expand its capabilities, keeping up with its clients and the client's customers' needs.

**②** 

# **TABLE OF CONTENT**

# INTRODUCTION

Preface Executive summary Reading Guide			3 4 8
01	Introduc	ing the Project	9
	1.1	Introduction	10
	1.2	Problem Definition	12
	1.3	Project Assignment	13
	1.4	Project Approach	13
ESEA	RCH		
02	Unders	tanding the Context	16
	2.1	Technology Transformation	17
	2.2	Customer Experience	20
	2.3	Clients in the Financial Sector	21
O3 Theoretical Foundation			24
	3.1	Literature Research Approach	25
	3.2	Taking a Deep Dive into Customer Experience	27
	3.3	Key Factors Leveraged to Enhance the Desirability of IT	29
	3.4	The Use of Technology to Improve Customer Experience	31
	3.5	Concluding the Three Research Areas	34
04	Discove	ering the Drivers and Barriers	36
	4.1	Approach	37
	4.2	Analyzing the Data	40
	4.3	Emerged Expert Insights	42
	4.4	Explaining the Driver and Barriers	44
	4.5	Reflecting on Research Goals	49
	46	From Insights to Personas	51

#### 05 **Specifying the Design Direction** 54 55 5.1 Approach 5.2 56 Future Vision for Technology Transformation 58 5.3 Design Brief 62 06 Developing the Solution 63 6.1 Approach 64 Co-Creation Session with SPD Students 6.2 65 6.3 Selecting One Idea 67 6.4 Co-Creation Session with VODW Consultants 70 O7 Delivering the Solution 71 7.1 Approaching the Future 7.2 74 Introducing the CX Innovator's Guide 7.3 77 Implementation Plan 78 7.4 Resources Needed for Implementation 80 08 Testing & Evaluating 81 8.1 External and Internal Testing 84 8.2 Design Evaluation 86 09 Conclusion & Recommendation 87 9.1 Discussion 90 9.2 Limitation 91 9.3 Recommendation 92 9.4 Personal reflection

References Appendices 94

# READING GUIDE

### Main chapters

There are ten main chapters in the thesis. The start of a new chapter can be recognized by a purple-colored page.

### Key takeaways

The key takeaways, identified by the yellow text boxes, are presented at the end of each main chapter. In this way, a quick overview can be obtained when you have little time to read.

#### Double Diamond

At the beginning of every chapter, the double diamond is shown. The parts that are highlighted indicate the progress of the project since the double diamond approach is used for this thesis (Figure 2).

#### Quotes

Quotes from EY employees are italic and have this dark gray color.

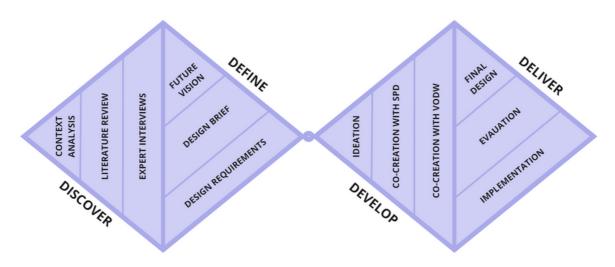


Figure 2: Dubble Dlamond approach for this project

### Glossary

In this glossary, terms and abbreviations that are frequently used in this thesis are defined. Although there may be additional meanings or definitions for the same term, this thesis adheres to the ones listed below.

CX Customer Experience

EY Ernst & Young

FSO Financial Services

IT Information Technology

SPD Strategic Product Design

TC Technology Consulting

TT Technology Transformation

# 01.

# Introducing the Project

This chapter provides an introduction to the context of this thesis. It descripts the scope, gives information about Ernst & Young, and explains the project assignment. Furthermore, the project approach will be clarified and visualized.

#### **CHAPTER 1.1**

# INTRODUCTION

In today's highly competitive business landscape, customer experience (CX) has emerged as an important factor shaping customer loyalty, satisfaction, and retention (McKinsey, 2022). With digital transformation driving shifts in customer demands. businesses must recognize that a single negative customer experience can lead customers to easily switch to competitors. Consulting firms, such as EY, providing diverse professional services to clients across industries, must diligently attend to their CX strategies to differentiate themselves and deliver greater value to clients. The ideal solution should not only be viable and technically feasible but should also align with the desires of clients, their employees, and end customers. Yet, devising an effective CX strategy for consulting firms can prove challenging, given the complexities of their services, diverse client needs, and multifaceted touchpoints throughout the customer journey.

One sector that is already feeling pressure to reinvigorate itself is the financial sector. This includes retail banking, insurance companies, and wealth and asset management. An article by McKinsey (2020) suggests that retail banks should use technology to improve their client-facing capabilities, such as personalized digital channels, wealth management tools, and customer relationship management systems. By doing so, they can enhance client satisfaction and deepen relationships with their clients.

This thesis embarks on the first step towards integrating CX into the projects of Technology Transformation (TT) within the financial sector. By delving into the realm of CX, this thesis aims to augment TT's knowledge, offering invaluable insights and recommendations on enhancing CX in future projects, ultimately providing greater value to clients. The stakeholders for this thesis are shown in Figure 3.

This thesis was realized in collaboration with Ernst & Young (EY). EY is a professional service company that provides a range of services, including audit, tax, and advisory services to businesses and organizations of all sizes. EY is active in more than 150 countries and has over 365,000 employees. It is EY's purpose to 'Building a better working world'. EY aims to play a critical role in building a better working world for its people, for its clients, and for its communities.

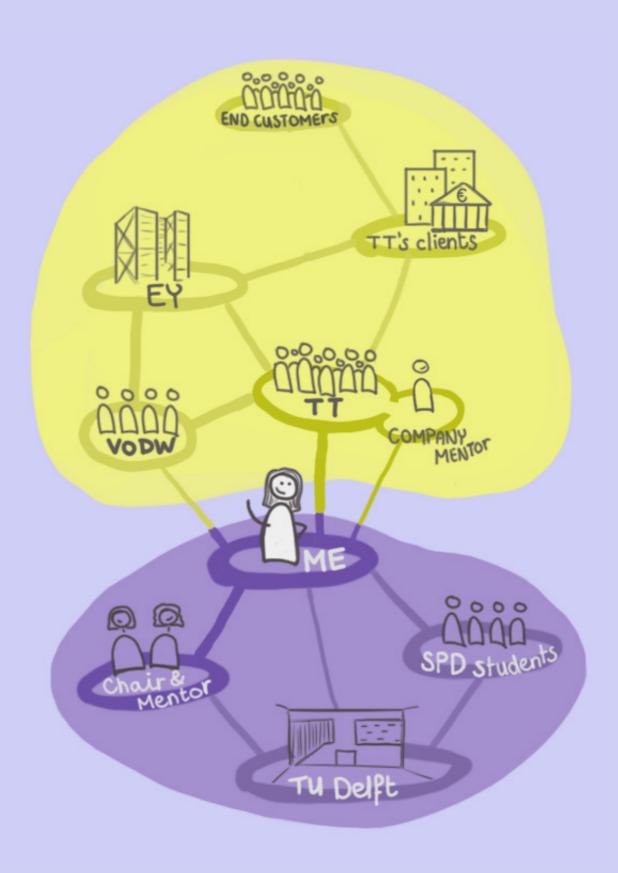


Figure 3: Thesis stakeholders

## **CHAPTER 1.2**

# PROBLEM DEFINITION

This thesis focuses on the Technology Transformation (TT) team, one of EY's Technology Consulting (TC) teams. With clients in the financial sector, the team gives advice on how to define and implement IT strategies, business models or, major technology deployments. The team does core IT transformations, focusing on the underlying IT infrastructure. Nevertheless, advising the best IT solutions to its clients is not enough anymore. The team needs to stay ahead of its competitors and should work on the capabilities and diversification of the team. TT consists of people with a business or a technology background and considers itself as the bridge between technology and business. Also, most of the work focuses on the backend and midend of IT systems. The frontend is designed by another team or company as the team does not have the capabilities to do this. As a result of this constraint, the team's solutions primarily revolve around viability and feasibility aspects. However, the absence of a customer-centric approach to tackling intricate problems has led to a deficiency in the desirability of the solutions. According to IDEO's innovation model (Figure 4), a successful innovation necessitates the integration of viability. feasibility. 2019). desirability (Orton, Nonetheless, transitioning towards a focus that places a higher value on Customer Experience (CX) demands the acquisition of new skills and capabilities.

In this particular thesis, the end-users encompass both the client's employees and their customers, as both groups interact with the IT systems in question.

The TT team lacks knowledge when it comes to delivering more customer-centric solutions, while it is becoming increasingly more important. Clients and customers are asking for next-generation CX (Accenture, 2021). At this moment, the team has no clear vision or goal for the coming years when it comes to their CX strategy. Still, the team wants to be ahead of its competitors, and therefore it needs to upgrade its tools and develop new capabilities. This research asks for an understanding of the importance of CX, what the future of the financial sector will look like, and what is needed for the team to deliver CX solutions to its clients.

In pursuit of a customer-centric approach, the design department VODW at EY stands as another noteworthy team. VODW comprises skilled design consultants who are experts in CX. It is worth noting that up to this point, VODW and TT have not yet collaborated on any joint projects.

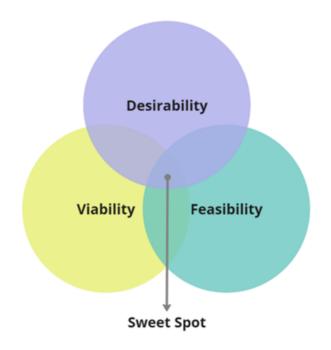


Figure 4: Sweet Spot for Innovation (IDEO, n.d.)

## **CHAPTER 1.3**

# **PROJECT ASSIGNMENT**

The goal of this thesis is to develop the first step towards a future where CX is incorporated in TT's projects, a solution that helps them understand CX and how to use it in future projects for their clients. To reach this goal, the overall research question is formulated as followed:

How can the Technology Transformation team's service offering be enhanced by expanding their consulting capabilities through the adoption of a customer-centric approach?

#### **CHAPTER 1.4**

# PROJECT APPROACH

The structure used for this project is the double diamond method, a framework made for innovation by the British Design Council (2004). The report is documented using this structure (Figure 5). The actual process has been an iterative process with multiple phases and changes.

## **Discover**

In the Discover phase, the context is explored. TT's work and capabilities will be explained; Customer Experience will be further explored and current developments in financial institutions will be highlighted. This context analysis is followed by a literature review where more complex topics about the context are further researched, such as desirability in IT and CX. After the literature review, goals for the expert interviews were created. Expert interviews were conducted with different teams within EY to understand the drivers and barriers to developing CX capabilities.

## **Define**

In the Define phase, the findings from the previous phase are analyzed and synthesized.

The insights will give an overview of the drivers and barriers within the team, at the client, and for collaborating with CX experts from VODW. The insights from the literature review and the expert interviews are clustered and translated into a future vision for the TT team as well as a design brief including a problem statement and design requirements.

#### Develop

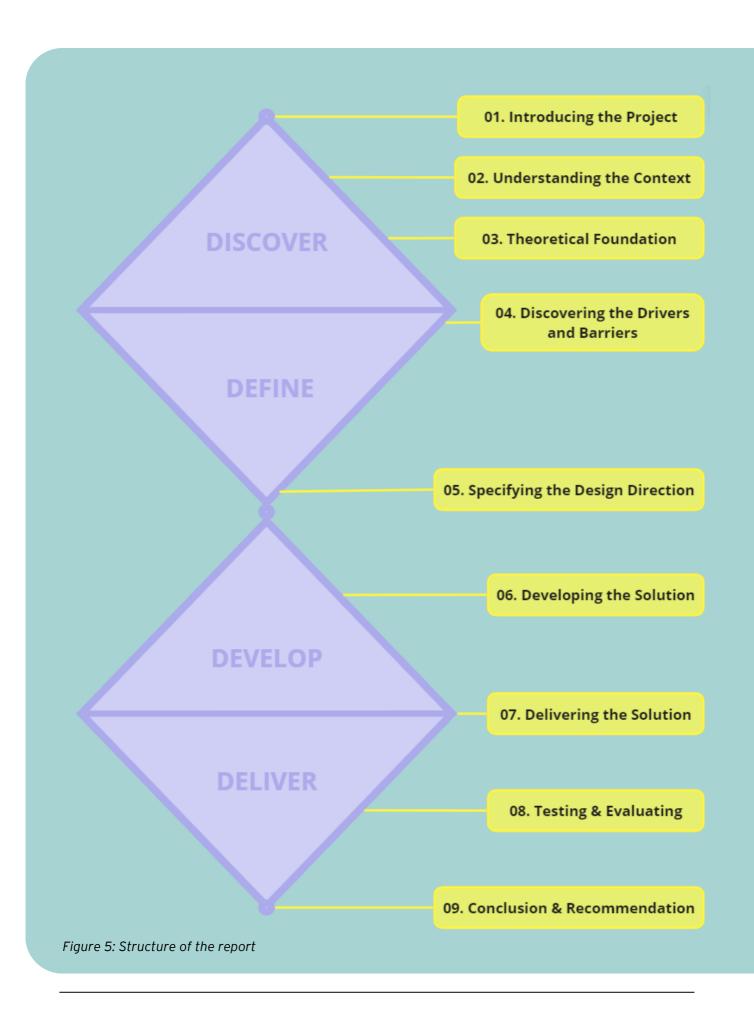
In the Develop phase, the road to the solution is explored. By facilitating co-creation sessions with SPD students and CX experts from VODW, the first ideas are mapped. A first draft of the CX Guide will be made.

#### Deliver

In the Deliver phase, the conceptual CX Guide will be tested by SPD students and the TT team. With insights from these A/B tests and user tests, recommendations for the concept can be made. Furthermore, limitations and other recommendations are formulated on how to further incorporate CX in future projects.

# Key Takeaways: Introducing the Project

- **Problem definition**: It will become a necessity for the TT team to deliver IT solutions with a customer-centric approach. However, despite the increase in awareness, the team has no knowledge about CX and no concrete plan on how to adopt CX in their work. **Company**: The Technology Transformation team of EY delivers IT solutions to its clients. Nevertheless, customer experience is becoming more important. Only without a vision and the right tools the team is not able to help its clients now and in the future.
- **Assignment**: Develop the first step towards a future where CX is incorporated in TT's projects, a solution that helps them understand CX and how to use it in future projects for their clients. **Approach**: For this project the double diamond approach will be used. In this way, the process of the project is well structured.



# 02.

# Understanding the Context

In this chapter the context of the research project is described (Figure 6). The role on the Technology Transformation team will be further explored, and the basics of customer experience will be outlined. This is followed by a rundown of the types of financial institutions.



# TECHNOLOGY TRANSFORMATION

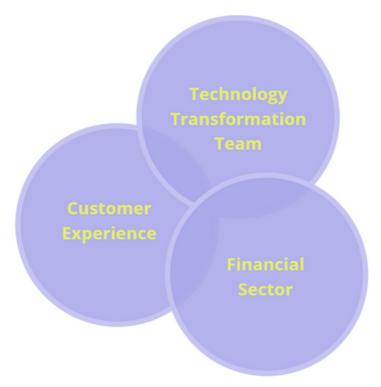


Figure 6: Focus of the context analysis

Within EY's Technology Consulting (TC) branch are four teams: Data and Analytics, Digital and Emerging Technology, Cybersecurity, and Technology Transformation. This thesis will focus on the last one.

TT, established three years ago, consists of 28 employees. Technology is at the top of their agenda. The team navigates their clients through transformations of IT systems, as clients and customers expect more and more technological products and services. It, therefore, focuses on technology that data-driven provides solutions. Βv implementing a fundamental technological transformation, they make the client's business futureproof. Their IT solutions are mostly focused on the backend of the client's

system, implementing new technologies, and advising the right software provider. Consultants from TT explained that they do this by aligning the core IT strategy with the client's business strategy. This is possible because every employee in TT has a background in business or technology.

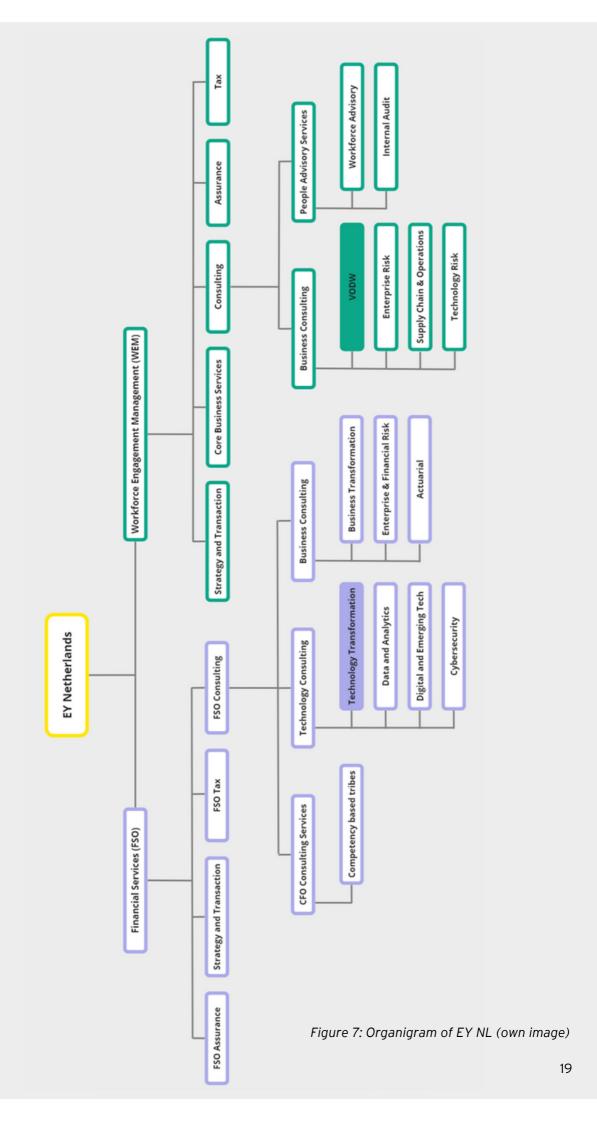
Their clients are in the Dutch financial sector, which includes banks, insurance companies, and wealth and asset management. Within the banking sector, for example, they focus on themes such as data enablement, anti-money laundering, core banking platforms, and IT service management. For insurance companies, the TT team supports the road to core insurance implementation including the architecture and vendor selection.

The team's emphasis on viable and feasible solutions has led to a shortfall in the desirability of their offerings. As CX -further explained in Chapter 2.2- gains increasing importance for clients, the client's employees, and the client's customers, TT recognizes the need to focus more on developing their CX capabilities. This is vital to handle future projects requiring end-to-end solutions. Currently, TT excels in building the backend and midend of IT systems. Because the team does not have the capabilities to deliver endto-end solutions, another team or company has to develop the frontend. This results in missed project opportunities for TT. Also, a meeting with VODW revealed concerns about the lack of coherence between frontend and backend, particularly when developed separately by different teams or companies. This discrepancy is attributed to the absence a customer-centric approach during of backend and midend development. Consequently, developing TT's CX capabilities is crucial to address the desirability aspect of their solutions and propel the team to an advanced level of performance, preventing them from outsourcing the last part of projects and potentially missing out on earnings.

As briefly mentioned in Chapter 1.2, EY houses a distinct design department known as VODW, which has been an integral part of the company since 2018. Figure 7 shows the organigram of EY The Netherlands, focused on the different types of consulting teams within the company. VODW centers its expertise on strategy, marketing, and digitalization, including both design and business consultants. Their primary mission involves assisting clients with optimizing CX,

commercial excellence, and product and service innovation. In contrast, the TT consultants excel in IT-related matters, positioning them as the experts in this domain.

For this thesis, the main objective is for TT consultants to acquire knowledge and proficiency in CX tools. However, it is equally crucial to acknowledge the limits of their expertise and recognize the opportune moments to involve the VODW designers. By striking a harmonious balance between the two teams, this thesis aims to foster a collaborative environment where TT can learn from CX specialists and effectively allocate tasks to achieve the best outcomes. This aspect will be thoroughly explored in Chapter 4.



## **CHAPTER 2.2**

# **CUSTOMER EXPERIENCE**

CX includes all facets of a business's offering. Everything from the standard of the customer service to the advertising, packaging, characteristics of the products and services, and their reliability (Meyer & Schwager, 2007). In other words, the total of all contacts a customer has with a business over the duration of their relationship is referred to as CX. This covers all touchpoints, as well as the feelings and expectations a customer has while interacting with the business.

CX is seen as a more holistic and comprehensive view of the customer's experience than customer satisfaction. It considers all touchpoints and interactions with the business, both before and after the sale (McKinsey, 2022). Providing a great CX can lead to a variety of benefits for businesses, such as increased customer loyalty, improved brand reputation, and higher revenue growth. To provide a great CX, companies need to understand their customers' needs and preferences and use that information to design and deliver a personalized and seamless experience. This can involve investina in technology, rethinking organizational structures, and empowering employees to put the customer first. CX is becoming increasingly important. customers' expectations continue to evolve.

A great CX can help the business differentiate itself from its competitors in today's highly competitive business landscape (Accenture, 2021).

CX is a key factor for businesses to use in boosting loyalty to products and services (Badgett, Boyce & Kleinberger, 2007). A good CX can therefore be seen by a business to competitively differentiate itself. In research done by PwC (2018), the importance of a good CX is explored. They discovered that companies across different industries only have a few chances to get it right. After a single bad experience, customers are likely to walk away from a product or brand. About 17% of American customers walk away after one bad experience and 59% walk away after several bad experiences (Figure 8). The most valued aspects of CX, according to the same efficiency. convenience. research. were knowledgeable customer service, and easy payment.

CX is becoming a leading management objective. While companies cannot fully control the CX, they can still monitor, design, and manage a variety of factors that influence it (Becker & Jaakkola, 2018). Companies can define the intended CX, and react to important unforeseen circumstances.

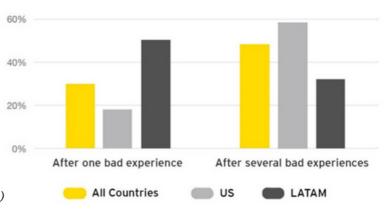


Figure 8: When do consumers stop interacting with a brand they love? (PwC, 2018)

#### **CHAPTER 2.3**

# CLIENTS IN THE FINANCIAL SECTOR

TT's clients are banks, insurance companies, and wealth and asset managers. Here, the current state and future developments of these kinds of companies will be analyzed. These companies are important stakeholders in this thesis and therefore a clear view of them is needed for the context analysis.

## Retail banking

This form of banking offers financial services to individual consumers rather than just companies. Retail banking gives individual customers a secure way to manage their finances, access credit, and make deposits. Nowadays, banks need to focus on delivering customer-centric experiences, which involve understanding customer needs, personalizing products and services, and providing seamless digital experiences (EY, 2020). With the growing demand for mobile banking services, banks should invest in technology to provide seamless digital experiences. Research by EY shows that customers personalization features the most because they help them maximize the functional benefits associated with the products. According to McKinsey (2020), one of the three most important strategic priorities for retail banks in Western Europe is delivering a remarkable client experience powered by technology. Digital engagement accelerated due to the pandemic, resulting in a higher demand for remote customer service and a lower demand for physical customer service. In order to provide remote customer service through secure omni-communication channels banks must start from the client's perspective and work backwards. Retail banks must provide seamless mobile touchpoints with accessibility from anywhere at any time.

#### **Insurance Companies**

Insurances provide financial protection to individuals, businesses, organizations or against potential future losses or damages. Some of the most common types of insurance are health, auto, homeowner, travel, and life insurance. In a report by IBM (2021), consumer demand for the next generation of insurance that focuses on customization, convenience, transparency, and adaptability has increased as a result of the pandemic. Insurance companies must rethink their relationship with data by embracing various types from new sources and utilizing platform business models to innovate in order to meet changing customer needs. The shifting needs of consumers can be seen as an invitation for insurers to innovate and grow to stay ahead of their competitors (EY, 2022). Nevertheless, the widespread adoption of digital platforms is necessary to meet the demand for hyperpersonalized and real-time risk protection. McKinsey (2021) has the same advice for insurance companies. CX teams should invest time to get smart on Al-related technologies. According to their prediction, there will be significant changes in the insurance sector due to the rapid advancement of technology in the coming ten years.

#### Wealth & Asset Management: Pension funds

When an employee retires at the end of their careers, the capital in their pension fund is used to pay them a pension. Pension funds pool a sizable amount of capital for profitmaking investments in the stock and bond markets (Park, 2023). In 2022, the Dutch government has concluded a pension agreement with new agreements on pensions and AOW. A new act is needed because people get older, change jobs more often, or work for themselves. One of the new agreements is a more transparent, personal pension system. With the new pension system, it will be clearer to people what amount of money they put in, what amount of wealth people build up with that, and what people can expect when getting retired (Rijksoverheid, 2022). The bill Pensions Future Act -in Dutch: Wet Toekomst Pensioenen (WTP)- amends the Pensions Act, the Income Tax Act 2001, and some other laws related to the revision of the pension system and some other changes (Wet Toekomst Pensioenen, 2023). WTP gives risks explicitly to the people since they will receive more power over their pensions and what happens to it. This means that people must take initiative themselves. The WTP makes participant activation and selection guidance more important than ever before (EY, 2022). This asks for extra guidance from pension funds and optimized customer journeys, since not every person is engaged to his/her pension. Financial illiterate people stand a drastic increase in self-responsibility and risk await as a result of the WTP. Pension funds have a duty of care. It is crucial that people start to take care of their own pensions. With this increase of risk and individual effort, it is important that the (digital) customer journey is accessible and user-friendly.

# Key Takeaways: Understanding the Context

• EY's TT team navigates their clients through transformations. They focus on guiding clients through IT system transformations but put less emphasis on the customer experience. • TT's expertise lies in the backend of IT systems, while frontend design is typically handled by another team or company. • CX encompasses all facets of a business's offering. A great CX can lead to increased customer loyalty and higher revenue growth. Conversely, a bad CX can drive customers away, prompting them to switch to other companies. • Digital engagement accelerated in the financial sector due to the pandemic, resulting in a higher demand for optimized digital customer experiences. • For businesses in the financial sector, like banks, insurance companies, and wealth managers, delivering a customer-centric experience is crucial. Personalization, convenience, and seamless digital experiences are highly valued by customers.

# 03.

# **Theoretical Foundation**

This chapter provides the theoretical background of the thesis. Customer experience will be further explored using existing literature. The results of the literature review are used as building blocks for later stages of this thesis.



# LITERATURE RESEARCH APPROACH

After the initial exploration, done in Chapter 2, a need to establish a comprehensive foundation and scope of CX for TT remains. Additionally, a deeper understanding of technology in the financial sector is required. To address these gaps and identify potential future opportunities for TT, a thorough literature review has been undertaken. This review aims to form a theoretical framework within this thesis. Beginning with a holistic view of CX, the focus will be gradually narrowed down to delve deeper into the realm of finance and technology. The literature review comprises desk research on existing literature and trend analysis. To provide structure, three key search areas have been utilized as a guiding framework throughout this chapter (Figure 9). Moreover, each topic is accompanied by a research question, facilitating a methodical exploration of relevant literature.

# Research area 1: Taking a deep dive into customer experience

This area covers the various aspects of CX, such as methods for measuring and improving CX, as well as crucial CX tools. The following research question is answered in this section: How can CX be effectively understood, measured, and improved in TT's shift towards CX-focused it solutions?

# Research area 2: The key factors leveraged to enhance the desirability of IT

This area explores the importance of understanding the factors that make IT desirable and how they can be incorporated. The following research question is answered in this section:

What are the key factors contributing to the desirability of information technology?

# Research area 3: The use of technology to improve customer experience

The third section elaborates on the use of technology to enhance the CX. It focuses on the financial sector and how digitalization impacts the relationship between the business and its customers. The following research question is answered in this section:

How can technology be used to improve customer experience in the financial sector?

Deep dive into CX

Enhancing desirability of IT

Technology to improve CX

Figure 9: the three research areas for the theoretical foundation

# TAKING A DEEP DIVE INTO CUSTOMER EXPERIENCE

CX has received notable attention over the past ten years in both practice and research (Becker & Jaakkola, 2018). To have a better understanding of CX itself, the challenges, and the opportunities that come with it in the shift towards CX-focused IT solutions, a deep dive into the topic has been done. As discussed earlier in the introduction and context analysis, a thorough understanding of CX is needed as a foundation for future steps in this project.

HOW CAN CX BE EFFECTIVELY UNDERSTOOD AND IMPROVED IN TT'S SHIFT TOWARDS CX-FOCUSED IT SOLUTIONS?

## The meaning of CX in a B2C context

As mentioned in Chapter 2, CX is the internal, subjective reaction a customer has to any direct or indirect contact with a business (Meyer & Schweger, 2007). Direct contact includes purchase, use, and service. Indirect includes advertising, marketing, branding, reviews, and even criticisms. Data about a customer's experience are obtained at touch points - a point of contact, especially between a business and its customers or consumers (Cambridge Dictionary, n.d.). Not every touch point has the same value. The ease of transferring money matters more than a retail bank's advertisement. According to Meyer & Schweger (2007), CX eventually depends on three components that shape the customer's perceptions of a brand. First is the emotional dimension, emotions aroused by the business' messages. Second is the sensory dimension, everything that is sensed by the customer visually and auditory. Lastly, the cognitive dimension, is what the customer thinks about the business. brand. and

products/services. Another aspect, not mentioned in the article, is the social aspect. A perception of a business is also affected online, by its external context (Bleier et al., 2019). It is the influence of social media and online reviews on CX.

## CX and employee satisfaction

including Numerous companies, KPMG, Amazon, and Google, have been employing chief CX managers to create the experience of their customers (Lemon & Verhoef, 2016). CX is becoming a leading management objective every year. Additionally, CX does not only impact the customer of a business, but also the business's employees. In an empirical study done by Sharma & Chaubey (2014), the researchers found that a great CX starts at high levels of employee satisfaction. The more contented the employees at the researched bank were, the more likely they were to stay with their employer, the better they were at what they do, and the more satisfied the customers were. According to the research, higher levels of employee satisfaction are a result of high levels of internal service quality, such as a positive outlook, professionalism, responsiveness, technological support, and ambiance.

#### Measuring customer experience

In Lemon & Verhoef's (2016) research, the five key aspects of service design are advised as a starting point to measure CX. The five aspects of service quality are assurance, empathy, reliability, responsiveness, and tangibles (Parasuraman, Zeithaml & Berry, 1988). This approach is advised since it has been validated across many industries. A different method for evaluating the quality of the CX is suggested by Klaus & Maklan (2013).

They distinguish four dimensions of it: peace of mind, moments of truth, outcome focus, and product experience. For their research, they collected data from four service settings such as mortgage customers, and retail banking customers. This research thoroughly investigated how the service experience affects crucial marketing outcomes, with the four dimensions of CX quality as significant impact. Peace of mind is the most significant influence on customer satisfaction and word of mouth. Moment-of-truth is greatly relevant as well, because of its close link to the direct interaction and CX with the business.

### The use of personas

The most important aspect of achieving a productservice's usability is understanding the customer (Junior & Filgueiras, 2005). customer Understanding the can be accomplished in a variety of ways, including user-focused marketing surveys, usability tests that collect demographic and behavioral data, and interviews with actual users or their representatives. Personas, according Cooper (1999) and Reimann (2003), are collections of realistic representative data that may also include fictitious information intended to provide a more accurate characterization. The persona's composition may be based on fictitious data as well as the demographic and biographical details of the personality being modeled. Personas can be represented by a picture to add realism and have names that are similar to those of real people. They described the persona technique as a component of a project with clear objectives. Using personas in customercentered design processes has many advantages. Research by Miaskiewicz & Kozar (2011) offers a ranked list of benefits with

audience focus, product requirements prioritization, prevention of self-referential design, and decision guide as the highestscoring benefits for customer-centric design.

### Customer journey mapping

A customer journey addresses the procedural and experiential elements of the service processes, from the perspective of the customer. It narrates the customer's interactions with a product, which could refer to a physical product or a service. The journey involves repeated interactions between the business and the customer, allowing a comprehensive understanding of the customer's experience throughout their engagement with the product. The customer journey perspective is crucial for involving customers in strategy work and business model development. It is integral to the design processes of well-known service design agencies (Følstad & Kvale, 2018). Customers now interact with businesses through a wide range of touchpoints across numerous channels and media, which leads to more complicated customer journeys and the growing focus on the CX (Lemon & Verhoef, 2016). While CX refers to the overall perception that a customer has about a business, based on all their interactions over time, the customer journey refers to the sequence of touchpoints a customer has with a business from the initial awareness to postpurchase evaluation. It is crucial to pinpoint the crucial touch points along the customer journey that have the biggest impact on important customer outcomes, even though doing so is a complex and challenging task (Lemon & Verhoef, 2016). A strong CX will be created by a seamless experience across channels through channel integration.

#### **CHAPTER 3.3**

# KEY FACTORS LEVERAGED TO ENHANCE THE DESIRABILITY OF IT

In today's competitive landscape, projects that not only meet functional requirements but also captivate customer's hearts and minds hold a significant advantage. This subchapter investigates desirability in information technology projects and product (IT) development, offering insights into how consultants can deliver desirable and customer-centric solutions.

# WHAT ARE THE KEY FACTORS CONTRIBUTING TO THE DESIRABILITY OF INFORMATION TECHNOLOGY?

Balancing viability, feasibility, and desirability To succeed in today's dynamic and evolving markets, businesses need to continuously design products, which could refer to a physical product, a digital offering, or a service that meets the demands of the customer. Because businesses spend too much time and money creating the incorrect product before realizing too late what the correct product should have been, many businesses fail (Mullins & Komisar 2009; 2002). customer-centric Crowne The development process, which essentially necessitates an iterative process of "building and evaluating" products, is becoming more and more popular among businesses as a means of overcoming such uncertainties (Blank & Dorf 2012). According to IDEO, viability, feasibility, and desirability are the three overlapping human-centered design criteria that a new product concept must address in order to succeed in the market (Dennehy et al., 2016). What is likely to develop into a sustainable business model is made clear in the viability space. This includes the business's strategic vision, its new product

development policies, and its market segment research policies. While the feasibility area examines the technological underpinnings and prerequisites and asks, "What is technically organizationally feasible?" desirability space, which asks, "What do people desire?" and ultimately "How do people decide on new products drawn out of innovative design prototypes," develops the necessary collaboration with the customer and stakeholders. Businesses can thoroughly test the viability, feasibility, and desirability of a minimal viable product (MVP). Dennehy et al. (2016), provided a list of evaluation questions to ask during prototype testing. For desirability, it includes questions such as "Having tested the prototype, what do you think are its strengths and weaknesses?" Evaluation guestions strike a balance between discussions of viability, feasibility, and desirability, allowing businesses to assess their MVP with objectivity. Objectivity is crucial since it prevents teams from having a "rose-tinted" view of their MVPs, which may be technologically feasible but fall short of desirability to be a success (Dennehy et al.,2016).

# Making information technology desirable

Understanding the factors that contribute to the desirability of IT is important for TT in future projects. According to Bhattacherjee's (2001) model, consumers' choices to repurchase a product after making their first purchase are similar to users' decisions to continue using an IT. As a result, after initial use, people reevaluate their adoption decision in light of their expectations and decide whether to keep using the IT or stop (Bhattacherjee 2001). Continuous use of IT is not always driven by conscious rationality and

intentions but can be shaped by emotions. IT Desirability refers to the passionate and affective relationship individuals have with IT and proposes that it significantly influences their future IT-related decisions (Cheikh-Ammar & Barki, 2012). The non-rational perspective presented in the paper complements existing rational models and offers a new approach to understanding the mental processes that influence the continuous use of IT. Cheikh-Ammar & Barki (2012) built on Bhattacherjee's (2001) model (Figure 10) by adding the three characteristics of IT that increase desirability: accessibility, communicability, and traceability. Accessibility refers to the ease and convenience with which customers can interact with IT systems. It includes factors such as user-friendliness, intuitive design, and the ability to cater. Communicability refers to the capacity of an IT system to facilitate effective efficient and communication between the user and the technology itself.

It involves the seamless transmission of information and clear presentation of data. Traceability refers to the ability to track data, processes, or changes within an IT system. It involves establishing clear links and audit trails, enabling users to trace the origin and impact of specific components within the IT infrastructure. Cheikh-Ammar & Barki (2012) argue that while desirability and usefulness are conceptually different, they are likely to individuals correlate because rationalize their behavior after making decisions. In the case of designing technology individuals, functionality, aesthetics are important (Bichard et al., 2007). Their research explores inclusive design approaches as unbiased methods for accommodating the needs and desires of older individuals, aiming to reduce aesthetic stigma. It suggests that both functionality and aesthetics can be successfully integrated into the design process from the start, leading to more considered IT products.

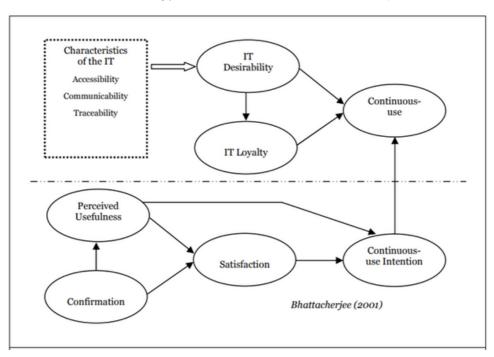


Figure 10: Making IT projects and products desirable (Cheikh-Ammar & Barki, 2012)

## **CHAPTER 3.4**

# THE USE OF TECHNOLOGY TO IMPROVE CUSTOMER EXPERIENCE

This subchapter examines how technology can be transformative in enhancing CX. Businesses can create immersive, personalized experiences that enthrall customers, increase engagement, and foster a strong sense of desirability by utilizing technological solutions.

HOW CAN TECHNOLOGY BE USED TO IMPROVE CUSTOMER EXPERIENCE IN THE FINANCIAL SECTOR?

The role of CX technology in the financial sector

Customers now interact with businesses through a wide range of touchpoints across numerous channels and online media, which leads to more complicated customer journeys and a growing focus on the customer experience (Lemon & Verhoef, 2016). Here, omni-channel management has become the new norm due to the increase of potential customer touchpoints and the decrease in control. Now businesses must integrate numerous functions, including IT, service logistics, marketing, operations, human resources, and even external partners, in order to create and deliver positive CX. Since technology-based service delivery systems are increasingly a part of shopping, it is crucial to assess how they affect the CX. The emergence of an entirely new technologyenabled shopping mode (online retailing) as well as the introduction of various technologybased systems within the traditional brickand-mortar shopping environment serve as examples of how these technology-mediated interactions manifest in the retail industry (e.g., self-service check-out counters) (Verhoef et al., 2009). Blockchain, IoT, and Al technologies are some of the most recent developments in the financial industry (Vergallo & Mainetti, 2022). The researchers' findings could be summed up by stating that future banking customers will access their services autonomously by using multi-channel robots and using both smart home devices and mobile devices, protected by a personalized risk assessment layer.

Technology used by financial institutions to improve the CX

New technologies powered by Artificial Intelligence (AI) -such as the Internet of Things (IoT), Augmented Reality (AR), virtual assistants, and chatbots- are completely transforming the CX (Hoyer et al., 2020). With these emerging technologies, a new value for customers will be created. Al describes actions such as data analysis and interpretation, learning from data, and applying the learning to complete specific tasks and goals. In other words, a product, service, or solution's intelligence is improved by AI (Shankar, 2018). AI employs algorithms to give machines the ability to comprehend and produce natural language, gain knowledge from experience, and express emotions. Today, algorithms can perform better than skilled humans at a growing number of tasks (Simonite, 2014). Virtual assistant software programs can converse with users verbally or in writing. They are created to mimic human dialogue. Examples of virtual assistant are chatbots and recommendation agents. With the help of AI, recommendations personalized, based on the purchase history of other customers. Better decisions that reflect customer preferences are cognitive value of Al-powered technologies (Hoyer et al., 2020).

A positive correlation was found between the use of Al-generated chatbots and CX on banking platforms (Bhattacharya & Sinha, 2022). This research focused on banks in major Indian cities with tech-savvy residents who lead fast-paced lives. demand personalization, and demand flawless services. With the ongoing development of Al, mimicking human behavior and decisionmaking, technology has the potential to further increase the four types of brand experience discussed earlier. IoT, virtual assistants, and chatbots are just a few examples of the new technologies that will have a significant impact on CX.

In a research done by Parise, Guinan & Kafka (2016), the researchers found which digital technologies can transform the CX. In order to understand how businesses are utilizing digital technologies to transform the CX, interviews with retailers and customers as well as pilot projects with stores and banking institutions were conducted. The digital assistant and the remote expert were two technology-based models businesses used to enhance the CX. Digital assistants are technologies such as Apple's Siri and Amazon's Alexa. The remote expert is a real person who can provide the consumer or customer with immediate assistance and who is located remotely. Parise, Guinan & Kafka (2016) discovered that if advisors and their personal advice are removed from the branch, 26% of customers will leave the bank.

Key drivers and barriers for optimized CX in digital banking

The importance of the CX in the financial services sector, particularly in the digital age, is being acknowledged more and more.

According to research, offering the best possible customer service can boost sales, profitability, and competitive advantage (Chauhan, Akhtar & Gupta, 2022). The same researchers discovered that the key drivers of banking  $\mathsf{CX}$ were convenience, usability, security, trust, personalization, and socialization. In the creation of a welldeveloped CX, digital banks face challenges such as privacy concerns, the need for continuous improvement, and regulatory compliance. The researchers advise digital banks to adopt a customer-centric approach, leverage data analytics, and incorporate customer feedback. In this way, digital banks will be more likely to deliver personalized customer-centric services. In the UK, the relationship between digital banking, CX, and financial performances was analyzed from the bank managers' perspective and customers' perspective in two separate papers (Mbama et al., 2018; Mbama & Ezepue, 2018). The relationship between digital banking, CX, and financial performance is strongly positive in the eyes of bank managers (Mbama et al., 2018). They believed that by providing convenience, speed, and 24/7 accessibility, digital banking technologies enhance the CX. Increased customer loyalty, retention, and acquisition result from these improvements, which would improve financial performance. Nonetheless, the research also showed that banks encounter difficulties when putting digital banking technologies into practice. Concerns about security, technical difficulties, and resistance to change on the part of customers and employees were found to be the biggest obstacles. Strategies that banks use to overcome these obstacles are spending money on cybersecurity, educating both customers and staff and working with

fintech companies. From the perspective of the customer, the same positive impact of digital banking on CX was found (Mbama & Ezepue, 2018). Customers perceive the digital services of the bank as convenient and efficient. The research showed that improved customer satisfaction results in increased customer loyalty and increased revenue.

Furthermore, the research showed that customers' positive experiences with digital banking services have a significant impact on bank financial performance. The researchers discovered that a number of variables, includina usability, security, responsiveness to customer needs, affect how well customers perceive the quality of digital banking services. The research emphasized the value of personalized services in digital banking, with customers appreciating services that are specifically tailored to their needs.

#### **CHAPTER 3.5**

# CONCLUDING THE THREE RESEARCH AREAS

Research area 1 focused on how CX can be effectively understood. measured. improved in TT's shift towards CX-focused IT solutions. This includes the emotional, sensory, cognitive, and social dimensions, as well as employee satisfaction. Measuring CX can be done using different approaches, such as the five aspects of service quality: assurance, empathy, reliability, responsiveness, and tangibles. Understanding the customer through the use of personas and customer journey mapping also plays a significant role in creating a positive CX.

Research area 2 presents the key factors contributing to the desirability of IT. Those key factors are accessibility, communicability, and traceability. To integrate these factors effectively, a customer-centric development must approach be adopted collaboration with customers and stakeholders, gathering user insights, and the ΙT solution with expectations. For projects targeting specific user groups like older individuals, functionality and aesthetics must be considered to meet their needs and create visually appealing designs. By prioritizing accessibility, communicability, and traceability, along with a customer-centric approach, projects can develop more desirable ΙT solutions.

Findings from research area 3 show that technology can greatly enhance CX in the financial sector by enabling omnichannel management, leveraging AI, utilizing digital assistants, and addressing key drivers such as convenience, usability, security, trust, personalization, and socialization. These technological advancements offer personalized interactions, faster and more convenient services, improved reliability, and and enhanced vailability, satisfaction. Security, technical difficulties, and resistance to change are the biggest barriers in the financial sector due to the sensitivity and privacy of the information involved. By adopting a customer-centric approach, leveraging data analytics, and incorporating customer feedback, financial institutions can deliver personalized and seamless experiences that foster customer loyalty and drive financial performance.

The literature review provided a strong foundation for understanding CX in the financial sector, but to delve deeper into TT's current capabilities and to uncover drivers and barriers, interviews with TT consultants have to be conducted. These interviews allow for insights and a tailored approach to develop TT's CX capabilities, contributing to the team's growth.

## **Key Takeaways: Theoretical Foundation**

• Understanding the customer using user personas and customer journey mapping plays a significant role in creating a positive CX. • The key factors contributing to the desirability of IT factors are accessibility, communicability, and traceability. • More desirable IT solutions can be developed by prioritizing a customer-centric approach. • Technology can enhance CX in the financial sector with key drivers such as convenience, usability, security, trust, personalization, and socialization. • Barriers to overcome for optimizing the CX in the financial industry are security issues, technical difficulties, and resistance to change.

# 04.

# Discovering the Drivers and Barriers

This chapter explains the approach to the explorative research conducted at EY to get a deeper understanding of the way of working and the knowledge gaps in the TT team. Interviews with VODW are held to identify the drivers and barrier to collaborate.



#### **APPROACH**

comprehensive In order to gain а understanding of TT's capabilities and values, a series of interviews were conducted both within and outside the team. Interviews were held within TT to empathize with the team, explore their perspective on CX, and identify the drivers and barriers to developing CX capabilities. Interviews with technology experts and CX experts, within TT and VODW, were conducted to understand significance of CX in consulting projects and to uncover potential drivers and barriers for collaboration between TT and VODW in future projects. Furthermore. interviews conducted with three other consulting teams within EY to discern their specific areas of expertise and ensure there is no duplication of efforts. This approach ensures that the deliverables for TT in the later stages of the thesis are distinct from the work carried out by other TC teams within EY. These interviews not only helped identify capabilities and key factors but also shed light on the different working methodologies of TT and VODW. By conducting these interviews, a deeper understanding the challenges of opportunities facing TT was revealed, paving the way for valuable insights and design opportunities.

#### Interview goals

The interviews were done with two main goals and three research questions. First, it was the aim to establish a fundamental understanding of TT's roles and capabilities. This will help to empathize with the team and design a solution that is tailored to the team's capabilities. Second, it was the aim to get insights from VODW who are specialized in CX and have experience with collaborating with TC teams.

#### Research questions

Three research questions were developed to organize the interview plan. The first two research questions are linked to the first goal of the interviews. The third question is linked to the second goal of the interviews. The research questions are set up to attain the interview goals.

- 1. What are TT's capabilities and level of understanding of CX?
- 2. What are the challenges that TT faces within the team and at the client concerning the implementation of CX capabilities?
- 3. What are the drivers and barriers for technology consultants and VODW consultants to collaborate?

#### Sample strategy

To get an all-round view of the TT team, a selected group of consultants are interviewed. The consultants are from different experience levels, from consultants to senior managers. Lastly, three CX experts from VODW are interviewed. These design consultants are familiar with executing CX projects. Their expertise is needed to get a better understanding of CX during consulting projects. Essential to mention here, it is important to discover what the TT team's capabilities are, and when one of VODW's consultant should be involved in a consulting project for their extended knowledge of CX.

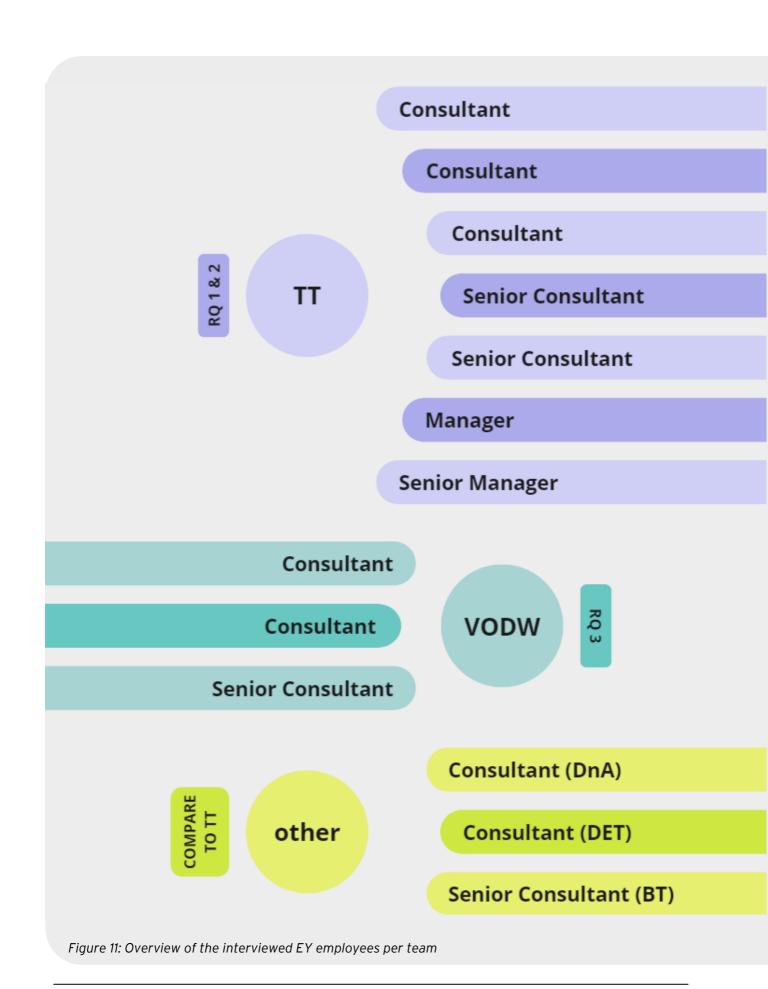
Since TT is not the only TC team within EY, interviews are also conducted outside of the team. It is important that with the results from this report, the TT team does not take over work from other teams. Instead, the TT team should deliver new values that are not part of the company yet. Three consultants from the Data & Analytics team (DnA), Digital & Emerging Technologies (DET), and Business Transformation (BT) were interviewed. The last-mentioned team is not in TC, but business consulting. The consultant from this team is interviewed because her team focuses on transformations, just like TT. In other words, it was important to find an unambiguous difference between the teams. In total, thirteen EY employees were interviewed. An overview of the interviewed EY employees is shown in Figure 11.

#### Pilot interview

A pilot interview was conducted to improve the interview plan. It was held with a senior consultant from the TT team. During the pilot interview, the structure was assessed, and some questions were replaced by key points that should be discussed during the interviews. This resulted in an interview plan with a more natural flow. Additionally, the interview plan was customized to each team that was being interviewed. The interview plan can be found in Appendix C. The interview plan is in English, but interviews were held in Dutch when Dutch was the interviewee's first language. Otherwise, the interview was held in English.

#### Data collection

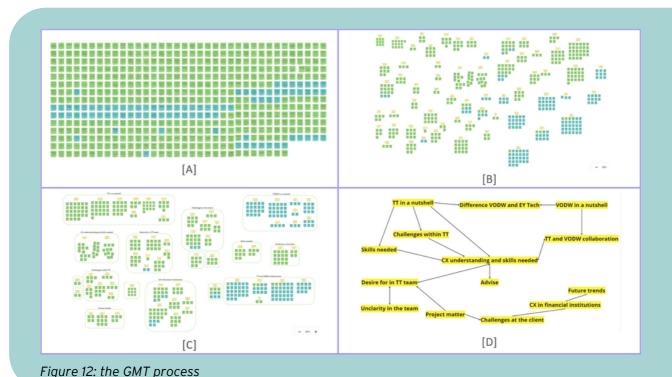
At the start of the interviews, all interviewees were informed that the data was being used for this thesis project. They were asked to sign a consent form which stated that they could refuse to answer questions and withdraw from the research at any time, without having to give a reason. This form can be found in interviewee's Appendix В. The name mentioned employees, and clients are anonymized. The interviewees were also asked for the consent of audio recording. The interviews were held physically at the EY office in Amsterdam or online on MS Teams were recorded with a recording application.



#### ANALYZING THE DATA

After conducting all the interviews, the recordings were transcribed. The transcripts organized case-by-case were and in alphabetical order. The interviews with TT and VODW employees were coded, and the interviews with DnA, DET, and BT were summarized (Appendix D). The interviews were coded without assistance or help from EY employees or others. To build the data on a systematic theory, the Grounded Theory Methodology (GTM) by Glaser and Strauss (1968) was used. The interviewees' quotes were coded based on topic and applicability. To make it simple to recall quotes and interpretations during the next step, the interpretation of the quote's meaning was also documented. This helped to iteratively structure and visualize insights while going repeatedly through the raw data. The guotes and the codes were first collected in Excel to create a database with all the materials.

To have an overview and find correlations, the codes were transferred from Excel to Miro, with each code on a separate post-it (Figure 12.A). Codes from TT were put on a green post-it and codes from VODW were put on a blue post-it. With open coding, groups of similar codes were formed which created concepts (figure 12.B). Concepts clustered into categories to have a better overview of the data (figure 12.C). To create a structure and find relationships between the categories, the categories were linked to each other using axial coding (Figure 12.D). Iterating on the links between the categories resulted in an overview of the clustered categories and their correlations (Figure 13). An extended version of the final analysis can be found in Appendix E.



40



Figure 13: Quick overview of the clustered categories and their correlations (see Appendix E)

#### **EMERGED EXPERT INSIGHTS**

During the interviews, a large quantity of raw data was collected. The outcomes were shared and discussed with consultants and managers from TT and VODW. This helped to get early-stage feedback and test the possible relevance of the initial insights.

While structuring the data, many insights emerged around the previously mentioned research questions. From the data, six drivers and ten barriers were found, in three different categories (Figure 14 and 15).

_			
Category 1	Within Technology Transformation	Drivers to develop CX capabilities	Motivation to develop CX capabilities
			Seeing opportunities at the client
		Barriers to develop CX capabilities	Little to no CX knowledge
			Resistance to change
			Not understanding what CX means for TT
			Absence of training on CX tools
Category 2	Technology Transformation & VODW	Drivers to collaborate	Motivation and desire to collaborate
			Needing each others capabilities
			Changes in the financial sector
		Barriers to collaborate	Different ways of working
			Different values
			Internal bureaucratic barriers
Category 3	Technology Transformation & Client	Driver to include CX in current projects	CX is becoming more important
		Barriers to include CX in current projects	Resistance to change
			CX is not a priority
			Regulatory reasons

Figure 14: Summary of emerged drivers and barriers

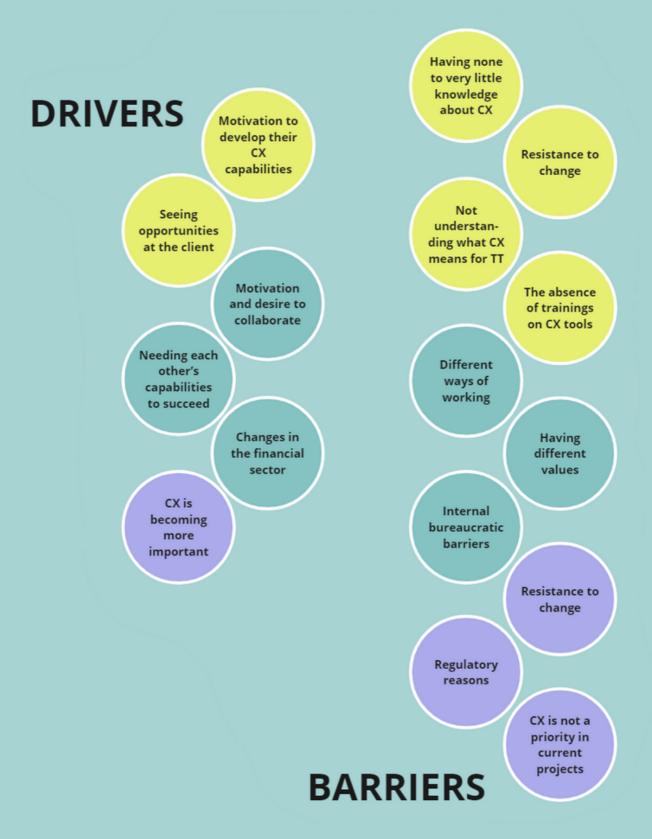


Figure 15: The drivers and barriers

#### **EXPLAINING THE DRIVERS AND BARRIERS**

The insights that emerged during the analysis of the interviews, including TT's level of understanding of CX and a range of drivers and barriers, will be illustrated by utilizing direct quotes from the interviews. These quotes provide firsthand perspectives and support the analysis and findings presented.

### CATEGORY 1: WITHIN TECHNOLOGY TRANSFORMATION

As stated in previous chapters, TT does transformation projects for clients in the financial sector. Their focus lies in delivering IT solutions that primarily target the backend of the client's system. This involves implementing innovative technologies and offering expert guidance in selecting the most suitable software provider. Thev see themselves as the bridge between technology and business. One of the consultants explained the team's expertise as follows:

"So, notify the client's business needs earlier and you make the translation to what they need technically from that pointof-view and the transformation itself is of course the implementation of new software or the replacement of current software with new software." -TT.7

**DRIVERS** 

In the pursuit of adopting a customer-centric approach and developing CX capabilities within the team, a comprehensive exploration was conducted to identify the drivers and barriers. Among the drivers, a notable

motivational factor emerged as consultants expressed their eagerness and motivation to develop their CX capabilities. As one consultant said:

"I really want to have a training about what CX really is. CX isn't just making customer journeys and personas just really making more behind that and also what are those opportunities on this." -TT.5

They are not only motivated because they want to develop themselves. The consultants are **seeing opportunities at the client** and for the client's customers during current and previous projects.

"Because that's the customer experience that's lacking. People want to access finance, but they don't know how to access finance." -TT.2

BARRIERS

The first barrier to implementing CX in their project is TT having none to very little knowledge about CX. Since the team hasn't done projects yet that include CX elements or require CX capabilities, it's having a hard time acknowledging what is needed to support their client.

"So now we're starting from scratch. We don't have any resources that we consultants can fall back on for our next proposal and people learn the most on their engagement." -TT.6

Resistance to change was often mentioned as well. Even though the team can be keen on participating in these interviews and engaging with CX, actively changing or working on one's capabilities is easier said than done. Realizing the effort that it takes to really immerse in a new subject can be discouraging.

"There is resistance to change, obviously. And I think that's a pitfall a lot of people here fall into and to make people understand that there's more within CX than what you see in the first hint." -TT.6

Since most of the consultants from TT have no experience with CX, they don't understand what CX means for TT. With CX being a broad concept, it's hard for TT to grab the essence of it. During projects, this already starts with defining the client's problem.

"I think people first also need to understand how you look at a problem from a CX perspective versus and targets operating perspectives and target operating model perspectives." -TT.3

Team members are motivated to learn more about CX, but they do not know where to start, and what it means for the work they do at the client.

"Should we people also learn from okay, but what is it? what is now? Yes, what exactly is customer experience? How does that translate both online and offline and how does that affect the services we provide?" -TT.1 In addition to their overall lack of comprehension, the consultants highlighted the **absence of training on CX tools**. Still, they expressed a strong interest in acquiring knowledge and skills related to tools such as personas and customer journey mapping, emphasizing the need for dedicated training in these areas to be able to use these tools later on in projects.

"I think we just need training. So anyway, what is a customer journey? How do you think from the customer's point-of-view, what exactly does that mean? And how do you also weigh up your client's assignment, while thinking of the customer." -TT.5

Besides personas and customer journeys, other tools such as service blueprints were mentioned.

"But at the moment I think we are mainly looking for people who can do service blueprint mapping, so they can look at it architecture who understand the architecture of an end-to-end solution and can then put a service blueprint on it to make." -TT.6

## **CATEGORY 2: TECHNOLOGY TRANSFORMATION & VODW**

Just like TT, VODW works together for clients, but their projects are quite different. VODW helps clients by working together on business strategies, service design, and frontend design. The consultants don't have a background in technology, but rather in design, business, and marketing. The customer's needs come first, or as one of the consultants said:

"We help companies from all sectors to transform and, we actually always do that from the customer point-of-view and the market strategy. The starting point is always the customer or a certain trend in the market, a desired experience design or marketing technology." -VODW.1

As stated in Chapter 2, CX is becoming increasingly important for companies in the financial sector. The possibility of the two teams collaborating and joining forces is investigated during the interviews with VODW, considering VODW has collaborated in the past with other TC teams and TT has no experience with CX projects. The consultants from VODW see opportunities and reasons to collaborate. Some reasons are focused on internal opportunities:

"I think that is very inefficient to train someone from TT who has a very technical background to do customer experience." -VODW.3 And some reasons are focused on external opportunities:

"We are now also working on the entire Pension legislation, for example. This will no longer be arranged centrally in the future, but everyone will be responsible for their own pension fund. [..] Yeah, how are you going to do that right if you don't understand what your customers want, huh? And how are we going to do that without pension experts?" -VODW.1

#### **DRIVERS**

For the two teams to collaborate, drivers and barriers were found. The first driver found in both teams was the **motivation and desire to collaborate**. Interviewed employees from TT mentioned the desire to do bigger projects in the future, which also involve collaborations with different teams, such as VODW.

"In 5 years, it would seem very cool that we really have a core team. Together with VODW, that we will be asked internationally to develop customer journeys and then roll them out in the organization with core systems." -TT.5

The same motivation to work with other teams was found at VODW.

"We have the ambition to have more technology experts in our projects, so if you like a technology, yes, working with EY Tech anyway. That ambition is there." -VODW.2 The second driver is **needing each other's capabilities to succeed**. As both teams have their own expertise and experience, they can use each other to deliver better work and become more successful. For example, VODW needs TT's capabilities to know if something is feasible.

"And then we need them again to look at what we want from the CX, but is that technically possible at all? We don't know." -VODW.2

And TT needs VODW's capabilities for the customer side of their transformation projects.

"I think it is right to look for that cooperation better and in addition, we learn a lot from them because they approach things differently, just a little more thorough from the customer side, not like we do." -TT.5

From experience from another project where VODW collaborated with another TC team, VODW already sees the benefits of collaborating, such as complementing each other's expertise.

"That makes it fun, while they have all the technical knowledge that we don't have. I mean, we really couldn't build a platform like what we've done with DET. Then we would never have been able to do it alone, so that is very nice that you can complement each other very much." -VODW.3

The third driver is an external driver, it's the changes in the financial sector, such as the new pension law. These changes are noticed by TT and VODW. They see that future projects require both customer-centric design and financial expertise.

"If we wanted to move towards a platform in which you can let customers make pension choices independently, well, build an app or build a platform in which customers can submit such an application, we cannot do that ourselves within VODW. We really need TT for that. Pension specialists are needed." -VODW.1

#### **BARRIERS**

Besides the driver, barriers to collaboration were found as well. The first barrier is that **the teams have different ways of working**. This will be a barrier from the start of the project where the problem has to be defined and requirements are set up.

"Only, we do our work with other methodologies and with other principles, so you get a completely different perspective on projects." -VODW.3

These different ways of working are also noticed during projects.

"Yeah, they just have a very linear way of working. While designers iteratively. And yes, a little more hands-on or something." -VODW.2 TT is more likely to look at the technical side and work in a more structured way.

I look a little more process-wise, don't !? Also look from the customer journey, but with slightly less marketing sauce. TT.2

The second barrier is that **the teams show different values**, which come up when decisions have to be made. TT is more likely to put technical benefits first, while VODW puts customer satisfaction first. VODW consultants experienced this during a collaboration with another TC team.

"That the people from EY Tech say, yes, but if we do it this way or that, it is technically much easier and that we say, yes, but those design principles were customer satisfaction above all else." -VODW.1

The third barrier causing difficulties for the teams to collaborate is an **internal bureaucratic barrier**. The consultants are dependent on the projects that come in. Which project they will do gets decided by the team's partner. Additionally, the teams work in different silos, as shown in Figure 7 in Chapter 2.1. If the teams want to collaborate, they first need projects that are acquired by the teams' partners.

"The problem is much higher up in the company, not me or [manager], but higher up. I think it's the policies." -VODW.3

### CATEGORY 3: TECHNOLOGY TRANSFORMATION & THE CLIENT

While challenges will occur when the team has to develop CX capabilities and shift towards a customer-centric approach, new challenges will also arise on the client side. In the interviews, one driver and three barriers to including CX in current projects were found.

#### **DRIVERS**

The driver to including CX in current projects is that CX is becoming more important than before for companies in the financial sector. Even though the client may be resistant or won't see CX as a priority, it does impact their business:

"Certain developments that we see in the market and that are now also happening at other banks. There you also see that a bad customer experience is one of the main reasons that customers leave their bank. Not because they don't offer the right products, not because the prices are too high, but just because the experience is not good." -VODW.1

**BARRIERS** 

Nevertheless, when working with the client, TT experiences **resistance to change** on the client's side. Change is hard for clients as it often asks for extra time, money, and energy, and business-as-usual is the easy option, making it a proponent barrier for TT:

"I think because the client was afraid of change. They don't know what's coming. They don't really want to change. And because they're like, yeah, probably could make my life easier, but I'm lazy, and if my life has continued to be ok this way." -TT.1

Resistance to change is not only because of laziness but also because of the type of people working at companies in the financial sector:

"Insurers naturally employ risk-averse people." -TT.4

The second barrier to including CX in current projects are **regulatory reasons**. Companies in the financial sector must comply with a lot of rules and regulations, making change and the introduction of new technologies such as personalization hard:

"The regulations also make it very difficult to automate and therefore to use the customer experience and therefore the customer experience technology properly to automate many things." -TT.4

At the start of every transformation project, a list of business requirements is set up by the client. The team has experienced that these requirements go for user needs and that CX is not a priority in current projects. Companies in the financial sector don't see the urgency of CX, yet.

"In my last project, the user experience was not taken into consideration at all." -TT.2

**CHAPTER 4.5** 

#### **REFLECTION ON RESEARCH GOALS**

Six drivers and ten barriers were found as a result of the analysis of the interviews. The qualitative research had two main objectives, which are discussed in Chapter 4.1. The objectives and the degree to which they have been attained will be discussed in more detail in the section that follows.

The initial goal was to gain a profound understanding of TT. This will make it easier to understand the team and create a solution that is suited to their capabilities. The second goal was to gather insights from CX experts from VODW who have previous experience working with TC teams.

# ESTABLISH A FUNDAMENTAL UNDERSTANDING OF TT AND ITS CX CAPABILITIES

# After interviewing seven consultants from TT, many different insights emerged. Interviewing interviewing consultants from varying levels and with different teadifferent expertise gave a broad view of the DnA, and Dl different ways TT works. Because of the very different kinds of projects, it was difficult to in the financi understand their different needs. Financial The three

institutions differ a lot from each other, which makes every project unique. A consultant can work within TT for over a year and still only contribute to one project at one client. Within the team, consultants focus on different kinds of financial institutions and different parts of the transformations. This results in a team with expertise that varies from consultant to consultant. Working on the CX of a retail bank will be different from the CX of an asset manager. It was discovered during the interviews that doing real-world projects helps with developing new skills. The different kinds of projects TT does make it hard to paint a picture of the average TT team member. Nevertheless, fragmentation of the team and differences in experience will always be a thing in consulting firms and other clientbased companies.

Next to TT's capabilities, other matters were discovered. The team experiences difficulties with keeping up with each other. As the consultants work on different projects at different clients, they don't know what their direct colleagues are doing. This can explain why the consultants had different answers when they had to explain what the team does.

# DISCOVER EXTERNAL INSIGHTS AND COLLABORATION OPPORTUNITIES

Insights outside of TT were discovered by interviewing six consultants from different teams. Doing interviews with BT, DnA, and DET confirmed that these teams focus on other kinds of projects and on clients in the financial sector as well as other sectors. The three interviewed VODW consultants were selected because they have one particular thing in common: they all had done a project before with a team within EY's TC. Interviewing VODW's CX experts who already collaborated with a TC team before helped with including new perspectives. To make two different teams collaborate in the future, it was important to hear from both sides how they view the other team. Also, the second research goal was aimed to help make decisions in the next phase of the project. Discovering the opportunities for TT and VODW to collaborate was needed as TT cannot become CX experts themselves overnight. Mostly at the beginning, of adopting a customer-centric approach and developing CX capabilities, they will need the help of VODW. It was discovered during the interviews that collaboration depends on the partners of both teams. Since a partner is responsible for bringing in the projects, two partners from two different teams have to cooperate to acquire a project that includes both teams.

#### FROM INSIGHTS TO PERSONAS

This section introduces distinct three of technology consultants personas throughout encountered this project, depicting the various types present in the TT team. These personas influence the design of the final concept. Figure 16 displays the personas created to deeper gain understanding of TT's team members.

Combining the data from the expert interviews and observations conducted while working with the team at the EY office in Amsterdam, resulted in the creation of the three personas. Creating three of them strikes a balance between being comprehensive and manageable for this project.

The personas were made because it is crucial to acknowledge that not all consultants in the TT team are alike. With 28 team members, there exists a varying level of knowledge about CX among them. Although the interviews with seven TT team members suggest a high level of motivation to develop CX capabilities, this doesn't hold true for every single member of the team. The team encompasses diverse attitudes and interests, and some consultants may not share the same enthusiasm for CX, preferring to focus on other subjects such as AI or Cloud. There may be consultants who are resistant to shifting from their current way of working to a more customer-centric approach.

As elucidated in Chapter 3.2, personas are archetypal representations of intended users that offer an insightful visualization of their behavior, values, and needs (Van Boeijen et al., 2014). By creating these personas, a cohesive and shared understanding of the values and needs of TT consultants is fostered, serving as a solid foundation for designing the final concept with precision and relevance. These personas serve as essential tools to design for the team's unique needs and characteristics.



#### **Audrey**

Role in TT Consultant

#### Quote

"I'd love to focus more on the human side of the IT systems we advise and implement"

#### Background

Has learned about customer experience during her study. She knows what a persona and customer journey are but has never worked with it during her time at EY.

#### Goals

- · Get Scrum Master certificate
- · Do an international project
- · Use CX knowledge in transformation project

#### Challenges

- Understanding how CX can be implemented in her current projects
- · Convincing colleagues to explore CX
- · Convincing current client to consider CX

#### Personality

- · Open-minded
- · Team player
- · Creative

#### Needs

- Fixed VODW consultant to reach out to when needed
- · Actionable CX tools
- Trainings about service blueprint mapping



#### James

**Role in TT** Senior Consultant

#### Quote

"I want to work on my capabilities as much as possible so I can become the best in my team"

#### **Background**

Has a background in business economics. He hasn't worked with CX before. He did hear about the term a few times at the office.

#### Goals

- · Get promoted to manager
- · Become an expert on Azure
- · Create a new product end-to-end at a bank

#### Challenges

- · Distinguish himself from the rest
- Keeping up with trends and developments in the financial sector
- · Gaining the right skills for end-to-end solutions

#### Personality

- · Disciplined
- Social
- Confident

#### Needs

- Understand relevance of CX in today's financial sector
- Understand VODW's way of working, and what they can do for TT



#### Oliver

Role in TT Consultant

#### Quote

"I'm here to work on big project with banks and asset managers

#### Background

Newly graduated. He has a major in business administration and has never heard of CX before.

#### Goals

- · Start his first client project
- Desire to create the whole omni-channel of an asset management

#### Challenges

- · Find his place within the team
- · Get to know and befriend his colleagues
- · Transition from student to consultant

#### Personality

- Persistent
- Curious
- Practical

#### Needs

- Onboarding consultant trainings
- Understand TT's way of working
- Understand current development in financial sector

#### Key Takeaways: Discovering the Drivers and Barriers

• Interviews were done to get a fundamental understanding of TT's roles and CX capabilities and to get insights from VODW who have experience with collaborating with TC teams. • Thirteen consultants were interviewed, of whom seven consultants from TT, three consultants from VODW, and three consultants from other technology and business consulting teams. • From the interviews, six drivers, and ten barriers were found, in three different categories. • TT's drivers to develop CX capabilities are internal motivation and external opportunities. The barriers to developing CX capabilities are the lack of CX knowledge, resistance to change, not understanding what CX means for TT, and the absence of training on CX tools. This answers RQ 1 and partly RQ2. • What will drive collaboration between VODW and TT, is that they are motivated to collaborate, they need each other's qualities, and future projects are opportunities to collaborate. • Barrier for collaborating with VODW are their different ways of working, different values, and internal bureaucratic barriers. This answers RQ3. • Barriers to including CX in current projects at the client were found including resistance to change, CX not being a priority, and regulatory reasons. This answers RQ2.

# Specifying the Design Direction

This chapter translates the insights from the desk research and interviews into the future vision for the Technology Transformation team. Finally, the design brief and the design requirements will be presented.



# CHAPTER 5.1 APPROACH

This chapter illustrates the transition from the research phase to the design phase. Results from the context analysis, desk research, and expert interviews are used to set up the final design brief (Figure 17). The design brief and the design requirements were created together with the future vision. The future vision illustrates what CX in TT will look like beyond this project.

The design brief helps to define the problem statement and the design goal for this project. The design requirements are the guidelines during the Develop phase.

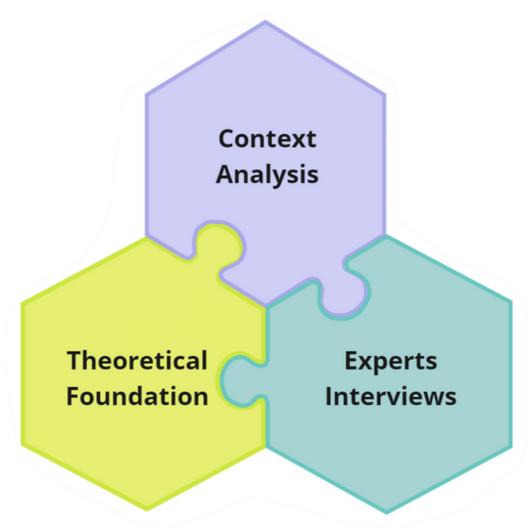


Figure 17: Bringing all the insights together

#### **CHAPTER 5.2**

# FUTURE VISION FOR TECHNOLOGY TRANSFORMATION

The future vision presented in this thesis is the result of a comprehensive analysis encompassing context analysis, desk research, and expert interviews conducted within TT and VODW. By envisioning the future of CX in technology consulting, TT and this thesis can benefit from gaining a clear overview and understanding of the path ahead. The design brief outlined later in this chapter not only aids in achieving a more workable outcome but also assists businesses in embracing a long-term, future-focused perspective (Calabretta & Gemser, 2016), making it a significant step towards TT's desired future state. This thesis will be the first step towards the future vision.

A pivotal finding from Chapter 2's Context Analysis is the increasing importance of CX for companies, particularly with a noticeable gap in the financial sector. TT recognizes this trend and is determined to develop its CX capabilities. However. the interviews conducted in Chapter 4 revealed that the team currently lacks a solid understanding and expertise in CX. Nevertheless, TT remains highly motivated to acquire knowledge, learn new skills, and utilize new tools in the CX domain. On the other hand. VODW consultants, being CX experts, have extensive experience collaborating with various EY TC teams and are equally motivated to enhance future collaborations.

In light of these key insights, the envisioned future for TT in 2030 and the financial sector rests on three fundamental pillars (Figure 18), shaping the way CX will be integrated and advanced in the forthcoming years.

Delivering End-to-End Solutions

This pillar envisions TT as a well-rounded and versatile team capable of providing comprehensive solutions to their clients. Currently, TT focuses primarily on backend IT solutions, but the dream is for them to expand their expertise and develop CX capabilities to cover the entire spectrum, from backend to frontend development. By achieving this goal, TT will be able to create fully integrated and seamless IT systems that deliver a superior CX for their clients.

Advising Viable, Feasible, and Desirable Transformations

This pillar emphasizes TT's role as a strategic advisor to their clients. In addition to their technical expertise, the team aspires to become skilled in evaluating the viability, feasibility, and desirability of proposed transformations. By adopting a customercentric approach and understanding the client's business objectives and customers' needs, TT can provide actionable insights and recommendations that align with the client's strategic goals.

Becoming a Trustworthy Advisor for Clients
The third pillar revolves around TT's reputation as a trustworthy and reliable partner for their clients. By consistently delivering high-quality services, exceeding expectations, and building strong, long-term relationships, TT aims to become the go-to technology consulting team for its clients. Trust is crucial in the consulting industry, and TT aspires to be known for its professionalism, integrity, and commitment to client success.

#### Dream Project

An example of a dream project for TT would be to partner with a financial institution to develop a cutting-edge banking application. TT would not only design and implement the backend systems that handle financial transactions and data processing but also craft an intuitive and visually appealing frontend interface for employees customers to interact with. This project thorough involves conducting market research, understanding the regulatory landscape, and identifying customer pain points. TT will then advise the client on the most desirable, viable. and feasible technological solutions that address the client's and customers' needs. TT would work

closely with the client's leadership team, ensuring a smooth and successful transformation while mitigating risks and maximizing returns on investment. The end-to-end solution would revolutionize the client's banking services, enhancing the CX and attracting new customers.

As for the timeframe, the achievement of this future vision may take several years, with a minimum of seven years, depending on the team's dedication, resource allocation, and opportunities in the market. TT can set milestones and continuously evolve to fulfill their aspirations over time.



Figure 18: Future vision TT

#### **CHAPTER 5.3**

#### **DESIGN BRIEF**

The following phase establishes a clear starting point and describes the design brief that will be used to bridge the research phase and the design phase of this thesis. The following information is used to build the brief: insights from the context analysis, desk research, and interviews with TT and CX experts.

#### **Reframed Problem Statement**

The initial research question of this thesis is: How can the Technology Transformation team's service offering be enhanced by expanding their consulting capabilities through the adoption of a customer-centric approach?

Chapter 2 illustrated TT's lack of CX capabilities resulting in them having to outsource the last parts of their projects, and them missing out on project opportunities. On the client side, CX is becoming increasingly more important. Digital engagement accelerated in the financial due to the pandemic, resulting in a higher demand for optimized digital customer experiences. Delivering a customer-centric experience is crucial, as customers are likely to switch to another business after several bad experiences. Chapter 3 highlights that more desirable IT systems can be developed by prioritizing a customer-centric approach. Personalization, convenience, and seamless digital experiences are highly valued by customers. Accessibility, communicability, and traceability make IT more desirable, but there are barriers in the financial sector such as security issues and technical difficulties. Chapter 4 exposes drivers and barriers within TT to develop CX capabilities, Expert interviews demonstrated their motivation to

develop CX capabilities, but also the lack of CX knowledge, and consultants that do not understand what CX specifically for TT means. There is an absence of tools and training on CX. The CX experts from VODW are motivated to collaborate with TT in future projects, though being hampered by the teams' different ways of working and internal bureaucratic obstacles.

#### **Design Goals**

To be able to reach the future vision, the first step towards it has to be developed. This project will be that first step. TT will need more than the to-be-designed solution as there are many steps for the team to take. Two design goals are created to ensure the project's success:

1. MOTIVATE TECHNOLOGY
TRANSFORMATION CONSULTANTS
TO EXPAND THEIR CX CAPABILITIES
2. DEVELOP TECHNOLOGY
TRANSFORMATION CONSULTANTS'
CX CAPABILITIES

Motivate Technology **Transformation** consultants to expand their CX capabilities This goal aims to inspire and encourage all members of the TT team to actively engage in developing their CX capabilities. While some consultants may already be motivated, it's crucial to ensure that the entire team shares the same enthusiasm. motivating Βv consultants to expand their CX capabilities, the team can collectively work towards a customer-centric approach, which will enable them to deliver more effective and desirable IT solutions for their clients.

Develop Technology Transformation consultants' CX capabilities

This goal focuses on providing the necessary resources, and support to enhance the CX expertise of TT consultants. It acknowledges the varying levels of proficiency among others. By investing in the development of their CX capabilities, the TT team can bridge the knowledge gap and create a consistent standard of CX expertise across the team. This will ensure that the team is well-equipped to meet the increasing demands for desirable IT systems.

Overall, these two design goals are essential for the TT team to embrace a customercentric approach, enhance their CX capabilities, strengthen their and collaboration with VODW. By achieving these goals, TT can position itself as a more competitive and customer-oriented TC team, ready to excel in the ever-evolving landscape of technology and customer expectations.

#### Design statement

A design statement was established based on these design goals. According to the brand positioning statement as represented in branding literature (Van der Vorst, 2017), the formulation of the design statement is constructed. This includes defining a product category (1), target group (2), and benefits of the aimed design on different levels: functional (3), emotional (4) and self-expressive (5):

Develop a CX 'product' (1) for TT consultants (2) of all levels, that stimulates them to incorporate a customer-centric approach in their transformation projects and includes actionable customer experience tools (3) which gives the consultants the opportunities to confidently consider all aspects (Feasibility/Viability/Desirability) during transformation projects (4), while being a proactive consultant who enables their client's IT systems to be user-friendly and future-proof (5).

#### **Design requirements**

The requirements serve as the foundation for creating the final concept in Chapter 6. Van Boeijen et al. (2014) assert that design requirements specify the fundamental attributes of the design. The requirements listed below are derived from the findings of interview insights and observations of the teams to ensure that they align with TT's capabilities, managerial style, and design goals. The concepts created in Chapter 6 will be designed using these requirements.

# Design requirement for Design goal 1 Design goal 2

#### Clarity and readability

Presenting new information for TT in a clear and understandable manner will make it easier for the team to understand the importance of developing CX capabilities and how to achieve them.

#### Visual engagement

The requirement for visual engagement arises from the importance of captivating the consultant's attention. Engaging visuals can make the subject CX more appealing and memorable.

#### Accessibility and practicality

The final concept needs to be accessible and practical for the consultants to use. It should be readily available to them and easy to integrate into their existing workflows or learning processes.

#### User-friendly and easy to navigate

A user-friendly design is crucial to encourage active engagement with the final concept. It should be intuitive to navigate and interact with, allowing consultants to easily access the information they need.

Accessibility to technology consultants with varying levels of experience

Since the consultants have different levels of familiarity with CX, the final concept should cater to all experience levels. It should provide resources and guidance suitable for those with no prior CX knowledge as well as those with some understanding.

Scalability for future growth and development

The final concept should be scalable to accommodate the potential expansion of the team's CX capabilities and projects in the future. It should be adaptable and capable of handling increasing demands as the team progresses.

Sustainability in terms of maintenance and updates

To ensure the long-term effectiveness of the final concept, it should be sustainable in terms of maintenance and updates. The design should allow for easy revisions and adjustments as new developments in CX emerge.

#### Key Takeaways: Specifying the Design Direction

• The design brief that bridges the research phase and design phase is presented. • Three pillars shape the future vision and the way CX will be integrated and advanced in the forthcoming years: Delivering End-to-End Solutions, Advising Viable, Feasible, and Desirable Transformations, and Becoming a Trustworthy Advisor for Clients • TT's dream project involves partnering with clients to develop cutting-edge IT systems, delivering end-to-end solutions that enhance the CX by addressing the desirability, viability, and feasibility of their solutions, while ensuring a smooth and successful transformation for the client. • The design goals for this thesis include motivating TT consultants to expand their capabilities, develop their CX knowledge, and strengthen alliances with VODW. • Design requirements are set up to guarantee that the final concept satisfies the needs of the TT team.

# 06.

## Developing the Solution

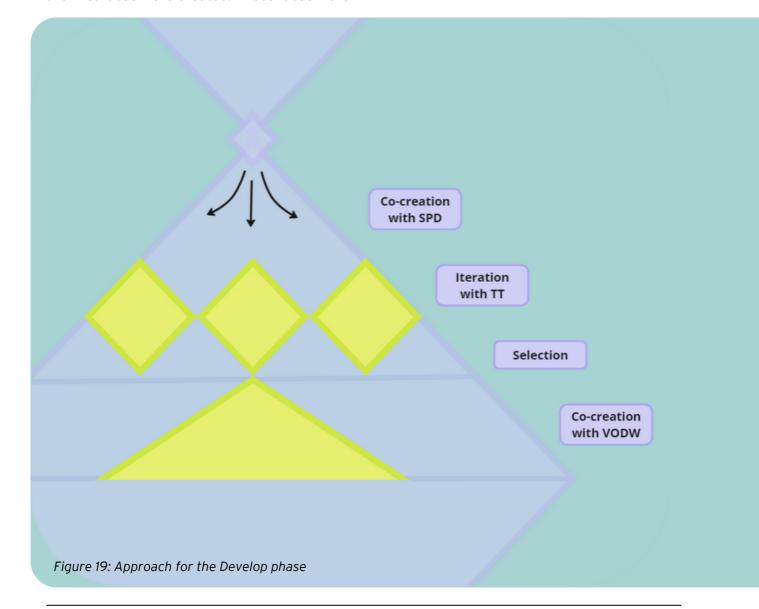
It this chapter, the development of the solution is described. It shares the development approach, and the creative sessions held with students and consultants. Finally, it will present the final concept.



#### **APPRAOCH**

For this part of the project, a collaborative design approach was used to find the best solution (Figure 19). The design approach known as collaborative design also referred to as co-creation or participatory design, promotes effective stakeholder collaboration (George, 2023). The first brainstorming session was held with fellow SPD students. Here, the findings from the research phase were discussed and new ideas were created. Through collaborative and individual ideation, the first ideas were created. These ideas were

then developed into concepts, and evaluated during individual meetings with TT consultants. Together with their feedback, one concept was selected as the final concept for TT. Further development was done during the co-development workshop with VODW consultants. This session with VODW was held to get insights from CX experts and sharpen the final concept. Consultants who had worked before with a TC team were selected for this session.



#### CO-CREATION SESSION WITH SPD STUDENTS

The first creative session was held with three fellow SPD students who were familiar with EY and my project. The goal of the session was to come up with new ideas and find ways to expand the capabilities of TT. To run an effective creative session, a plan consisting of three parts was set up, having a 2-hour time span.

The session started with an introduction to the project, including the results from the research phase. At the end of the introduction phase, the design goals and requirements were shared to make the intention of the project clear.

Next, a brainstorming session, using How-to questions and rolestorming, was facilitated to showcase multiple perspectives on the project (Figure 20). How-to's serve as problem statements presented in the format of "How to" with the intention of generating a diverse array of problem descriptions (Van Boeijen et al., 2014). The dynamic and inviting phrasing of How to's encourages creativity and fosters an environment that builds upon the ideas of others. Rolestorming is a brainstorming technique, developed by Rick Griggs (1985), where people brainstorm while roleplaying. It produces original ideas while also reducing anxiety. Whilst rolestorming, people are less afraid and more likely to speak up when asked to make suggestions in character (Vegt, 2023). For the rolestorm, a scenario was created where the SPD students had to act technology consultants who were responsible for the digital transformation of a fictitious insurance company. creativity to flow naturally during this session

resulted in new ideas. The collective exchange of ideas improve idea generation due to increased associative processing (Ritter & Mostert, 2018).

For the last part, product and service ideas were developed by combining the ideas generated during the brainstorm, resulting in two main ideas. Appendix F contains the full setup for the creative session, including the fictitious scenario that was used.

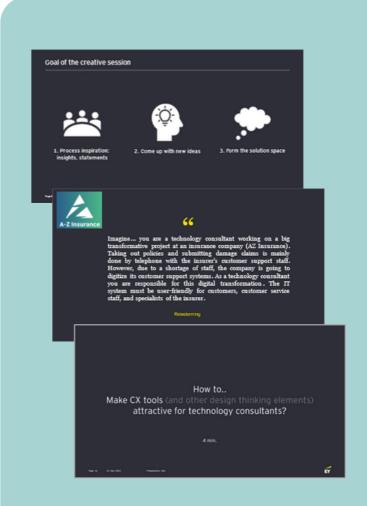


Figure 20: Glimpse of the slides from the session

#### **SELECTING ONE IDEA**

After an insightful creative session with the SPD students, two concepts were developed for TT, each tailored to meet the team's needs. These concepts were shaped based on the design brief outlined in Chapter 5.3 and created with valuable input from the creative session. To ensure the concepts' practicality, compatibility with the team, and a feasible implementation strategy, five iterative meetings were conducted with TT team members from various levels. Their comments and criticisms were collected on post-its in Miro. These meetings served as crucial touchpoints to continuously refine the concepts before choosing the final concept.

Concept one. It revolved around the idea of a framework, providing a structured approach to guide TT consultants in applying CX principles and tools directly to the client (Figure 21). Concept two, a CX playbook, offered a comprehensive resource that would empower TT consultants with practical tools and techniques to develop CX capabilities (Figure 22). During these iterative meetings, the TT team members shared their opinion on the concepts. The consultants' comments provided insights, highlighting the significance of a balanced approach.

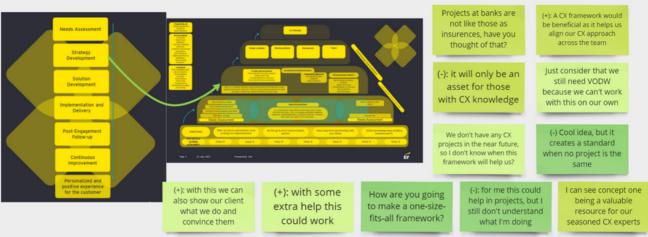


Figure 21: The CX framework and feedback from TT

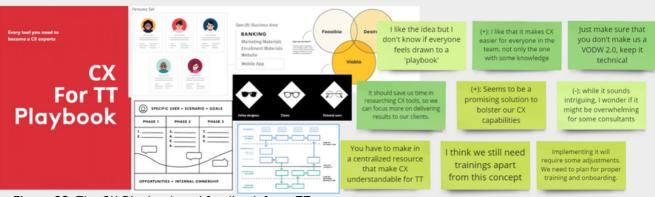


Figure 22: The CX Playbook and feedback from TT

For deciding which concept to develop and deliver to TT, it was important to keep the design goals in mind, and what the best first step would be for the team. The feedback from the team members was taken into mind and a Harris profile was used. This is a visual representation of the strengths weaknesses of design concepts (Van Boeijen et al., 2016). It is used as a practical tool to choose ideas. For the Harris profile, the design requirements from Chapter 5.3 were used to evaluate the three concepts. The Harris profile created for the concepts can be found in Appendix G.

Concept two emerged as the best scoring idea. It also resonated most strongly with the TT team. Concept two was more in line with Design goal 2: Develop TT's CX capabilities. Concept one would rather be the next step for TT when CX capabilities are well developed. As one consultant enthusiastically shared "I like the potential the CX playbook has to engage the whole team. This is interesting not only for me or [consultant] but also those who can be a bit resistant to CX."

As one consultant mentioned, "The winning concept should empower all of us to grow and become confident CX champions."

Concept one would have been a promising concept for a team that was already familiar with CX. Concept two fitted TT better as there are currently no CX projects, meaning that the framework wouldn't be used. Concept two was considered a great first step to motivate TT (Design goal 1), and to creating a solution that helps TT consultants develop their CX capabilities (Design goal 2).

# CO-CREATION SESSION WITH VODW CONSULTANTS

A second creative session was held with three VODW consultants, who had worked with a TC team before. Different from the first creative session with SPD students, this creative session's goal was to further develop the final concept. The moment the session was held there was openness to change and space for adjustments. The session is held with VODW consultants because they are experts in the field of CX, as well as customer-centric design. For this session, a plan consisting of four parts was organized to make it efficient and to make it fit in the 1.5-hour time span available.

To start, a presentation that included the insights from the research phase and the design brief created in Chapter 5 was given. The chosen concept was presented and there was room for questions and comments to make sure everyone understood the concept on the same level.

The content of the chosen concept was discussed to discover the best way to introduce TT to CX. The goal was to further develop a CX playbook for TT that fits the needs and wants of the team. As the term playbook did not strongly appeal to TT, a new term had to be reassessed. Additional tools were discussed and collected on post-its in Miro. Attention was drawn to how TT would use the final concept and how it woulld fit into their workweek. As members of the TT team are different from each other, the final concept will be used differently per consultant as well. Taking in mind the different users and reasons to use the final concept, helped with eventually creating a final concept that serves the different TT consultants.

By creating six different axes in Miro (Figure 23), various ideas for different users were made, matching the personas created in Chapter 4.6. Axis number 2 had the best match with the three consultants. While the other axes were too vague, axis number 2 could clearly distinguish three different types of users.

Lastly, different ways to test and validate the final concept were analyzed. One way to test the final concept can be done by A/B testing. A/B testing shows different versions of a product to a variety of people and measures which variation is the most effective at engaging users (Siroker & Koomen, 2015). Appendix H contains the setup for the creative session, including the axis created during the brainstorming session. How the personas in the axis interact with the chosen concept can be found in Appendix I and J.

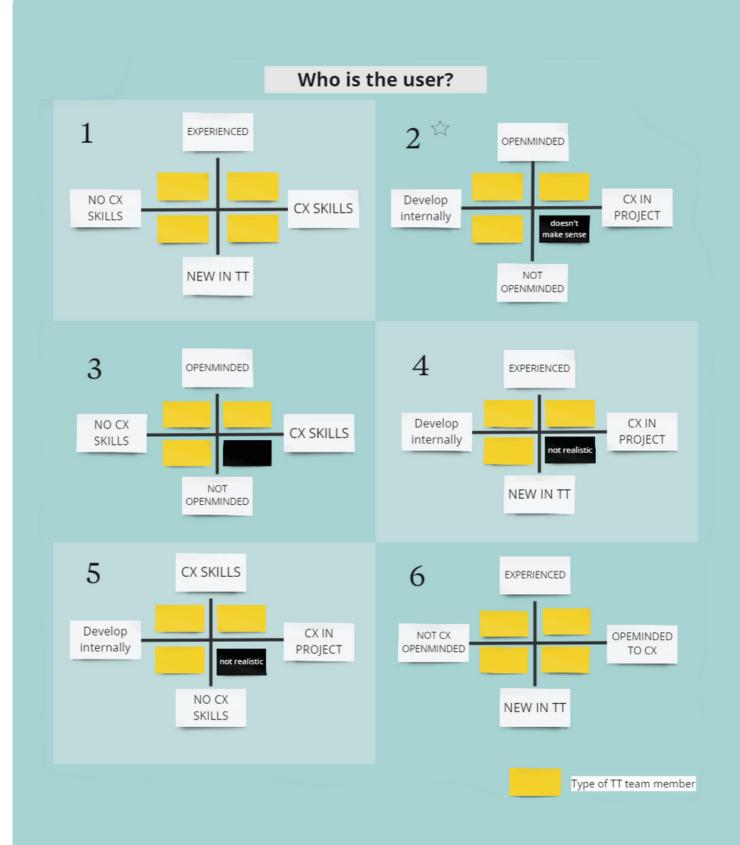


Figure 23: Glimpse of the axes made to distinguish different users

#### Key Takeaways: Developing the Solution

• Creative sessions with SPD students and VODW consultants promoted the development of the final concept, involving a collaborative design approach. • New ideas were generated with fellow SPD students. The creative session included brainstorming, rolestorming, and individual ideation, resulting in the development of three concepts for TT. • The ideas generated from the creative session were continuously developed and tailored to TT's needs through iterative meetings with TT consultants and managers. These meetings focused on practicality, compatibility, and implementation strategy to refine the concepts further. • With feedback from TT team members and the use of a Harris profile, one concept was chosen. • A second creative session took place with VODW consultants to further develop the chosen concept. Discussions included the context, personas, collaboration between the two teams, and ways to test and validate the final concept.

# Delivering the Solution

In this chapter, the final concept is presented. Future steps for TT are described. The development of the final concept, the first step, called The CX Innovator's Guide is presented.



#### **CHAPTER 7.1**

#### APPROACHING THE FUTURE

To be able to reach the future vision, TT needs to take several steps. By creating a roadmap for TT the first step towards the future vision was determined, resulting in the final concept for the team. The final concept for TT is established after highly iterative development process documented in Appendix J. The final concept is a tool that guides TT through its first interaction with CX. It combines various components that were discussed in earlier chapters of this thesis. For example, the findings from Chapter 3 where the use of personas and customer journeys were found as a way to enhance the CX. Also, the CX Guide keeps into account that the TT team has little to no knowledge about CX, which was discovered during the expert interviews in Chapter 4. The CX Guide's primary structure is based on the stated design goals and requirements from Chapter 5. With the insights gained from the creative sessions with SPD students and VODW consultants in Chapter 6, the content of the CX Guide was defined.

The realization of the future vision will be done in several steps. Input from TT during various meetings was used to map future steps that aim to guide TT towards the future vision. Two consultants and one manager were involved in mapping these future steps. In consultation with them, a holistic strategic plan is composed which shows long-term goals according to three horizons. Rather than having a short-term roadmap, the future steps stimulate the consultants within the TT to be inspired and imagine the future vision. Future milestones will encourage TT to get to this future vision.

Figure 24 shows the strategic plan and future milestones for TT. The following section explains the horizons in more detail.

#### Horizon 1: Explore CX

In the first horizon, TT focuses on exploring CX to prepare for expansion in the second horizon. TT's startingpoint and their first real touchpoint with CX will be a tool that guides TT through CX principles and the development of CX capabilities. This *CX Guide* will be further explained in Chapter 7.2. At the end of Horizon 1 in 2024, TT has explored CX's meaning and the role it plays in their work. The TT team will receive training and workshops about creating personas and customer journeys from VODW using the CX Guide. These trainings will prepare them to use the developed CX capabilities in future projects.

While there are currently 28 consultants, the team will recruit new consultants to join the team, focusing on people with a CX background. In parallel, TT's projects in the first Horizon still focus merely on the transformation of backend systems.

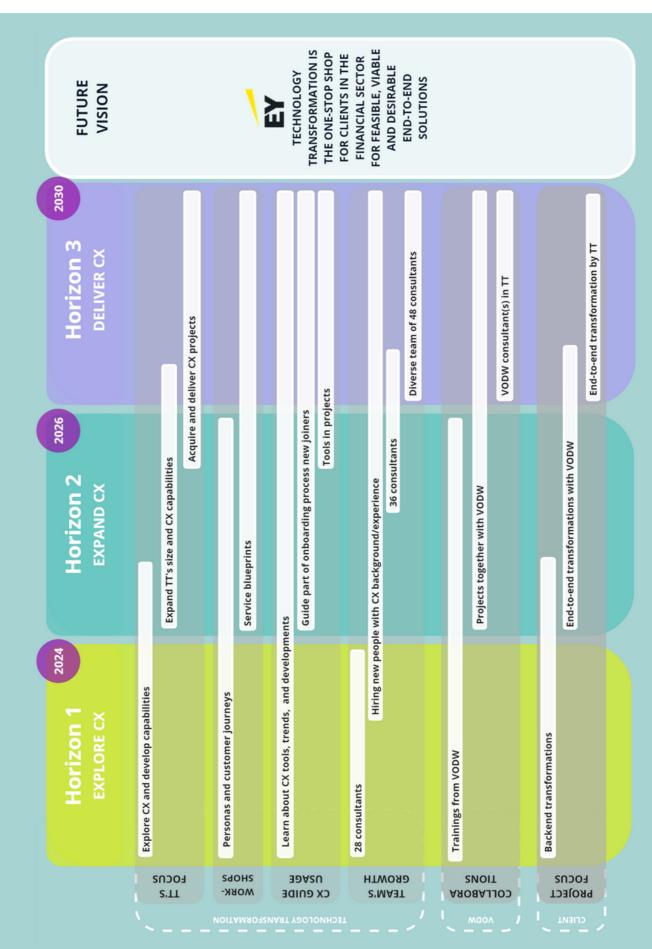


Figure 24: Future steps according to the three horizons

### Horizon 2: Expand CX

In the second horizon, TT focuses expanding the team's size and CX capabilities. This phase is the transition between the first and the third horizon where TT works on its growth and gains more CX capabilities. At the end of 2026, TT has developed and enhanced capabilities. When CX hiring consultants and managers, the team has focused on new joiners who have CX-related work experiences or backgrounds. The team will have 36 members by the end of 2026. VODW is still giving workshops in the second Horizon. TT consultants who have successfully done the persona and customer journey training receive training in service blueprints. These trainings are done by both VODW and externally hired professionals as these trainings require certain technical skills and knowledge about the financial sector. In parallel, the team's projects are still mostly focused on backend transformation. Some projects are in collaboration with VODW where they focus on full end-to-end transformations. These projects are the first ones in which TT works on transformations with frontend development. By collaborating with VODW, the team becomes familiar with full end-to-end solutions. The CX Guide is being used both within the team and at the client. At the client, tools are used during projects for creating personas, customer journeys, and service blueprints. Internally, the CX Guide has become part of the onboarding process. The CX Guide gets updates with new technology trends and developments and is used to learn about CX tools. Since more projects are done in collaboration with VODW the two teams establish a strong partnership.

### Horizon 3: Deliver CX

The third Horizon is the final phase of TT towards the future vision. At the end of 2030, the team will be a trustworthy advisor for endto-end solutions, from backend to frontend. The team is the one-stop-shop for companies in the financial sector for feasible, viable, and desirable IT systems. TT has focused on acquiring and delivering CX projects, gaining the client's trust. As the team has been spending time gaining new skills and acquiring new kinds of projects and new clients, the team has grown to a total of 48 members. This number is based on the long-term goals of TT, that were set in 2022. The consultants and managers have diverse backgrounds and previous work experiences to sharpen ideas and to be able to accept diverse projects. CX training is given by TT team members to new joiners. With the acquired capabilities and skills, TT has become a technology team that is able to deliver endto-end transformation projects. The CX Guide is a document used to onboard new joiners and it's used to document CX trends and developments. The increased collaboration with VODW and growth in CX projects has led to TT hiring VODW consultants as part of TT full-time. These VODW consultants have technical affinity and are the bridge between technology and design. With that, Technology Transformation has reached its goal of becoming a trustworthy advisor for viable, feasible, and desirable end-to-end solutions.

### **CHAPTER 7.2**

### INTRODUCING THE CX INNOVATOR'S GUIDE

This section presents the starting point for TT that provides guidance in starting the realization of the future vision and the further development of CX capabilities within the team. The CX Guide serves as a concrete starting point for TT in the first horizon.

When interviewing the TT team, a shared motivation to learn more about CX and to do CX-related projects in the future was found. Nevertheless, there is little understanding about this topic in the team and there are currently no tools that could help TT. CX is a broad concept, and the team needs to understand what it means within the financial sector. The design goals for this project are motivating TT consultants to explore CX and develop CX capabilities. Hereby I envision a future where TT is able to deliver end-to-end solutions, that are desirable, viable, and feasible while being a trustworthy advisor for their clients. To achieve the design goals and take the first step toward the future vision I designed The CX Innovator's Guide (Figure 25). Find the full digital Guide by scanning the QR code or by clicking here.

The CX Guide is designed to create a common understanding of the concept, showcase CX developments in the financial sector, and equip the team with CX tools. The purpose of the CX Guide is to strengthen the team by extending its capabilities and approaching their client's problems with a customer-centric approach. The CX tools provided in the CX Guide will help the team to give more customer-centric advice to their clients. The next sections offer a glimpse into the content and purpose of the step-by-step guide.



**Scan me** to experience the CX Guide

### Part 1: Introduction of CX

In the first part, the concept of CX is introduced, providing an overview of its significance and relevance for both clients and customers. It grabs the attention of the consultants by using numbers and figures from research about CX. It lays the foundation for technology consultants to understand the importance of CX in their projects.

### Part 2: Introducing VODW

This part presents an introduction to VODW. It highlights their expertise and the value they offer to their clients. By explaining what VODW offers to its clients, TT can better understand how VODW can help them with CX-related client work. VODW's alliances are highlighted, which are similar to TT's, creating resembles between the teams. It is concluded with two examples of CX projects. The confidential success stories are about VODW transforming the CX of a bank and an insurance company, which therefore is only visible to EY employees.

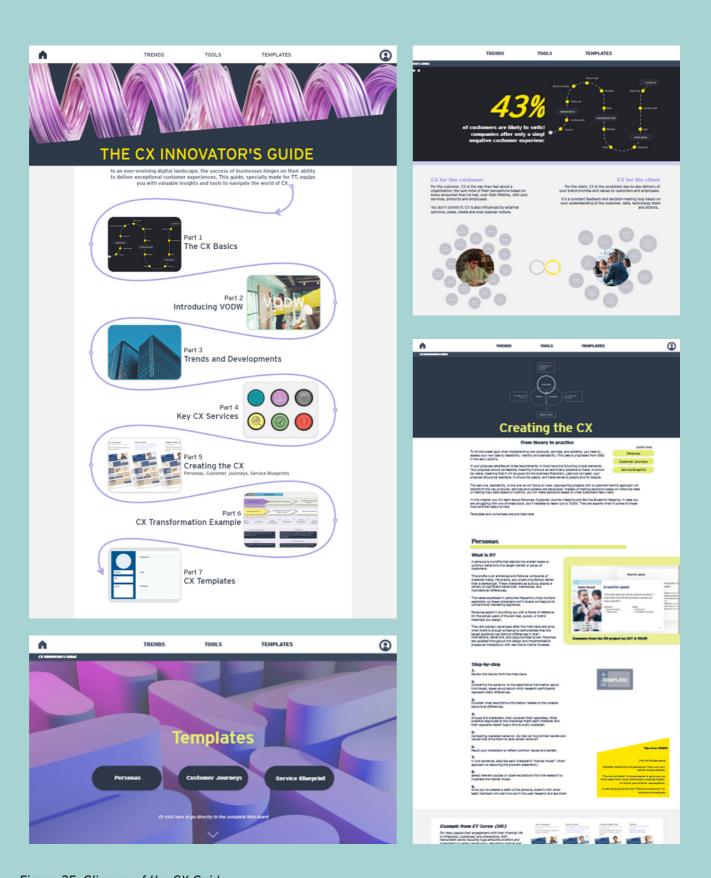


Figure 25: Glimpse of the CX Guide

### Part 3: CX Market Research

In this part, the guide delves into the current state of CX in the financial sector. It starts with CX in today's market and the impact it has on businesses. This is followed by current CX trends, developments, and disruptive technologies in the financial sector. It ends with a list of key systems, products, and solutions that enhance the CX of businesses. Technology consultants gain insights into the market trends and developments, providing a context for their CX projects in the financial industry.

### Part 4: Key Customer Experience Services

Here, the guide outlines the key CX services that the team could offer. Examples of different CX services that can be provided by TT. In this part, CX-related challenges faced by clients are highlighted. These challenges are opportunities for TT to help out their clients and it gives TT an idea of how a CX challenge and service offering would look like. Even though the challenges are very different from each other, they are still related to CX.

### Part 5: Creating the CX

This part focuses on the practical aspects of CX. TT consultants are guided through the process of creating personas, customer journeys, and service blueprints. Each tool includes a comprehensive explanation, a step-by-step plan, tips from VODW, and one or more examples made by VOWD, EY UK, and EY UK Seren (The UK version of VODW) during past projects.

### Part 6: CX Transformation Example

A comprehensive CX transformation example from a TC team from EY UK is presented in this chapter. An example is a recent project done at a British insurance company. Here, the use of customer journeys provides a framework to illustrate future capabilities and linkages to the technical architectures. With the future state journey map, the desired customer experience is highlighted. TT consultants can inspiration and learn from this real-life case study to apply similar approaches in their projects. The information in this part is confidential, and therefore only visible to EY employees.

### Part 7: CX Tools

In the final chapter, templates from the CX tools from part 5 are provided. These tools aid TT consultants in efficiently implementing CX practices in their projects, streamlining their work, and enhancing their overall performance. Here, a link to a Miro board is included. This link leads to a board with templates that can be adjusted and also include examples from old projects from different EY offices. Therefore, this board is accessible for EY employees only as well.

By making CX relevant and understandable for TT, the consultants will be more likely to be motivated to work on their CX capabilities. With the CX tools and the additional step-by-step plans, examples, and templates, TT can develop its CX capabilities.

### **CHAPTER 7.3**

### IMPLEMENTATION PLAN

After the creation of the CX Guide, ar implementation plan is needed. The reason for making this plan is to guarantee the success of the project. It clarifies what needs to be achieved with a clear timeline and milestones. The introduction and integration of the CX Guide within TT is structured to maximize engagement and effectiveness.

The CX Guide will be launched near the end of 2023 during the team's monthly meeting. Once a month, on a Friday, TT has a monthly meeting where everyone comes to the office to join this meeting physically. During this meeting, important updates about (upcoming) projects are shared. This occasion will unveil the CX Guide and its intrinsic value in enhancing TT's work. To ensure accessibility, digital copies will be widely distributed via email and MS Sharepoint, and the CX Guide will be readily available on EY's intranet.

In the weeks following, knowledge-sharing sessions focusing on CX trends and developments will be conducted with a comprehensive approach, aiming to engage every team member actively. This approach helps identify if there is any resistance to change from certain consultants. This session facilitates addressing the underlying causes and enhances the relevance of CX for TT.

In Q2 and Q3 of 2024, in-person training sessions and workshops are planned in collaboration with VODW. Consultants from VODW will train TT in CX, personas, customer journeys, and optional in service blueprints using the CX Guide. These sessions will highlight the advantages of applying CX principles within their project contexts.

To maintain the CX Guide and keep it up to date, distinct responsibilities will be assigned. An experienced manager will oversee the Guide, while a consultant will be tasked with continuous updates, including the incorporation of diverse examples from prior CX projects across various EY offices. To foster ongoing engagement and support, TT's CX channel on MS Teams will be used. Here, TT consultants can exchange experiences and seek clarifications related to the Guide and its implementation.

CX certificates will be introduced to motivate active engagement with the CX Guide. EY is committed to the development of its employees. Therefore, the company works with certain certificates. Participation in training and workshops is rewarded with certificates. These certificates can be used to work on projects where certain skills are required. Simultaneously, TT's and VODW's partner will focus on exploring new client opportunities and acquiring CX projects, possibly involving a CX pitch deck to showcase TT's and VODW's expertise to clients.

Key performance indicators (KPIs) will measure the adoption and impact of the CX Guide, such as the number of consultants utilizing CX tools. This data will be collected and analyzed by the responsible consultant and manager, enabling timely adjustments to the implementation strategy.

Lastly, an open feedback loop with TT will be maintained to continuously gather their insights and experiences with the CX Guide. The feedback will be invaluable in driving enhancements to both the CX Guide itself and the broader implementation process.

### **CHAPTER 7.4**

### RESOURCES NEEDED FOR IMPLEMENTATION

A plan is not enough to drive change. The right resources are needed to reach future goals. To ensure TT's growth, resources are needed to develop the new CX capabilities. These resources are:

- Money for further and professional development of the CX Guide
- Money for training sessions and workshops from external experts
- Time from the consultants
- · CX experts to hire
- CX training from VODW
- Certifications

The time of the consultants may initially be a problem, but as the value of CX in today's market has increased, this issue is likely to be resolved. For advanced CX capabilities, the contribution of VODW, as well as external experts will be needed. The training budget may be used to fund the formation of CX training and workshops, and to compensate consultants for their time spent training. Resources can also be new hires. TT can hire people who have experience with CX. They share their knowledge when working together with colleagues on client projects. The certificates, as mentioned in Chapter 7.3, can be developed within EY to stimulate TT consultants to develop their CX capabilities.

### Key Takeaways: Delivering the Solution

- The final concept for TT, The CX Innovator's Guide was established through an iterative process involving prototyping, and the use of personas and customer journeys. Three personas were created to understand the target audience, representing different needs, capabilities, and attitudes towards CX.
- Customer journeys were developed from the personas to identify pain points and opportunities for the content of the CX Guide. The CX Guide aims to create a common understanding of CX, raise awareness about CX in the financial sector, introduce VODW's approach, and equip the team with CX tools and methods. The CX Guide is designed to cater to consultants with varying levels of knowledge and interest in CX, addressing their specific needs and expectations. The CX Guide serves as a starting point for TT to develop its capabilities and work towards delivering end-to-end solutions.

# 08.

# Testing & Evaluating

This chapter consist of two parts. First are the test sessions with both SPD students and later TT consultants. The design evaluation assesses the final concept, attempting to capture the value of the CX Guide.



### **CHAPTER 8.1**

### **EXTERNAL AND INTERNAL TESTING**

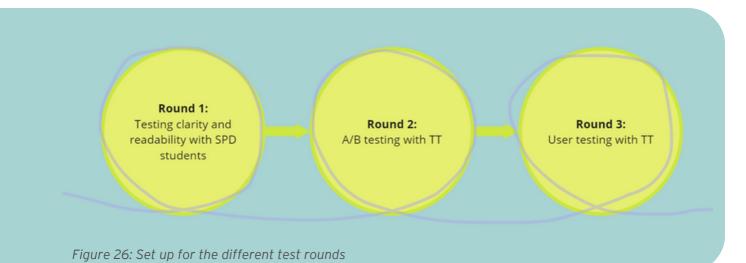
To test the final concept, three different activities were set up (Figure 26). The test sessions consist of different rounds including input from SPD students, A/B testing with TT, and user testing with TT. These sessions are aimed at testing the final concept and receiving feedback. Giving team members a sense of involvement in the development and improvement of the CX Guide will foster a sense of ownership and improve their performance.

The goals set up for the test sessions were:

- · Test the usability of the CX Guide
- Test which touchpoint is most liked by TT

The first validation round of the CX Guide was with SPD students to receive critical feedback from fellow designers. It were the same students who participated in the creative session described in Chapter 6.2. The presentation of the final concept deliberately provided minimal contextual information, aiming to evoke a natural response and minimize any potential bias influencing their opinions. The students engaged in assessing the CX Guide's clarity and readability, assuming it was being used within TT by people having little to no CX knowledge. The evaluation focused on the CX Guide's inherent coherence and user-friendly design, ensuring a seamless flow. The CX Guide's effectiveness in presenting new information clearly was facilitate covered. aiming to understanding of the essence of developing CX capabilities and the steps to achieve this goal.

"I see the potential of engaging this target audience. For some part you need to do a lot of scrolling or clicking which you can minimize, so make sure TT doesn't get bored." -SPD.3



The feedback received from the SPD students revealed their useful responses to the CX Guide. They reacted positively to the incorporation of design thinking tools -such as personas- tailored to the context of technology consultants. However, they also raised questions about the practical integration of new information into their regular workweek or project dynamics.

"I like how 'designer-ish' things are added, but it doesn't look like it's for designers like us which could scare people off, it seems very accessible for consultants." -SPD.1

A/B testing was conducted with four TT consultants to assess the interaction with the CX Guide. The consultants were provided with both a physical and a digital version of the Guide and were requested to provide feedback on their experiences. The physical version of the CX Guide was a printed-out booklet containing the exact same information and ratio between text and visuals as the digital version of the Guide.

The dynamic nature of the digital version, offering interactive elements and hyperlinks, was unanimously seen as a more engaging learning experience than the physical version.

On the other hand, one consultant did express reservations about the digital version for one reason:

"While the digital guide is more interactive right, I do get easily distracted by every email or Teams notification that comes in." -TT.1 The feedback collected indicated a clear preference for the digital version of the guide, suggesting its enhanced usability and compatibility with the consultants' workflow.

Five consultants from TT evaluated the final concept. One consultant was familiar with CX, but the others were not. In this way different perspectives were included, and diverse feedback was generated. The consultants are aware of the project from the beginning and some contributed during the concept development. The final design is presented in one-on-one meetings, whereas the focus is on testing the usability as well as the desirability, feasibility, and viability of the CX Guide.

At the start, the participating consultant were introduced to the CX Guide. There was room for questions and other discussions. Some small changes were suggested during this stage of the session.

"Personally, when looking at a blog post I want to go straight to the info, so when there is a lot of text, like under Personas: what is it? you could think about summarizing it in bullet points or highlighting some keywords, or add some colors to regain the attention of the reader." -TT.2

"The CX Guide feels overwhelming at first like it's trying to cover so much ground at once. If you would try to use it without ever the help of fellow colleagues or VODW, it will be less practical for our day-to-day work." - TT.5

In conclusion, the feedback from TT consultants shed light on the critical elements of usability, clarity, and engagement within the CX Guide. Their insights emphasized the importance of catering to diverse levels of CX knowledge and delivering content in a format that aligns with their work habits.

During this session, participants were asked to give their opinion on the usability of the CX Guide and their expert opinion on this new topic 'CX'. One consultant commented on the flow of the Guide and that the use of it can be designed a little more intuitively:

"It looks very good and the content hits the spot! If it's supposed to be a guide, I would make it even more obvious of like where to click first and the steps like where to begin because there is much information, and it is well separated but like if a company wants a guide, they would want a step by step approach" -TT.3

"I think it's a great addition for out team's knowledge and it will definitely spark some interest in the whole CX domain." -TT.2 In summary, the feedback from TT consultants illuminated the need for improved intuitiveness in the CX Guide's design, affirmed its potential as a valuable knowledge resource, and provided clear direction for future training and resource development to develop their CX capabilities.

Lastly, the participating consultants were asked to explain which resources they thought would be needed to further develop their CX capabilities. The consultants expressed a favorable perception of the value of training service blueprints, online learning materials. illustrative examples. and sessions. knowledge-sharing Training workshops by a seasoned professional on how to implement CX in projects were suggested. Knowledge-sharing sessions organized for the whole TC together were suggested where updates, developments, and expertise from different teams can be exchanged.

### **CHAPTER 8.2**

### **DESIGN EVALUATION**

Calabretta (2016) developed an empirical research framework that is used to structure and provide an overview of the value the final solution offers. Value creation, value delivery, value capture, and value proposition are the four pillars of this empirical framework. Every pillar tries to provide answers to various questions in order to build a structured overview of the benefits the ultimate solution will offer TT. The questions are answered briefly and sharply in order to quickly illustrate this.

### Value proposition

• What solution does the concept offer?

The solution provides TT consultants entry points to learn about CX within technology transformations in the financial sector, as well as to discuss CX within the team. It also provides a step-by-step guide for developing CX capabilities.

- Who will use and buy the solution? Members of the TT team will use the solution right away. Clients will also indirectly use the solution when they choose to include CX elements in a transformation project.
- Why would users be interested in the solution?

TT (direct users): The solution provides direction and a structured methodology for adding CX in technological transformations. Also, VODW, indirect users, they can help with responding to current CX trends and developments to support TT.

The solution would be interesting to indirect users like other TC teams if they want to develop or improve their CX capabilities. Last, clients, also indirectly affected by the CX Guide, can be interested in the Guide when they don't have in-house CX capabilities.

• Why is the solution sustainable?

The CX Guide itself cannot be referred to as sustainable in terms of sustainable energy sources. Sustainable in terms of maintenance and updates...

How is sustainability measured?

Here, sustainability is in terms of maintenance. The sustainability can be measured by the amount of updates the CX Guide undergoes per quarter.

### Value creation

- Which stakeholders are involved?
  - o The Technology Transformation team
  - o The VODW team
  - o EY's clients

### Value delivery

 How does the solution reach its users and clients?

Through the steps described in the roadmap and during the onboarding process of new joiners, the solution reached TT. The assigned manager and consultant are responsible for this.

### Value capture

What are the solutions costs?

Time. To develop CX capabilities, TT must spend time in reading and using the CX Guide, as well as future workshops and training from VODW and other CX experts.

• What are the solution's revenues?

After receiving training, TT consultants are able to bill clients for the additional time they spend working on projects and incorporating CX elements. With their new capabilities, or when working on projects with VODW, TT will be able to attract new projects and clients in the future.

### Key Takeaways: Testing & Evaluating

- To validate the final concept different activities were organized The final concept received feedback from SPD students who gave feedback on the clarity and readability of the CX Guide. A/B testing and user testing were done within TT. The A/B tests concluded a preference for the digital version of the CX Guid The CX Guide itself is seen as a great addition to the team's knowledge and interest in CX. The feedback from TT consultants illuminated the need for improved intuitiveness in the Guide's design.
- Online learning materials were suggested as a favorable addition to the Guide

# Conclusion & Recommendation

In this chapter I will look back on my thesis project. I will reflect on the initial problem statement, how my project connects research and design, and I will end with a personal reflection.

### **CHAPTER 9.1**

### **DISCUSSION**

The initial goal of this thesis was to research how TT's service offering can be enhanced by expanding its consulting capabilities through the adoption of a customer-centric approach. Specifically, TT had to gain the ability to imagine the use of their IT systems through the eyes of different kinds of customers. Therefore, the research focused on CX, a broadly researched topic.

During the first part of the research, the literature research, it was found that CX is becoming increasingly important for companies in the financial sector, while they are lagging behind. This is for multiple reasons, some of them being the strict rules, regulations, and privacy issues. Nevertheless, a negative CX leads to customers switching service-providing companies.

While analyzing the TT team and interviewing different TT team members, it was found that they focus on viability and feasibility. The IT systems they advise and implement have to be viable for their client's business and the IT system itself should be technically feasible. The desirability is not taken into account. Since the team only deals with the implementation of the backend of IT systems, the team does not consider the CX. Later, the frontend gets designed by another team or company. The absence of a customer-centric approach during the development of the backend system affects the development of the frontend.

In order to expand the team's knowledge by developing CX capabilities, drivers and barriers had to be found on three levels: within the team, at the client, and for collaboration with VODW. VODW is a team of

design consultants with CX experts. It is the team that develops the frontend of IT systems based on the backend developed by TT. The discovered drivers and barriers include a motivation to develop CX capabilities, but also a resistance to change within the team. TT has no understanding of CX and what it means for their work. Both TT and VODW consultants are motivated to collaborate in the future as they need each other's capabilities, bureaucratic obstacles make it difficult to collaborate. At the client, CX is currently not a priority, but CX is becoming increasingly important. Rules and regulations make innovative and customer-centric technology hard to implement, causing resistance to change on the client's side.

Before defining the next step for TT, a future vision was created. This future vision focused on TT as a team that, in 2030, would be able to deliver end-to-end solutions and become the trustworthy advisor for their client to advise viable, feasible, and desirable transformations.

With the future vision in mind, the first step towards it was created for TT. TT first needs to understand what CX is and learn about CX tools. An iterative design phase, including two co-creation sessions, resulted in a CX Guide for TT. The CX Guide shows TT team members what CX means in the financial sector and tools to use to empathize with customers. The CX Guide includes step-by-step methods on how to make personas, customer journeys, and service blueprints. These CX tools are accompanied by examples from previous projects from different EY offices around the world.

Test sessions with both SPD students and TT team members showed a preference for the CX Guide in digital format. The digital version of the CX Guide will make it easier to keep it up to date with new CX trends and technology developments in the future. It was also concluded that the CX Guide fitted well with the team's knowledge. Finally, it was seen as the ideal first step for the team towards a future where CX projects are the team's work.

Looking back at the start of this project, the outcome was not the expected one. At the start, it was assumed that the TT team had some knowledge or skills concerning CX. It was an often mentioned topic during meetings and one that was seen as crucial for the team's work. In reality, the team did not really know what they were talking about. Only one team member had previous experience with CX, but for the other team members, it was just a buzzword. Besides, every team member had his or her own definition of CX. It was challenging to get everyone on the same page. Over the course of the project, it was discovered that not all team members were as motivated to learn about CX as they first seemed. It is currently a hot topic, but the development of new capabilities requires time and effort.

### Reflecting on the design statement

The design statement from Chapter 5.3 stated: "Develop a CX 'product' for TT consultants of all levels, that stimulates them to incorporate a customer-centric approach in their transformation projects and includes actionable customer experience tools which gives the consultants the opportunities to confidently consider all aspects during transformation projects, while being a proactive consultant who enables their client's IT systems to be user-friendly and future-proof."

It can be concluded that the CX Guide is suitable for TT consultants of all levels as the CX Guide starts with understanding and awareness about the topic before going into the CX tools. The CX Guide stimulates TT consultants to learn about the world of CX and incorporate CX tools in future projects. However, it is not proven if it can already be used on the client's side yet. My final concept does not directly improve the desirability of IT systems. It is the starting point of incorporating a customer-centric approach for making desirable IT systems. It also starts the conversation about CX with the client as TT learn about the importance of it.

### Reflecting on the design process

Looking back at the start of the project and the process of it since February, I can say that it wasn't like any other design project I have carried out at IDE. My project is one that is not solely in the design domain as it involves business aspects, but also aspects of change management. Certain design anthropology skills were needed as well. It felt as if I first had to become part of the TT team before I was able to design a product or service for them. As a result, a lot of time was put into the team and understanding their needs and way of working. Therefore, a lot of time was put into the Discover phase, which led to less time for the Develop phase. I was still pursuing the initial CX framework I had in mind during the first co-creation session. I came to the realization that I needed to let go of that idea in order to create the best possible product for TT during the second co-creation with VODW consultants. I gained perspective on resilience after switching from what I thought was ideal for TT to a new and more appropriate solution for the final concept. The different roles I can take on are something I've discovered through this process, and I believe that this is a quality of a strategic designer. I learned from this process that I can approach a complex problem analytically, synthesize data to produce useful information, turn the knowledge into an effective and appropriate solution, and create a product that is appropriate for the given situation.

### Relevance for the field of design

The relevance of design in both technology consulting and the financial sector is demonstrated by this thesis. It demonstrates that applying design thinking and employing a design approach can be helpful when wanting to become more robust or future-proof even in the realm of IT and finance. It highlights that it is achievable to develop genuinely helpful services and strategies as a strategic designer, who takes up the challenge to reframe the given problem and take a people-oriented approach towards the initial problem.

### Relevance for EY and TT

Enhancing the CX of IT systems in the financial sector is a growing market and an undiscovered opportunity for TT. TT team members have discovered its relevance and importance, seeing the opportunities it has for their work. The CX Guide can be used within TT, but it also has the potential to be used at the client. Here, it is used to showcase to the client the relevance of CX and how TT plans to translate it to the current project. My research contributes to TT with 28 employees, but it also holds the possibility to be used in other TC teams (in total approx. 140 employees) within EY in the Netherlands.

## CHAPTER 9.2 LIMITATION

Here, the main limitations encountered in this thesis are discussed. It is important to acknowledge that no thesis is completely flawless or inclusive of every single aspect.

### Time constraints

Due to limited time, the CX tools in the CX Guide did not delve deeper into the different financial institutions and their unique characteristics. This resulted in more generalized step-by-step plans to making personas, customer journeys, and service blueprints.

### Research sample and selection

The research is limited due to the selection of interviewees. The sample strategy focused on selecting TT team members from different levels. They were not selected randomly but by interest. This means that TT team members interested in CX were more likely to participate in the interviews than team members who weren't interested in CX. By using this strategy, further (design) decisions were made on the basis of the interviewed TT team members' interest in CX.

### The size of the scope

The thesis generally focuses on customer experience, which is a very broad topic. Some aspects of CX can be very specific for each individual case or project. This made it difficult to find specific research findings, for insurance companies or pension funds, or case studies from other EY offices. CX covers all customers, not only a financial institution's customer, but also the employees. The size of the scope limits the possibility to focus on one certain target customer and perhaps creates wide-ranging design results.

### Complexity of the scope

One significant limitation encountered during the course of this thesis pertains to the complexity of the scope. EY, with all its different teams, is a large and multifaceted company, operating within a dynamic environment that involves a multitude of stakeholders, each with their own unique interests. The thesis focused on CX, as well as desirability and customer-centricity. TT had to develop CX capabilities to make a more customer-centric backend system, so the desirability of the frontend will be more desirable for different kinds of customers. As the CX Guide can have a positive impact on the TT team members, it is unknown what impact it has on the client, and on the frontend systems.

### **CHAPTER 9.3**

### RECOMMENDATION

Future goals and starting points for additional development were established using the feedback gathered during testing activities with TT. It is advised to take these suggestions into consideration for future growth and development of the CX Guide and the TT team.

### Video training

The CX Guide has step-by-step plans and shows examples of from previous CX-related work. To positively enhance the accessibility of the CX Guide, it is recommended to include videos. These videos will be made by CX experts who give a detailed explanation of each CX tool and how to use them during projects. These videos will guide consultants through the creation of a persona, customer journey, or service blueprint. Because the videos can be watched at any time and everywhere, it will make the CX Guide more user-friendly. Watching a video of someone explaining is easier than reading about it and doing it all by oneself.

### CX pitch deck

An essential component to be developed in the future is the CX pitch slide deck. This slide deck will assist employees in effectively conveying to their clients the significance of prioritizing CX. Without a readily available slide deck, pitching the concept to clients can prove challenging. Consequently, creating a comprehensive deck that incorporates auidelines. concise facts, and potential benefits will greatly facilitate implementation of the solution.

### Hiring a CX expert

To be able to deliver end-to-end solutions, and cover the additional workload, new people are needed in the team. This project focuses on the first step for TT to take, and even though the consultants have to develop CX capabilities, CX experts are needed as well. The current TT consultants are experts in backend IT systems. New people should be hired for the development of frontend IT systems.

### Future research

The current CX Guide is focused on the financial sector as a whole. For future research it is recommended to explore and dive deeper into one kind of financial institution. For example, there is a lot going to change with the new pension law in the Netherlands. With the help of pension experts, one can research the consequences of this new law and how pension funds can adjust to this new law and build customer-centric IT systems.

### **CHAPTER 9.4**

### PERSONAL REFLECTION

Reflecting on the biggest challenges during this project

### Systematically working

Working systematically was a personal challenge during my thesis project. After the first two months, I started to struggle with maintaining a structured approach and effective time management. It was difficult to stay organized and keep track of multiple tasks and deadlines. Unfortunately, this struggle resulted in delays in the project. However, this project taught me a lesson or two about the importance of discipline and planning. I learned to implement strategies such as creating detailed schedules, reaching out to fellow SPD students, setting priorities, and breaking down tasks into manageable chunks. By embracing a systematic approach, I was able to overcome my initial difficulties and improve my overall efficiency in project execution.

### Stakeholder management

Another learning experience was stakeholder management. It proved to be a delicate balancing act. On one hand, I had to meet the expectations of TU Delft, ensuring that the project aligned with the academic requirements. On the other hand, TT had its own set of expectations, seeking outcomes that aligned with its goals and objectives. Additionally, I also wanted to please TT's clients and ultimately satisfy their endcustomers. Juggling these different stakeholders' needs was challenging, as their priorities often diverged. However, this experience taught me the importance of prioritizing, structuring, effective communication, and compromising, to deliver an outcome that satisfied all stakeholders.

### Designing for consultants

One of the biggest challenges during this project was designing for consultants whose work differs per client and per project. The thing is, these consultants all have different roles and work on various projects for different clients. This made the whole project very complex. I had to come up with a design that could suit their daily changing needs and work. I would compare it to trying to hit a moving target. When I thought that I finally discovered a new insight, I also found the opposite to be true. Since the consultants work on different projects, they could have totally different answers to the same question. But still, it was a great learning experience. I had to get creative and think outside the box to create a design that could adapt to different scenarios. It definitely challenged me, but I learned a lot about designing for complex situations.

### REFERENCES

Accenture. (2021, February 22). Customer Experience Index. Accenture. Retrieved on April 5, 2023, from https://www.accenture.com/us-en/insights/song/customer-experience-index

Badgett, M., Boyce, M. S., & Kleinberger, H. (2007). Turning shoppers into advocates. IBM Institute for Business Value, 35(3), 352-369.

Barbu, C. M., Florea, D. L., Dabija, D. C., & Barbu, M. C. R. (2021). Customer experience in fintech. Journal of Theoretical and Applied Electronic Commerce Research, 16(5), 1415-1433.

Becker, L., & Jaakkola, E. (2020). Customer experience: fundamental premises and implications for research. Journal of the Academy of Marketing Science, 48, 630-648.

Bhattacharya, C., & Sinha, M. (2022). The Role of Artificial Intelligence in Banking for Leveraging Customer Experience. Australasian Accounting, Business and Finance Journal, 16(5), 89-105.

Bhattacherjee, A. (2001). "Understanding information systems continuance: An expectation-confirmation model." Mis Quarterly: 351-370.

Bichard, J. A., Coleman, R., & Langdon, P. (2007). Does my stigma look big in this? Considering acceptability and desirability in the inclusive design of technology products. In Universal Acess in Human Computer Interaction. Coping with Diversity: 4th International Conference on Universal Access in Human-Computer Interaction, UAHCI 2007, Held as Part of HCI International 2007, Beijing, China, July 22-27, 2007, Proceedings, Part I 4 (pp. 622-631). Springer Berlin Heidelberg.

Blank, S., & Dorf, B. (2012). "The startup owner's manual: The step-by-step guide for building a great company. K & S Ranch." Inc, California. PubMed Abstract OpenURL (2012).

Bleier, A., Harmeling, C. M., & Palmatier, R. W. (2019). Creating effective online customer experiences. Journal of marketing, 83(2), 98-119.

Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: what is it? How is it measured? Does it affect loyalty?. Journal of marketing, 73(3), 52-68.

Calabretta, G., Gemser, G., & Karpen, I. (2016). Strategic Design: Eight essential practices every strategic designer must master. Bis publishers.

Cambridge Dictionary. (n.d.). Touchpoint. In Cambridge Dictionary. (n.d.). Retrieved February 27, 2023, from https://dictionary.cambridge.org/dictionary/english/touchpoint

Carr, N. (2020). The shallows: What the Internet is doing to our brains. WW Norton & Company.

Chauhan, S., Akhtar, A., & Gupta, A. (2022). Customer experience in digital banking: A review and future research directions. International Journal of Quality and Service Sciences.

Cheikh-Ammar, M., & Barki, H. (2012). Technology desirability.

Cooper, A. & Reimann, R. M. (2003). About Face 2.0 The Essentials of Interaction Design. John Wiley & Sons. 2nd edition.

Cooper, A. (1999). The inmates are running the asylum: Why hightech products drive us crazy and how to restore the sanity. Ind.: Sams. Indianapolis, 1999.

Crowne, M. (2002, August). Why software product startups fail and what to do about it. Evolution of software product development in startup companies. In IEEE International Engineering Management Conference (Vol. 1, pp. 338-343). IEEE.

Dennehy, D., Kasraian, L., O'Raghallaigh, P., & Conboy, K. (2016). Product market fit frameworks for lean product development.

Ebert, C., & Duarte, C. H. C. (2018). Digital transformation. IEEE Softw., 35(4), 16-21. Retrieved March 21, 2023, from https://www.researchgate.net/profile/Carlos-Henrique-Duarte-2/publication/326241618\_Digital\_Transformation/links/5b4d14f3aca27217ff9b05e4/Digital-Transformation.pdf

Ernst & Young Global Limited. (2020). Three focus areas to help banks reframe their future. EY Global. Retrieved March 18, 2023, from https://www.ey.com/en\_gl/banking-capital-markets/three-focus-areas-to-help-banks-reframe-their-future

Ernst & Young Global Limited. (2021). How can banks transform for a new generation of customers? EY Global. Retrieved March 18, 2023, from https://www.ey.com/en\_gl/banking-capital-markets/how-can-banks-transform-for-a-new-generation-of-customers

Ernst & Young Global Limited. (2022). Nine customer types defining the next wave of insurance. EY America. Retrieved March 3, 2023, from https://www.ey.com/en\_gl/insurance/nine-customer-types-defining-the-next-wave-of-insurance

Ernst & Young Global Limited. (n.d.). Customer Experience in Consulting. EY The Netherlands. Retrieved March 2, 2023, from https://www.ey.com/en\_nl/consulting/customer-experience

EY VODW. Business Transformers. (n.d.). EY - Nederland. Retrieved July 18, 2023, from, https://www.ey.com/nl\_nl/ey-vodw

Følstad, A., & Kvale, K. (2018). Customer journeys: a systematic literature review. Journal of Service Theory and Practice.

George, C. (2023). Your Guide to Collaborative Design. Creately Blog. Retrieved on May 31st, 2023, from <a href="https://creately.com/blog/diagrams/your-guide-to-collaborative-design/">https://creately.com/blog/diagrams/your-guide-to-collaborative-design/</a>

Glaser, B. G., Strauss, A. L., & Strutzel, E. (1968). The discovery of grounded theory; strategies for qualitative research. Nursing research, 17(4), 364.

Hoekstra, S. (2023). Color Column: Violet. Nix Sensor Ltd. Retrieved on July 3rd, 2023, from <a href="https://www.nixsensor.com/blog/color-column-violet/">https://www.nixsensor.com/blog/color-column-violet/</a>

Hoyer, W. D., Kroschke, M., Schmitt, B., Kraume, K., & Shankar, V. (2020). Transforming the customer experience through new technologies. Journal of interactive marketing, 51(1), 57-71.

IBM Corporation. (2021). Personalization, platforms, and data-designed offerings. The new generation of insurance. IBM Corporation USA. Retrieved March 18, 2023, from https://www.ibm.com/downloads/cas/D6DVQMGP

IDEO Design Thinking. (n.d.). IDEO | Design Thinking. Retrieved September 6, 2023, from https://designthinking.ideo.com/

Junior, P. T. A., & Filgueiras, L. V. L. (2005). User modeling with personas. In Proceedings of the 2005 Latin American conference on Human-computer interaction (pp. 277-282).

Keller, K. L. (1993), "Conceptualizing, Measuring and Managing Customer-based Brand Equity," Journal of Marketing, 57 (January), 1-22.

Kumar, K. N., & Balaramachandran, P. R. (2018). Robotic process automation-a study of the impact on customer experience in retail banking industry. Journal of Internet Banking and Commerce, 23(3), 1-27.

Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. Journal of marketing, 80(6), 69-96.

Leone, R. P., Rao V. R., Keller, K. L., Luo, A. M., McAlister, L., & Srivastava, R. (2006), "Linking Brand Equity to Customer Equity," Journal of Service Research, 9 (November), 125-38 Maklan, S., & Klaus, P. (2011). Customer experience: are we measuring the right things?. International Journal of Market Research, 53(6), 771-772.

Mbama, C. I., & Ezepue, P. O. (2018). Digital banking, customer experience and bank financial performance: UK customers' perceptions. International Journal of Bank Marketing.

Mbama, C. I., Ezepue, P., Alboul, L., & Beer, M. (2018). Digital banking, customer experience and financial performance: UK bank managers' perceptions. Journal of Research in Interactive Marketing, 12(4), 432-451.

McKinsey & Company (2021). Insurance 2030—The impact of AI on the future of insurance. McKinsey & Company. Retrieved April 8, 2023, from https://www.mckinsey.com/industries/financial-services/our-insights/insurance-2030-the-impact-of-ai-on-the-future-of-insurance

McKinsey & Company. (2021). What is CX? McKinsey & Company. Retrieved March 3, 2023, from https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-cx

Meyer, C., & Schwager, A. (2007). Understanding customer experience. Harvard business review, 85(2), 116. Retrieved March 25, 2023, from https://idcexed.com/wp-content/uploads/2021/01/Understanding Customer Experience.pdf

Miaskiewicz, T., & Kozar, K. A. (2011). Personas and user-centered design: How can personas benefit product design processes?. Design studies, 32(5), 417-430.

Mullins, J. W., & Komisar, R. (2009). "Getting to plan B: Breaking through to a better business model." Harvard Business Press.

Orton, K. (2019, 26 maart). Desirability, Feasibility, Viability: The Sweet Spot for Innovation. Medium. Retrieved June 26, 2023, from https://medium.com/innovation-sweet-spot/desirability-feasibility-viability-the-sweet-spot-for-innovation-d7946de2183c

Parasuraman, A., Zeithaml, V. A., & Berry, L. (1988), "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality," Journal of Retailing, 64 (1), 12-40.

Parise, S., Guinan, P. J., & Kafka, R. (2016). Solving the crisis of immediacy: How digital technology can transform the customer experience. Business Horizons, 59(4), 411-420.

Park, M. (2023). Pension Fund. Corporate Finance Institute. Retrieved April 10, 2023, from https://corporatefinanceinstitute.com/resources/capital-markets/pension-fund/

PricewaterhouseCoopers. (2018). Experience is everything: here's how to get it right. PwC. Retrieved April 11, 2023, from

https://www.pwc.com/us/en/services/consulting/library/consumer-intelligence-series/future-of-customer-experience.html

PricewaterhouseCoopers. (2023). Payments 2025 & beyond. PwC Global. Retrieved April 9, 2023, from https://www.pwc.com/gx/en/industries/financial-services/publications/financial-services-in-2025/payments-in-2025.html

Rijksoverheid. (2022). Pensioenakkoord: een transparanter en persoonlijker pensioenstelsel. Pensioen | Rijksoverheid.nl. Retrieved April 5, 2023, from https://www.rijksoverheid.nl/onderwerpen/pensioen/toekomst-pensioenstelsel

Ritter, S. M., & Mostert, N. M. (2018). How to facilitate a brainstorming session: The effect of idea generation techniques and of group brainstorm after individual brainstorm. Creative Industries Journal, 11(3), 263-277.

Rolestorming, Product Marketing, Rick Griggs, Quid Novi, Napoleon, Mastery Academy, Creativity, Problem Solving, VanGundy, MindTools, RE Griggs, R.E. Griggs, Balanced Mastery. (n.d.). Griggs Achievement. Retrieved September 6, 2023, from https://www.griggsachieve.com/Rolestorming/

Shah, D., Kumar, V., & and Kim, K. H. (2014), "Managing Customer Profits: The Power of Habits," Journal of Marketing, 51 (November), 726-41.

Shankar, V. (2018). How artificial intelligence (AI) is reshaping retailing. Journal of retailing, 94(4), vi-xi.

Sharma, M., & Chaubey, D. S. (2014). An empirical study of customer experience and its relationship with customer satisfaction towards the services of banking sector. Journal of Marketing & Communication, 9(3).

Simonite, T. (2014). IBM Watson's Plan to End Human Doctors' Monopoly on Medical Know-How. MIT Technology Review.

Siroker, D., & Koomen, P. (2015). A/B testing: The most powerful way to turn clicks into customers. John Wiley & Sons.

Trivedi, J. (2019). Examining the customer experience of using banking chatbots and its impact on brand love: The moderating role of perceived risk. Journal of internet Commerce, 18(1), 91-111.

Van Boeijen, A., Daalhuizen, J., Van der Schoor, R., Zijlstra, J., (2014). Delft Design Guide. Macmillan Publishers.

Van der Vorst, R. (2017). Contrarian Branding: Stand out by camouflaging the competition. BIS Publishers.

Van Thiel, D., & Van Raaij, F. (2017). Explaining customer experience of digital financial advice. Economics, 5(1), 69-84.

Vegt, K. H. B. (2023). Designing a remote lifestyle intervention for older adults using empathic design (Bachelor's thesis, University of Twente).

Vergallo, R., & Mainetti, L. (2022). The role of technology in improving the Customer Experience in the banking sector: a systematic mapping study. IEEE Access.

Verhoef, P. C., Lemon, K. N., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, L. A. (2009). Customer experience creation: Determinants, dynamics and management strategies. Journal of retailing, 85(1), 31-41.

Wet toekomst pensioenen, Eerste Kamer Der Staten-Generaal. Amend. § 36.067. Retrieved April 6, 2023, from

https://www.eerstekamer.nl/wetsvoorstel/36067\_wet\_toekomst\_pensioenen

99