

Innovating the Customer Journey

**Implications for Managing the Customer Experience,
Customer-Company Interactions, and Trust**

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The President:

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Abstract

Companies are increasingly innovating the customer journey to improve the customer experience, to achieve a competitive advantage, and to increase customer loyalty. Innovation is gaining ever greater importance not least due to developments in digitization and technology and rising customer expectations. Companies' response is currently strongly trial-and-error based and calls for a more strategic approach to innovating the customer experience. This dissertation addresses this need. Its main objective is to identify success factors and management approaches for a strategic innovation of the customer experience through changes in the customer journey.

Customers form an experience during every interaction with a company. Innovating the customer experience means innovating these customer-company interactions in the customer journey. Changing the customer journey and customer-company interactions in novel ways is strongly driven by the company and subsequently affects the customer. Therefore, this dissertation investigates the effects and implications of innovating the customer journey by considering the company side, the interactions, and the customer side.

On the company side, the results of a single case study find five process attributes, five management practices, and insight transformation practices. Together, these constitute a triple focus that supports the development of relevant and applicable high-impact innovations. Considering customer-company interactions, a multiple case study shows that innovating such interactions takes the form of nine innovation strategies. These are best approached with a sequence perspective on the customer journey that emphasizes sections of related touchpoints. A conjoint experiment with customers moreover identifies distinct innovation preferences for two customer segments. On the customer side, trust is a key consideration and expert interviews indicate the presence of three trust enablers in digital interactions with customers. An experimental study with customers finds that trust is always affected by changes in the interaction strategy and that trust enablers need to be strategically approached to manage the impact of changes on trust.

Together, the results yield management implications for innovating the customer journey in order to improve the customer experience. A management plan suggests specific steps to approach such innovation in an organization. Moreover, avenues for further research in the field of customer experience management, customer journey management, and service innovation are suggested.

Zusammenfassung

Unternehmen verfolgen zunehmend die Innovation des Kundenprozesses, um das Kundenerlebnis zu verbessern und somit einen Wettbewerbsvorteil zu erzielen und die Kundenbindung zu erhöhen. Dies gewinnt nicht zuletzt aufgrund technologischer Entwicklungen, zunehmender Digitalisierung und wachsenden Kundenerwartungen an Bedeutung. Zurzeit beruhen die Ansätze von Unternehmen stark auf Versuch und Irrtum und es bedarf eines strategischeren Ansatzes zur Innovation des Kundenerlebnisses. Die vorliegende Dissertation adressiert diese Fragestellung mit dem Ziel, Erfolgsfaktoren und strategische Managementansätze für eine Innovation des Kundenerlebnisses durch Veränderungen im Kundenprozess zu erarbeiten.

Bei jeder Interaktion mit einem Unternehmen entsteht ein Erlebnis beim Kunden. Das Kundenerlebnis zu innovieren bedeutet, diese Interaktionen zwischen Kunde und Unternehmen im Kundenprozess zu erneuern. Solche Veränderungen werden stark von Unternehmen vorangetrieben und beeinflussen den Kunden. Daher betrachtet diese Arbeit die Effekte von Innovationen des Kundenprozesses von der Unternehmensseite, mit Blick auf die Interaktionen sowie von der Kundenseite.

Für die Unternehmensseite zeigen die Ergebnisse einer Einzelfallstudie einen dreifachen Fokus, bestehend aus fünf Prozessattributen, fünf Managementpraktiken sowie Praktiken zur Transformation von Erkenntnissen, die gemeinsam die Entwicklung relevanter und anwendbarer, wirkungsvoller Innovationen unterstützen. In Hinblick auf die Interaktionen zwischen Kunde und Unternehmen ergibt eine vergleichende Fallstudie neun Innovationsstrategien, die nahelegen, den Kundenprozess aus einer Sequenz-Perspektive zu betrachten, die jeweils Abschnitte zusammenhängender Kundenkontaktpunkte betont. Eine Conjoint-Analyse identifiziert darüber hinaus zwei Kundensegmente mit unterschiedlichen Präferenzstrukturen in Bezug auf die Innovationsstrategien. Auf der Kundenseite ist Vertrauen von zentraler Bedeutung und Expertengespräche zeigen drei vertrauensbildende Faktoren in digitalen Kundeninteraktionen auf. Ein anschließendes Experiment mit Kunden zeigt, dass Vertrauen grundsätzlich von Veränderungen in der Interaktionsstrategie beeinflusst wird, sodass die drei vertrauensbildenden Faktoren strategisch eingesetzt werden sollten, um den Einfluss der veränderten Interaktionsstrategien auf das Kundenvertrauen zu steuern.

Zusammengenommen liefern die Ergebnisse Managementeinsichten in die Innovation des Kundenprozesses sowie Handlungsempfehlungen für Manager mit konkreten Schritten für eine Innovation des Kundenerlebnisses. Darüber hinaus werden Forschungsempfehlungen in den Bereichen des Kundenerlebnismanagements, des Kundenprozessmanagements und der Service Innovation aufgezeigt.

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List of Abbreviations

ABIC	Adjusted Bayesian Information Criteria
acc.	according
AIC	Akaike Information Criterion
API	Application Programming Interface
ATM	Automated Teller Machine
AVE	Average Variance Extracted
B2B	Business-to-Business
B2C	Business-to-Consumer
BIC	Bayesian Information Criterion
CAIC	Consistent Akaike Information Criterion
CEM	Customer Experience Management
CEO	Chief Executive Officer
CFI	Comparative Fit Index
CI	Confidence Interval
COO	Chief Operating Officer
CRM	Customer Relationship Management
CSISG	Customer Satisfaction Index of Singapore
cust.	Customer
e.g.	exempli gratia (for example)
esp.	especially
et al.	et alii (and others)
etc.	et cetera (and the rest)
FAQ	Frequently Asked Questions
FinTech	Financial technology
GDP	Gross Domestic Product
Gen Y	Generation Y
H	Hypothesis
HB	Hierarchical Bayes
i.e.	id est (that is)
ibid.	ibidem (in the same place)
ICT	Information and Communication Technology
ID	Identifier
incl.	Including
IT	Information Technology
KMO	Kaiser-Meyer-Olkin
KPI	Key Performance Indicator
LL CI	Lower limit of confidence interval

MAE	Mean Absolute Error
MSI	Marketing Science Institute
n.d.	no date
NSD	New Service Development
org.	Organization, organizational
p., pp.	page, pages
PDPA	Personal Data Protection Act
PIN	Personal identification number
R&D	Research and development
reg.	regarding
RegTech	Regulatory technology
RLH	Root Likelihood
RMSEA	Root mean square error of approximation
SE	Standard Error
SGD	Singapore Dollar
SGX-ST	Singapore Exchange
SRMR	Standardized Root Mean Residual
TRIZ	Theory of Inventive Problem Solving
UL CI	Upper limit of confidence interval
VIF	Variance Inflation Factor
vs.	versus (against)
Z-mot	Zero moment of truth

1 Innovating the Customer Journey for Improved Experiences

1.1 Introduction

Innovating the customer journey has become a new field of competition for companies that focuses on new and improved customer experiences. Fierce competition and consolidating processes in many industries, the digitization of many customer-company interactions, and increasing customer expectations, are driving companies to actively manage and improve the customer experience they provide. Success stories of companies that differentiate from competitors based on a superior customer experience management are widely shared and aspired to. Yet, for many companies, managing the customer journey in a way that improves the customer experience is a largely unstructured process and concerns an issue that is characterized by its broad and difficult-to-grasp nature. As such, many companies struggle to successfully implement changes in the customer journey that improve the customer experience in a way that brings value to both the customer and the company and sets them apart from competitors.

Successful customer experience management is anchored in a company's customer journey management. The customer journey consists of all those company-customer interactions that can be proactively set up or designed by the company and of those interactions that cannot be directly influenced by the company, such as peer-to-peer interactions. A company can affect the experience of its customers especially through those touchpoints that it can directly influence. It is thus necessary, and also the goal of this dissertation, to understand how changes in the customer journey are strategically implemented to improve the customer journey.

The necessity to better understand customer experiences and associated improvement processes is also voiced in the relevant literature. For instance, the MSI research priorities 2016 – 2018 address the need for research on designing the customer-company interactions along the customer journey in order to deliver superior experiences (Marketing Science Institute, 2016, p. 6). In a second, related research priority, it states that “new knowledge and new models are needed in the area of innovation: designing, developing, and bringing new products, services, and experiences to market” (Marketing Science Institute, 2016, p. 14). The research on customer experiences and related topics, such as customer journey management, has received strong attention in recent years. Central to this research are efforts to account for the dynamic processes in which customer experiences are formed. The specific demands placed on interactions with a company are subject to the unpredictability of individual customer journeys, which are in turn influenced by the individuality of the customer and contextual and situational factors.

This dissertation addresses these issues by investigating the link between changes in the customer journey and the customer experience. This topic is approached in three parts. The objective is, first, to understand how improving the customer journey should be anchored in the organization so as to realize changes in the customer journey effectively and efficiently. Second, the research presented here aims to guide managers with specific change options. These can be implemented in the customer interactions along the customer journey and form nine distinct change strategies for improving the customer experience. Finally, the goal is to understand how changes to the journey – not least those that are brought about by digitization – affect the customer relationship with the company and, most critically, customer trust. In providing a comprehensive overview, the results of these parts are converged to indicate an avenue for further research. They are also integrated into a management plan that suggests specific actions for innovating the customer journey in order to improve the customer experience.

1.2 Research Context

1.2.1 Practical Context and Relevance

Industries evolve through a natural life cycle throughout which they continuously reinvent themselves (Moore, 2006, pp. 16-19). Companies innovate their offers in order to set themselves apart from their competitors and to avoid the trend towards commoditization and competing on costs. One way to achieve this is to continuously innovate the interactions in the entire customer journey by focusing on the overall experience. The previous focus on product features, services, and relationships has shifted to a focus on the overall customer experience (Palmer, 2010, p. 197). As customers benefit from improved experiences, successfully innovating the customer experience also yields benefits for the organization. Creating superior experiences satisfies customers and binds them to the company, thereby creating the potential to distinguish the company from its competitors (Johnston & Kong, 2011, p. 6). Most importantly, positive customer experiences can lead to a higher customer engagement, customer loyalty, and a competitive advantage. This in turn can translate into financial advantages for the company (Grønholdt, Martensen, Jørgensen, & Jensen, 2015, p. 96; Klaus & Nguyen, 2013, p. 237; Kranzbühler, Kleijnen, Morgan, & Teerling, 2018, p. 433; Stein & Ramaseshan, 2016, p. 8; Verhoef et al., 2009, p. 38).

Further, the change towards managing the customer experience is strongly driven by digitization and by increasing consumer expectations (Rawson, Duncan, & Jones, 2013, pp. 92-93). Following technological developments, companies need to coordinate the customer experiences at an increasing number of touchpoints (Schögel, 2010, p. 1). While there are effective tools for managing the experience at individual touchpoints, the challenge is to manage the experience across multiple touchpoints and along the entire journey (Rawson et al.,

2013, p. 92). At the same time, technological advances open up new opportunities for managing the customer experience. New possibilities to retrieve and analyze customer data emerge. The insights gained from this data enable companies to better accompany customers through their individual journey by adapting interactions according to their individual needs and situation.

Customers form experiences every time they interact with a company. Throughout the customer journey, the customer repeatedly interacts with the company at various touchpoints and accumulates a vast amount of experiences that all contribute to a customer's perceived overall experience with the company. By strategically managing the holistic experience at interactions that are important to their customers, companies can set themselves apart from their competitors and raise the bar in their industry. There is an increasing number of examples of companies in different industries that have successfully innovated the customer experience through a strong focus on the customer journey and customer value. For example, NikePlus has expanded the customer experience by connecting its sporting gear with mobile devices and by establishing a customer community (Wise, Stone, & Wright, 2013, p. 3). Amazon has changed the customer journey and allows customers to order products and samples for trying before purchase, thus making selecting and returning goods a less risky and more convenient experience (Amazon, 2018a, 2018b). By creating FRANK Bank, OCBC Bank in Singapore has created a new business domain that allows catering to the unique needs of its younger customers and thus provides them unique experiences (OCBC Bank, 2011, p. 1; n.d.). The insurance provider Lemonade has significantly improved the customer experience of insurance holders by creating a mobile-based insurance that builds on artificial intelligence to quickly and seamlessly process claims (Lemonade, 2018).

While companies recognize the need to innovate the customer experience, there is ambiguity about how to approach innovation in the customer journey, where to focus innovation activities, and what their impact on the experience is (Gentile, Spiller, & Noci, 2007, p. 396; Lemon & Verhoef, 2016, p. 83; Shaw & Ivens, 2005, p. xix). Accordingly, in practice, customer experiences are only rarely improved and innovated strategically (Bodine, 2013, p. 9; McColl-Kennedy et al., 2015, p. 433). Managers struggle to determine how to successfully transform customer interactions in a way that improves the customer experience. This in turn makes it challenging to strategically approach customer experience innovation and to allocate resources in order to leverage the full potential of interactions with the customer.

1.2.2 Theoretical Context and Relevance

This dissertation defines *customer experience innovation* as *altering the quality or the context of the customer experience by implementing new or enhanced interactions between the company and its customers*. It approaches this topic by emphasizing the managerial perspective of managing the customer experience through the customer journey (Kranzbühler et al., 2018,

pp. 438-439). Innovating the customer experience can be addressed from several research perspectives and primarily concerns the literature on customer experience management, customer journey management, and service innovation.

Customer experiences are formed during every customer-company interaction. Interactions can be with the company itself, with one of its representations, or with fellow customers (Gentile et al., 2007, p. 397; Verhoef et al., 2009, p. 34). The customer experience is defined as a customer's "internal and subjective response" during these interactions (Meyer & Schwager, 2007, p. 118). As customers' overall experience is the sum of their interaction-based experiences with the company, it is the individual interactions that matter and are important for a company to address. Interactions take place at touchpoints, so that managing these touchpoints helps to influence the experience of all customers that pass a certain touchpoint. Together, the touchpoints that a certain customer has with a company form the customer journey. Managing the customer experience aims to change and improve customer-company interactions throughout the journey. This requires specific capabilities on the part of the company (Homburg, Jozić, & Kuehnl, 2017, p. 386) in devising effective improvements to elicit positive experiences.

Service innovations are designed and implemented in the customer journey in order to improve the customer experience. Prahalad and Ramaswamy (2003, p. 18) noted that two trends – "convergence of technologies and industries" and "convergence of consumer and company roles" – lead to the "future of innovation" and imply a new approach towards innovation that evolves around subjective consumer experiences. This observation was supported by Pine and Gilmore (2014, p. 24) who, based on the concept of the experience economy, saw experiences as a form of economic offering that provides ample opportunity for creating value through frequent innovation.

The underlying phenomenon, customer experience management, is by its nature customer-centric (Schmitt & Mangold, 2004, p. 28). As stated by the service-dominant logic, the focal point from where value emerges for the customer is "value-in-use" and "value-in-context" (Edvardsson, Tronvoll, & Gruber, 2011, p. 329). A promising way to account for this value is to look at the experience that the customer has while interacting with a company. Value per se is generally created in relations and networks rather than in transactions. Thus, the marketplace can be perceived as a network of companies, customers, and other participants who collaborate in creating customer experiences (Maklan & Klaus, 2011, p. 773). This coincides with recognizing users as co-creators of value and of their experience (Prahalad & Ramaswamy, 2003, p. 18). In terms of experience management, this offers new ways for companies to provide value for the customer (Candi, Beltagui, & Riedel, 2013, p. 282).

The literature on managing and innovating customer experience is described as "nascent" (Candi et al., 2013, p. 281; Homburg et al., 2017, p. 378; McColl-Kennedy et al., 2015, p. 430). To advance the customer experience concept, more empirical research is needed (e.g.,

Bruhn & Hadwich, 2012b, p. v; Kranzbühler et al., 2018, p. 447). Although the potential impact of customer experience innovations has been acknowledged, concrete recommendations on how to strategically develop and implement them remain scarce. Research on customer experience has so far focused mainly on managing and improving existing experiences in the customer journey rather than on innovating experiences. Studies have identified potential dimensions, determinants, and attributes of customer experiences, yet their relationship with the organizational approach to managing customer experiences needs further investigation (Bruhn & Hadwich, 2012a, p. 18; Kranzbühler et al., 2018, p. 439). Similarly, the literature on touchpoints in the customer journey offers categorizations of touchpoints, while less is known about the role of touchpoints in context and their connection with the experience during interactions (Lemon & Verhoef, 2016, pp. 88-89; McColl-Kennedy et al., 2015, p. 432). Insights are missing as to what types of experiences customers value, in which context, and at which interactions in the customer journey. Taken together, the drivers, attributes, and effects of customer experience innovation need to be better understood. Developing a more differentiated picture of the interrelations between innovations of interactions and their impact on company and customer can build the basis for informed recommendations on how to develop new and improved customer experiences.

1.3 Guiding Research Questions

In the extant literature, key considerations regarding the drivers, mechanisms, and nature of the effects of customer journey innovations are to date vaguely defined and require further exploration. Three broad areas would advance the literature: learning about management approaches that support customer experience innovation, describing different innovation options, and understanding the effects of changes to interactions on the customer. These three areas emphasize slightly shifting perspectives for innovation, i.e., the company perspective, actual interactions, and customer considerations. Throughout this dissertation, this division into company-, interaction-, and customer-related aspects will be used to structure the analyses and to specify the resulting findings.

For practitioners, current insights are also only actionable to a limited extent, as findings are rather conceptual in nature and rarely consider strategic innovation in customer experience management. While some recommendations on developing the grounds for a good customer experience have been advanced, concrete guidance on innovating the customer journey, in order to keep ahead of competition, is missing. This shortcoming has led and still leads to a frequent application of trial-and-error processes. This research aims to shed light on how to innovate the customer experience and how to anticipate the impact of these innovations on the company and the customer.

This research seeks to contribute to a better understanding and enabling of a strategic approach to customer journey innovation that improves experiences. To this end, it draws on

research into how innovations that improve customer experience can be developed by a company, which types of innovations to customer-company interactions exist, and how they are effectively applied with regard to their impact on the customer. To fill this gap, this dissertation aims to answer the following guiding question:

Guiding Research Question

Which success factors for customer journey innovations yield superior customer experiences and what are the implications for the company, for customer-company interactions, and for the customer?

To answer this guiding research question, three sub-questions are formulated that structure this dissertation. The research questions are developed in further detail at the beginning of the respective chapters of this dissertation and are briefly outlined below. Also, a brief overview is given on the scope that the respective chapters cover in answering the sub-questions.

On the company side, this dissertation seeks successful approaches to developing customer experience innovations and their effective integration in the organization. Key to managing the customer experience is linking the individual, subjective customer experience with the design implications for the customer journey. In particular, processes and practices specific to customer experience innovation that are applied to achieve this are investigated. Anchoring the customer experience management in the organization has implications for the setup and impact of the innovation process. Thus, on the company side, the integration of customer experience management into company operations and its effect on the ability to innovate the customer experience are investigated. This leads to the first sub-question.

Research Question 1

How can customer experience innovation be anchored in the organization in order to integrate the individual customer experience and the organizational perspective on customer experience management?

Considering customer-company interactions, the second sub-question refers to which innovative interactions resonate well with customers and how they create value for the customer and the company. Acknowledging the innovation potential of the customer journey requires a deep understanding of specific innovation options and their effects on interactions, on the customer, and on the company. In order to allow for strategic innovation in the customer journey, insights into which touchpoints are addressed by these changes are required. Thus, when considering customer-company interactions, this study explores in which ways interactions between the customer and the company can be innovated in order to improve the customer experience and which touchpoints are affected by these changes. Moreover, differences in the perception of these innovations between groups of customers are investigated.

Research Question 2

Which innovation options for touchpoints exist in the customer journey for creating positive customer experience and how do these innovations affect the customer and the company?

On the customer side, customer trust is identified as a critical consideration in developing innovative interaction strategies. It serves as an indicator of customers' reception of changes in the customer journey that is related to the overall customer experience. Moreover, trust is an important contributor of value for the company. The final sub-question explores how trust building is enabled in increasingly digital customer-company interactions. Innovating customer-company interactions to improve the customer experience affects the interaction approach. This study considers how far changes in interactions, in particular the degree of digitization, affect customer trust. Moreover, differences between the phases in the customer journey and different company types are taken into account.

Research Question 3

Which trust-building strategies enable successfully building trust in different customer-company interactions?

The research is embedded in the literature on customer experience management, customer journey management, and service innovation. It seeks to provide both theory-advancing and managerially actionable insights that provide guidance for strategically and systematically developing customer experience innovations.

1.4 Research Approach and Setting

1.4.1 Research Approach

The goal of this dissertation is to address customer experience innovation in a way that advances existing theoretical conceptualizations and that responds to problems encountered in practice. Due to the nascent state of the relevant research streams and the complexity of the topic, an exploratory focus on theory development is appropriate. This dissertation therefore adopts an *inductive research approach* to answer the research questions raised in the previous section (Bonoma, 1985, p. 203). This approach allows inferring general insights from research observations and subsequently testing and validating these theoretical generalizations (Bonoma, 1985, p. 199). This research follows recommendations in the literature and applies inductive field research and case research (Bonoma, 1985, p. 200; Eisenhardt, 1989, p. 532).

This approach makes it possible to investigate the factors relating to the company, the interaction, and the customer, as they all contribute a different angle and area of interest to innovating the customer experience which supports differentiating the findings.

This research applies a *discovery-oriented approach* (Kohli & Jaworski, 1990, pp. 1-2; Morgan, Anderson, & Mittal, 2005, p. 133), in order to identify the success factors regarding the anchoring, targeting, and sustaining of experience innovation. This approach also enables detailed analyses so that the resulting findings can be translated into specific management guidelines. Within the scope of this dissertation, the adopted positivistic approach implies a combination of methods, including both interviews and case studies, as well as quantitative studies for refinement (Workman, Homburg, & Gruner, 1998, p. 26).

The theoretical analyses build on problems observed in practice and thus follow a *reality-oriented approach* (Tomczak, 1992, p. 83; Ulrich, 1981, p. 21). This approach aims to solve problems encountered in practice and prioritizes translating the findings from the theoretical analyses into relevant practical applications. This dissertation thus combines explorative research and quantitative methods (Tomczak, 1992, p. 82). Answering the research questions is understood as an iterative learning process that combines theoretical reflection and insights from empirical data (Tomczak, 1992, p. 84). The criteria of “criticality,” “utility,” “validity,” “verifiability,” and “clarity” are pursued to ensure *theoretical and practical relevance* as well as *methodological rigor* (Dossabhoy & Berger, 2002, p. 313; Dyllick & Tomczak, 2009, p. 72). The chosen approach responds to claims for managerial relevance and empirical rigor, and thus addresses the management problems and gaps in theory informing the guiding research questions (Reibstein, Day, & Wind, 2009, p. 2; Shrivastava, 1987, p. 80; Varadarajan, 2003, pp. 368-370).

1.4.2 Study 1: Exploratory Qualitative Study

After specifying the research questions and the research approach of this dissertation, the practical relevance of the topic was strengthened in preliminary exploratory interviews.

1.4.2.1 Methodology of the Exploratory Study

To supplement the identified current challenges in managing and innovating the customer experience and to validate the relevance of the research questions with insights from practitioners, an exploratory qualitative research study was conducted in the form of expert interviews.

1.4.2.1.1 Respondent Selection and Data Collection

The preliminary explorative research study was conducted in the form of semi-structured in-depth expert interviews. The technique of interviewing experts was chosen, as the results of

expert interviews yield rich insights into the research subject (Eisenhardt & Graebner, 2007, p. 28). Due to their expertise in the field, respondents can identify the effects of current initiatives as well as underlying principles with regard to customer experience innovation (Hitzler, 1994, p. 26; Pfadenhauer, 2009, p. 452).

The interviews asked managers about their perspective on customer experience management and customer experience innovations. Experts were invited to participate in the interviews based on their expertise with customer experience and its innovation. To avoid bias in the chosen approach, the interview partners were chosen to constitute a diverse group of experts, representing managers from different hierarchical levels, functions, and industries (Eisenhardt & Graebner, 2007, p. 28). Managers in marketing, service or customer experience roles, and consultants, were selected in order to account for a diverse set of perspectives on the topic. Data collection took place in 2015. In total, twelve interviews were conducted. It was decided not to add any additional interviews, as at that point, no new information was added and redundancy was achieved (Glaser & Strauss, 2010, pp. 67-77; Lincoln & Guba, 1985, p. 202). The interviews lasted between 45 and 65 minutes. The list of interview partners is provided in Appendix A.1.

The objective of the exploratory study was threefold: to identify themes that managers are concerned with regarding customer experience innovation; to understand the status quo of companies' endeavors to innovate the customer experience; and to determine the challenges and open questions about innovating the customer experience. The questions focused on the perceived relevance and meaning as well as the drivers and impact of customer experience innovations, and on the processes for innovating the customer experience. Furthermore, the interviewed managers were asked to suggest practices and unresolved challenges in developing customer experience innovations. The interview guide can be found in Appendix A.2 .

1.4.2.1.2 Data Analysis

The analysis of the data gathered during the expert interviews sought to identify those focus areas in the field of customer experience innovation that are relevant to research and practice and to reviewing the empirical evidence in terms of the various research questions. An inductive coding approach was selected. Coding was not structured provisionally according to the research questions. This approach was chosen for two main reasons: It enabled approaching the information openly and surfaced themes relevant to the experts throughout the coding (Miles, Huberman, & Saldaña, 2014, p. 81). The results were subsequently used to validate the research questions.

In the first-cycle coding, the data resulting from the expert interviews was coded with an in-vivo coding approach. This approach extracts words and paragraphs from interviews and retains respondents' own language, thus emphasizing their voice (Miles et al., 2014, p. 74; Saldaña, 2013, p. 91). This type of coding yielded statements regarding the experts' opinions

and perspectives on customer experience innovation as well as the meaning they assign to it. The statements were then further analyzed with a focused coding approach. This second-cycle coding technique assembles the most relevant codes from the first-cycle coding and assigns them to categories (Saldaña, 2013, p. 213). Thus, this technique allows forming themes from the data that represent topics highly relevant to the interviewed experts.

The interviews were analyzed individually in order to gain an in-depth understanding of each expert's perspective. Moreover, comparing the interviews allowed identifying common themes and topics of relevance that were repeatedly stated. The analysis of the gathered data thus iteratively combined within-case and across-case analyses (Eisenhardt, 1989, p. 540; Miles et al., 2014, p. 103). In the following, the findings are discussed in terms of the relevant themes that emerged for managers and implications for this research.

1.4.2.2 Findings of the Exploratory Study

The responses in the expert interviews indicated that managers were aware of the relevance of the customer experience for their company, but that their companies were at very different stages in managing customer experience and in establishing the corresponding mindset throughout the organization. Respondents agreed that customer experience management has become very relevant for companies in recent years. The majority of respondents recognized customer experience as important and actively manage it in their company.

Company: Managing customer experiences and anchoring them in the organization

Respondents agreed that innovation for the sake of innovation does not provide valuable results. Their examples of successful customer experience innovations most frequently *started with the ambition to solve a concrete customer problem*. In the process of fixing this problem, new customer insights were generated and innovation was developed. Other examples suggest a green field approach or benchmarking with other industries and competitors as a starting point. All managers claimed that deep customer insights are required for the problem definition and the ideation phase. The *process of customer experience innovation tends to be unstructured*, though, and regularly appears ad-hoc. Bottom-up information flow, involving front-line employees during the innovation process, and empowering the front-line enable companies to act on user insights. Similarly to the difficulty in assessing attributes of the innovation process, the interviewed managers had *difficulties specifying successful innovation methods and techniques* for customer experiences that would yield effectiveness and speed. Instead of relying on customer surveys, interviewees revealed that innovations are frequently tested directly in the market to generate immediate, fast, and unbiased customer feedback.

Most managers indicated that the mindset of the company strongly matters for innovating the customer experience. Managing the customer experience requires focusing on what is good for the customer and on responsiveness to customer needs. A long-term view and a customer-focused organizational culture, employee empowerment, good internal communication, and

a good customer relationship management (CRM) system were acknowledged as *prerequisites for successful customer experience management*. Managing the customer experience is not seen as a pure marketing task but rather as the task of the entire organization. A customer-centric philosophy is expected to create a good customer experience, which should be reflected in higher satisfaction scores and revenue growth. Culture-wise, reorienting the company around the customer is challenging, as is establishing the necessary bottom-up and top-down communication that would trigger customer experience innovations. *Implementation differs widely and proves challenging* according to the interviewed experts, not least due to vague definitions of customer experience coupled with different views on customer experience within companies. Managers admitted that there is often a mismatch between what truly matters to the customer and what companies perceive as being important to the customer, and that there is also a lack of appropriate measures for linking these perspectives.

Interaction: Approaches for innovating the customer experience

Essentially, when interacting with a company, customers search for experiences that solve a problem and add value. Accordingly, interviews revealed two dominant themes that are used to approach customer experience improvements: *simplifying the customer experience* and *enriching the customer experience*. Simplifying the customer experience ensures that interactions between the company and the customer are simple, convenient, and intuitive. Customers want interactions with companies to become easier and faster. Interviewees asserted that customers want to know what they receive and what they do not receive from an interaction, thus relating to the goal of creating transparency. The simplicity of interactions is determined by the degree to which an interaction allows customers to achieve their objectives. Also, companies aim to enrich their customer interactions to provide better customer experiences. In addition to elements that simplify the interaction, customers look for differentiating experiences, such as high service quality or individualized interaction. These experiences should be seamless, pleasant, and enjoyable.

The managers reported that qualitative measures are used in order to understand the relevance of interactions. However, especially in larger companies and in business-to-consumer (B2C) markets, a quantitative data-driven approach appears to be more frequently used. As a *starting point for innovating the customer experience in the customer journey*, the managers used touchpoints where there is an apparent problem. Often, these are touchpoints where expectations are especially high or where customers have little time. Some suggested focusing on those touchpoints with low satisfaction scores, where customers encounter problems or where customers discontinue an interaction. Other managers defined the interaction between customers and employees as most critical, as this is the most immediate contact a customer has with an organization. Apart from apparent problems in the customer journey, respondents generally agreed that it is at the moment hardly possible and very *challenging to identify the critical touchpoints* in the customer journey. The most frequent innovation trigger is customer

needs that are not met or only insufficiently. The potential of customer experience innovations to *improve already satisfactory experiences* is often only recognized once another company seizes the opportunity with an innovation.

Customer: Impact of managing the customer experience

The respondents perceived customer experience innovation as holding strong potential to increase customer satisfaction and loyalty. The main *challenge is to anticipate when and in which situation the customer values what type of interaction*. It was considered important to manage the multitude of different touchpoints, especially in the pre-sales phase, although some interview partners warned that the risk of neglecting long-standing customers is underestimated. Thus, they advocated a similar focus on the utilization phase in the customer journey. Regardless of the phase in the purchasing process, managers stated that a close fit between the interactions with the company's value proposition as crucial, as well as the feeling of being in control and a perceived coherence between various interactions. *A good customer experience that provides an added value to the customer is related to security and trust*. Both factors contribute to customer loyalty.

While the interviewed managers acknowledged the *influence of situation, context, and type of company* in theory, this insight is not actionable for them at the moment. In this respect, the need to identify those factors that indicate the value of an interaction and corresponding improvement options was repeatedly stated as one of the most important issues for managing the customer experience. Customer expectations are strongly driven by trends in society – such as perceived time pressure – and digitization. The managers reported *uncertainties with regard to managing the experience across channels and during increasingly digital interactions*, also with regard to considering individual needs and to acting on the existing customer insights. For companies, technology is mostly referred to as an enabler of customer experience innovation. It was affirmed that technology is used to *increase efficiency and an added customer value in the interactions in order to create security and trust*, and thus to elicit positive experiences.

1.4.3 Focus on Digitization and the Financial Services Industry

Customer experience innovation plays an especially pronounced role in the financial services industry (Ding, Hu, Verma, & Wardell, 2010, p. 97; Klaus & Nguyen, 2013, p. 430; Ponsignon, Klaus, & Maull, 2015, p. 297). This is therefore considered a critical industry, one that provides a well-suited setting for the research at hand. This is in line with previous research, where the financial services industry is the single most studied industry in the service innovation literature (Biemans, Griffin, & Moenaert, 2016, p. 393; Storey, Cankurtaran, Papastathopoulou, & Hultink, 2016, p. 530). The financial services industry, which among others comprises banks and insurance companies, offers a highly immaterial service that is essentially customer-specific (Friedrich, Graeber, Krause, Lindenthal, & Schönhage, 2013, p.

16). It is characterized by high information intensity for companies, by contractual complexity in the eyes of customers, by long-term, membership-based relationships with the customer, and by intangibility of the entire offer (Ponsignon et al., 2015, p. 299). The industry is increasingly consolidated and faces a shift towards commoditization (Alt & Puschmann, 2016, p. 24). This makes it difficult to differentiate from competitors based on financial product offers alone. Moreover, increasing regulation since the financial crisis in 2008 prompts companies to continuously change (Alt & Puschmann, 2016, pp. 25-26), and also to search for new ways of differentiation. For banks in Switzerland, the ending of Swiss bank secrecy involves a regulatory change that has severely impacted their business. Next to these industry characteristics, additional triggers for a strong focus on the customer experience in the financial services industry are identified and discussed below.

Changing customer expectations

The financial services industry faces rising expectations from customers that are influenced by experiences with other industries. Customers have come to expect the same level of services that they know, e.g., from retail and travel, but also from technology companies and start-up companies that enter the financial services industry (Capgemini & Efma, 2015a, pp. 13-14; Capgemini, LinkedIn, & Efma, 2018, p. 15). The service they receive from companies like Amazon, Netflix, or Uber sets the bar higher also for the financial services industry, which needs to match those heightened expectations. Especially younger customers, so-called Generation Y customers, have high expectations and low tolerance for failure to meet these expectations (Capgemini & Efma, 2015a, p. 19; 2016a, pp. 13-14). For these customers, experience is generally more important than for older generations (Alt & Puschmann, 2016, p. 29). The change in customer expectations influences customer behavior. Most importantly, this means that the traditional strong loyalty to the financial services industry is reduced and customers are more inclined to switch service providers.

New technological developments

A focus on the customer experience is required but also enabled by the developments in technology (Capgemini et al., 2018, p. 19). Digital technologies and mobile devices have a high diffusion rate in the population. In 2015, already three quarters of customers in Switzerland used the Internet for their banking activities (Bloching, Wege, & Flemming, 2015, p. 22). This share continues to rise. The preference for interacting digitally is especially strong among younger customers (Alt & Puschmann, 2016, pp. 28-29). Technology forms part of and spans all areas of customer life. Mobile phone penetration in the German-speaking region is 93%, of which 77% are smartphones, and 80% of people use computers and 40% use tablets (Consumer Barometer with Google, 2017b). 78% of the population use the Internet as the first source to look for information (Consumer Barometer with Google, 2017a). This is relevant as digital interactions also influence offline interactions between customers and the bank or

insurance provider. Today, customers who contact financial advisors are often very well informed and ask for specific information (Alt & Puschmann, 2016, p. 29). The changes in customer behavior due to technology require financial service providers to respond by developing new forms of interactions that are enabled by such technology.

From a company's perspective, technology opens up new opportunities for interacting with customers. The financial services industry is information-intensive and has used IT to create a multi-channel system for interacting with customers (Albesa, 2007, p. 496). Throughout its history, the financial services industry has embraced technology in order to increase efficiency and reduce costs. By introducing technologies throughout history such as the ATM, online banking, and mobile banking, the financial services industry has for a long time operated in a multi-channel environment (Albesa, 2007, p. 493; Alt & Puschmann, 2016, p. 29; Morrison, Pitt, & Kietzmann, 2015, pp. 273-274). In this sense, the financial services industry is thus considered as innovative (Albesa, 2007, p. 502). Today, technology is not only used for efficiency anymore, but for differentiation in customer-company interactions (Alt & Puschmann, 2016, p. 30). Moreover, instead of applying technology selectively to few interactions, it can change the entire customer journey. Companies' stronger focus on the customer potentially affects all interactions (Alt & Puschmann, 2016, p. 104).

By using artificial intelligence and other smart technologies, new forms of delivering a personalized service through digital interactions are explored. In this regard, for instance, robo advice, blockchain applications, bots, and analytics are applied throughout the financial interactions (Capgemini et al., 2018, pp. 20-26; Terrizzano et al., 2018, p. 5). The challenge for financial service providers is to retrieve relevant customer data, to analyze it, and to act upon it. In addition, coping with the massive amounts of data that become available through digital interactions with customers proves challenging in practice.

Due to these developments, previous touchpoints that involved interacting with the customer in person are replaced by digital interactions. Many financial service providers consequently reduce the number of branches that they operate. In Germany, more than a quarter of all branches have been closed since 2000 (Schwartz, Dapp, Beck, & Khussainova, 2017, p. 1). Going along with this trend is a lower frequency of customer visits to branches, which has declined from three visits per month in the early 2000s to only one visit per month on average in 2016 (Alt & Puschmann, 2016, p. 29). Also, the use of other offline contact points has decreased, as for example ATMs are less frequented given the increasing use of mobile payments and contactless payments (Imwinkelried, 2018). Companies attempt to deliver the same level of personalization in personal contact through digital channels. For this, technologies such as video calls, chats, or avatars are implemented in digital interactions with the customer.

Competition by FinTech companies

In recent years, the financial services industry has faced new competition from start-up companies, which have been entering the industry with new and mostly technology-based offers.

So-called FinTech (short for “financial technology”) companies enter the industry with offers that seize changing customer expectations and behavior and the new opportunities deriving from technology. The most successful FinTech companies strongly focus on the customer experience in their offers (Capgemini et al., 2018, p. 10; H2 Ventures & KPMG, 2016, p. 3). Next to FinTechs, also technology companies such as Google and Apple have entered the industry with technology-based financial services. New to this form of the competition is that such companies apply technology throughout the entire customer journey in order to improve the customer experience. Banks and insurances perceive their highest threat of disruption as coming from FinTech start-up companies and technology companies, and in the insurance industry also from self-insurances by manufacturers (Capgemini & Efma, 2016a, p. 26; Efma & Infosys, 2016, p. 8).

Focus on innovation and the customer experience

There is rising pressure for innovation and for a customer focus in the financial services industry in order to stay competitive. Innovation comprises service offerings that are new to the company and to the customer. Managing the customer experience is becoming increasingly necessary. The main innovation investment area among banks in 2016 was customer service and customer experience, followed by investments in channels (Efma & Infosys, 2016, p. 17), which are also major topics in the insurance industry (Capgemini & Efma, 2016a, p. 9). Compared to start-up companies and technology companies, banks are considered late movers, for example with regard to developing apps based on mobile and social web (Alt & Puschmann, 2016, p. 30).

Increasingly, however, FinTech companies are not considered as a threat but as partners for established companies (PwC, 2017, p. 7). In 2016, retail banks considered partnering with innovative start-ups as the best way to access new technologies. This focus ranked even higher than conducting in-house research (Efma & Infosys, 2015, p. 32; 2016, p. 30). Established companies actively invest in or partner with FinTech companies, for example in the form of partnerships, incubators, accelerators, hubs, or hackathons. FinTech companies have also been shown to benefit from collaboration with incumbents (Morel et al., 2016, p. 3). Moreover, banks also collaborate with technology companies. For instance, the German direct bank Comdirect partners with Google and Amazon to integrate speech recognition through access via various digital devices (Mussler, 2017).

Established companies need to stay competitive and to transform their business in a way that customer experience is emphasized in the entire customer journey and that every touchpoint is designed to deliver on customer experience. FinTechs that embrace these changes are currently seizing this as an advantage. While such transformation can create a competitive advantage, many unresolved questions remain that make the implementation of customer experience management a challenge that can be perceived as threatening by managers. Managing the customer experience and creating innovations along the customer journey requires new

skills, not least to retrieve and analyze relevant data in order to manage the digital customer relationship. To successfully cope with digitization, all business functions need to be involved. Further, related company functions, such as marketing, also need to be adapted (Morrison et al., 2015, p. 274; Schwartz et al., 2017, p. 3).

1.5 Dissertation Outline

This dissertation is structured in five parts. Chapter 1 has introduced the dissertation topic, demonstrated the theoretical and practical relevance of the research. It has formulated the research questions structuring the dissertation according to the main focus areas in customer journey innovation: the company side, customer-company interactions, and the customer side. Next to validating the relevance of the research by an explorative research study, Chapter 1 has provided an overview of the research context and research approach.

Chapter 2 considers the company side for innovating the customer experience and the meaning for internal management structures. Drawing on the literature of customer experience management and service innovation, it considers how companies can bring about changes in the customer journey for innovating the customer experience and for sustaining this approach. To answer this question, a single in-depth case study was conducted with the Singaporean bank OCBC. Results indicate the presence of five process attributes, five management practices, and insight transformation practices that promote the successful development of customer experience innovation in a company.

Chapter 3 explores the changes in customer-company interactions in the course of customer experience innovation. It emphasizes the literature on the customer journey and focuses on specific innovative changes that are implemented in the customer journey in order to improve the customer experience. It implements a sequential research design, employs a multiple case study of 92 FinTech companies, and develops nine distinct innovation strategies. These nine strategies appear to be recurring patterns that each focus on innovating different aspects of customer-company interactions. A subsequent conjoint experiment with 419 customers indicates the presence of customer heterogeneity that manifests itself in two customer segments that exhibit distinct preferences for these innovation strategies. The results of this part suggest taking a perspective on customer experience innovation that focuses on touchpoints as part of sequences. Moreover, innovating such sequences should be informed by customers' purpose in interactions.

Chapter 4 emphasizes the customer side in innovating the customer journey. It considers the literature on digital customer-company interactions and on trust, in order to study how changes in the journey affect customer trust. Two studies are conducted in a sequential design. First, applying the technique of expert interviewing, the perspectives of twelve experts on digitization and trust in the customer journey are collected and analyzed. Results suggest the presence of three groups of trust enablers that are distinctly employed in two trust-building

strategies. An experimental study with 660 customers further investigates the role of the trust enablers. Results indicate the need for strategically choosing digital changes in the customer-company interactions in the customer journey in order to manage anticipated effects on customer trust.

Finally, Chapter 5 consolidates the results and develops recommendations. It depicts the contributions to the relevant literature streams. Next to defining the pillars and levers for customer journey innovation, it draws up a four-step management plan that brings together the three core areas of customer experience management and innovation: the company, the interaction, and the customer. Finally, limitations and avenues for further research that emerge from considering the three areas simultaneously are outlined.

Figure 1-1 depicts the structure of this dissertation, which corresponds to the defined objectives. The conducted empirical studies are surveyed in Table 1-1.

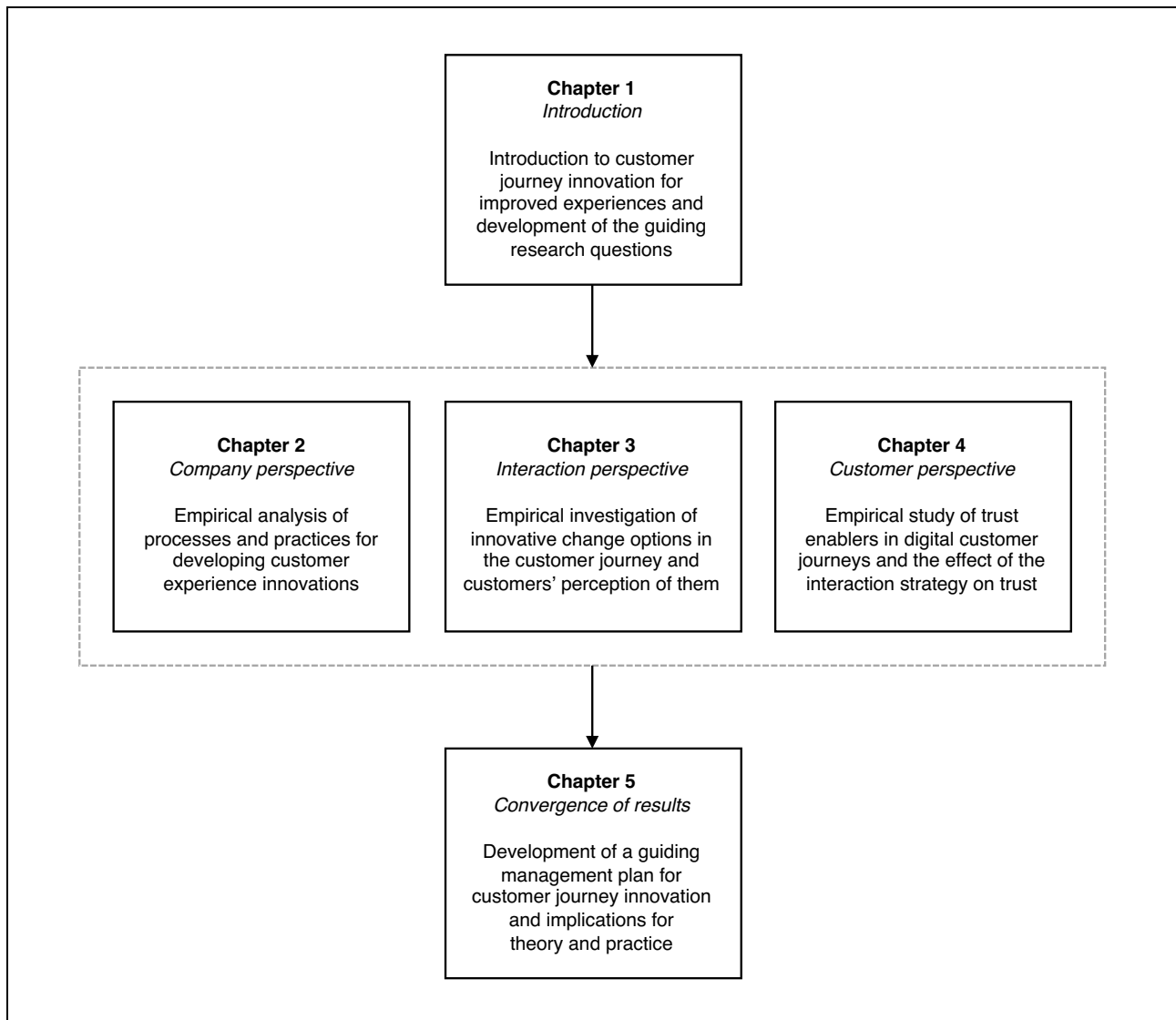


Figure 1-1 Overview of the dissertation

Table 1-1 Overview of empirical studies

Part	Focus	Study	Participants	Context	Approach	Key findings
Chapter 1: Introduction	Challenges in innovating the customer journey	Study 1	12 managers	Established financial service provider, other companies	Expert interviews	<ul style="list-style-type: none"> Customer journey innovation is of high relevance to practitioners Currently, a strategic approach is missing and only two broad innovation approaches are observed (namely, simplifying and enriching)
Chapter 2: Company perspective	Implementing customer experience innovation in organizations	Study 2	1 company	Established financial service provider	Single case study	<ul style="list-style-type: none"> Five process attributes and five management practices contribute to customer experience innovation in a company Insight transformation practices contribute by continuously changing insights between concrete and abstract and between specific and general
Chapter 3: Interaction perspective	Innovation options for changing customer-company interactions	Study 3.1 Study 3.2	92 companies 419 customers	FinTech companies Financial services customers	Multiple case study, content analysis Conjoint experiment	<ul style="list-style-type: none"> Nine innovation strategies are repeatedly applied to innovate customer-company interactions Innovating customer-company interactions benefits from a sequence perspective on touchpoints that is informed by customer purpose Customers are heterogeneous in their preferences for innovations and form two distinct segments
Chapter 4: Customer perspective	Managing the impact of changes in the digital interaction strategy on customer trust	Study 4.1 Study 4.2	12 managers and academics 660 customers	Established financial service providers, FinTech companies, other companies Financial services customers	Expert interviews Scale development, experiment	<ul style="list-style-type: none"> Three groups of trust enablers support building trust in digital customer-company interactions Digitization efforts in the pre-sales and the utilization phase yield distinct effects on trust Companies can follow two trust building strategies, the impact of the chosen interaction strategy on trust differs according to the company type

2 Anchoring Customer Experience Innovation in the Company

2.1 Introduction

Many companies have recognized the importance of managing the customer experience. How the customer perceives the interactions with the company not only impacts customer value, but allows companies to create superior customer interactions. Positive customer experiences that stem from such interactions can create higher customer engagement and loyalty, offer a competitive advantage, and translate into financial advantages for the company. To set themselves apart from the competition, companies need to create new and innovative interactions with the customer that continuously improve the customer experience.

However, while many companies have created responsibilities and resources for managing the customer experience, they often remain without a strong impact on the general operations of the company, meaning that the efforts do not translate into better experiences during customer-company interactions. Thus, the question is how the management of customer experiences should best be set up and integrated into a company in order to create innovations of which the effects improve the customer experience and translate into value for the company. Specifically, the research question is *how customer experience innovation can be anchored in the organization in order to integrate the individual customer experience and the organizational perspective on customer experience management*.

This chapter addresses this question and analyzes successful approaches to integrating customer experience management in the company. It also considers how impact is created, and how this enables continuously improving the company's effort to innovate the customer experience.

For practitioners, the study provides insights into specific actions that can strengthen their company's positioning in terms of customer experience management. It is illustrated how the objective of better customer experience management can grow into becoming an organic part of the organization. From the chosen theoretical perspective, the study addresses the gap between bringing the research on customer experience and on customer experience management together by proposing processes and practices that allow companies to bridge the gap between the individual customer's experience and the management of the general customer journey.

To answer the question of how customer experiences can be effectively managed in the company to yield innovative outcomes, a single in-depth case study was conducted. The Singaporean bank OCBC has oriented its entire business towards designing superior and favorable customer experiences. The case is set in the financial services industry in Singapore and can be considered a critical case, as both the financial services industry in general and financial

service providers in Singapore in particular face strong and even increasing pressure to compete on offering superior customer experiences, while at the same time, the industry creates a dynamics for meeting this changing environment and takes proactive measures to be ahead of customer expectations.

This chapter is organized as follows. First, the challenge faced by companies with regard to customer experience is discussed in detail. Then, the relevant concepts in the literature are discussed and approaches to integrating customer experience management delineated. The methodology for the case study is presented and the case of OCBC is elaborated. This is followed by a discussion on the key factors that allowed OCBC to integrate customer experience management and to initiate a process towards transforming how employees approach projects. Implications are formulated for both practitioners and theory. Finally, avenues for further research are identified and an outlook is presented.

2.2 Relevance of Organizational Customer Experience Management

Companies are increasingly required to strategically manage the customer experience in order to innovate the customer experience and stay competitive. Investigating how integrating customer experience management into company operations affects the ability to innovate is relevant both from a practical and a theoretical perspective.

2.2.1 Practical Relevance

Managing the customer experience has gained a place on the agenda of many companies. Already in 2015, it was estimated that in 2016, 89% of all companies would compete on customer experience (Gartner, 2015). Recent reports investigating the impact of changing the customer journey in order to facilitate superior customer experiences show a strong effect on both the company and the customer. Changing the customer journey with an emphasis on changing digital demands has been shown to result in substantial revenue increases and cost decreases (McKinsey, 2017, p. 22). Yet, many companies are facing difficulties in implementing customer experience management effectively. This is mainly due to two challenges.

When managing the customer experience, companies orchestrate the interactions throughout the customer journey in order to elicit positive customer experiences and to steer a customer's experience with the company. The first challenge is that customer experiences are by nature subjective and thus can only be prepared for, but not directly influenced by companies. *Establishing the link between the general form of the customer journey and the impact on the individual customer is challenging and crucial to managing the customer experience.* Many companies approach this issue by involving users throughout the management process and by testing the impact of the interactions in the customer journey on the customer. These insights

help to identify potential to improve the customer experience and to better respond to customer needs. More challenging, however, is the development of the changes to the interactions, especially when trying to create new customer experiences. The objective of customer experience management is not only to improve existing interactions but also to innovate them. To guide the innovation process and to increase its effectiveness, it is necessary to understand which attributes of the customer experience management process foster and yield innovations. Therefore, one goal of this study is to identify elements of the process and practices that yield differentiating outcomes on the customer experience.

The second challenge relates to the implementation of successful customer experience management considering the increasing focus on customer experiences also among competitors. Recurring themes among practitioners include “putting the human in the center,” ensuring the “human touch in products and services,” implementing design thinking and agile methods (that are iterative, use frequent prototyping, and involve the customer), making interactions “simple and easy” for the customer, and “reducing complexity” on the side of the customer. As these management and innovation practices become more commonplace, the challenge for managers is to understand how customer experience management can be implemented in the organization in order to yield a lasting impact and to create a sustained competitive advantage. Preparing the organization for creating superior experiences and sustainably integrating such processes in the organization is required. *Creating a larger impact of the customer experience improvement efforts throughout all customer-company interactions requires companies to anchor customer experience management in the entire organization and to master the practices for improving the customer experience.* The second goal of the study is thus to understand attributes of the customer experience approach of an organization that effectively and sustainably embed customer experience management in the organization.

2.2.2 Theoretical Relevance

Innovation that improves the customer experience has evolved as a company response to increasing competition (e.g., Candi et al., 2013, p. 279; Gentile et al., 2007, p. 405; Homburg et al., 2017, p. 377; Pullman & Gross, 2004, p. 551). Differentiation has shifted from a competition on “tangible design” through competition based on “service benefits” and “relationships” to competition on “experiential values” (Palmer, 2010, p. 197). Customer experience management has gained high significance for both research and practice and is considered a source of competitive advantage (Homburg et al., 2017, p. 395; Kranzbühler et al., 2018, p. 433; Verhoef et al., 2009, p. 38). The concept of customer experience has become an umbrella construct that is characterized by a diverse set of understandings (Kranzbühler et al., 2018, p. 436). Still, research on customer experience management is at a nascent stage (e.g., Homburg et al., 2017, p. 378; McColl-Kennedy et al., 2015, p. 430). Generally, customer experiences are either approached from the customer’s perspective or from the organizational perspective.

So far, however, links between the two perspectives have rarely been considered in research (Kranzbühler et al., 2018, pp. 438-439). While the customer perspective emphasizes the individual customer's experiences and provides insights into the underlying psychological processes, the organizational perspective looks at customer experience management across customers and focuses on management approaches and internal company processes.

McColl-Kennedy et al. (2015, p. 431) advocated more strongly acknowledging the role of all involved parties. The authors suggested looking at the practices of all actors that yield effects on the customer experience (ibid.). Also, the related literature on service innovation suggests considering how various practices, such as behaviors, activities, knowledge, or emotions, contribute to innovation and how they relate to the different actors and physical artifacts involved (Barrett, Davidson, Prabhu, & Vargo, 2015, p. 144).

This study aims to identify innovation practices specific to customer experience innovation that allow bridging the customer perspective and the organizational perspective. Orchestrating the customer journey in order to influence the customer experience is not perceived as a limitation that keeps the company from the customer, but rather as a tool that allows communication between the parties. The literature on customer experience management acknowledges that not all interactions can be controlled by the company and that, besides the direct touchpoints between the company and the customer, there are also many indirect interactions (Verhoef et al., 2009, p. 32). This case study investigated how solutions that are developed can have an impact beyond the actual touchpoints addressed in the customer journey.

Service innovation describes a company's *development of new and improved services that create value for both the company and the customer* (Snyder, Witell, Gustafsson, Fombelle, & Kristensson, 2016, p. 2407; Storey et al., 2016, p. 527). The literature has identified attributes of the new service development process, but acknowledges that the process for service innovation is less narrowly defined than that for product innovation. So far, recommendations on the setup of an effective service innovation process and management approach that accounts for the service context are missing (Biemans et al., 2016, p. 395). Specifically for the case of customer experiences, research has called for the identification of tools and techniques (Zomerdijk & Voss, 2011, p. 67). The literature has suggested, among others, a strong customer focus by employing ethnographic research, a strong employee involvement by ensuring front-line and bottom-up involvement, and a flexible approach that uses prototyping (Rawson et al., 2013, pp. 93-94; Zomerdijk & Voss, 2011, p. 77). Although these recommendations are adopted in practice, managers still largely perceive service innovation as a trial-and-error process (see Section 1.4.2.2). Moreover, as these practices are increasingly implemented, the question arises how they can be implemented to allow for sustainable differentiation from competitors. In order to identify which attributes of an innovation process allow a company to make sustainable differentiations, this study specifically looks at the application of best

practices with regard to service innovation, the possibility of anchoring the process and practices in the organization, and the transformation of insights throughout the process in order to create new solutions.

2.3 Extant Literature on Customer Experience and Service Innovation

Two perspectives have emerged in the literature on customer experience management. One takes the perspective of the consumer, the other the organization's perspective, to describe customer experiences (Kranzbühler et al., 2018, p. 439). First, the meaning of customer experience for the individual customers is described. Afterwards, customer experience management is discussed from the company perspective.

2.3.1 Customer Experience from the Individual Customer's Perspective

2.3.1.1 Defining Customer Experience

As defined by Meyer and Schwager (2007, p. 118) *customer experience is a customer's "internal and subjective response" that results from interacting with a company*. Such interaction takes place at diverse points of contact, so-called touchpoints, which may include contact with the company itself, its employees, or with fellow customers (Gentile et al., 2007, p. 397; Verhoef et al., 2009, p. 34). The interaction can be direct – where the customer actively seeks contact with the company – or indirect – when contact occurs without the company's involvement (Verhoef et al., 2009, p. 32). The customer's response to these interactions can be cognitive, affective, emotional, social, and physical in nature (Gentile et al., 2007, p. 397; Schmitt, 1999, p. 60; Verhoef et al., 2009, p. 32). In this sense, customer experience is inherently holistic (Verhoef et al., 2009, p. 34). Individual customer experiences are created during all stages of the customer journey, across multiple channels and touchpoints, and in both business-to-business (B2B) and business-to-consumer (B2C) markets (Candi et al., 2013, pp. 281-282; Rawson et al., 2013, p. 92; Verhoef et al., 2009, p. 32). Customer experience is the sum of all experiences that accumulate through a customer's direct or indirect contact with a company over time (Rawson et al., 2013, p. 92).

The experiences that result from the customer-company interaction can be arranged on a continuum according to their creation process (Carù & Cova, 2007, p. 13): from actively shaped by the company (Pine & Gilmore, 1999) through co-created by company and customer (Prahalad & Ramaswamy, 2003) to being created without the company's direct influence. From the company's perspective, a further distinction is made between interactions that are under its control and ones that cannot be controlled by the company (Verhoef et al., 2009, p. 32). Moore (2006, p. 266) observed that innovating the customer experience means "modifying the customer's end-to-end experience from initial encounter to ultimate disposition." Prahalad and Ramaswamy (2003, p. 16) noted that for experiences that are co-created, the

goal is to expand the environment in which interactions take place in order to allow for a wider range of possible experiences. Mainly drawing on the definitions of customer experience by Meyer and Schwager (2007) and Gentile et al. (2007), as well as on the concepts on innovating the experience introduced by Pine and Gilmore (1999) and Prahalad and Ramaswamy (2003), customer experience innovations will be defined as follows: *Customer experience innovation alters the quality or the context of the experience by implementing new or enhanced interactions between the company and its customers.*

Customer experience management builds on the concepts of customer relationship management (CRM) and service marketing, and develops them further. Although related, customer experience management is distinct from customer relationship management. While CRM considers single transactions that happened in the past, customer experience management takes a “continuous” approach that focuses on current interactions (Gentile et al., 2007, p. 396; Meyer & Schwager, 2007; Verhoef et al., 2009, p. 38). In this sense, CRM concerns “what a company knows about a customer,” while customer experience management considers “what a customer thinks about a company” (Meyer & Schwager, 2007, p. 120). An experiential response orientation is also distinct from the concept of market orientation in that it considers sensorial and behavioral customer responses in addition to the cognitive, affective, and relational dimensions (Homburg et al., 2017, p. 395). A further distinction can be made between services and experiences. Service describes the “treatment of a customer” in which the customer actively contributes to service creation (Johnston & Kong, 2011, p. 7). Customer experience on the other hand is the “personal interpretation of the service process and [the customers’] interaction and involvement with it” (Johnston & Kong, 2011, p. 8). It is thus less tangible and focused more strongly on the customer (Sundbo, 2009, p. 433).

2.3.1.2 Evolution of the Concept of Customer Experience

While the concept of experiences has been mentioned as early as in the writings of Keynes, Marshall and Smith (Frow & Payne, 2007, p. 90), Holbrook and Hirschman (1982) were among the first to recognize the experiential dimension of consumption. Until then, the more rational “information processing perspective” had been predominant, before they postulated that “fantasies, feelings, and fun” are equally important motives for consumption (Holbrook & Hirschman, 1982, p. 132). Pine and Gilmore (1999) further developed this idea with the concept of the “experience economy,” in which experiences are a form of economic output, (similar to commodities, goods, and services) (Pine & Gilmore, 1999, p. 6). Their approach is one of “staging experiences” where the company designs a context that creates certain experiences for the customer (Pine & Gilmore, 1999, p. 30), but where customers do not get the opportunity to actively produce their own experiences (Carù & Cova, 2007, pp. 11-12). In an experience economy, memorable experiences are created by the company for the customer, e.g., by theming a story and creating impressions. Pine and Gilmore (1999, p. 166) and Pine

and Gilmore (2014, p. 28) concluded that in the future, the experience economy will develop into a transformation economy. This means that consumers will no longer be the recipients of experiences that are staged for them by the company, but will instead choose an offer in expectation of how the experience will “change” them.

Today, the understanding of experience creation in the academic literature has broadened. The responsibility of the company has shifted from staging an experience towards a more open approach, one that provides the context that enables customers to create their own experiences (Prahalad & Ramaswamy, 2003, p. 12) and means that “memorability” is no longer the necessary core of customer experience (Gentile et al., 2007, p. 396). In order to reconcile the different views, Carù and Cova (2007, p. 13) proposed that the involvement of the customer can vary along a continuum from passive reception of staged experiences through participation as co-creator to experience creation that is independent from the company. Moreover, Carù and Cova (2003, pp. 281-282) emphasized that apart from “extraordinary” experiences, which were pronounced in the experience economy, “ordinary” experiences are also comprised by the customer experience concept. With the introduction of the service-dominant logic, services and the experiences that are provided through them are considered as fundamental to economic exchange (Kranzbühler et al., 2018, p. 437; Vargo & Lusch, 2004, p. 9).

Research on customer experiences has become increasingly holistic. While customer experiences was initially considered at separate encounters with the company, the tendency nowadays is to assume a longitudinal perspective that acknowledges that the customer experience develops over time and through repeated encounters with a company (Kranzbühler et al., 2018, pp. 437-438). Following this logic, also past experiences influence customer experience (Verhoef et al., 2009, p. 33). Already early on, research acknowledged that in addition to the immediate impact of the interacting parties (i.e., a customer and a company) on the experience, contextual and environmental factors, including other customers, also affect the experiences elicited through these interactions (Bitner, 1992, p. 60; Hui & Bateson, 1991, p. 182). Further broadening the focus, customer experiences are not only shaped by the focal company, but by the broader network of companies that a customer interacts with during a service provision (Patrício, Fisk, Cunha, & Constantine, 2011).

Customer experience management has been approached from a consumer behavior perspective as well as from a strategic marketing perspective (Carù & Cova, 2007, p. 11). The goal in consumer behavior is to identify the psychological dimensions of the experience construct. The consumer behavior perspective is converging increasingly with neurophysiological research and applies neuromarketing to study customer experiences (Achrol & Kotler, 2012, p. 39). This stream of research investigates how senses are elicited in the brain. The goal of experiential marketing, on the other hand, is to strategically develop and apply experiences as an economic offer. For the research at hand, while the consumer behavior side should not be neglected, a strategic approach towards customer experiences will be taken, as the focus is

on providing insights on processes and practices for management to innovate and improve the customer experience and less on the individual customer reaction.

2.3.1.3 Customer Experience in the Customer Journey

Consumers generally aim to fulfill utilitarian (i.e., functional) and hedonic (i.e., experiential) needs (Candi et al., 2013, p. 282). Both types of needs are combined in every product or service in different proportions (Addis & Holbrook, 2001, p. 58). The experiential value of an offer is especially important as it creates a more emotional relationship and strengthens customer loyalty (Chitturi, Raghunathan, & Mahajan, 2008, pp. 58-60; Schmitt & Mangold, 2004, p. 22). The customer experience is triggered by a series of experience clues that send a message to the customer (Berry, Carbone, & Haeckel, 2002, p. 86). Customers perceive those clues both by their presence and by their absence. Managing the customer experience means orchestrating these clues in a way that they correspond to the customer's needs (Berry et al., 2002, pp. 85-86; Carù & Cova, 2007, p. 4). Analogously to the functional and hedonic values of an offer, a first category of clues deals with functional value, while a second category comprises the more emotional clues that address the senses (smell, sound, sight, taste, texture, environment) (Berry et al., 2002, p. 86). This second category, i.e., emotional clues, can be further specified as "mechanics" (clues that are emitted by things) or "humanics" (clues emitted by persons).

The goal of customer experience management is to manage the sum of experiences in order to elicit favorable subsequent reactions and behaviors. A key factor is to create consistency (Schmitt, 1999, p. 60). For the company, the starting point is to carefully manage the clues so as to deliver a favorable experience at every interaction. Interactions take place between a customer and the company, employees, or other customers. The means of the interaction are technologies and servicescapes (Klaus & Edvardsson, 2014, p. 70; Verhoef et al., 2009, p. 34), but also a company's visual and verbal communication or branding. All of these – from employees through technologies to fellow customers – are collectively termed "experience providers" (Schmitt, 1999, p. 60). The resulting experiences are composed of dimensions: sensory (how the customer senses), affective (how the customer feels), creative or cognitive (how the customer thinks), physical behaviors and lifestyle (how the customer acts), and social identity (the relation of the customer with the environment) (Schmitt, 1999, p. 60). Experiences lead to mental conceptions, which trigger certain emotions, judgments, and eventually actions (Klaus & Edvardsson, 2014, p. 70).

The company, the customer, and the context impact the interactions (the interface where company and customer come together, no matter who initiates or drives the interaction) and the customer experiences (that are inevitably generated in the course of the interaction). While the company can influence the result of an interaction to a certain extent through designing a platform (e.g., in terms of positioning, value promise, and experience motif), it is the social

interactions that strongly impact the experience, but that are also less predictable (Carù & Cova, 2015, p. 277; Harris, Baron, & Parker, 2000, p. 113; Schmitt & Mangold, 2004, p. 81). Experiences, too, can be broken down into more specific elements. The clues at each touch-point – designed in order to evoke a certain response in the consumer – ideally address all six dimensions of customer experience (sensorial, affective, cognitive, behavioral, life style, and social) (Candi et al., 2013, p. 281; Gentile et al., 2007, p. 398; Schmitt, 1999, p. 60). Consistent over any experience, an experience is perceived through emotions, the level of trust, and a sense of control (Chase & Dasu, 2014, p. 575). The “optimal” experience creates a feeling of “flow” and should have functional, purposeful, engaging, compelling, and memorable qualities (Pullman & Gross, 2004, p. 553). Moreover, it is able to convey meaning and social status to the customer (Sundbo, 2009, pp. 439-440). The objective for customer experiences has also been described with concepts such as the “total,” “emotional,” “perfect,” and “outstanding” experience (Grønholdt et al., 2015, p. 91). McColl-Kennedy et al. (2015, p. 430) pointed out, however, that customer experiences arise in all interactions and do not necessarily have to be characterized as outstanding, but rather can also arise in “mundane situations and across a range of contexts.” The relationship between customer experience and impact on company performance is affected by several factors, including situational context and customer-related factors (Bruhn & Hadwich, 2012a, p. 14; Verhoef et al., 2009, p. 14). Regarding the latter, the customer’s level of involvement and commitment is an important differentiator (Gentile et al., 2007, p. 402).

A customer’s judgments of an experience lead to a psychological response that creates behavioral intentions and actions by the customer that, in turn, create performance outcomes for the company (Bruhn & Hadwich, 2012a, p. 21; Johnston & Kong, 2011, p. 8). Through stimulating the customer’s emotions, experiences impact the purchasing motivation and thus have an indirect effect on company performance (Xu & Zheng, 2006, p. 87). The psychological response comprises the cognitive and emotional response, most importantly the customer’s satisfaction that results from judging the value of an experience (Klaus & Edvardsson, 2014, p. 69). The customer’s personal values furthermore determine which stimuli are perceived predominantly and thus the response that is triggered (Jüttner, Schaffner, Windler, & Maklan, 2013, p. 742). In an ideal situation, customers should become advocates of the company (Frow & Payne, 2007, p. 92).

The outcomes of customer experiences are the value for the customer on the one hand, and an effect on firm performance on the other. Concerning the *outcomes for the customer*, customer experiences can range from inferior through competitive to distinctive (Fawcett, Fawcett, Cooper, & Daynes, 2014, p. 457). Klaus and Maklan (2013) developed a measurement scale specifically for customer experiences that considers the quality of the product experience, the outcome focus, peace-of-mind provided to the customer, and the performance

at moments-of-truth. Customers' experiences throughout the interactions with a company impact their preferences and purchase decisions (Gentile et al., 2007, p. 396). Considering the *outcomes for the company*, good experiences improve customer's loyalty and satisfaction and trigger positive word-of-mouth – which are typical metrics for evaluating an experience – and positively impact employee satisfaction and revenues (Klaus & Maklan, 2013, p. 237; Rawson et al., 2013, p. 92). In particular, the effect of meaningful customer experiences on loyalty in the long-term in the on- and offline context, on satisfaction, and on a competitive advantage is highlighted in the literature (Addis & Holbrook, 2001, p. 51; Anil, Jay, & Tingting, 2016, p. 104; Bruhn & Hadwich, 2012a, p. 7; Ismail, 2011, p. 193; McColl-Kennedy et al., 2015, p. 430; Stein & Ramaseshan, 2016, p. 8). Customer experience has been shown to impact the company's financial and market performance, as well on differentiation (Grønholdt et al., 2015, p. 96). As such, for the company, the objective of improving the customer experience is to increase customer loyalty, financial performance, and market performance.

2.3.2 Customer Experience Innovation from the Company's Perspective

In the following, an organizational perspective will be assumed that looks at how customer-company interactions can be designed innovatively to elicit superior customer experiences. This comprises notions of the related organizational implications.

2.3.2.1 Customer Experience Improvements in the Organization

Managing the customer experience is becoming increasingly decisive for companies as customers look for meaning in their life, want to make the most of self-actualization, and want to improve their social status (Sundbo, 2009, p. 436). In order to manage the customer experience, a profound understanding of the performance of the company and the status quo of the customer relationship is required, for which market research forms the basis (Rawson et al., 2013, p. 94). Schmitt and Mangold (2004, p. 38) distinguished determinants of customer experience based on the degree to which the company can influence these and based on the impact they have on the customer experience. With a general process for managing the customer experience being devised (e.g., Schmitt, 2003, p. 25), moving from a theoretical to a more practically-driven approach is necessary to identify specific tools for developing an interface that yields a superior customer experience (Gentile et al., 2007, p. 395).

Research has found that many different small or even seemingly minor changes to the customer interface can profoundly improve customer experience, satisfaction, and loyalty (Bolton, Gustafsson, McColl-Kennedy, Sirianni, & Tse, 2014, p. 258; D. Grewal, Levy, & Kumar, 2009, pp. 1-2). Examples include consistent messages across channels and responsiveness to the customer (ibid.). Companies tend to underestimate the impact of these aspects and tend to consider them of minor value to the customer experience, whereas customers

assign high priority to these aspects (Bolton et al., 2014, p. 259). In overcoming this gap between the company and customer evaluation, the authors suggested rethinking traditional service management approaches. This means that the human element in interactions should be emphasized and higher importance needs to be attributed to the emotional component of the interaction. This can be achieved, for instance, by allowing for co-creation by the customer (Bolton et al., 2014, p. 266).

Innovated experiences are a result of changes in the interactions and can in turn alter interaction quality (Moore, 2006, p. 131). Several options for innovating the experience and for altering interactions exist, for example, through introducing new touchpoints or through offering new paths through touchpoints (i.e., new journeys). How well an innovation is accepted depends on many factors. Looking at the example of self-service technologies, Meuter, Bitner, Ostrom, and Brown (2005, pp. 63, 65-66) reviewed innovation characteristics, individual differences, and consumer readiness as potential factors that impact the willingness to try a new touchpoint. Similarly, according to Meuter et al. (2005, p. 77), the perceived risk, compatibility, trialability, complexity, and competitive advantage – mediated by consumer readiness – lead to an increased willingness to try out an innovation. Acknowledging these factors during the development can enhance innovation acceptance.

A further aspect to consider when designing experiences is the experience space in which interactions take place. It encompasses an individual customer's experience and relevant related aspects, specifically the event, the context (space and time), inner involvement, and the derived personal meaning (Prahalad & Ramaswamy, 2003, p. 14). Innovation thus refers to both the "co-creation and expansion of such experience spaces" (Prahalad & Ramaswamy, 2003, p. 14). The environment in which the customer makes an experience is determined by the technical and social capabilities of the company, as well as by the customer-company interaction through technological devices or employees in various channels (Prahalad & Ramaswamy, 2003, p. 15). In order to attend to the individual's needs and preferences (that are themselves contingent on context and time), the experience environment should be flexible and dynamic but stable at the same time (Prahalad & Ramaswamy, 2003, p. 15).

2.3.2.2 Service Innovation to Facilitate Customer Experience Improvements

Innovating the customer experience means employing service innovations throughout the customer journey in order to improve the customer experience. In today's dynamic context, in which technology and customer expectations are rapidly changing, and in which competition is global, developing new services functions as a company resource. Required to remain competitive, this resource can lead to growth, new value for customers, and higher customer satisfaction (Biemans et al., 2016, p. 382; Kuester, Schuhmacher, Gast, & Worgul, 2013, p. 533; Thakur & Hale, 2013, p. 1108).

2.3.2.2.1 *Definition of Service Innovation*

Snyder et al. (2016, p. 2401) acknowledged the growing amount of service innovations that create new customer experiences and thereby re-define the business of innovators. Services are characterized by intangibility, inseparability, heterogeneity, and perishability (Zeithaml, Parasuraman, & Berry, 1985, pp. 33-34). However, there is no general agreement on the meaning of service innovation (Biemans et al., 2016, p. 394; Snyder et al., 2016, p. 2401). Due to the individual nature and context sensitivity of services, service innovation is considered as “emergent, interactive, and dynamic, as well as knowledge and information intensive” (Barrett et al., 2015, p. 137). This study adopts the definition by Storey et al. (2016, p. 527), *who define service innovation as the “development of new or enhanced intangible offerings that involves the firm’s performance of a task/activity intended to benefit customers.”* Despite marginal differences, service innovation and new service development (NSD) processes are typically considered equivalent (Biemans et al., 2016, p. 383). Service innovation entails changes in value for the company and the customer (Snyder et al., 2016, p. 2407). Over time, research on service innovation has shifted from a focus on the success factors of new service development to a focus on competences and capabilities, customer insights, and contextual factors of service innovation (Biemans et al., 2016, pp. 391-392).

The development of research on service innovation can be separated into three phases, each adopting a different perspective. The *assimilation perspective* emphasizes the role of technological changes in service innovation and expresses the Schumpeterian view (Gallouj & Savona, 2009, pp. 156-158; Witell, Snyder, Gustafsson, Fombelle, & Kristensson, 2016, p. 2864). This perspective distinguishes between the categories of product, process, market, sources of supply, and organizational innovation as different types of innovation. According to the Schumpeterian view, an innovation is an invention that is successfully launched in the market (Snyder et al., 2016, p. 2402). Moreover, from this perspective, an innovation is new to the company (and other actors) and generates value for the company but does not consider the customer (ibid.). This view suggests that the same principles hold for both product and service innovation and thus refers to both as “innovation” (Koskela-Huotari, Edvardsson, Jonas, Sörhammar, & Witell, 2016, p. 2965; Witell et al., 2016, p. 2869). A second stream in the literature, the *differentiation approach* (or demarcation perspective, (Witell et al., 2016, p. 2870)), differs from the previous approach in that it considers service innovation as distinct from product innovation (Gallouj & Savona, 2009, p. 160) and refers to “services innovation” (Witell et al., 2016, p. 2869). The differentiation approach stresses the role of non-technological elements and perceives the categories of innovation from the former approach as not expressing the essence of innovation (ibid.). It emphasizes the role of the company in developing innovations, but does not require innovations “to be substantially new, introduced in the market, or make a substantial profit in order to be considered a service innovation” and continues that “[i]n practice, this means that all service firms develop service innovations”

(Witell et al., 2016, p. 2870). More recently, some authors have advocated the *synthesis perspective*, which proposes that innovation theory should encompass both product and service innovation (Witell et al., 2016, p. 2864). This perspective refers to “service innovation,” which describes both the NSD process and the innovation outcome (Witell et al., 2016, pp. 2869-2870). It highlights that services are co-created with the customer and that co-creating innovative services may involve processes as well as products and processes (Skålen, Gummerus, Koskull, & Magnusson, 2015, p. 137; Witell et al., 2016, p. 2870). As this perspective considers economic development as stemming from new combinations of innovation, this perspective is related to the neo-Schumpeterian view (Witell et al., 2016, p. 2864). Moreover, Gallouj and Savona (2009, p. 163) suggested the Lancasterian and post-Lancasterian approach as one that can operationalize this perspective by emphasizing the multiple characteristics of a product, such as the technical characteristics, competences, and the characteristics of service creation. Rajala, Gallouj, and Toivonen (2016, p. iv) pointed out that the synthesis perspective is expressed in many recent theoretical approaches, among others, the service-dominant logic, which posits that all economic exchanges are inherently service exchanges (Lusch & Vargo, 2006, p. 282), as well as the experience economy approach (Pine & Gilmore, 1999). Also, the critical role of ICT (information and communications technology) as a resource for service innovation has been stressed (Barrett et al., 2015, p. 136).

Service innovations are characterized based on the degree of change, the type of change, the newness of the innovation, and the means of provision (Snyder et al., 2016, p. 2404). The *degree of change* can be radical, which describes a new service that does not have any characteristics of previous services. Or it can be incremental, which means a service that changes previous services by adding or substituting characteristics (Gallouj & Weinstein, 1997, pp. 547-548). Moreover, improvements that enhance characteristics of the service without changing the offer itself and that recombine existing services are also frequently used in the literature to describe the degree of change (Snyder et al., 2016, p. 2404). The *type of change* mostly relates to product or process related changes (Snyder et al., 2016, p. 2405). In their systematic review of the extant literature, Snyder et al. (2016, p. 2405) also found studies that distinguish organizational (strategic and managerial), delivery, and marketing changes. However, these categories are difficult to operationalize and have thus been evaluated as “not suited for service innovation research” (Snyder et al., 2016, p. 2407). Another distinction concerning the type of change is made between interactive service innovations, which take place in direct interaction and are noticed by the customer, and supportive service innovations, which concern service production in the back-end and are not noticeable by the customer (Salunke, Weerawardena, & McColl-Kennedy, 2013, pp. 1087-1088). Especially the former type is relevant when innovating the customer experience by changing interactions with customers. It has been related to a sustained competitive advantage (Salunke et al., 2013, p. 1093). *Newness* distinguishes between innovation outcomes that are new to the market and those that are new to the firm, where frequently radical innovations are related to innovations new to the market

and incremental innovations to innovations new to the firm (Snyder et al., 2016, p. 2405). Snyder et al. (2016, pp. 2406-2407) went a step further by concluding that radical innovation should mean new to the world, while incremental innovations should mean new to a market or geographic region. In general, an innovation needs to be perceived as new from the customer's perspective, which implies that new value is co-created. In addition, sufficient attention should be paid to the value for the company, i.e., the market performance of the innovation (ibid.). A focus on the changes in value has been advocated to assess the outcome of service innovations (Snyder et al., 2016, p. 2407). Finally, the *means of provision* distinguish between innovations that use technological or organizational (human) enablers for development (Snyder et al., 2016, p. 2405). Dotzel, Shankar, and Berry (2013, p. 260) distinguished between p-innovations, which describe human-enabled innovations, and e-innovations, which can be better standardized and scaled. For this reason, the latter are more commonly applied in the financial services industry. E-innovations are implemented to improve the efficiency of and the experience yielded by services (Snyder et al., 2016, p. 2407). P-innovations have also been related to high-touch services and have been described as tacit services, while e-innovations are related to high-tech services and have been described as explicit services (Snyder et al., 2016, p. 2495; Storey et al., 2016, pp. 530-531).

2.3.2.2.2 *Processes for Innovating the Customer Experience*

To innovate the customer experience, service innovations are implemented throughout the customer journey with the objective of sustainably impacting the customer experience. Service innovation has been considered as the development of new value propositions (Skålen et al., 2015, p. 137). Originally, the innovation process in the service industry was less structured than the product innovation process, although this has tended to change recently (Gassmann & Sutter, 2013, p. 163; Sundbo, 2009, p. 440). Similarly, the innovation activities in the experience economy are perceived as emergent and less formalized, even though some authors have attempted to conceptualize them as a structured and systematic process (Gallouj & Savona, 2009, p. 155; Skålen et al., 2015, p. 140).

The NSD process differs from the new product development process (Papastathopoulou & Hultink, 2012, p. 705). Due to the interactive nature of services and value creation with customers, open and interactive innovation models are now considered as best suited to describing the NSD process (Rajala et al., 2016, p. v). The nature and success factors of service innovation have been described differently, as will be outlined below.

The “reverse product cycle” by Barras (1986, p. 165) is considered the first attempt to describe the innovation cycle that is specific to services. The author observed that technology adoption initiates the service improvements and that process innovation is followed by product innovation. However, the theory is not applied anymore in services research as it is considered to describe the diffusion of technological innovations (Gallouj & Weinstein, 1997, p. 538;

Toivonen & Tuominen, 2009, pp. 888-889). Fitzsimmons and Fitzsimmons (2000, p. 18) suggested a new service development process cycle, one that acknowledges the iterative and non-linear nature of the NSD process and stresses the role of four enablers (i.e., people, product, systems, and technology). The authors emphasized that with service development, often the planning and execution phases converge and that expertise in both phases marks high NSD competence. Den Hertog (2000, p. 4) developed a four-dimensional model of service innovation that proposes that innovation may include new service concepts, new client interfaces, new service delivery systems, and/or new technological options. Alam and Perry (2002, pp. 527-528) suggested a sequential innovation process that pays particular attention to the ideation phase and to strong customer orientation. Stuart and Tax (2004, pp. 611-612), who saw services as performances, noticed that services are “integrated systems” that need to be considered when trying to understand the processes for developing a service. The authors suggested that to develop staged experiences, formal integration mechanisms (such as planning meetings) increase effectiveness and efficiency, that experimentation increases the success rate and innovativeness, and that results from experimentation should only be codified at a late stage. They also suggested that there is a need for authenticity in all aspects and that all actors need to immerse themselves in their role during service delivery, and that management support is critical for success (Stuart & Tax, 2004, pp. 620-623). Toivonen and Tuominen (2009, p. 894) found that service innovation can occur either reactively, as a response to a need, or proactively, as an open search for ideas. Among knowledge-intensive business services, they found that the order of the idea generation, development, and market launch can vary and that in either order, customers play an important role in the process (Toivonen & Tuominen, 2009, pp. 898-899).

The service innovation process has also been conceptualized as a learning process that aims at generating and finding applications for new knowledge (Hipp & Grupp, 2005, p. 519). Moreover, the process contains scientific, technological, organizational and social aspects (ibid.). Especially tacit knowledge needs to be shared between the different actors (“personalization strategy”) in order to achieve a sustained competitive advantage through innovation. Ideally, this is combined with sharing and formalizing explicit knowledge (“codification strategy”), to increase the impact on the competitive position, NSD proficiency, and innovativeness (Storey & Kahn, 2010, p. 405). However, further research is needed to understand how such strategies can be best combined and applied throughout the development process and which effects this will yield (Storey & Kahn, 2010, p. 406).

The outcomes of service innovations are shaped by the customer’s and the company’s competences as well as by the service’s material and immaterial technical attributes (Gallowj & Savona, 2009, pp. 163-164). Characteristics of experience innovations are that they are frequently ad-hoc and involve employees and customers rather than a dedicated R&D depart-

ment. Moreover, the outcomes encompass behavioral more than technological changes. Notably, truly radical innovations are rare, both in service- and in experience innovations, even though innovative services often combine forms of innovations (product, process, etc.) (Sundbo, 2009, p. 440). A service innovation should ideally create value for both the company and the customer, but also for stakeholders such as alliance partners and communities (Ostrom et al., 2010, p. 5). For the company, successful service innovation contributes to short-term commercial success and to long-term strategic competitive advantage (Storey et al., 2016, p. 529).

2.3.2.2.3 *Success Factors for Service Innovation*

Kuester et al. (2013, pp. 535-536) found service-related success factors for service innovation (e.g., service quality), process-related success factors (e.g., customer integration), company-related success factors (e.g., top management support, interdisciplinary teams, service responsiveness), and market related success factors (market attractiveness). Storey et al. (2016, p. 530) added the categories of strategy characteristics and team characteristics that impact service innovation success.

Launch proficiency has been shown to be the most important factor for new service success (Storey et al., 2016, p. 536). It also plays a more important role in NSD than in product development. In comparison to product innovation, service innovation is strongly influenced by the company's absorptive capacity, its innovation strategy, and the involvement of front-line staff (ibid.). Organizational design, efficiency of the development process, the innovativeness of the service, external relationships, internal communication, and structured development are further factors that strongly impact the success of new services (ibid.).

The financial services industry, which is the focus of this research, offers "explicit services" that are based on explicit knowledge and on coded information data and that involve information or communication networks (rather than "tacit services," which are based on tacit knowledge and where production and consumption occur simultaneously) (Storey et al., 2016, pp. 530-531). Explicit services are "often centrally produced, separable, homogeneous, or consistent due to standardized processes and functionally associated with service technologies" (Storey et al., 2016, p. 531). In the literature on service innovation, the largest group of studies focuses on the financial services industry (Biemans et al., 2016, p. 393). For companies offering explicit services, a proficient operations and delivery system that creates synergies with the new requirements of service innovations is beneficial (Storey et al., 2016, pp. 538, 542-543). Also, a strong market orientation that detects customer needs is required (ibid.). Finally, cross-functional integration and knowledge integration mechanisms are more important in explicit than in tacit services (ibid.).

Companies in the financial services industry are characterized as "efficient developers," i.e., companies that tend to develop innovations in-house, that aim to standardize the offer, and

that pursue the main objective of increasing efficiency (Kuester et al., 2013, p. 537). Consequently, among these companies, especially service-related success factors and company-related success factors are perceived as most important (Kuester et al., 2013, pp. 539-541). Concerning the service, this includes the superiority of the service and the quality of the service experience. To succeed in these areas, high employee motivation is necessary. Concerning the company, customer orientation and high internal cooperation are considered key.

2.3.2.3 Approaches and Means for Innovating the Customer Experience

2.3.2.3.1 *ICT for Innovating the Customer Experience*

Innovation is enabled by genuine empathy with customers, by a belief in transformation through ICT, by continuous organizational learning, and by the orchestration of a network with key partners (S. C. Srivastava & Shainesh, 2015, pp. 259-261). Technology in general and ICT in particular are highly relevant in all industries and are considered as resources with a transformative role in service innovation (Barrett et al., 2015, p. 136; Vargo & Lusch, 2004, p. 2). It has even been suggested that currently, digital innovation might be the most important factor for business innovation (Barrett et al., 2015, p. 148). ICT is considered key to service innovation and is related to enhanced knowledge processes and absorptive capacity (Barrett et al., 2015, p. 140). Similarly to S. C. Srivastava and Shainesh (2015), Wooder and Baker (2012, p. 20) studied service innovation in emerging markets. They supported the notion of the need to truly sense and understand customer needs. Moreover, the authors found that the solution should be kept simple (especially in the beginning of the development process) and launched quickly, in order to continue learning and to reach a critical mass of customers.

While technology plays an important role for service innovation, its role for customer experience depends on its impact on customers' needs rather than on the new technology itself (Maklan, Antonetti, & Whitty, 2017, p. 110). Studies have shown that relying almost exclusively on technology (specifically, self-service automation) for service innovation can even lower customer satisfaction. Instead, a combination of technological and human elements has been considered best suited to creating loyalty and customer retention (Barrett et al., 2015, p. 140).

2.3.2.3.2 *Knowledge for Innovating the Customer Experience*

Service innovation can occur during customer interactions, through developing new knowledge, or as a result of formalizing existing practices (Barrett et al., 2015, p. 137; Gallouj, 2002, p. 20). Companies apply three value creating mechanisms, namely, resource exploitation, resource combination, and value reinforcement (where one innovation objective is achieved while pursuing another) (S. C. Srivastava & Shainesh, 2015, pp. 257, 262). S. C. Srivastava and Shainesh (2015, pp. 249, 262) found that knowledge (i.e., skills, competencies,

and understandings) is the most critical resource during the development and launch phase. During the growth and expansion phase, technology becomes more critical and needs to be complemented by often neglected institutional resources such as laws, practices, and agencies during late growth and expansion (*ibid.*). Barrett et al. (2015, p. 142) also emphasized the role of institutions (such as norms and institutional arrangements) for innovations through new technology and new markets. Maklan et al. (2017, p. 110) highlighted that incremental improvements are key to creating a learning process in the organization. On the customer side, supporting learning is also key to good experience. Ponsignon et al. (2015, p. 306) found that educating customers about the offers through their front-line staff and marketing prevents confusion and negative emotions.

The knowledge-based view has developed from the resource-based view and considers knowledge as the resource that is strategically most relevant for creating value and competitive advantage (Grant, 1996b, p. 110). Knowledge consists of information and know-how (Kogut & Zander, 1992, p. 384). Accessing outside knowledge requires an absorptive capacity of the company, i.e., the ability to acquire, assimilate, transform, and exploit knowledge (W. M. Cohen & Levinthal, 1990, p. 128; Zahra & George, 2002, pp. 189-190). In this sense, a company's knowledge integration capability is crucial (Grant, 1996a, p. 375). Furthermore, a company needs a combinative capability of connecting different sources of knowledge in order to innovate (Kogut & Zander, 1992, p. 391).

Innovation activities can be conceptualized as a form of knowledge creation activities (Madhavan & Grover, 1998, p. 1; Nonaka, 2007, p. 164). In relation to customer experience innovation, existing tacit and explicit knowledge can be recombined in order to develop new insights that can be employed to solve customers' problems. Making personal tacit knowledge explicit is important for creating new knowledge, especially in the beginning of an innovation process (Nonaka, 2007, p. 164; Nonaka, Umemoto, & Senoo, 1996, p. 214). It requires engaging the entire organization, i.e., all functions and levels (Nonaka, 2007, pp. 164-165).

To develop an innovation, it is necessary to possess both "use knowledge," i.e., an understanding of how to create value in the usage situation, and "technology knowledge," i.e., an understanding of how to deploy resources in order to deliver a service (Edvardsson, Kristensson, Magnusson, & Sundström, 2012, p. 421). Knowledge needs to be relevant, new, and feasible, while further considerations for innovation are the credibility, comprehensibility, and cost of this knowledge (Kristensson, Gustafsson, & Archer, 2004, pp. 6-7; Mahr, Lievens, & Blazevic, 2014, p. 602; Moenaert & Souder, 1996, p. 1601). Innovating the customer experience requires sound knowledge of the user, the user's situation and context, and needs or problems. The technical knowledge is applied in order to solve customers' problems and to improve their experience. Thus, technical knowledge is used as a means for developing the innovation, but the main requirement for customer experience innovation is to create use knowledge, based on which the elements making up the customer experience are designed.

Knowledge from different departments in the company and from the user is combined in order to develop solutions. For the development process of customer experience innovations, an important consideration is to envision who should be involved and which processes or techniques allow tapping into relevant knowledge and information.

2.3.2.3.3 *Culture and Organizational Capabilities for Innovating the Customer Experience*

Companies that succeed in implementing a focus on experience innovation in their culture establish the basis for competitive advantage (Rawson et al., 2013, p. 98). According to Norton and Pine (2009, pp. 4, 6), in the case of the experience economy, innovation is not primarily about making transactions more convenient and faster (i.e., a focus on functional jobs), but rather about using the firm's competencies for adding qualities that make customers want to spend more time with the company (i.e., social and emotional jobs).

Research on innovation development finds that, generally, customer orientation, competitor orientation, and interfunctional coordination all contribute to the innovation performance of the company (Atuahene-Gima, 2005, p. 63). These elements are inherent to customer experience innovation. To innovate, a customer perspective is taken in order to perceive the interactions and experiences along the journey from the customer's point of view. Learning from competition has also been suggested as a contributing factor by Zomerdijk and Voss (2011, p. 77). And finally, as many different touchpoints – managed by different departments – are involved, innovating the experience is a collective effort in a company and thus cross-functional collaboration is recommended (Rawson et al., 2013, p. 95; Sundbo, 2009, p. 438). The innovation focus needs to be instilled in the culture of the organization and the processes, metrics, and incentives need to be adapted accordingly, especially as customer experience has been shown to be strongly interrelated with employee experience (Rawson et al., 2013, pp. 96, 98; Ryder, 2007, p. 86).

Customer experience management needs to be rooted in company culture. Regarding the cultural mindset, Homburg et al. (2017, p. 387) stressed the need to acknowledge that a touchpoint may elicit multiple experiences and that considering the customer journey is appropriate to account for interactions and their interconnections from the customer's perspective (Homburg et al., 2017, p. 388). Following the notion of considering the end-to-end customer journey, which involves a multitude of interactions, is the observation that customer experience management needs to be open to collaboration with third parties (Homburg et al., 2017, p. 389).

Service design has been identified as a company's mindset that is critical for innovation and necessary for creating customer experiences (Andreassen et al., 2016, p. 22). With this mindset, companies design services based not only on their understanding of customers and their

interactions with the company, but also on customers' contexts, interactions with other companies, and social systems. In this way, they enhance customer centricity (*ibid.*). This improved understanding is translated into the design of customer-company encounters at touch-points (Andreassen et al., 2016, p. 24). In face of the increasing role of technology, Barrett et al. (2015, p. 149) suggested that service design is context-dependent, involves many diverse actors, and that, in addition to a human-centered approach, emphasizes the role of digital artifacts. Papastathopoulou and Hultink (2012, p. 713) also anticipated the increasing relevance of service design in response to changes due to technology, customer needs, and globalization.

Christensen and Overdorf (2000, p. 75) suggested that an innovation can be developed in-house within existing functions if it fits the organizational processes and values. If the fit with organizational processes is poor, a heavyweight team working solely on the project should be created. If the fit with organizational values is poor, a spinout (at least for commercialization) should be opted for (*ibid.*). For service innovation, the organization needs to be set up to be flexible and agile in order to respond to changes. Once the innovation becomes established in the market, this entrepreneurial approach transitions to a more formalized approach (Wooder & Baker, 2012, p. 20). Lemon and Verhoef (2016, p. 89) reported the case of the Dutch bank ING, which transformed its entire operations into an agile and team-based mode of work that is inspired by IT start-ups. The objective is to overcome silos, to increase flexibility, and to ensure a high customer focus throughout all operations. For managing the customer experience, it is key to be close to the customer. As such, an effective customer experience management should be built bottom-up in the organization with an important role played by middle management (Maklan et al., 2017, p. 93).

To manage the customer experience, specific employee and manager capabilities need to be developed (Maklan et al., 2017, p. 110). For innovation among experience companies, leadership takes an important role in relating the innovation activity to strategic goals (Fuglsang, Sundbo, & Sørensen, 2011, p. 675). Front-line employees are recognized as contributing relevant knowledge to the innovation process. This knowledge concerns customer needs and expectations, the resources that can be offered within scope of the service, and practices necessary for realizing the service (Karlsson & Skålén, 2015, pp. 1354-1355). In addition, focusing on employee training and on improving the employee experience so that employees are more engaged and motivated are specific ways of improving the customer experience (C. A. Voss & Zomerdijs, 2007, p. 12). The training of front-line employees who are in direct contact with the customer during service delivery is crucial to improving the customer experience (Ponsignon, Durrieu, & Bouzdine-Chameeva, 2017, p. 767).

A firm's capabilities refer to the ability to use and combine its unique organizational resources in a way that achieves a pre-specified task. These capabilities frequently employ both tacit elements (e.g., knowledge or leadership) and explicit processes (Helfat & Peteraf, 2003, p.

999; C. L. Wang & Ahmed, 2007, p. 35). They are crucial in innovation processes, even more when the subject of innovation is an intangible experience. Capabilities are located in a company's resources, processes, and values (Christensen & Overdorf, 2000, p. 68). Those processes and values make up the organizational culture in the long-run (Christensen & Overdorf, 2000, p. 71). For market-oriented companies, Day (1994, p. 41) identified inside-out, outside-in, and boundary spanning capabilities as key capabilities. Outside-in capabilities allow companies to build strong relationships with their stakeholders and to sense changes in the market early on, both among customers and in technology. Inside-out capabilities are those company-internal capabilities that can be leveraged once an external stimulus or opportunity emerges and include processes and technology development. Boundary-spanning capabilities integrate the first two types (e.g., in order to make strategic decisions, to develop new products, and to deliver services). To explore and proactively deal with fast changing market environments, the inside-out orientation encompasses dynamic capabilities while the outside-in orientation concerns adaptive ones (Day, 2011, p. 188). To innovate the customer experience, companies need both dynamic capabilities and adaptive capabilities.

Dynamic capabilities are inside-out capabilities that enable scanning and identifying changes in the market as well as configuring internal and external competences and resources in order to match these changes (Day, 2011, p. 188; Teece, Pisano, & Shuen, 1997, p. 516). Dynamic capabilities are – related to knowledge generation – “learned and stable activities.” They configure the operating routines that are responsible for the operational well-functioning of a company (Zollo & Winter, 2002, p. 340). Thus, dynamic capabilities are processes (such as product development and decision making), but they do not produce an actual good or service (Eisenhardt & Martin, 2000, p. 1106; Helfat & Peteraf, 2003, p. 999). Dynamic capabilities are based on organizational learning and knowledge generation in a company (Zollo & Winter, 2002, p. 340).

In order to innovate the customer experience proactively and strategically, a company needs to anticipate emerging and latent needs among consumers. This concerns experience innovations for the entire customer base, but also required changes for individual customer journeys. To anticipate these needs and to act on them, a company needs an adaptive capability that can be incorporated in its culture and that requires a strong external network (Day, 2011, p. 189). In experience management, adaptive marketing capabilities are even more critical than dynamic capabilities (Day, 2011, p. 188). They require continuous learning of a company, in order to proactively sense and respond to changes in the market by immersing itself into the lives of customers, by identifying their latent needs, and by scanning for developments in other industries (Day, 2011, pp. 188-189).

2.3.2.3.4 *Customer Involvement for Innovating the Customer Experience*

Lusch and Nambisan (2015, p. 161) considered service innovation as the “rebundling of diverse resources that create novel resources that are beneficial (i.e., value experiencing) to some actors in a given context.” From this perspective, service innovation usually involves a network of actors that also include the customer. Next to the importance of the service ecosystem (i.e., emergent actor-to-actor networks) and service platforms (i.e., platforms for service exchange and venues for innovation), the authors stressed the relevance of value co-creation with customers (Lusch & Nambisan, 2015, pp. 161, 166). Generally with services, customers play a dual role as co-creators, as they create both the customer experience and co-create value (Andreassen et al., 2016, p. 24).

For service innovation, three roles of customers as co-creators are identified: ideators, designers, and intermediaries (Lusch & Nambisan, 2015, p. 168). As ideators, customers contribute knowledge about their needs, context, and usage situations. As designers, customers recombine their existing knowledge in new ways to create new services. As intermediaries, customers span different ecosystems and allow for knowledge transfer between them. The ideas that customers contribute in the innovation process have been found to be highly innovative and to provide insights on latent needs, especially when they also contribute to company’s interpretation of information (Matthing, Sandén, & Edvardsson, 2004, pp. 490-491). The resulting understanding of customers’ needs that employees gain from working with customers aided the implementation of innovative ideas and even triggered the identification of further application options (Matthing et al., 2004, pp. 491-492). Involving customers in NSD processes directly affects technical quality and innovation speed, and has been indirectly related to competitive superiority and sales performance (Carbonell, Rodríguez-Escudero, & Pujari, 2009, p. 547). This is independent of the stage in the development process in which customers are involved (Carbonell et al., 2009, p. 548).

Edvardsson, Edvardsson, Kristensson, Magnusson, and Sundström (2010, p. 12) further investigated methods for involving customers in innovation processes. They distinguished the application of methods based on whether the customer involvement happens within or outside the actual usage situation and whether the involvement happens within or outside the actual service context. For customers familiar with the actual service context, and who report their experience in the actual usage situation, methods include empathic design and collaboration with lead-users (Edvardsson et al., 2012, p. 422). With this approach, customers generate knowledge on the use and technology involved in the service and point to problems and solutions related to their needs (ibid.). When, in contrast, customers who are familiar with the service context report from outside the actual use situation, methods such as participatory design, toolkits, customer group involvement, or a conversational approach may be opted for (Edvardsson et al., 2012, p. 423). As the information is collected outside the use situation,

customers have time to reflect on the service but might underemphasize the dynamic interrelationship between resources (Edvardsson et al., 2012, p. 423). The opposite case exists when customers report their experience with a service in the actual use situation and when, however, these customers have no experience with the actual service context, which instead is simulated or imagined. In this case, information acceleration is suggested, since this approach uses service simulation or innovation techniques based on avatars (Edvardsson et al., 2012, p. 424). For example, this is suitable for testing various versions of an existing service or services that do not yet exist (Edvardsson et al., 2012, pp. 421, 424). Finally, when the customer is unfamiliar with the actual service context and reports from outside the usage situation, the TRIZ method or free elicitation can be employed (Edvardsson et al., 2012, p. 425). These methods tend to generate creative and imaginative ideas (Edvardsson et al., 2012, p. 421). Apart from methods that fit the above classification, additional methods, such as prototyping and various specialized interview techniques, can be applied throughout the innovation process with customers (Edvardsson et al., 2010, pp. 31-35).

2.3.2.3.5 *Practices and Tools for Innovating the Customer Experience*

Managing the customer experience needs to go beyond managing service quality, which merely allows creating consistency but does not help answer several key questions: how to design the customer experience, where to place the focus, or where to dedicate resources (Maklan et al., 2017, p. 94). By studying companies in the financial services industry, Ponsignon et al. (2015, pp. 303-304) found that successful companies recognize the holistic nature of customer experience that is conceptualized as a non-linear customer lifecycle, in order to manage the customer experience. They collected and analyzed detailed data on interactions that were used to improve critical but underperforming touchpoints (Ponsignon et al., 2015, pp. 303-304, 306). A similar observation was made by Maklan et al. (2017, p. 96). Based on a case study of the Royal Bank of Scotland, the authors suggested focusing pragmatically on the most important interactions in the customer journey, collecting data on a highly detailed level, and applying the developed solutions to other fields in order to continue learning (Maklan et al., 2017, pp. 108-109). In order for managers to cope with the broad and highly complex customer experience concept, Maklan et al. (2017, p. 93) suggested not to approach the customer experience holistically, but instead to ensure feasibility of innovative solutions by considering the quality, costs, and operations of activities related to customer experience management.

The data collected during transactions is used to personalize the customer experience on the level of the individual customer (Ponsignon et al., 2015, p. 307). To be able to effectively leverage the data, it is important to create customer insights in-house (Maklan et al., 2017, p. 97). Customer experience design addresses the configuration of individual touchpoints, the end-to-end customer journey, and the physical and social environment of the interaction

(Ponsignon et al., 2017, p. 764). Overcoming the limitations of their highly intangible product, service companies should apply sensory design to the tangible elements of the interactions to ensure that they communicate the desired experience and represent the brand and values of the company (Ponsignon et al., 2015, p. 308). Customer experiences should be specifically designed to be emotionally engaging and not just to fulfill the functional needs of customers, which may be achieved by including sensory elements or through personalization or customization (Bolton et al., 2014, pp. 264-265). Concerning the touchpoints in the customer journey, the sequence and the position of peak experiences have been recommended in the literature as relevant aspects to consider, as elaborated, for instance, by Zomerdijk and Voss (2010, p. 75).

Beltagui, Candi, and Riedel (2016, p. 763) identified six service design strategies that improve customers' emotional experience. Three of the strategies seek to empower the customer and evolve around designing a service for the needs of a typical customer, building customer communities, and creating visibility for processes that are usually hidden and in the back-end. The other three strategies accommodate the customer and involve designing services for a variety of different customers with the help of personas, investing in the relationship between customers and employees, and making processes invisible and less complex for the customer by shifting them to the back-end.

For designing and improving services, many methods have been suggested that are also used to innovate the customer experience. These include blueprinting, service mapping, servicescape design (Bitner, 1992) or service transaction analysis (Johnston, 1999), but also design thinking or the inclusion of performing and visual arts (Bitner, Ostrom, & Morgan, 2008, p. 17).

Related to the mindset of service design is the concept of design thinking (Andreassen et al., 2016, pp. 22-23). The design thinking approach is used to improve the customer experience by seamlessly orchestrating all elements that influence the customer experience (Bolton et al., 2014, p. 261). The approach is inherently human-centered. This means that customer empathy is built in the beginning of the design thinking process and is used to understand the customer's situation and context, in order to even identify latent needs (Brown, 2008, p. 87). It can be used to create a "human touch" and authenticity in interactions (Bolton et al., 2014, pp. 261, 264). The design thinking process is iterative and explores ideas by experimenting, frequent prototyping, and testing in order to learn and potentially fail early in the process, and by advancing quickly with new insights (Brown, 2008, p. 87). Also, simulation is used to create new insights (C. A. Voss & Zomerdijk, 2007, pp. 20-21). In the design thinking process, cross-functional teams, outside parties, and customers are involved in order to allow for knowledge sharing and transfer between the parties.

Apart from innovation techniques from services, additional tools and techniques need to be applied for experience innovations (Zomerdijk & Voss, 2011, p. 67), for instance, designing

experience clues or customer journey mapping (Berry et al., 2010, p. 87; Shaw & Ivens, 2005, pp. 65-66). Some of the available techniques in customer experience include ethnographic research, empathic design, front-line and bottom-up involvement, storytelling, and prototyping (Rawson et al., 2013, pp. 93-94; Zomerdijk & Voss, 2011, p. 77). When managing the customer experience, apart from these methods, the critical incident technique, workshops, or consumer research are also frequently applied (Maklan et al., 2017, p. 97). Customer insights may be collected through traditional market research, empathic research, trend watching, or observing best practices from other industries (C. A. Voss & Zomerdijk, 2007, pp. 17-19). Also, customers can be directly involved in the development process as co-creators. The experience design process has several stages. Different methods are appropriate for each stage.

To overcome difficulties with delivering positive customer experiences, Rawson et al. (2013, p. 93) suggested that customer journeys need to become part of companies' operating model. Apart from determining the objectives for each interaction, and apart from comparing it to the current state, the authors emphasized that cross-functional processes are needed to redesign the journeys. Moreover, the authors pointed to the need to instill a cultural change aimed at continuously improving the customer journey in order to yield a sustainable effect and to increase impact (*ibid.*).

2.3.2.4 Managing Customer Experience Innovation

The importance of managing customer experiences has been strongly driven by practice. Research on customer experience management is still considered sparse, although its relevance has been acknowledged by both academia and practice (Homburg et al., 2017, pp. 377-378).

Customer experiences are influenced by attributes of interactions, which either directly or indirectly relate to the company. These interactions consist of elements that can be controlled by the company but also by elements beyond the company's control. For both types, when the company shapes the touchpoint at which an interaction with the customer takes place, the customer's experience is still subject to the individual's interpretation of that encounter (Stein & Ramaseshan, 2016, p. 8). The objective of managing customer experiences is thus to anticipate these interpretations and to create the prerequisites needed for a good customer experience. As the different interactions between a customer and a company are interrelated, optimizing individual encounters is not enough. Rather, the customer experience accumulates over the different interactions. Thus, to identify improvement potential, a company has to account for these dependencies (Rawson et al., 2013, p. 92). Companies should assume a customer journey perspective that allows identifying critical journeys and detecting underperforming interactions in these journeys and thereby points to necessary changes (Rawson et al., 2013, p. 93). Therefore, understanding the customer journey through interactions, and redesigning these in order to improve the customers' path, is critical. Kranzbühler et al. (2018, pp. 447-448) and Andreassen et al. (2016, p. 431) advocated a dynamic view on the customer

experience that accounts for the fact that customer journeys are no longer linear and involve other actors in addition to the customer and the company. This acknowledges that customers' interpretations of the interactions change over time (Andreassen et al., 2016, p. 432).

Homburg et al. (2017, p. 384) considered customer experience management as a “firm-wide management approach” that “refers to the cultural mindsets toward [customer experience], strategic directions for designing [customer experiences], and firm capabilities for continually renewing [customer experiences], with the goals of achieving and sustaining long-term customer loyalty.” The interplay of culture, touchpoint design, and capabilities for renewing customer experiences is core to successful customer experience management. Strategic directions are defined for designing interactions. Specifically, the authors found that touchpoints need to be thematically cohesive, consistent, context-sensitive, and interconnected (Homburg et al., 2017, pp. 389-390). When managing the customer experience, it is thus important to improve individual interactions while at the same time taking into account the broader picture that consists of the touchpoints' contexts and their interrelationships. Implementing the cultural mindset and the strategic directions in the company processes yields four firm capabilities that are aimed at continually renewing the customer experience and are necessary to respond to high competitive pressure and frequent changes in customer experiences (Homburg et al., 2017, p. 386). First, companies use the capability of touchpoint journey design to orchestrate all potential touchpoints, to deduce corresponding requirements for other business functions, and to disseminate the concepts for radically new touchpoints (Homburg et al., 2017, pp. 391-392). Second, prioritizing touchpoints in the journey refers to the capability of allocating resources to critical touchpoints and to short-term modifications of single touchpoints, which includes the dissemination of incremental improvements of touchpoints (ibid.). Third, the capability of touchpoint journey monitoring refers to gathering relevant indicators for the performance at touchpoints (ibid.), for example, through visualization or an experience audit (Berry et al., 2002, p. 86). Finally, touchpoint adaptation refers to the capability to develop propositions for incremental modifications and radically new touchpoints in the customer journey (Homburg et al., 2017, p. 392), which forms a component of successful customer experience management. The development of such propositions is largely based on the interpretation of performance indicators and their enrichment by actively gathering customer feedback (e.g., from customer observation or customer workshops) (ibid.). Key are a profound understanding of individual touchpoints, their relation with other touchpoints, and a sense of their role in the broader context of the interaction.

Grønholdt et al. (2015, pp. 96-97) found that among several dimensions of customer experience management, the dimension of “touchpoint management” accounts for the highest estimated impact on differentiation and financial results. At the same time, managers clearly state that they have the lowest abilities for this dimension, which comprises the ability to identify

and describe the ideal rational and emotional customer experiences at all potential touchpoints. While managers feel rather competent about devising the rational component of the customer experience, they have difficulties in planning for the emotional component of interactions at touchpoints (ibid.). The same pattern is discovered in employee training and recruitment, where rational competences are emphasized over emotional ones (ibid.). This is especially critical considering that the combination of emotional and functional benefits in one offering is the most effective means of creating a competitive advantage (Anil et al., 2016, p. 113). When functional benefits are difficult to evaluate, customers rely on the emotional elements of the offering (Grønholdt et al., 2015, pp. 92-93).

Fuglsang et al. (2011, p. 662) studied service innovation among companies where customer experience is core to their service, but their findings can be extended to other types of companies and more generally also to customer experience management. They found that experience companies are highly innovative, which is mainly attributed to the application of customer and employee knowledge, but also to globalization effects and ICT (Fuglsang et al., 2011, p. 663). While the authors claimed that absorbing the knowledge and information needed to innovate is rather easy, they acknowledged that innovation among experience companies is mainly about finding new applications for this knowledge in the specific context (Fuglsang et al., 2011, pp. 663, 670). As such, innovation with regard to the customer experience is an open and situated process that is considered a path-creating activity (Fuglsang et al., 2011, p. 663).

Table 2-1 summarizes extant literature on managing customer experiences. The overview considers articles dealing with changes or improvements to the customer experience, which are anchored in the changes to the customer journey.

Table 2-1 Overview of the evolution of literature on customer experience and customer experience management with regard to innovation

Authors	Research goal	Conceptualization of customer experience	Research method	Key overall findings
Pine and Gilmore (1999, 2014)	Identification of innovation opportunities in the experience economy	Customer experiences are commercial offerings that engage customers in memorable ways	Conceptual	The five value creating opportunities are: (1) customizing goods, (2) enhancing services, (3) charging for experiences, (4) fusing digital technology with reality, (5) transformative experiences.
Prahalad and Ramaswamy (2003)	Explore next practices in value creation and innovation	Customer experiences are co-constructed through personalized interaction	Conceptual, weak signals approach	To innovate, companies need to focus on experience environments that are supported by a network of companies and consumer communities to co-create unique value.
Moore (2006)	Innovation opportunities during the evolution of the company	Customer experience innovation is differentiating a commoditized offer by modifying the customer's end-to-end experience	Conceptual	Customer experience innovations are suitable in mature markets and especially effective for volume operations in the B2C market. For complex systems operations, a direct access to the customer is required.
Gentile et al. (2007)	Tools for devising the right stimuli (incl. the environment) to support an excellent customer experience	Customer experience originates from interactions, is personal and engages customers on different levels	Conceptual, empirical (case studies)	Experiential and functional features are equally relevant. Successful products involve multiple experiential components. Customer involvement and commitment are potential moderators.
Norton and Pine (2009)	Rules for disruptive experience innovations	Customer experiences involve the choreographing of a sequence of events that get emotional and social jobs done and engage customers	Conceptual	Disruptive experiences focus on emotional and social jobs (as compared to convenience innovations that fulfill functional jobs). It is crucial to fulfill promises concerning emotional needs and to get the job done right, and a series of staged experiences needs to be orchestrated to create "time well spent".
Sundbo (2009); Sundbo and Sørensen (2013)	Characteristics of the innovation process in the experience economy	Customer experience as a mental process, customer experiences are intentional, sensational and memorable	Conceptual, empirical (taxonomic method, case studies)	Customer experience innovation is more supply-determined than services, and is intuitive, non-systematic and artistic. Differences exist between the primary (customer experience as core product) and secondary (customer experience as augmented product) experience sector.
Verhoef et al. (2009)	Conceptual model of the experience construct, incl. antecedents, moderators, strategies	Adding the holistic nature and cognitive, affective, emotional, social, and physical response to existing definitions	Conceptual	Social environment, service interface, retail atmosphere, assortment, price, customer experiences in other channels, brand, and prior customer experiences are drivers. Situational and consumer factors are moderators.
Zomerijk and Voss (2011)	Processes and practices for developing experiential services	Experiential services place customer experience at the core of the service offering	Empirical (case studies, interviews)	Strong emphasis on customer insights, mapping of the customer journey, and storytelling are required (in addition to service development practices).

Table 2-1 Overview of the evolution of literature on customer experience and customer experience management with regard to innovation (continued)

Authors	Research goal	Conceptualization of customer experience	Research method	Key overall findings
Johnston and Kong (2011)	Recommendations on systematically designing and improving customer experiences	Customer experience is subjective, personal, and exists in the mind of the customer	Empirical (longitudinal case studies)	Ten-stage "road-map" to customer experience improvement (evolves around planning, research and mindset, involvement, and implementation of the customer experience).
Fuglsang et al. (2011)	Dynamics of innovation in companies offering an experiential core service	Customer experiences form a set of characteristics of services provided by a company.	Empirical, survey	Innovation in experience companies often takes the form of open innovation and is an interactive process. At the same time, innovation is a situated process, as companies' strategy is to strive for product differentiation.
Candi et al. (2013)	Suitability of customer experience innovation for companies in- and outside the hedonic sector	Customer experience as a subset of services and a unique context for innovation	Empirical (case studies, longitudinal survey)	Offers with an experiential core contribute more to success and competitive advantage than offers with experiential augmentation.
Klaus and Edvardsson (2014)	Design of service systems that create customer experiences in line with the value proposition and the company's customer experience strategy	Customer experience is the response to interactions and is created in the context of a service system	Conceptual, empirical (interviews)	To manage customer experiences, companies create value propositions based on customers' perceptions of value, align service systems with value perceptions, and incorporate customers as resources to co-create value.
Grønholdt et al. (2015)	Measurement of customer experience management and impact of customer experience management dimensions on business performance	Customer experiences include product and service experiences during the pre-purchase phase, purchase phase, use and post-use phase	Empirical (quantitative management survey)	Seven dimensions of customer experience management impact financial firm performance, mediated by differentiation. Highest importance is associated with customer touchpoints. Managers associate the lowest capability with the management of touchpoints, followed by the management of emotional customer experience.
McColl-Kennedy et al. (2015)	Devising future directions for research on customer experience	Customer experiences are holistic and dynamic in nature and are co-created by customers and with other actors	Conceptual	Three directions for research on customer experience: broadening customers' role as co-creators, taking a practice-based approach considering the activities of multiple actors and the dynamic nature of customer experience, considering customer experiences holistically and as dynamically emerging over time and across touchpoints.
Homburg et al. (2017)	Demarcation of customer experience management from other marketing concepts	Customer experience management is a firm resource	Grounded theory	Customer experience management comprises the cultural mindsets, strategic directions, and firm capabilities, which each consist of first-order resources.

2.4 Study 2: Single Case Study on Customer Experience Management at OCBC

2.4.1 Methodology of the Single Case Study

To identify how experience management can be effectively integrated into the company to innovate the customer experience, an in-depth single case study was conducted. This chapter describes the case selection, details the data collection procedure, and documents the case analysis.

2.4.1.1 Case Selection

To answer the question of how customer experience management can be anchored in the organization to yield innovative outcomes, a single in-depth case study with a holistic design was conducted (Yin, 2014, p. 50). The Singaporean bank OCBC was chosen as a critical case to study the implementation of customer experience management (Yin, 2014, p. 51). The level of analysis was individual projects pursued by the Customer Experience Design Department, which owned the topic of customer experience management in the organization.

Case studies are especially applicable when there is only limited prior insight, for exploration purposes, and when the research object is influenced by human behavior (Schögel & Tomczak, 2009, p. 83). Customer experience management has been considered to still be in its infancy. The effects of customer experience management are to a large degree influenced by humans, most importantly by members of the company and by customers who interact with that company. As such, other authors in the field of customer experience management have recently conducted single-case studies (Maklan et al., 2017, p. 95; Ponsignon et al., 2017, p. 768). The field of service innovation has also called for “more exploratory, fine-grained qualitative research approaches, such as in-depth cases research [...]” (Biemans et al., 2016, pp. 395-396).

OCBC qualifies as a critical case due to its unique positioning based on customer experience management in an environment that is characterized by high customer expectations and external pressure to succeed in this regard. Customer experience management is part of the company’s philosophy and the basis of its competitive advantage. The bank’s purpose is to create innovative financial services that meet customers’ needs and help them achieve their objectives (OCBC Bank, 2017). The bank achieves high satisfaction ratings among its customers and has received awards for its efforts (Institute of Service Excellence, 2016; OCBC Bank, 2016b). The context in which banks in Singapore operate is characterized by high customer expectations with regard to customer experience, high competitive pressure that considers customer experience management a competitive necessity, and strong encouragement

from the Singaporean government to invest in innovation and in improving customer experience. In this demanding environment, OCBC has successfully established an effective customer experience management in its company. OCBC established a Customer Experience Department in the form of a dedicated department owning the topic. While the department does not aspire to develop innovations per se, the results of its customer experience improvement projects can be considered innovative and create new value for both the customer and the company.

Case studies answer the questions of “how” and “why” (Yin, 2014, p. 14). The case study at hand aims to identify how OCBC integrates customer experience management in the organization and why this contributes to creating interactions that are innovative and yield superior customer experiences and value for the company. A case study design allows analyzing how the determinants, characteristics, and context factors determine the outcomes of customer experience innovations (Yin, 2014, p. 16). It allows one to understand the attributes of a company’s experience management, its interaction with customers, and its environment, as well as how these attributes affect the outcomes of a company’s customer experience management efforts.

The goal is to analyze and explore the case of OCBC with regard to the research question. The case study is both descriptive and explanatory. It aims to describe the implementation of customer experience management at OCBC. In addition to this, the study seeks to identify causal relationships that explain how and why the outcomes of customer experience management could be achieved by OCBC.

Several measures have been taken to meet the four criteria for goodness of case studies, namely, construct validity, internal validity, external validity, and reliability (Gibbert & Ruigrok, 2010, p. 712; Gibbert, Ruigrok, & Wicki, 2008, p. 1466). To ensure construct validity, multiple projects of the Customer Experience Design team were studied in the case (Yin, 2014, pp. 46-47). Moreover, Bojan Blecic, who is Senior Vice President and Head of Experience Design at OCBC, reviewed the case throughout the process and provided his feedback (*ibid.*). Moreover, by applying triangulation in the form of using different data sources, multiple perspectives were taken into account (Yin, 2014, p. 121). To ensure internal validity, the logic model was followed (Yin, 2014, pp. 155-163). A chain of events in the customer experience management process was mapped in order to identify causal relationships that lead to the outcomes of innovation, improved customer experiences, and the anchoring of customer experience management in the organization. Moreover, explanation building ensures internal validity (Yin, 2014, pp. 147-150). In this regard, explanations how and why the Customer Experience Design Department effectively implemented customer experiences to yield the aforementioned outcomes were developed and then iterated for each of the different projects implemented by the team. External validity relates to the concern of generalizability of single case studies (Corbin & Strauss, 2015, p. 342; Yin, 2014, p. 48). This study builds on the

academic literature, and the case analysis iterated between theory and the interpretation of data sources (Eisenhardt, 1989, p. 546). Finally, to ensure reliability, data collection and analysis were documented (Yin, 2014, p. 49). A case study database consisting of field notes and documents relevant to the case study was set up to create transparency and to allow for replication (Gibbert et al., 2008, p. 1468; Yin, 2014, pp. 123-127).

2.4.1.2 Data Collection

Several sources of data were combined to allow for data triangulation and to account for different perspectives on the work of the OCBC Customer Experience Design Department (Yin, 2014, p. 121). Data collection included three interviews and one on-site workshop with the Senior Vice President and Head of Experience Design between 2015 and 2017. One of these meetings also included the Vice President of Experience Design. The first interview was used to define the key issues in customer experience management and was conducted via telephone. These issues were further investigated in the following meetings. The purpose of the next three meetings was to understand how customer experience management became successfully ingrained and implemented at OCBC. Topics included how the Customer Experience Design team works, and why it works in that particular way. Examples of projects that demonstrate the work of the team were collected. The data collected from the interviews and the workshop were complemented with key documents provided by OCBC managers and with publicly available sources. Moreover, observations were collected during a site visit of the office and during a branch visit in Singapore.

2.4.1.3 Case Analysis

An inductive coding approach was applied for the analysis. This approach avoids a priori codes and instead allows codes to emerge during analysis, thus ensuring a perspective best able to capture the essence of the data (Miles et al., 2014, p. 81). Analysis is an iterative process that switches between theory and the multiple data sources collected (Eisenhardt, 1989, p. 546). The interpretation of the case builds on existing insights from the literature and extends them by the new insights generated through the case.

In the first-cycle coding, open coding was applied to the data, i.e., coding open to data contents (Saldaña, 2013, p. 100). Next, causation coding was applied to identify cause-and-effect relationships among the codes (Miles et al., 2014, p. 79). Causation coding not only describes how certain effects emerge, but also why a certain outcome is created. It also acknowledges the conditions and contexts in which cause-and-effect relationships take place (ibid.). The objective of this step was to identify causes for the innovative outcomes of customer experience projects, for the impact on the customer experience, and for the anchoring of customer experience management in the organization. The results of the first-cycle coding were further analyzed in the second-cycle coding, where pattern coding was applied (Miles et al., 2014, p.

86; Saldaña, 2013, p. 210). Pattern coding allowed synthesizing the results and identifying common patterns of practices that led to the outcome of customer experience management.

The analysis considered the improvement processes and practices implemented by the Customer Experience Design team. It combined within-case analysis, which generated a deep understanding of each of these processes and practices, with cross-case analysis, in which insights were compared and combined (Eisenhardt, 1989, p. 540; Miles et al., 2014, p. 103).

The results of the analysis identified patterns of processes and practices that together allow effectively implementing customer experience management in the organization and that yield innovations with regard to the customer experience. The results explain how OCBC combines the individual level of the subjective customer experience and the general level of designing customer journeys to elicit these customer experiences. Further, they explain how OCBC creates innovations by combining and transforming insights. From a broader perspective, the insights derived from the in-depth analysis of the case study provide general observations into the characteristics of successful customer experience management and innovation.

2.4.2 Case Description¹

2.4.2.1 Excelling in Customer Experience at OCBC

OCBC is one of the three major local banks in Singapore. Formed in 1932, it is now one of the major players in the retail and private banking market in Singapore, with 52 branches in Singapore alone and over 630 branches in 18 countries worldwide (OCBC Bank, n.d.). It is one of the largest banks in terms of assets in Southeast Asia and earned a core net profit after tax of SGD 3.90 billion in 2015 (OCBC Bank, 2016a, p. 2). The bank is listed on the Singapore Exchange (SGX-ST) and the founding family, the Lee family, holds approximately 30% of shares (OCBC Bank, n.d.; Reuters, 2015).

The Singaporean banking industry is very competitive and products offered are generally of very high quality but with little differentiation. Customers in Singapore are used to high service standards and expect excellent levels of service when interacting with banks. To compete in this environment, OCBC aims to integrate its offers in the life of its customers in a way that addresses their needs and makes it convenient to interact with the bank. OCBC ensures that products are well designed and easy to understand, so that customers can understand the products and value the simplicity of doing business with OCBC as compared to other banks.

¹ Section 2.4.2 “Case Description” has been published: Schögel, M., & Knaak, M. (2017). *Managing customer experiences at OCBC*. Reference no. 517-0200-1. Cranfield, UK: The Case Centre.

To pursue this purpose, OCBC established the Customer Experience Design department that belongs to OCBC's Consumer Wealth Management division (see Figure 2-1 for the organizational chart). Initially, there had been a divisional head for the three departments of Customer Experience Management, Market Research, and the department of Culture, who in turn reported to the CEO. Today, the department of Culture does not exist any longer and the Customer Experience Design team reports directly to the Chief Operating Officer (COO) of OCBC. Moreover, as part of the Customer Experience Design department, "The Studio" team was created with the objective to "clear up" the relation between the customers and the bank, which had long been established and was strongly impacted by the company's tradition. A team of twelve designers (of whom nobody has a banking background) works together with product and marketing teams to enhance the design and simplicity of the products and services in order to make them more appealing to customers.

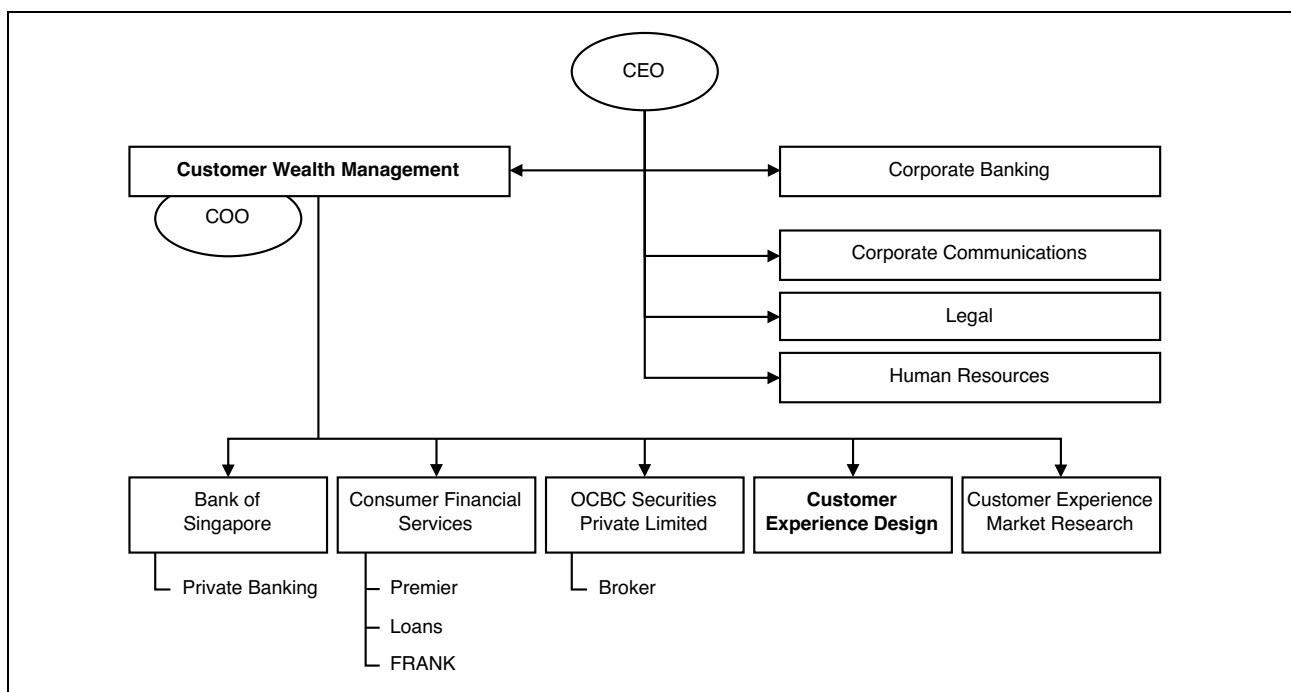


Figure 2-1 Organizational chart of OCBC

The Customer Experience Design team acknowledges that large projects of improving the customer experience need time and they are thus started on a small scale. In the beginning of new projects, experience is gathered on a smaller scale, iterated and improved until a good experience for the customer is achieved. The observations from the small scale offer better control and are then gradually scaled to a larger impact.

The office where the Customer Experience Design team is located is purposefully designed in a rough and chaotic way that inspires trying out a lot of things in order to fail quickly in a controlled environment and to learn. It provides the facilities to observe customers during their interaction with OCBC products, to listen to their needs, and allows experimenting with improved solutions. Bojan Blečić, who is also Senior Vice President and Head of Experience Design at OCBC, leads the Group Customer Experience. Together with his team, they aim at differentiating OCBC by focusing on a superior customer experience in all their offers.

2.4.2.2 Firm Profile of OCBC

OCBC was founded in Singapore in 1932 as the “Oversea-Chinese Banking Corporation,” and is thus the oldest established bank in the country. Today, OCBC operates in 18 countries worldwide. Since early on, OCBC was managed by a local management team that quickly expanded the bank’s activities. Throughout its history of growth and expansion, the goal was to increase the market and to target a wide range of customers and cater to their diverse needs. In addition to organic growth, the company grew by acquiring several other banks and consequently, it today owns various subsidiaries.

OCBC’s banking services comprise consumer banking and business banking, investment banking, transaction banking, and global treasury. Moreover, the company operates in the insurance sector, in asset management, and stock brokering. In the field of consumer banking, OCBC is a leading bank particularly for wealth management and home loans in Singapore. In order to further strengthen its position in private banking, where – in contrast to retail banking – high net worth individuals are targeted in particular, OCBC continuously develops specific product solutions for its customers.

2.4.2.2.1 Company Background

A key differentiator of OCBC is its inherent focus on customer experience and the unique ability to rethink the banking experience, with which it achieved a strong presence among local customers and continues to increase its market share. When interacting with OCBC, customers experience a bank that engages with them according to their individual needs. This is reflected in the company’s purpose to *help individuals and businesses across communities achieve their aspirations by providing innovative financial services that meet their needs*. Moreover, customers value the simplicity of banking with OCBC. OCBC continuously questions its offer, aiming to remove the unnecessary, increase simplicity, and add the relevant.

OCBC’s constant focus on customer experience contributed to this success. The dedicated Group Customer Experience department deals with client-facing activities in order to improve customer experience across all products and touchpoints. Building on its strengths in customer involvement, data analytics, prototyping, and service quality improvements initiatives, the department closely collaborates with other departments in the company to improve the customer-facing interactions. In addition, the Group Customer Experience also is involved in internal projects that aim at enhancing employee experiences, for example in collaboration with the Operations & Technology department or the Human Resources department.

The bank applies design principles that have been developed during its quest to make banking with OCBC a unique experience. OCBC created a culture of commitment to make things easy and simple for its customers and aligned all processes in the company to this philosophy. Once simplicity is achieved, the bank aims to make the interactions more relevant and more

“beautiful.” The efforts paid off. OCBC has been recognized as one of the five World’s Strongest Banks² for five years in a row (from 2010 until 2015) and has been rated as Singapore’s Most Admired Bank in 2010 (OCBC Bank, 2016b). In addition, the bank received a number of awards for its commitment to the customer experience as well as for individual products.

2.4.2.2.2 *Interactions with the Customer at OCBC*

Customers interact with OCBC throughout their entire life, and especially during significant changes in their life (e.g., graduation and first job, family foundation and house building). Over the customer journey, customers interact with the company to operate the account, to gain information, and to solve problems. The characteristics of these interactions differ as customers exhibit different personalities, expectations and needs, risk profiles and investment criteria. In order to understand its customers and anticipate changing needs and changing contexts, OCBC regularly conducts customer research and actively involves customers in the development of new offers. Furthermore, the company closely monitors changes in technological advancements and in consumer preferences to be able to prepare for and respond to these trends.

Interactions between OCBC and its customers take place frequently and through a diverse set of channels. Increasingly, customers prefer interacting digitally with OCBC via mobile devices. As a response, OCBC continues to refine its mobile apps. Customers additionally use online tools in order to manage their accounts. While Internet banking gives customers access to all services and features, including advanced functions such as investment in unit trusts and the setting of saving goals, OCBC’s mobile banking apps are specifically designed for simple and convenient access to a large variety of the most important features (OCBC Bank, 2016d). Other relevant points of contact between the bank and customers are offline channels, in particular branches and ATM’s or phone calls.

OCBC designs both the actual interaction as well as the respective context and environment with great care. The interactions need to be simple to understand and well-designed and the context of the interactions needs to support this notion. Therefore, technical elements (such as the store, the app, the website) and human elements (e.g., the employees and the “human” language) are purposefully applied. OCBC strongly invests in a consistent experience across channels and strengthens the social component of banking. The criteria for all offers are to be easily accessible, clear, and understandable for customers.

² Measured by five indicators: tier one capital to risk-weighted assets, nonperforming assets to total assets, loan-loss reserves to nonperforming assets, deposits to funding, and the efficiency ratio (Bloomberg, 2015).

All these efforts undergone by OCBC to cater to the needs of their customers seem to pay off. A study on customer loyalty in retail banking showed that OCBC had by far the highest customer loyalty among banks in Singapore (measured by the net promoter score), which can be attributed to their innovation on several fronts, amongst others their light-branch format, as well as extended access hours on Saturdays and Sundays to match the busy Singaporeans' lifestyle (Bain & Company, 2014).

2.4.2.2.3 *Customer Experience at OCBC*

In its strategy, OCBC focuses equally on customers, products, risk management, productivity, people, and shareholder value. A key ingredient of its strategy is to design superior customer experiences to gain a competitive advantage (Kang Zwicky, 2014). According to OCBC, customer experience is a *customer's rational and emotional judgment on how good any interaction with the bank is, spanning all products and channels that a customer encounters over the journey*. In this regard, the company is positioned as a customer centric bank that has the image of being reliable and easy to do business with.

OCBC strongly focuses on capitalizing on the trend toward digitization. Both in terms of customer experience and digitization, OCBC continuously innovates in order to stay ahead of the competition. OCBC's customers encounter a bank that they find simple to interact with and that thinks the same way as its customers throughout their entire journey. As a result, customers now have a clear understanding of what they need to do when interacting with OCBC and thereby gain a feeling of security and control.

2.4.2.3 OCBC in the Singaporean Banking Industry

With its strategic focus on the customer experience, OCBC aims to achieve a distinct positioning in the local market. Their philosophy to deliver a superior customer value is an immediate response to the needs of Singaporean customers and it is pursued by OCBC with the goal to outpace the competition.

2.4.2.3.1 *Banking Industry in Singapore*

The Singaporean banking industry is very homogenous with more than a hundred banks and bank-related service providers. Singapore hosts three local banks that share the majority of the Singaporean consumer banking market (RFi Group, 2015). The three major local banks are DBS (The Development Bank of Singapore Limited), UOB (United Overseas Bank), and OCBC.

In the following, the Singaporean banking industry is analyzed in further depth according to Porter's five forces model.

Industry rivalry within the highly homogeneous and saturated Singaporean consumer banking industry




A history of consolidation of local banks contributed to their market position, especially in light of the strong international competition (Huat, Lim, & Chen, 2010, p. 13). With the three banks DBS, OCBC, and UOB competing fiercely in the Singaporean market, gaining an advantage is no longer possible via product differentiation. As the product portfolio is very homogeneous across the different banks and leaves little room for differentiation, banks in Singapore compete on delivering superior customer experiences and strive for high customer satisfaction rates in order to increase their loyalty (Institute of Service Excellence, 2016, pp. 2-3).

The Institute of Service Excellence at the Singapore Management University publishes an annual Customer Satisfaction Index of Singapore (CSISG) report in which the satisfaction of Singaporean customers is polled for different industries, amongst others for banking. In these annual surveys, local banks generally received top scores from their clients and are viewed more favorably by the Singaporean people than foreign banks. However, the satisfaction scores are relatively volatile year on year as a result of competitive dynamics between local and foreign banks, which pushes all players to constantly improve in order to keep up with the competition and with the Singaporeans' high expectations.

Innovation is further encouraged by the Singaporean government and new emerging forms of competition, e.g., coming from FinTech companies (Kang Zwicky, 2015). The fierce competition in Singapore's saturated banking market has led to a well-advanced digital banking landscape in which banks compete for customers, moving Singaporean banks among the most advanced banks worldwide in terms of digital banking (McKinsey, 2013, pp. 12, 70). With the online banking penetration being among the highest in the world and the mobile banking penetration rate increasing equally fast in Singapore, the fierce competition focuses in particular on digital banking. All three of the major local banks are investing heavily in innovations around this growth trend. Singapore's big three banks are ranked at the top of their Asian peers with regard to their digital banking offerings and the functionality of their mobile apps (DBS, 2015, pp. 4-5). Their digital banking portfolio includes, besides the standard functionalities, more advanced options such as online account opening for existing customers as well as credit/debit card and loan applications. Their mobile apps feature functions such as balance checks, fund transfers to mobile numbers, bill payments, branch or ATM locators, and cardless withdrawals. DBS also offers mobile promotions, UOB and OCBC provide mobile financial planning tools, and OCBC's mobile app allows users already since 2015 to check their balance more conveniently via fingerprint identification (DBS, 2015, pp. 11-13).

With their strategies on creating customer value and their major investments in digital banking, the three major players have maintained strong positions in the market, of which an overview is provided in Table 2-2.

Table 2-2 Overview of Singapore's major three local banks (2015)

Company			
Core profile	Strong technological innovation agenda	Early starter, simplistic	Differentiating customer experience
Market capitalization (in million SGD)	37'540	29'040	34'850
Customer deposits (in million SGD)	320'134	240'524	246'277
Market share (retail banking in Singapore), (RFi Group, 2015)	54%	10%	18%
CSISG customer satisfaction rating (Institute of Service Excellence, 2016, p. 5)	71.6	70.8	71.6

Differentiation of DBS: In recent years, DBS has been heavily investing into technological innovations to differentiate from the competition. It has established various partnerships with technology companies, among others it collaborates with IBM to develop a technology based on artificial intelligence to provide contextualized and customized investment advice to high net worth customers. DBS is also fostering partnerships with research agencies to explore emerging technologies with the aim of simplifying the banking experience for its customers. The bank also works on improving the customer experience with technical innovations in its non-digital customer interactions, for example by providing the bank's relationship managers with a special app that improves the quality of the conversation with the customer.

Differentiation of UOB: UOB was the first of the three big Singaporean banks to launch its Internet banking in 1997. It also launched its mobile app relatively early in 2011. It was the first bank to allow cardless money withdrawal at ATMs, which was a differentiating factor compared to its competitors. It is thus considered as an early starter in the industry. UOB also invests into the redesign of its 500 regional branches, equipping them with smart self-service machines and digitizing the processes and transactions.

Differentiation of OCBC: OCBC is thriving on innovative approaches of making the banking process easier and more satisfying for its customers, in order to differentiate from the competition by offering a superior customer experience. Due to its continuous improvements of customer focused technology and design, its active Internet and mobile banking customer base, as well as its overall online activity, volume has increased dramatically over the last years. OCBC offers its online and mobile customers various simplifying and helpful functions, such as tracking and categorizing spending behavior in a personal financial management tool. Furthermore, OCBC tries to tailor its customer experience to specific demographic segments by opening up FRANK by OCBC, a bank targeted at students and young professionals.

Threat of substitutes through FinTech innovations

In recent years, the global banking industry has witnessed the emergence of FinTech innovations that make financial services more efficient through the usage of software and technology. There are already various FinTech solutions that cater to customers along the retail banking value chain, for instance new payment methods or alternative financing, loans, and mortgages. Some of these FinTech innovations rely on an existing bank account, while others help customers to sidestep the retail bank as a financial mediator, like crowdfunding platforms. Singapore is one of the core FinTech hubs worldwide due to its well-developed financial infrastructure and because it functions as a gateway to other Asian markets.

The emergence of FinTech alternatives for payments and financing disrupts the retail banking value chain at both ends. Banks generally follow a loss-leader pricing strategy, which means that they provide basic services like bank accounts, transfers and payments for a very low fee that does not cover the internal overheads. These basic services are meant to attract new customers and provide the potential for up- or cross-selling toward the more profitable loans and mortgage business. They also provide the platform for the bank's relationship with the customer: On average, a customer interacts with his or her bank twice a day on a payment-related basis, which represents more than 80% of customers' interactions with their retail bank (DBS, 2015, p. 23). If customers started to use non-bank FinTech alternatives for their payments, it would seriously undermine the contact intensity of the bank's relationship with its customers and the up- and cross-selling potential. Moreover, if customers were to turn to non-bank alternatives for financial products, the banks would remain with their low-margin services that do not cover their overhead and again miss the more profitable up- and cross-selling opportunities (Hart, 2015).

However, regulations with regard to provider safety and economies of scale will keep benefiting the established retail banks and they therefore are unlikely to be replaced altogether by FinTech alternatives, which generally rely on the existing banking infrastructure. This makes it more probable that FinTech solutions will be incorporated into retail banks or operated collaboratively, rather than posing a competitive threat. In the long run, FinTech solutions are therefore even considered as an opportunity for retail banks (DBS, 2015, p. 23).

Threat of New Entrants

The Singaporean banking industry is very crowded and well-regulated, which makes it difficult and rather unattractive for smaller banks or foreign entities to enter the public banking sector. Privacy and security are regulated in the Singaporean banking system. Strict banking secrecy laws are implemented to ensure confidentiality for customers. With the Personal Data Protection Act (PDPA), the Singaporean government further advances the personal data security and privacy protection and aims to match the standards set by other Western countries (Offshore-Banking-Singapore, n.d.; PDPC, 2016).

The high banking and smartphone penetration as well as the wireless broadband rates attract many companies with mobile payment offerings. Singapore has a well-developed system for near field communication and contactless payment. Apple Pay, Android Pay, and Samsung Pay were all launched in Singapore, in collaboration with major local and international banks (Tan, 2016). A new transfer system was developed that allows Singaporeans to transfer money even without having to know the recipient's bank account number (SBR, 2016).

Restrictions are posed on foreign banks regarding the number of branches and ATMs they are allowed to open in Singapore, thus limiting their physical presence and contact with Singaporean customers. However, the trend towards digital banking offers new opportunities for foreign banks, as mobile and Internet banking are not restricted by the Singaporean government. This allows foreign banks to sidestep the necessity of a physical presence, and thus to overcome regulatory restrictions and to address their customers directly online. Digital banking may therefore further increase foreign competition for Singaporean banks.

Bargaining Power of Suppliers and Buyers

As retail banks function as intermediaries for financial exchange between the money-supplying parties (depositors) and money-receiving parties (borrowers), the banks' suppliers and buyers of money are both considered as the banks' customers, who are either providing or accessing money, or both. Singaporeans tend to have multiple banking relationships and almost half of the Singaporeans reported that they would purchase financial products at other banks than their primary bank (Bain & Company, 2014, p. 22). Therefore, despite high satisfaction ratings, customers display a low level of loyalty towards their banking relationships.

The characteristics of the Singaporean customers in the banking industry are elaborated further in the subsequent paragraph.

2.4.2.3.2 Singaporean Customers

One characteristic feature of Singapore is the diversity of its population. Singapore is a very densely populated state with a heterogeneous population and four official languages, namely English, Mandarin, Malay, and Tamil. Over three quarters of its 5.5 million inhabitants are of Chinese ethnicity, while Malay and Indians make up the second and third largest ethnic share. Less than two thirds of the country's population are actual Singaporean citizens, while the rest are mostly non-permanent residents. Due to its export orientation and its thriving financial industry, service sector and shipping, Singapore is among the top countries with regard to GDP per capita worldwide.

According to a study by Singapore's Ministry of Manpower, Singaporean people are hard workers and they work among the longest hours in the world (Manpower Research and Statistics Department, 2016, p. 25; States Times Review, 2015). They tend to have very fast-paced lives (Chang, 2013). Besides their time-constraints, Singaporean customers are also

characterized by their tech savviness, as was found in by Infocomm Development Authority of Singapore in its annual survey 2014 (Salim, 2015). Especially mobile devices are ubiquitous among the Singaporean population and have already surpassed the computer penetration rate. In 2016, 91% of the population used a smartphone (45% with iOS and 54% on an Android operating system), which places Singapore among the top countries with regard to its Smartphone penetration rate (Consumer Barometer with Google, 2016; Today Online, 2014). On average, Singaporeans use 3.1 devices per person (Consumer Barometer with Google, 2016). This is reflected in the digital and mobile banking penetration rates, with 94% (McKinsey, 2015, p. 4) of the Singaporeans using digital banking and already roughly 53% (KPMG, 2015, p. 11) using mobile banking. Still, customers care about privacy of mobile apps, with 91% of mobile users stating to be concerned about sharing private information when using mobile devices (GSMA, 2014, p. 4).

Accordingly, Singaporeans' interactions with their banks have shifted to digital touchpoints. The majority of customers engages in Internet banking, many use a mobile banking app, and the usage of branches has seen a drastic decline over the past few years (Institute of Service Excellence, 2016, p. 3). Customers in Singapore, like Asian customers in general, are omni-channel users when interacting with their banks, choosing channels often based on availability and convenience. The three most frequently used channels are mobile, online, and ATMs (Bain & Company, 2014, p. 12).

Singaporean customers tend to own several bank accounts at the same time, which they use for different purposes and to different degrees. Choice options, speed, and transparency are of key importance to customers (Liew & Bellens, 2014, p. 13). Also, special-offers and promotions contribute to the trend of owning several accounts. Having more than four banking relationships is common, which is almost twice as high as in the rest of Southeast Asia and still growing (McKinsey, 2012b). Singaporean customers are looking for the best deals, have a relatively high willingness to switch and do not mind using several institutions for their basic banking products (RFi Group, 2013). This lack in customer loyalty is particularly problematic for Singaporean banks as these products are the basis of developing a strong relationship with the customer and usually determine the customer's main bank.

Still, long-standing customer relationships of more than ten years with the main bank dominate the Singaporean banking market. The majority of Singaporean customers only holds two or three products with their main bank (in comparison to European customers who often hold more than four products). Holding all products in one bank makes Singaporean customers feel concerned and they do not feel rewarded enough by their main bank for multiple product holdings. Singaporeans perceive the required effort of banking interactions particularly high. They are looking for faster, easier and more personalized interactions and expect their banks to recognize and reward their loyalty.

2.4.2.4 Designing Customer Experiences at OCBC

Accounting for the specifics of the Singaporean banking market, OCBC focuses its activities on improving the customer experience. OCBC started with a business-driven approach and, through the Customer Experience Design department, added a design perspective to its activities. The combination of business and design as two complementary angles is applied to rethinking the different forms of interaction with the customers and has brought additional value to the company. While the development time of interactions takes longer when including the design perspective, OCBC's management has been convinced to invest this time and money as the bottom-line results have shown not only an improved customer experience but also cost savings (due to lower customer confusion and error rates) and higher revenues, eventually (as customers only buy products that they understand). Importantly, the changes in the interaction with the customer oftentimes require changing the back-end processes accordingly.

2.4.2.4.1 *Forms*

OCBC struggled with high error rates in the forms it received from customers. Processing these forms took much time and incurred high costs. For each erroneous form, the costs for processing and correcting could accumulate up to SGD 32. Looking at the reasons for the high error rates, it was discovered that the forms were extensive, questions had been not clearly arranged, and the information sought was not always clear to customers. The forms used to include many questions that were not legally required but that were used by other departments as an additional safeguard. The amount of questions added up to asking customers for much information that was not linked to the actual purpose of the form. A side effect was often a small font size coupled with an unclear structure.

For customers, filling in the forms was an unpleasant experience and often led to frustration. Observing customers during filling in the forms showed that both the content and the structure and layout of the forms proved problematic. The Customer Experience Design team therefore decided to reframe the entire purpose of forms from what was perceived as an "exchange of information" to a real "conversation" with the customers that would guide them through the form. The designers started by asking which information was legally required, instead of what was merely desirable. All information that was not absolutely necessary was then excluded from the form. Also the wording and structure was simplified, aiming to create a clear and straight-forward process of filling in the form.

The newly designed forms clearly indicated the steps a customer would need to follow filling in the form. In addition to this, also the steps undertaken by OCBC were detailed, resulting in a strongly improved awareness and understanding for processing times by customers. In case

of an insurance form, previously it had not been clear to customers that setting up the insurance would take two months. As many customers had already cancelled their previous insurance, this left them without an insurance during this period, leading to high frustration and the feeling of being misinformed. A comparison of the old and improved forms can be found in Figure 2-2.

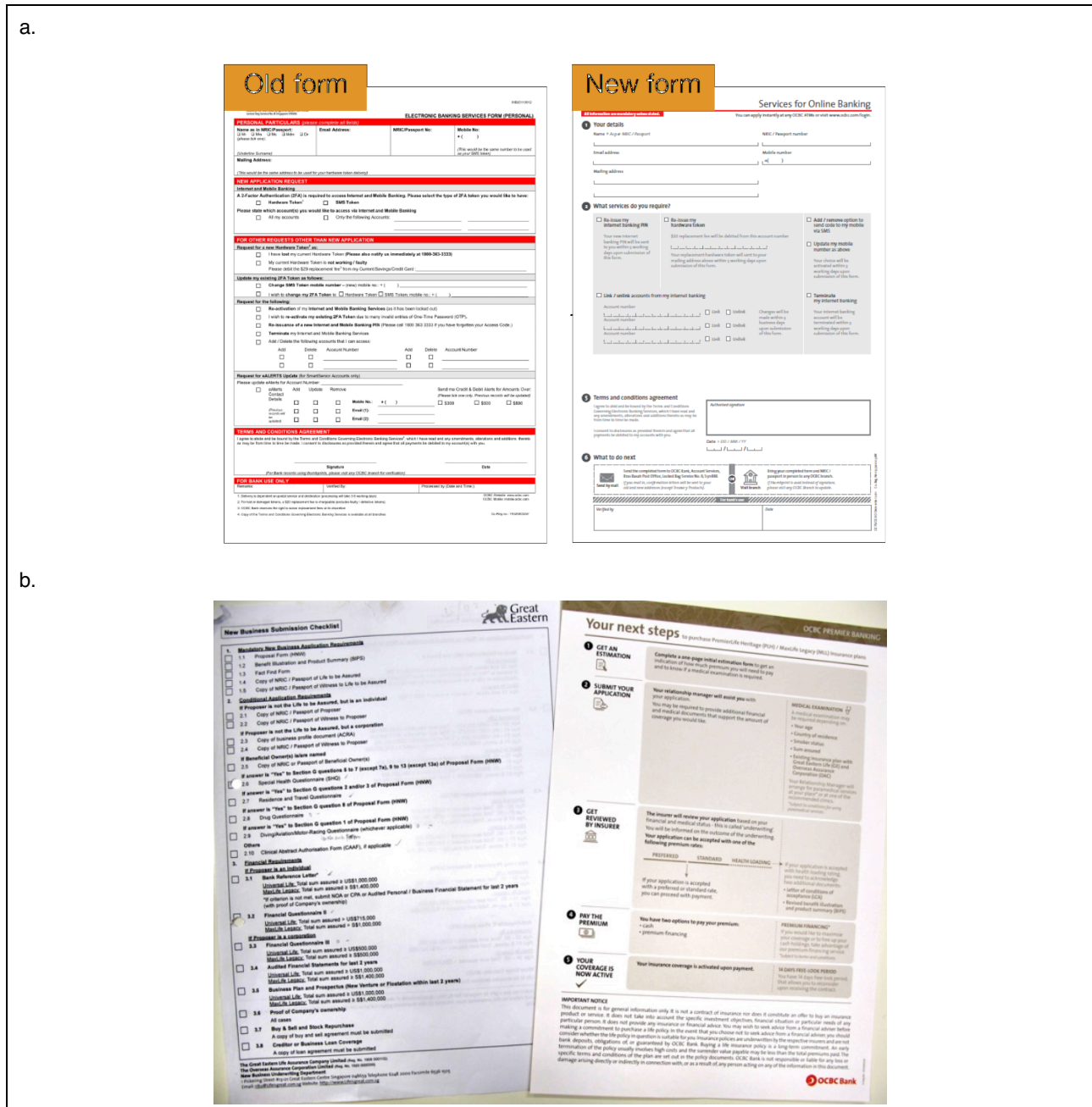


Figure 2-2 Redesign of forms at OCBC
Comparison of old and improved forms for an online banking form (a) and an insurance form (b).

As a result of these changes, forms were returned with a much lower error rate. In the case of an electronic banking application form, the error rate could be reduced from 22% to only 1% of forms with errors. This translated into cost savings for OCBC, as the majority of forms are filled in correctly and assistance in the branch or through the call center is not required anymore. From the insights of the initial projects, templates and guiding rules have been created in order to scale the learnings.

The insights also have been applied to the interaction with customer advisors at OCBC branches. Now, during the conversation with advisors, customers and advisors both can look at the screen, filling in the required forms together. The simple wording and clear layout make it possible that customer and advisor can easily navigate through the form.

2.4.2.4.2 Letters

Several project teams at OCBC noticed that customers were struggling to understand the information letters they received. In one incident, for example, customers were informed about two possibilities how they could receive their dividends, which left customers confused as to what they were asked for. In another situation, customers received a new credit card, however, they had problems understanding how to activate it and what to do with their old credit card. This resulted in frustration for the customers and in high costs for OCBC, as for example call center staff was occupied with clarifying the communication. Those apparent problems – though only minor issues in the entire customer journey – were used as the starting point to rethink the communication with customers.

In terms of its written communication, the bank would need to “speak human” in order to engage with the customers. The language of communication was altered in order to make it easily understandable to customer without a professional financial background. Financial terms and legal wording were translated into simpler language. Instead of “prevailing exchange rate,” OCBC now uses “exchange rate at that time” and instead of “surrender value payment,” it talks about “the money you get back.” Even more basic wording was altered in order to reduce the complexity, for example, “payment” is used instead of “remittance,” and “telling us” replaces the previous “notification.” In terms of design, a visually clear structure supports the content and ensures that the brand identity is also visually embraced. Furthermore, infographics are used to illustrate content. An example of a letter that has been changed in this way can be found in Figure 2-3.

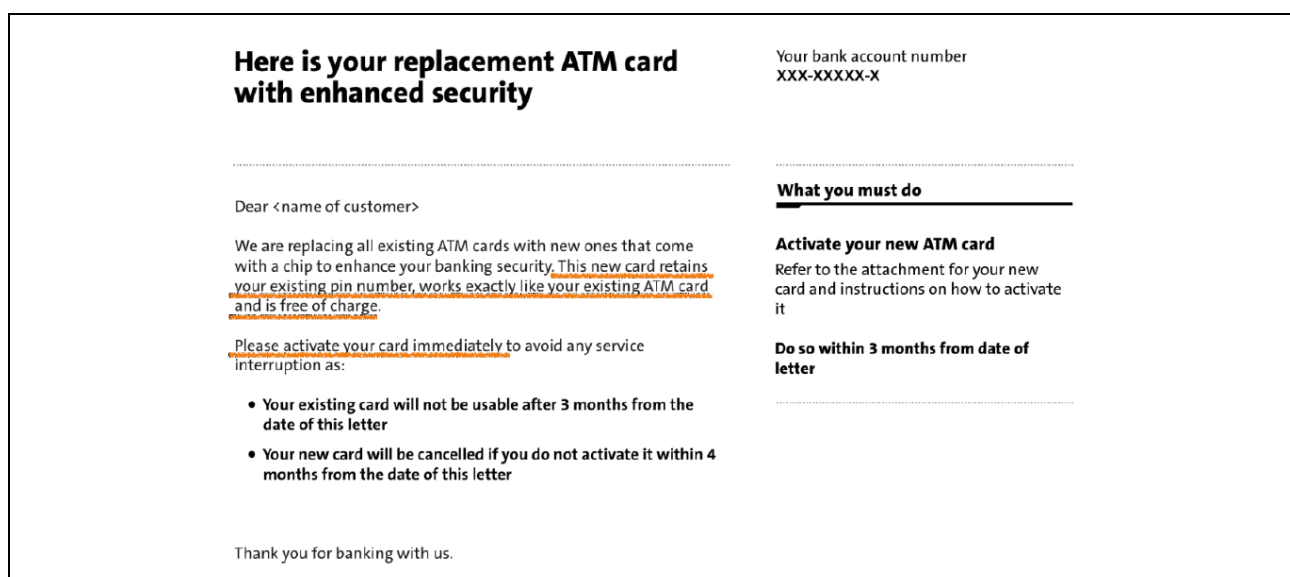


Figure 2-3 Redesign of letters at OCBC

The changes that were made for an initial project were aggregated and the learnings collected. Impressed by the results, managers of other projects started to approach the Customer Experience Design team. Although these managers had not previously faced problems with their communication, they wanted to proactively improve the interactions by implementing the learnings. Since then, the designers of the Customer Experience Design team have trained many of the employees who are responsible for content and wording so that every newly set up communication is created in a clear and understandable way. As a result, much of the communication of OCBC now follows the communication guidelines that were initially defined in small-scale projects and refined through repeated application.

The insights have now been applied to the communication of products as well, following the logic that customers only buy what they understand. An example of a product description is depicted in Figure 2-4. For some investment products, sales could be improved by 150% through improved communication, without changing the product itself.

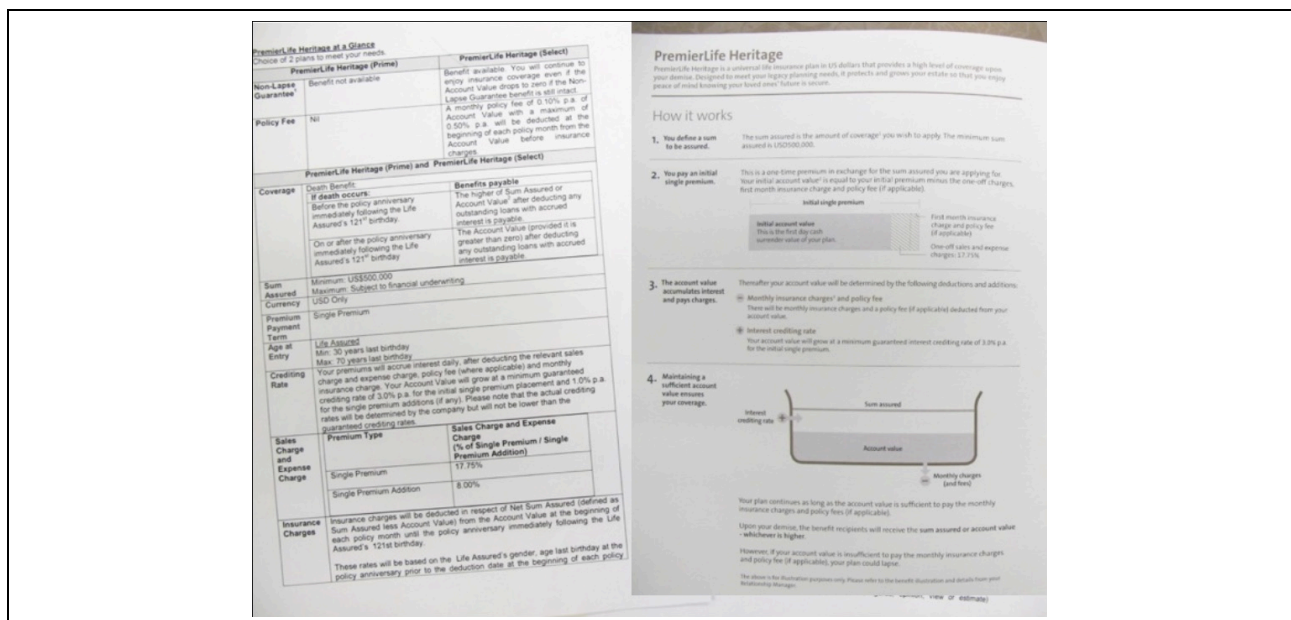


Figure 2-4 Redesign of product communication at OCBC

2.4.2.4.3 Website

The website used to be a “political” subject at OCBC. The set-up of the website reflected the internal company structure and the roles of the different departments. Every department included all information on the website that might be relevant for the customer at one point in time and the amount was proportional to the relative influence of the department within the company. Consequently, the website provided only minor marketing information, while extensive information was given on the details of the products. For customers, the amount of information was difficult to navigate and they needed to assemble the information they were looking for from various pages.

Recognizing this as a problem and completely redesigning the website was especially challenging due to internal power struggles between departments. The website had focused on

company internal needs where each department evaluated from their own perspective which information was relevant for them, with little collaboration. Convincing the responsible persons to structure the website according to the clients' needs was of key importance.

The redesign of the website was agreed to follow the notion of providing the right information for the right customer at the right place and time. The goal was to focus on one need at a time in order to avoid overloading the customer with information. Impressions on the redesigning process can be found in Figure 2-5.

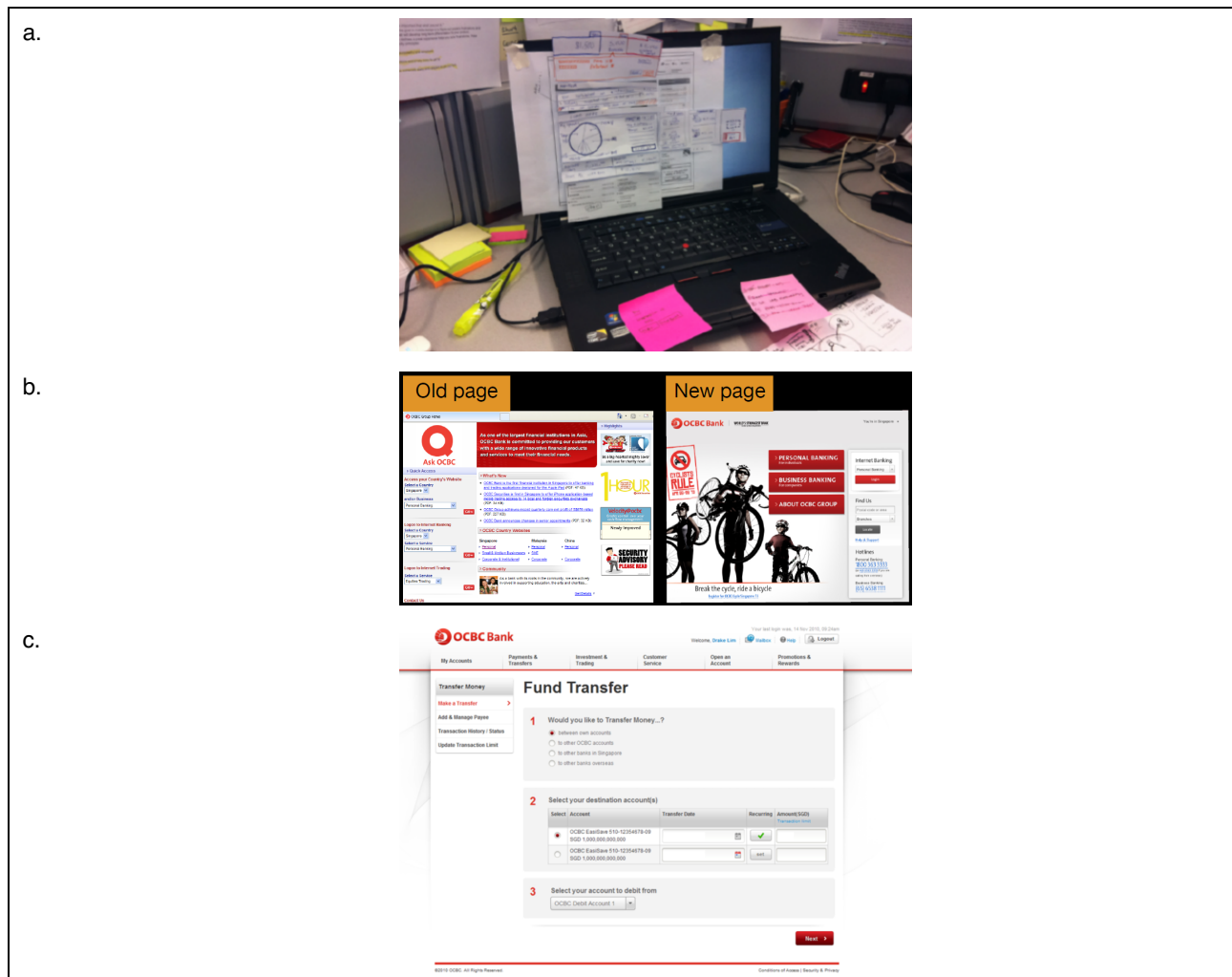


Figure 2-5 Redesign of the website at OCBC

Impressions of the redesign of the website, showing a prototype of the new website (a), a comparison of the old and new websites (b), and the new website with strongly reduced content (c).

The number of pages was drastically reduced from 20'000 to 600 for reasons of simplicity. Accordingly, the annual maintenance costs were reduced by SGD 500'000 (Boon, 2016). Today, the start page contains only the most relevant information. It serves the main purpose of redirecting customers to more specific information and only offers direct links to the most commonly used functions, account log in and contact information. While providing less information, the increased clarity in structure allows customers to quickly get to the information they are looking for. The current design was developed in an iterative process of prototyping and testing, frequently involving customers. A simple design has been adopted for all websites that allows intuitively navigating the website in order to arrive at the desired information.

2.4.2.4.4 *Mobile App*

OCBC was aware of the trend towards mobile banking early on and recognized the need to move fast. It started developing an app before customers were asking for it, in order to be prepared once they were. Customer needs differ based on the situation the customer is in and based on the device the customer is using. While some of the insights from previous projects could be applied to the development of the mobile app, the design team recognized some fundamentally different customer needs that would need to be approached specifically.

The design team of OCBC conducted ethnographic research and iterated the development so as to accommodate the specific needs of customers engaging in mobile banking. Prototypes of the app were frequently tested with customers to understand the purpose of the app and the use of its functions and to improve the design of the interface. The team observed customers who used their smartphones to access their bank account and found that the most common reason was to check the account balance. Accordingly, the app was designed in a way that the balance is immediately visible on the first page of the app. Only functions and information that are commonly needed on the mobile device when not at home are provided in order to create a simple and convenient app (see Figure 2-6).



Figure 2-6 Development of the mobile app at OCBC: Prototype and implemented design

Development of the mobile app, showing a prototype of the mobile app (a) and the implemented design of the mobile app (b, left: balance immediately visible on the start page, middle: overview of the latest transactions, right: the credit card overview).

The navigation of the app is simple and designed in a way to reduce the risk of mistyping. For most of the menus, no scrolling down is required, with the most frequently used functions being at the top of the list. Thereby, customers avoid searching for information that is not immediately visible on the screen. As mobile device buttons are rather often missed, special care was taken in designing the position of the buttons. For example, the “back” button and the “confirm” button are deliberately located apart from each other and are large enough so that they can be easily pressed. In case the back button is pressed accidentally, the information is saved and therefore, customers are not required to type in information again.

Even before customers required an app for tablet devices, OCBC started to scale the insights from the development of the smartphone app and apply them to larger devices. In the meantime, the iPad app has been launched. The simple accessibility of its functions was adopted from the mobile app. The functionality was enlarged to accommodate the more extensive purposes customers pursue when accessing their bank account from a tablet device. In the beginning of 2016, OCBC reacted to the increasing use of wearable devices among customers and developed a mobile banking app for the Apple watch (see Figure 2-7). The functionality is based on learnings from mobile and tablet apps that OCBC had already developed. With the watch app, customers can conveniently check selected information such as their account balance, recent banking transactions, or the nearest branch or ATM location without having to log into the mobile banking app on the smartphone.



Figure 2-7 Development of the mobile app at OCBC: Advertisement for the watch app

2.4.2.5 Designing Customer Experiences for Gen Y: FRANK by OCBC

OCBC used to notice that they did not explicitly target customers between their 20s and 40s. They made up a large group of customers that experienced far-reaching changes in their life, yet there were no specific products addressing their changing needs. Customers of the Generation Y (Gen Y) in particular used to have a clear opinion on banking, perceiving it as “uncool.” In order to target those customers, OCBC was convinced that it needed to approach them entirely differently from other customer groups. In line with this notion, also the approach to develop the offer would need to be reconfigured. To this end, OCBC did not work with an outside consultancy (although it did try), but eventually developed the solution in-house with the Customer Experience Design team. The result was the creation of the FRANK bank for young customers. FRANK bank stands for honesty, sincerity, and simplicity, as communicated in its slogan “frankly speaking” (McKinsey, 2012a, p. 4). As Bojan Blečić put it, “we were at the right place at the right time” to develop a banking concept for Gen Y.

In the first step, the design team felt that it needed to listen to the Generation Y to better understand them. They conducted an ethnographic research study and spent much time with members of the Gen Y. They listened to, observed, and learned from them, thereby developing a genuine empathy for them and a profound knowledge of their specific needs. The research considered psychosocial, behavioral, and ethnographic factors and showed that Gen Y wants to feel in charge of their life, but that they are generally not sufficiently considered by the banking industry (Pilcher, 2011). Customers tend to be passionate and expressive, focus on their career, are fashion conscious and adventurous. Moreover, the studies revealed their values to include honesty, sincerity, reliability, and being smart and stylish which are also reflected in the FRANK concept (Pilcher, 2011).

Meeting the customers themselves and not hiring a third party proved crucial to the development of the FRANK bank concept. For example, the designers noticed that customers attached notes listing their expenses to their credit cards, in order to keep track of their savings. OCBC picked up on this and intended to implement this as an option in its banking solution. On a FRANK account, expenditures and savings are separated, giving customer total control over their money. “Saving jars,” for instance, allow customers to deposit a certain amount of their income for a predefined purpose so that it is not available for general use any longer (McKinsey, 2012a, p. 4). The designers elaborated on many of such supposedly small or irrelevant things that turned out to feature strongly in the FRANK concept. Observing the behavior of Gen Y-customers first-hand allowed OCBC to incorporate what really mattered to these customers when launching FRANK bank in 2011.

Having developed a good understanding of the new target group, the next challenge was finding a way to connect with Gen Y. Different ideas were tested and played around with by

making them visible with paper boxes in the design studio. The slogan “What’s in your wallet?” was developed, inspired by the notes customers had attached to their credit cards. Moreover, the idea of a wall that displayed all products was tried out. Later, this changed to a wall that displayed all possible credit card designs. Those designs were not special, but proved to provide a way to connect with the customers and give them an opportunity to express themselves, which the designers had observed was highly important to Gen Y. At first, only debit cards were offered, as OCBC wanted to educate customers about savings and avoid encouraging spending. Later, however, credit cards were added to the offer. The goal was to develop a concept that appealed to everyone. Figure 2-8 provides an impression of the first prototypes and the final store design that has been implemented.



Figure 2-8 Development of the FRANK by OCBC store concept
Development of the mobile app, showing a prototype of the store (a) and the implemented store design (b).

The FRANK branches are called “stores” and the layout is close to the store concept that is familiar to Gen Y customers. OCBC collaborated with local artists who designed parts of the stores. As the designers of the Customer Experience Design team had observed that Gen Y tended to always go in company of friends instead of alone, the store layout has been designed accordingly. In the middle of the store, tables allow groups of friends to discuss in a “neutral zone” so that potential customers can consult with their friends before making a decision. Once a decision is made and they choose to buy, customers move towards the teller at the counter, as in a normal store. Employees in the FRANK stores are very engaged, calling themselves “Franklins,” and are perceived as cool by customers. They have the highest “e-

b”-score at OCBC, which measures the difference between customer encounters that exceed (e) expectations and those that are below (b) expectations and on which all employees in the branches of OCBC are assessed. The FRANK stores are located at universities and in malls, where Gen Y tends to spend lots of time.

FRANK was originally designed for and tailored to students’ needs. Yet, the challenge emerged that once they graduated from university, many customers left FRANK and went to a bank with a more “serious” image. The designers noticed this as a gap in their concept and found that they needed to address the new-to-workforce group as customers as well and accompany customers in this transition. Again, ethnographic research was conducted with a focus on observation and listening. The Customer Experience Design team learned that this group of customers avoided the association with the student world. To be sufficiently responsive, the concept for the new-to-workforce customers was developed in co-creation with them and the customers shared their conceptual ideas. For these customers, saving, enjoyment, protection, and amplification of wealth appeared crucial. Once their new life situation had been understood, it was matched with the banking world and reflected in FRANK’s in-store and digital concept. Today, the banking concept for the new-to-workforce customers is seen as an addition to the focus on students.

The stores in malls are laid out to focus on the new-to-workforce customers, while the stores close to universities still focus on students. To complete the FRANK concept, also a new website was prototyped. A blog was added that talks about matters that are important to young customers and furthermore educates them about financial topics. Store employees contribute to the content on the website, and special care is taken on the accessibility and full adaptability of the website to all devices (Pilcher, 2011). True to the Customer Experience Design team’s approach, all changes were tested in a controlled environment before their official launch (Kang Zwicky, 2014). The success of the FRANK bank shows on the customer side in terms of high satisfaction scores and on the company side in terms of good sales and profits. Evaluating the past five years since its launch, the ambitious goals have been met. The customer base increased by 55% and an 81% growth in debit cards sold was experienced. Furthermore, the bank received a design award for the concept of FRANK by OCBC and for its debit card designs (OCBC Bank, 2015, p. 20). Competitors such as DBS Remix now started to similarly attempt to access the potential of this young market.

2.4.2.6 Three Guiding Design Principles

Common to all customer experience initiatives at OCBC is that designing them follows clear principles. These are based on the customer experience strategy that states the experience to be designed as well as the necessary changes that this entails. The design teams incorporate three design principles in all projects. At the core is listening to the customers. As designers, the team is trained to pay attention to the customer in order to understand the needs and to

develop solutions that resonate both with the customer and designers (Boon, 2016). According to Bojan Blecic, “understanding the customer, how to connect and resonate with them, what they value and what motivates them is part of the design job. The designer understands the customer” (Boon, 2016).

2.4.2.6.1 *Customer Insight*

Both the simplicity and the design imperative are based on a profound customer insight. The understanding of the consumers’ behavior and needs is built by analyzing customer data as well as by gathering information from interacting with, observing, and listening to the customers. New offerings are developed based on insights in (evolving) customer needs (Teh, 2014), especially in terms of the information needs and the context of these needs. These insights then also inspire subsequent innovation at OCBC. Basing all further steps on these insights guarantees accessibility and relevance of the designed content in a way that customers receive information at the time and place they want it.

A deep understanding of customer needs and business goals is gained from targeted consumer research and from customer data. To generate these customer insights, OCBC combines various tools. Experience labs are set up to observe customers during their interaction with the bank and to engage them into a conversation about their experience. Ideally, top and middle managers as well as front-line employees participate in the labs and analyze their observations. Experiencing customers’ interactions with the offer of the company creates an understanding of the issues and challenges customers encounter as well as the emotions they display when interacting with OCBC. These first-hand insights allow understanding the customer and deducting points for actions.

Ethnographic research is used to fully understand customers, their needs, and their behaviors, and the role banks play in their life. During this type of research, employees of OCBC take part in the life of the customers and gather observations, interact with the customers in their daily life, and engage them into conversations on their values, wants, and needs. Based on the generated knowledge about the customers, completely new concepts such as the bank “FRANK by OCBC,” which targets Generation Y, have been developed.

Furthermore, the Group Customer Analytics & Decisioning, which is part of the experience division, provides insights from data. For example, the group not only analyzes the main data, but also what they refer to as “small data,” coming for example from customer complaints. This type of data is not big in quantity but provides particularly valuable insights (MacDonald, n.d.). Analyzing customers’ spending patterns and predicting their behavior has been contributing to the development of FRANK.

The key insights generated through research are collated into an overview that depicts customers’ information, functional, and emotional (met and unmet) needs, their goals and tasks,

and finally their motivation, expectations and context of interaction. The offer that would emerge from these insights will be stated clearly in the form of an elevator pitch and serves to further develop the offer according to the insights.

The exhibits in Figure 2-9 and Figure 2-10 illustrate how customer insight was core to the development of new solutions.

Based on customer research, OCBC found that working professionals were looking for rewards, simplicity and convenience. The strategy of OCBC was to directly target the new segment and thereby to enlarge their market share and to increase loyalty of existing customers to the account. The 360 Account has thus been created for the working professionals who are customers of the OCBC Bank. Matching their needs, the two characteristics of this account are that it is simple and rewarding: The initial account can easily be opened via a mobile app. Later on, when the customer interacts with the account, it is ensured that it is still simple and easily understandable, but in addition the component of reward is added. Customers receive higher interest rates the more they use the online banking of the 360 Account. Thereby, the account addresses customer's needs along the entire customer journey.

Figure 2-9 Exhibit: 360 Account

Pay Anyone (PAO) lets customers transfer small amounts of money to other persons using the recipient's Facebook account, e-mail address or mobile number, without having to know their bank account information (Aziz, 2014). The Pay Anyone service, provided since 2014, is available to all customers holding a FRANK or a 360 Account. PAO is intended for micro-payments up to \$100 (Aziz, 2014). This service differs from the traditional transfer process in several ways. First, and most importantly, the sender is not required to type in (or know) the recipient's bank account details. Rather, the recipient will be alerted of the incoming payment and needs to provide the own bank account information in order to receive the money. Second, the transfer is completed faster. Along with the alert, the recipient also gets a password from the sender that is valid for 24 hours that is required to accept the payment (Aziz, 2014). Thereby, the process is shortened by two days. Moreover, as one customer using the service points out, "[w]ith this service, we can choose to send the money using our mobile numbers or Facebook without knowing each other's bank account details. Furthermore, I will be able to know when my friends have paid me back without having to check my bank account statement" (OCBC Bank, 2014). Pay Anyone uses a newly developed transfer system, called FAST, that was introduced just one month earlier (OCBC Bank, 2014).

Figure 2-10 Exhibit: Pay Anyone

2.4.2.6.2 *Simplicity*

Simplicity is seen as the *hygiene factor* that customers need as a precondition for interacting with OCBC, because a good experience inherently needs to be clear and understandable for customers. To make an offer simple, OCBC reduces the content of interactions and focuses it on what is relevant to the customer. Achieving simplicity is a design approach to present offers, rather than a business approach itself.

Simplicity is regarded as the convergence of customers' mental models and the knowledge needed for understanding an offer. This convergence leads to clarity and confidence for customers, translating into higher sales and lower costs for OCBC. For example, customers are more willing to actively use a bank account which they understand and fewer customers need to seek help by contacting the company's call center.

To achieve this convergence, the decisions on what to reduce and where to focus are based on the insights generated from consumer research and big data. Prevailing assumptions held in the company are frequently compared to these insights and thereby challenged.

The exhibits in Figure 2-11 and Figure 2-12 illustrate how simplicity was incorporated in the design of new solutions.

MoneyIn\$ights is an online tool that is available since 2013 to all OCBC customers through Internet banking and as a mobile app. The service provides customers with an overview of their expenditures and can be organized by month or by expense category (OCBC Bank, 2013). The goal is to help customers save money and understand their spending habits (Uy, 2013). In an additional feature, the customer's spending habits are compared to other customers with similar demographics. MoneyIn\$ights allows customers to personalize the service by adding payment alerts or setting budgets (OCBC Bank, 2013). As a result, it assures customers of their financial situation, giving them a feeling of control and security.

Figure 2-11 Exhibit: MoneyIn\$ights

In spring 2015, OCBC introduced the feature "One Touch App" within its mobile banking app (Charlene, 2015). It is designed to simplify user's login process by replacing the repeated PIN request that was used before with just one fingerprint scan instead. The service currently works with the major smartphone systems (iOS operating systems and Apple's Touch ID fingerprint sensors, selected Samsung smartphones with Android operating systems) (OCBC Bank, 2016c). The fingerprint recognition requires a one-time activation using the PIN code (Theng, 2015). In addition to speeding up the login process, the new feature also adds to the safety of its mobile banking app by securing access to the customer's bank account information with the customer's unique fingerprint. OCBC is the first bank in the region to introduce such a service (Charlene, 2015). The feature was designed with the customer's convenience in mind; looking up the current account balance is one of the most frequently performed actions by customers (Theng, 2015).

Figure 2-12 Exhibit: OneTouch App

2.4.2.6.3 Design

The design of an interaction is considered as a *differentiating factor*. Creating a good customer experience is not only dependent on the content of the experience, but also on the design of this experience (Kang Zwicky, n.d.). Design has the ability to address the senses and emotions of customers. By engaging into a conversation with the customer – rather than exchanging information – OCBC establishes an emotional bond with the customer. Conditions for differentiating through design are that the content is relevant and simple, is visually clearly understandable, encompasses supporting and well-structured information, and has a "human" – that is, understandable and approachable – tone to it.

OCBC uses design as an innovation tool. The interaction channels need to be set up for engaging with a customer in a conversation. The interaction itself (including the language used) is set up to correspond to the capabilities and expectations of the customer. In addition to an innovation tool, design serves as a manifestation of brand value. All touchpoints together convey the brand to the customer.

The exhibit in Figure 2-13 illustrates how OCBC approached touchpoints from a design perspective to improve interactions with customers.

OCBC's communication at various touchpoints tended to confuse customers and leave them unclear about what they are asked to do by OCBC. For OCBC, this translated into higher costs, such as for example by incomplete forms, forms with errors, and a high amount of calls in their call center. Similar to the changes implemented with forms, the company applied the design principles to redesign the entire communication with customers. In OCBC's offline communication, the goal was to increase clarity. At credit card charging points, due to an unclear design, customers mistakenly tried to insert a card instead of just placing it on top of the point. Not only did this in several cases break the credit card, but it left customers dissatisfied. After recognizing this problem, the design was slightly altered in a way that altered customers' behavior and made it clear to them how to place the card.

Figure 2-13 Exhibit: Redesign of Touchpoints

2.4.2.7 Design Methods for Customer Experience

The Customer Experience Design team typically starts with the objective to fix an apparent problem or identified pain point. Oftentimes, these initial problems seem small and without a major impact in the entire customer journey, however, they tend to be persistent and negatively influence the customer experience. Even though there might not be clear evidence of their actual impact, the problems are fixed with a clear focus on progress. The design team starts to work on improvements by inviting customers, observing them and gathering their feedback. The finding of solutions is based on an iterative process of improving and testing with customers.

2.4.2.7.1 *The Design Process*

OCBC applies a design thinking process for developing new and innovative customer experiences. It begins with a deep customer insight built on actively listening to the customers, which unveils the complexity of the problem or serves as an inspiration for new developments. The ideas to fix an apparent problem are always prototyped and visualized. This changes the perception of their relevance and the behavior of product managers. Prototypes are tested iteratively as to whether customers understand the solution until a satisfactory solution is found. The final solution is verified by different business parties who observe the customers during their experience and who evaluate the results (Figure 2-14 illustrates a typical situation in the design process).



Figure 2-14 Situation in the design process of new customer experiences

The design process is built on the notion of “doing less to get more.” The focus on relevance, simplicity, and design is part of the mentality at OCBC. OCBC is unique in the sense that senior management was very supportive of this approach from the beginning on. Taking the perspective of the customer journey instead of a product focus additionally helps to create management buy-in and to work cross-functionally. Particularly the first-hand observation of customers when they interact with products allows truly understanding their experience, including potential challenges and emotions that arise during the interaction. In these observations of customers, senior-, middle-, and front-line managers are involved. Oftentimes, managers initially expect that once a solution has been developed, customers needed to be convinced and supported in adopting the solution. However in practice, new designs prove to change customer behavior automatically.

Key to the success of design initiatives is that they involve customers and employees as well as ensure a close follow-up on their performance.

Collaborating with Customers

In the beginning of the user-centered design process stands the initial market research that engages directly with customers, such as for example ethnographic research that has been conducted for the development of FRANK bank, where the immediate exchange with customers is sought through interviews. In addition, available customer data is analyzed in order to generate further insights. From these insights, the OCBC development team creates an outline for a solution that is prototyped, engaging managers from different levels and departments in generating these ideas. In the further development and refinement of the new offers, customers play a central role in testing the offers and providing feedback. Customers tend to provide feedback on the simplicity and design of the solution, rather than on the business idea itself. Based on their reactions to the solution, the development team of OCBC further refines it without the engagement of the customer, and puts the new prototype again to the test.

Involving the Entire Organization

The philosophy of achieving satisfying customer experiences through simplicity and design is anchored in the mindset, the corporate culture, and the employees’ skills. At OCBC, employees have a dedication of striving for an extraordinary customer experience. They have a culture of questioning, testing assumptions, and prototyping offers. Finally, they are trained to acquire the skills needed to make an offer simple and well-designed, so that interacting with the company is easy and enjoyable for customers.

OCBC inherently takes an outside-in approach to any development, starting always with the customer. In addition to observing customers’ behaviors, employees are asked to monitor general trends and advances in society and technology that may alter consumer behavior (Lim, n.d.). For example, technologies such as tablets and smart watches create new potential channels for interaction. This allows the company to be prepared for changes in consumer behavior

early on with matching solutions. Finally, OCBC is aware of potential internal changes that evolve in terms of changing channels and interactions with customers. The company aims to detect any changes affecting the customers' expectations and experiences early on in order to account for the necessary time for developing corresponding solutions.

Customer experience is closely intertwined with employee experience. Employees from all levels are fully committed to the customer experience. At OCBC, the strong commitment by top managers sends a signal to the organization about the importance of delivering superior customer experiences. While providing simple solutions starts with common sense, also dedication, discipline, and intelligence are needed to make it part of all solutions and to create a "beautiful" and enjoyable customer journey.

Monitoring Outcomes of Customer Experience Management

The effects of customer experience initiatives are always measured and monitored. From the customer perspective, the performance is assessed in accordance with the design principles, that is, customers rate how easy it was to complete their tasks, how useful the support offered by OCBC proved, and how pleasant the experience of solving the tasks was. Customers who had emotionally satisfying experiences are more engaged with their bank accounts and spend more money than less satisfied customers. Thus, OCBC measures the net promoter score, the website traffic, the number of downloads, and sales, among other KPIs (Kang Zwicky, 2012, p. 34). In general, the customer experience efforts have rendered positive results on any of these KPIs and have profoundly contributed to the top line and bottom line of OCBC.

2.4.2.7.2 Scaling the Learnings to Larger Impact

Once a solution has been developed, similar problems are identified throughout the organization and approached with the learnings from the initial project. By this process of *iteration, connection of the dots, and aggregation of the results*, the initial solution grows to attain a bigger impact throughout the company. Since already small changes can have tremendous impact, the efforts and outcomes are not a trade-off anymore but pay off positively.

A further benefit from this aggregation of a solution over a greater number of projects is that the insights from the initial project are further refined as they are applied to similar projects. This *iteration of the learnings* allows steadily advancing the solutions. Starting with small projects is a key success factor at OCBC as it provides the room to experiment with solutions, which leads to the confidence to take on bigger problems as well. For example, the forms were continuously improved in smaller projects. While not all changes that are implemented in the forms today were included in the first solution, detailed insights were developed as the process was repeated and today, they became the standards that are applied to all the forms and letters of OCBC's communication with customers. After all, for a project to be able to proceed, quick wins need to be generated and numbers be put behind the results.

Through the simultaneous work on several similar projects, the Customer Experience Design team could identify recurring patterns and they *connected the dots* of their solutions. For instance, they found similarities between their improvements in the forms and in the letters to customers. Based on these insights, guidelines could be developed that connected different projects and resulted in a new standard appearance of OCBC (see Figure 2-15). Design guidelines are extended to infographics, similar language is used in all communications, and a consistent look has been even achieved between its B2C and B2B operations, despite them being separate departments within OCBC. The creation of templates and rules facilitates the further scaling of the learnings from initial projects.

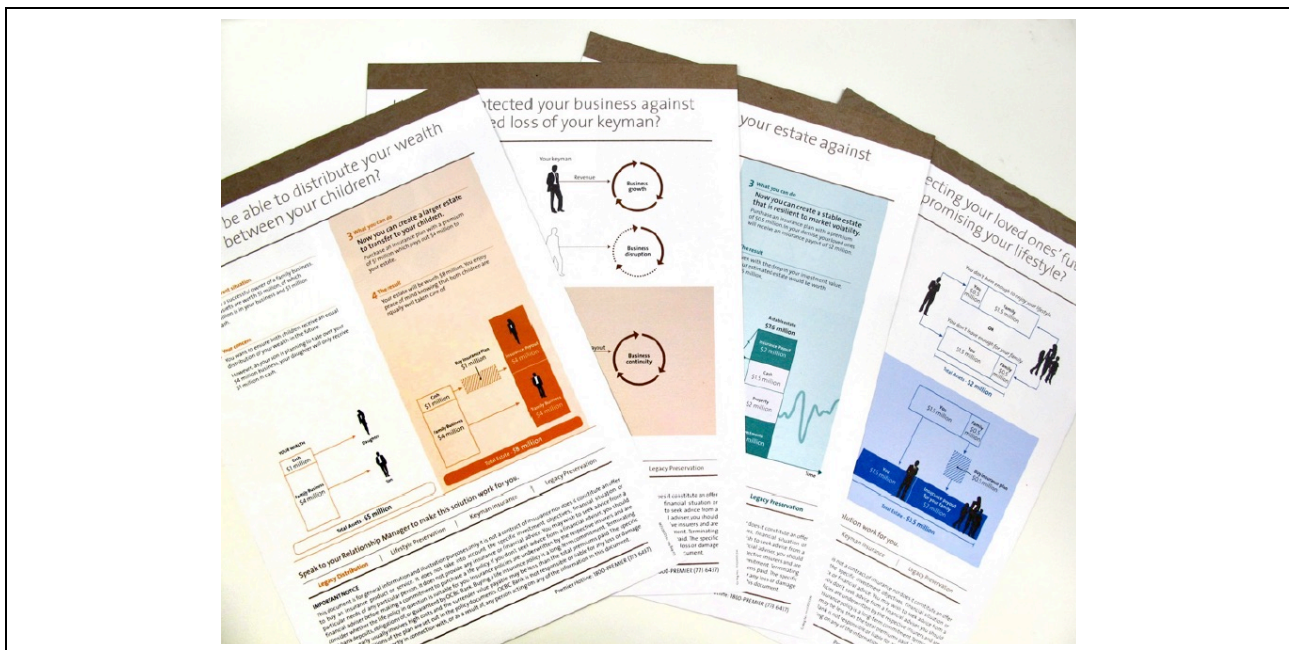


Figure 2-15 Scaling of learnings to all interactions with customers

After fixing the individual problems as illustrated by the examples given previously, the Customer Experience Design team started to look at the entire customer journey and made sure that it is “in tune.” For the designers, journeys are perceived as “barriers” as they differ greatly from each other, making it difficult to focus and consolidate all activities that are possibly required to get to a product. While often, the only objective is closing the sale, there is much more that happens in the journey before and after the problem that was fixed in the initial project. A major leap can be made by “flipping the dots” of previous projects and by putting them into perspective of the customer journey. Most of the value is created by *aggregating the projects* and by then developing insights for the entire customer journey. For example, the requirements from a mobile app could be readily transferred to the requirements from an iPad app by imagining and comparing potential interaction points in the customer journey. Similarly, the need for a tailored communication with young customers that was addressed in the form of the new FRANK bank concept was unveiled – at least in part – by learnings from previous projects.

2.4.2.8 The Way Ahead

To modify the communication with the customer, trust in the organization has been proven to be of key importance. The designers in the Customer Experience Design team around Bojan Blecic become increasingly involved and their tasks start to extend to the product development. Overall, their process keeps following the same principles. They start small, iterate and test the solution in a controlled environment until it is understood by customers. Their goal is to demonstrate the value of their design work and to drive sustainable change. To achieve this goal, they “evangelize” customer centricity, ensure the pursuit of being a leader in design, at the same time try to take a neutral and objective perspective, and finally act fast to get things done.

Today, every time a request comes to the Customer Experience Design team, the project is assessed in terms of its value for the customer and its value for the company (see Figure 2-16). Those projects that score high on both value dimensions are directly pursued. Those that fall short on one of the dimensions are discussed and redefined in order to resolve these shortcomings.

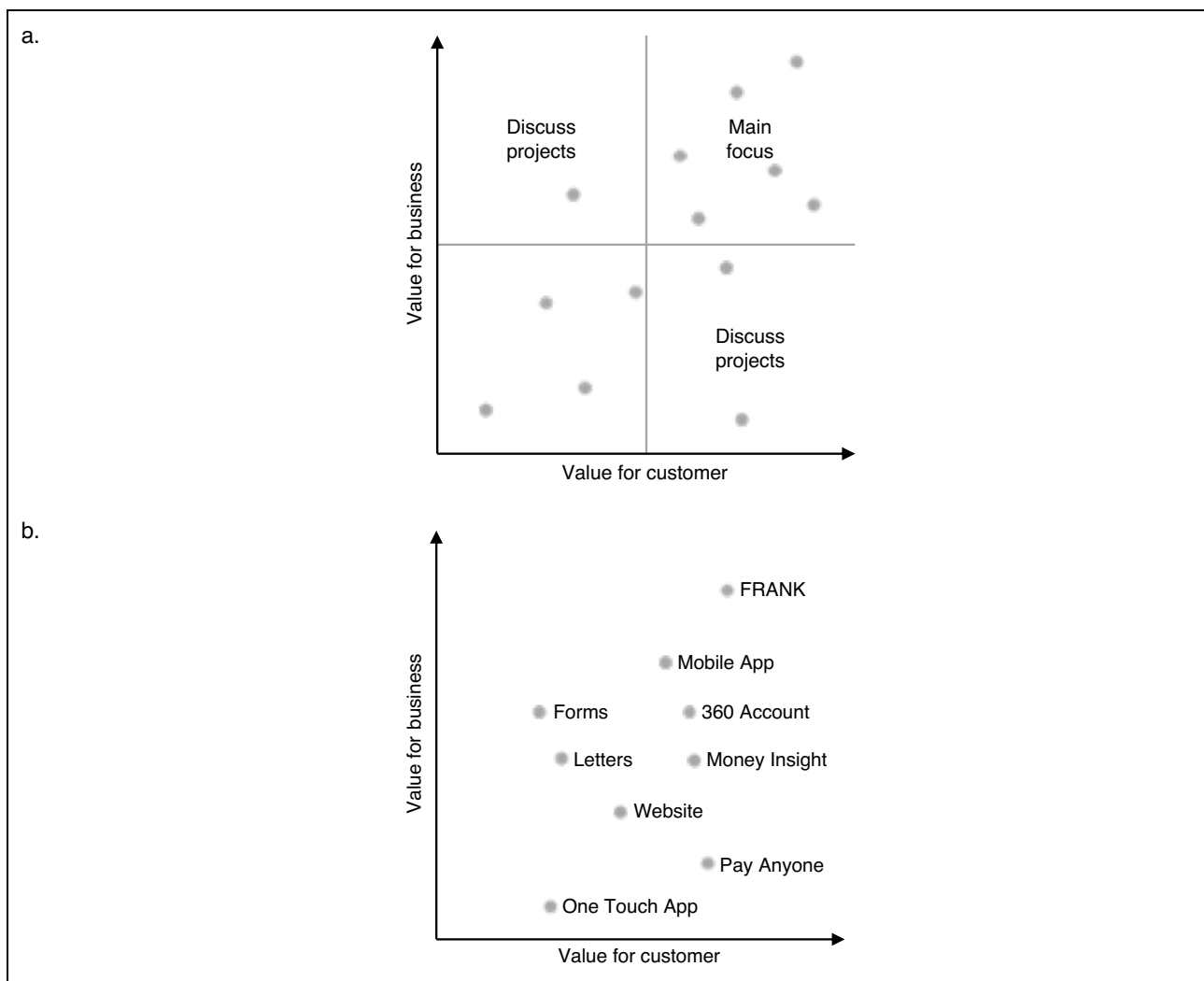


Figure 2-16 Evaluation of new incoming projects

Evaluation of incoming projects with an assessment grid (a), showing an exemplary assessment of completed projects in the “Main focus” quadrant (b).

The Customer Experience Design team sees its purpose shift towards making product managers successful in incorporating the design team's approach into their work. The members of the design team are thus change agents within OCBC and need a deep understanding of the design of customer experiences, paired with a broad knowledge of the different functions and their requirements. The first step in working with the product managers is to make them conscious about the importance of design. Product managers develop the corresponding awareness and they decide to do something, but they still lack the skill. With time, the goal is that they learn the design principles and are then able to internalize and apply them in their work on their own. The design team coaches the product managers more specifically, e.g., along certain projects. It is a gradual process of spreading the mindset and procedures throughout the organization and moving them from finding solutions to problems to focusing on the early development and management stages of specific products. Ultimately, the designers' objective is to ensure that other managers recognize and are able to fix bad designs so that they can design what is right and creates value for the customers.

The designers act as change agents within OCBC. Turning the company around toward a focus on customer experience is an ongoing process that takes time. For the Customer Experience Design team, it is key to get managers of all departments on board and sell them the design strategy in order to be able to integrate the customer centric philosophy in the company. Managing the associated complexity with cross-functional projects in a large company like OCBC continues to be a challenge. The team keeps searching for effective ways to structure and tackle complex products and to leverage the internal resources as well as overcome internal silos in order to find solutions that resonate with customers.

This step of teaching and empowering managers to improve the customer experience has become necessary, as the number of requests for projects surpassed the capacity of the Customer Experience Design team. At the same time, also their reach in an organization as big as OCBC is to some extent restricted. The Group Customer Experience is separate from other functional departments such as the marketing department, which in the past was often considered an advantage by the design team to be truly customer focused and to develop innovative solutions. However, the small size and this set-up of the team set limits to its effective impact in the organization. Future efforts will thus need to find ways to maintain the team's flexibility while implementing its insights throughout the company.

Despite the challenges, OCBC's strategy has in several ways been successful in integrating customer experience. The focus on customer experience is an inherent part of OCBC's strategy and should be engrained in the corporate culture. As focusing on the customers' needs strengthens customer loyalty, all structures and processes build on the fundamental orientation. OCBC acquired the ability to create superior experiences by developing a unique understanding of its customers. Following the customer centric logic that spans the entire organization, departments learned to collaborate to develop innovations and improve the overall

customer experience. From the initial account opening, over managing their accounts, up to changing them due to altered life situations, OCBC has rethought the interactions with its customers. The solution and experience development involve the bank's top management as well as front-line employees. Furthermore, OCBC closely collaborates with its customers in order to improve its offers. Regular data enquiries serve to further enhance experiences.

However, this development is also picked up by other banks in the industry. As the focus on customer experience responds to the Singaporean customers' expectations, also OCBC's main local competitors DBS and UOB strongly invest in improving the customer experience. The local banks increasingly appear to compete on a superior customer understanding and the ability to act on these insights. DBS, for instance, approaches customer experience management vigorously in both its digital and offline customer interactions, particularly with innovations and technological advancements. Also, it has launched DBS Remix, which targets a segment highly similar to that of OCBC's FRANK bank. Similarly, UOB announced its objective to offer high quality and seamless customer experiences and emphasizes customer service. UOB, too, targets student customers, for example with its recently launched credit card YOLO (abbreviation for "you only live once"). The increasing integration of customer experience in these banks' strategies raises customer expectations, thereby demanding rising investments on the side of the banks.

With regard to OCBC's customers, customer needs evolve quickly and OCBC needs to keep up. For example, OCBC created new services that correspond to customers' use of wearables and smart technologies. Also, customers' shift towards communicating with the bank through digital channels continues, and the role of physical branches decreases in significance (Institute of Service Excellence, 2016, p. 3). As customers' use of technology evolves and their needs and interactions with the company change, the design team aims at being ahead of these developments in order to be prepared and offer solutions to customers before they ask for them.

In looking ahead, the Customer Experience Design team at OCBC continues to embrace the challenges in- and outside of the company. Technological advancements, strong competition and increasing customer expectations continue to raise the bar that allows differentiating via a superior experience in the Singaporean banking industry. Furthermore, the internal challenges associated with the limitations in capacity of the Customer Experience Design team and the complexity inherent to many projects require to continuously assess the company's preparedness to succeed in responding to and at the same time shaping the fast-changing industry environment.

2.5 Findings of the Single Case Study

The process that OCBC follows in managing the improvement projects follows a distinctive pattern that is discussed below. Even though at the outset of the improvement process it is not the objective of the Customer Experience Design team to develop innovations, following this process has repeatedly improved the customer experience in innovative ways. Specific attributes and practices that are interwoven into the process yield such innovative solutions. Moreover, the insights gained throughout the process are repeatedly transformed so that innovative applications of the solutions are created.

2.5.1 Overview of the Customer Experience Management Process at OCBC

The customer experience management process at OCBC consists of two distinct phases. Phase I is concerned with solving a specific problem that has a negative impact on the customer experience. Figure 2-17 (page 82) depicts the customer experience management process for Phase I. Phase II extends the solutions that have been developed in Phase I to other stages in the customer journey and aims to improve the customer experience across customer journeys. Figure 2-18 (page 84) shows the process for Phase II.

2.5.1.1 Role of the Customer Experience Design Team

The objective of the Customer Experience Design team is to improve customer experience, but not to generate innovations per se. Still, the outcomes of the projects discussed can be considered innovative as they change the customer experience or the context of these experiences by implementing new or enhanced interactions between the company and the customer. In addition, the customer experience management process exhibits characteristics of an innovation process, as it passes through the stages of ideation, concept development, solution design and testing, and launch.

The customer experience management at OCBC (labeled “CEM” in Figure 2-17 and Figure 2-18) is in a unique position, as it is set up in a way that allows linking the subjective customer experience of individual customers with the general journey design implemented by the company. The customer experience and the individual customer context in which customer experience is embedded is depicted on the left-hand side in Figure 2-17 and Figure 2-18, while the general customer journey design and the organizational functions are depicted on the right-hand side.

The Customer Experience Design team employs the design principles that they emphasize throughout the whole process. These principles orient the management process towards what matters for customers.

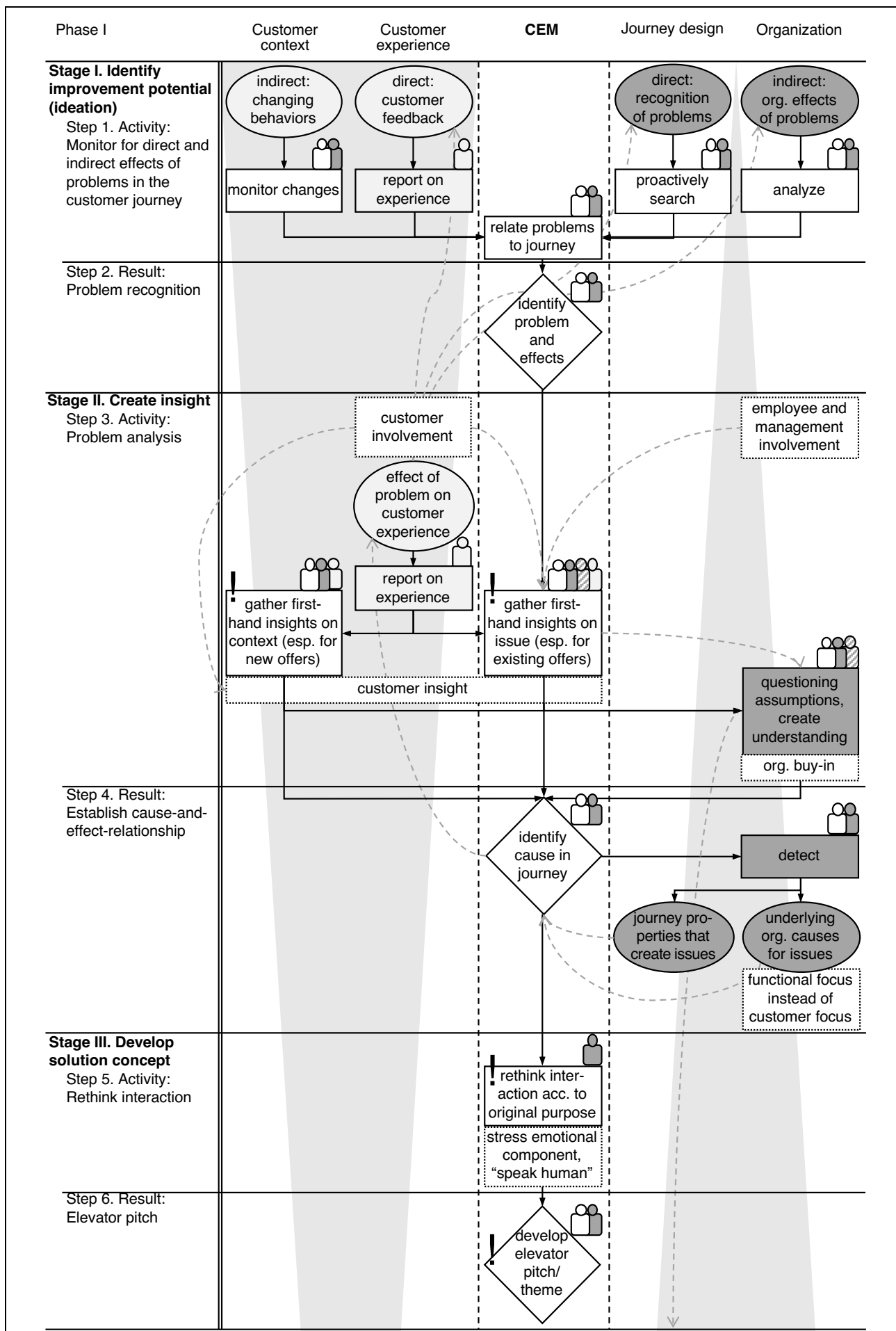


Figure 2-17 Phase I of the customer experience management process

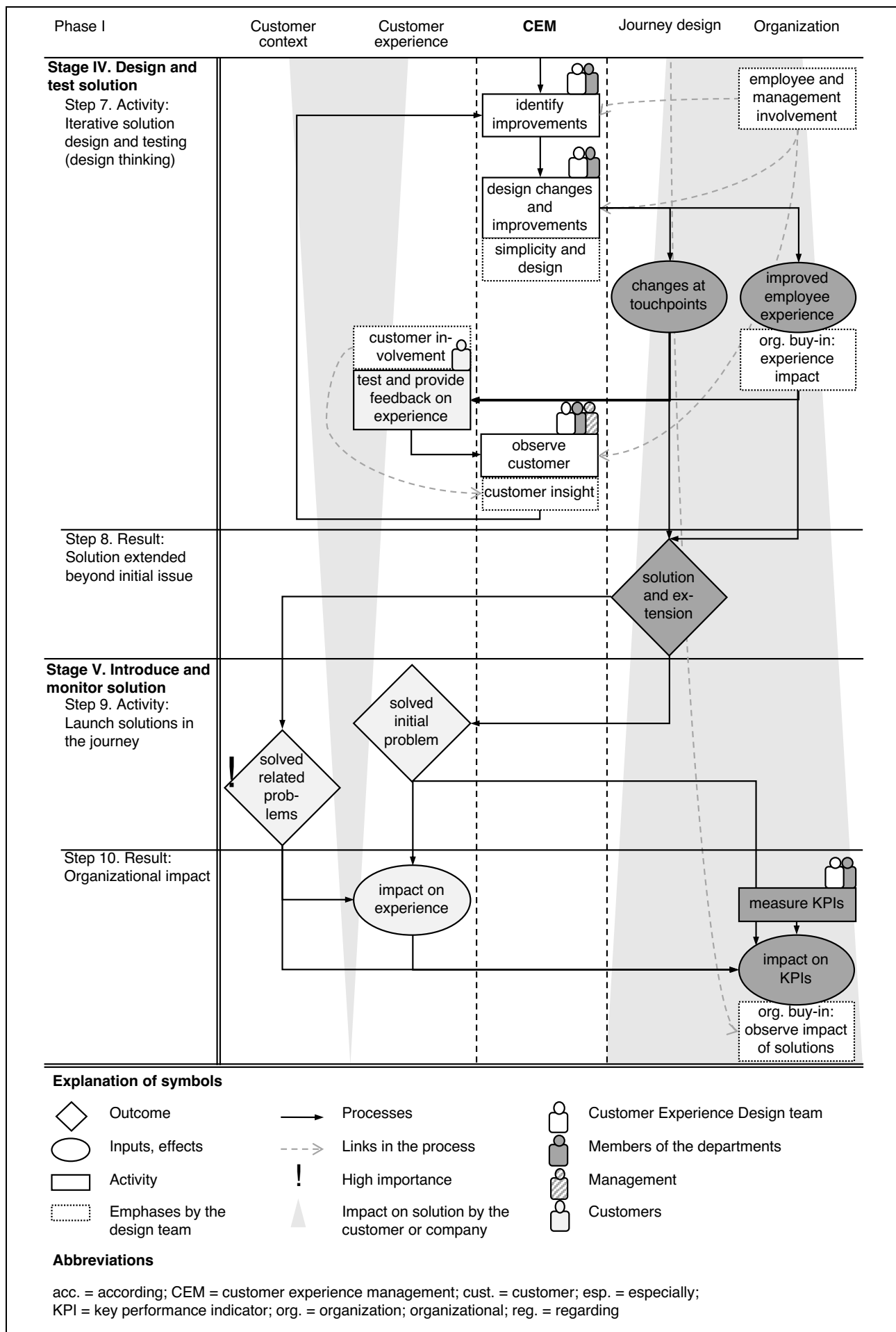


Figure 2-17 Phase I of the customer experience management process (continued)

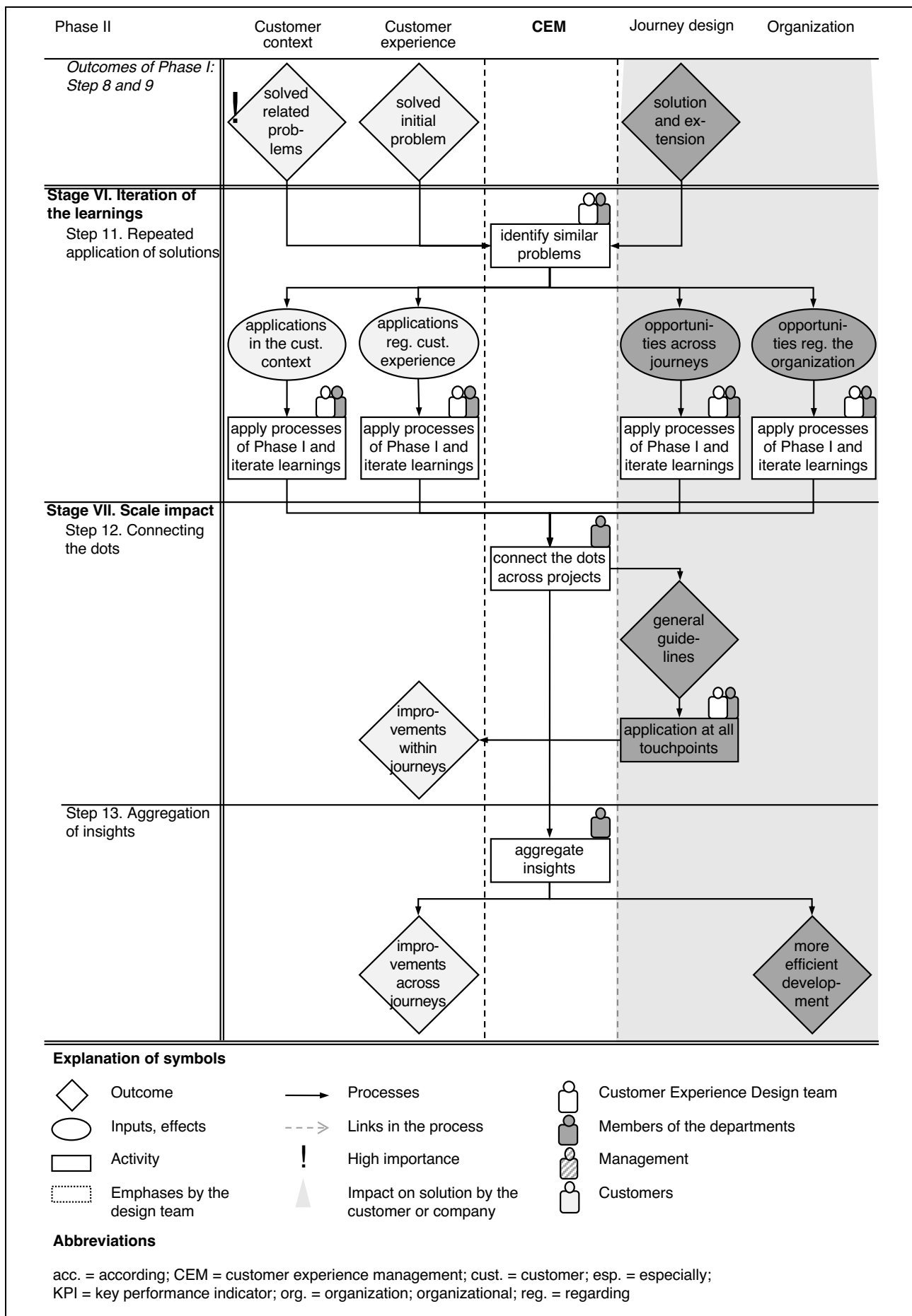


Figure 2-18 Phase II of the customer experience management process

2.5.1.2 Process Characteristics of Phase I

In Phase I, the improvement process follows five distinct stages (see Figure 2-17). The properties of the steps in these phases allow progressing from detecting a problem in the customer journey that affects the customer experience through examining it to developing an adequate response by the organization that is implemented in the customer journey. In the first stage, improvement potential is identified. Sources for detecting the improvement potential may have different origins. On the customer side, sources can be more indirect in nature, such as changes in the customer context (e.g., the increasing use of mobile devices or the lack of targeting for Gen Y customers) that indicate potential or direct feedback from customers, such as the reporting of negative experiences (e.g., issues with filling out forms). Problems and potential regarding customer experience also appear on the organizational side. Issues can be detected directly in the customer journey (e.g., noticing that the website is not set up with a customer focus) or more indirectly in the processes of the organization (e.g., high costs associated with errors in the forms). The customer experience team and managers at OCBC relate these observations to the customer journey in order to identify problems with the customer experience and their effects. In the second stage, the issues are elaborated on in order to gain a deeper understanding of them and of their causes. Insights are gathered first hand, such as through ethnographic research in the customer context (as, e.g., in the development of FRANK bank), or by observing customers during the interaction (e.g., observing why customers had difficulties with understanding letters). As the Customer Experience Design team, customers, members of the organization, and in selected instances the management is involved, an understanding for the customer is developed in the organization that allows questioning assumptions and identifying underlying causes for problems in the customer experience, and creates buy-in for the need to improve that experience. In the third stage, the Customer Experience Design team takes a step back to rethink the interaction according to the original purpose (such as considering forms as a conversation instead of an exchange of information). It develops an elevator pitch that guides the further process. The fourth stage contains a design thinking process that iterates between identified improvement potential, design changes in the customer journey and the organization, the feedback from and observation of customers. In this stage, the design principles of simplicity and design are prominently followed and the Customer Experience Design team, customers, employees, and management are involved in solution development. The solution is launched in the fifth stage. The solution that is developed through the process solves the initially detected issue but also surpasses this and addresses related issues in the customer context (e.g., as in the case of the redesigned forms, which prevented that customers cancelled their previous insurance too early). On the organizational side, all improvements are measured in terms of KPIs that display the impact of the solution for the organization.

Phase I is marked by many interlinkages between the elements of the customer experience management process (see Figure 2-17). One link goes from the underlying organizational causes of a problem to their symptoms (as evident on the organizational side). The underlying causes in the customer experience (step 4) often at least partly affect the causes of negative experiences in the customer journey, such as noticing that the website is a “political” subject. These causes in the journey in turn affect the customer experience (step 3), and problems will become apparent in the journey design (step 1, e.g., an overloaded website) or in the organization (step 1, e.g., a high number of customer service requests regarding a particular issue). Another linkage exists between employee and customer involvement and an increased organizational buy-in for the relevance of customer experience management. Customer, employee, and management involvement in step 3 is crucial for building customer insights and for creating an understanding for the customer in the organization. This in turn creates buy-in for the customer experience management in the company across levels and departments. Similarly, also in step 7, the involvement of all parties is crucial for the customer insight that is needed for developing extended solutions.

2.5.1.3 Process Characteristics of Phase II

In Phase II, the developed solution and its effects on the customer experience and in the customer context serve as starting points for extending the scope of the initial solution (see Figure 2-18). In step 11 in the beginning of Phase II, the insights generated in Phase I help to identify similar problems that negatively affect the customer experience. This can reveal potential existing in the customer context (e.g., after developing FRANK bank, it was acknowledged that the needs of new-to-workforce customers were not targeted well enough) or can detect similar problems with the customer experience (e.g., after changing the wording of letters and the structure of forms, the insights were applied to simplify other communications with customers accordingly). On the organizational side, previous insights help to prepare for changes in other journeys (such as applying the insights from developing the mobile app to the apps for tablets and watches). Insights can also be extended to find similar applications in the organization (e.g., applying insights from improving the forms to interactions between customers and advisors at branches; as such, they not only improve the customer experience but also the employee experience). The iteration of learnings allows scaling learnings by connecting insights across projects in order to develop general guidelines (e.g., in the form of a consistently simplified layout and wording). These can subsequently be applied without the immediate involvement of the Customer Experience Design team. The aggregation of insights from the different projects helps to identify patterns of changes across projects. The gained understanding makes the development of solutions more efficient.

Customer experience management at OCBC is characterized by attributes and practices that promote the development of innovative solutions. The triggers for innovations may be more

obvious, such as a pressing problem in the customer experience. But as recognized by Bolton et al. (2014), also small details, such as the observation of customers' use of sticky notes that featured in the FRANK bank concept, yield innovations. The specifics of the customer experience management process that channel innovation throughout the process are discussed below.

2.5.2 Five Process Attributes for Innovating the Customer Experience

The customer experience management process at OCBC exhibits distinct attributes that contribute to the development of innovative solutions in a company's customer experience management.

2.5.2.1 Mediating Role of the Customer Experience Department

The Customer Experience Department mediates the relationship between customer side and company side. Specifically, the department assumes the role of *mediating the relationship between individual experiences of the customer and the general customer journey* that is designed by the company. Thereby, insights are passed between the sides and effectively cross the boundary between the individual and the general organizational perspective on customer experience. All information regarding the customer that is later used to improve the customer experience passes through the activities of the Customer Experience team in the organization. By acting as mediator between the involved parties and their perspectives on the interaction, the Customer Experience team can combine knowledge and insights of both sides and integrate these into the customer experience improvement process.

2.5.2.2 Evolving Customer and Company Roles Throughout the Process

Overall, the *impact of the customer on the outcome decreases* throughout the process, while the *impact of the organization increases* throughout the two process phases. In the beginning, customers are strongly involved in finding the issues related to a problem with the customer experience, in defining the problem, and in creating an understanding for their experience. Customers' input is crucial for creating an understanding for challenges in the customer journey by reporting on their subjective experience. Here, the organization observes these issues in order to detect problems with the customer experience and establish the root causes of the issues. The organization steps back and learns about the customer problem.

The organization increases its impact later in the process when developing specific solutions. As the process proceeds, customer input is reduced to providing feedback on solutions developed by the organization. The organization, in contrast, assumes a leading role in developing the solution and in extending its impact by solving not only the initially detected problem but

also associated problems in the customer journey. Thus, the organization's impact continuously increases throughout the process.

2.5.2.3 Feedback Loops for Processing Insights

Two main feedback loops are inherent in the customer experience management process in Phase I and thus make continuous improvement and learning possible. In step 7 (iterative solution design and testing), an integrative *design thinking cycle* is embedded in the process. Creating a loop that contains the solution development, the generation of customer feedback, and the observation by managers and employees allows creating and refining customer insights and associated innovative customer responses.

A second, larger loop spans in the entire process in the first phase. This loop is illustrated by the dotted lines in Figure 2-17. This loop ensures that not only the symptoms of problems with the customer experience are addressed by the solutions, but also the underlying organizational causes. The actual reasons for causing problems in the customer journey are considered in the solution (instead of merely implementing quick fixes) by involving customers, by observing them, and by questioning associated assumptions in the organization. These causes are addressed in the implemented solution. Further learning is achieved and enters the improvement processes of further issues that are detected, since the effect of the solution on the customer and company is monitored.

2.5.2.4 Attention to Customers and their Context

Customers are repeatedly involved in the process in selected instances where they contribute unique insights. Also, the customer context is paid specific attention. The *dual observation of customer experience and customer context* ensures that solutions not only fit the customer but can also realize the desired experience in the context.

Customers are either involved in their usual context or are invited to the Customer Experience Department, and are thus involved outside their usual context. *Customer observation serves as a "filter"* to determine what really matters to the customer and what should feature strongly in the final product. For example, the ethnographic research for FRANK bank that was conducted in the customer context indicated that the sticky notes customers were using were important to the final solution, even though due to the detailed nature this might have been considered of minor importance.

2.5.2.5 Occasional Involvement of Management

The top management is repeatedly involved in the customer experience management process in occasions that allow meeting the customer. Specifically, it is involved *in instances where the customer is directly observed* and an understanding for the customer is formed. This has

several benefits. Most importantly, buy-in for the relevance of taking measures for improving the customer experience is created across levels and departments in the organization through this first-hand observation of customer interactions. Also, employees from different levels are involved in these instances. As a consequence of management and employee participation in the customer experience management process, a focus on customer needs is established throughout the organization, which helps to foster collaboration across departments and to overcome obstacles due to company internal silos and politics.

2.5.3 Five Management Practices for Innovating the Customer Experience

The formation of innovations in the customer experience management process is due to distinct management practices that are embedded in the process. These are discussed in the following.

2.5.3.1 Generating Insights In- and Outside the Customer and Organizational Context

Throughout the customer experience management process, OCBC applies the best practice of involving different parties in the process, most importantly customers, employees from different levels, and managers. The customer experience management process repeatedly switches between the contexts in which insights are generated and transformed. Thereby, it allows crossing the individual customer experiences with the general approach of customer journeys by the organization.

In steps 1, 3, and 11 (that all contribute new insights regarding a problem and associated solution), the *company enters the customer context and finds means to access the customer experience*. When entering the customer context, the company mainly aims to *gather opportunities and insights* with regard to the customer experience. Company members assume an open-minded approach, one that aims to learn about the customer and to gain insights first-hand. For example, members of OCBC entered the context of Gen Y customers in order to create insights into their lifestyle and needs when initiating the development of FRANK bank. Customers, the Customer Experience Design team, and members of the organization are involved to varying degrees. The type and level of their involvement is adjusted according to the specific circumstances and objectives of the project.

In steps 3 and 7 (that include analyzing the problem and associated solution), insights are generated *outside the customer and company context*. When interacting with the different parties outside the immediate customer and company context and instead creating an interaction in the design studio, the main objective is to *develop an understanding and later the solution*. The company applies means to access the customer experience, as outside the actual use situation, customers can report on their experience and employees can observe customers

during an interaction that has been set up. To develop understanding and a subsequent solution, it is important that all relevant parties come together and create first-hand insights.

While members of the company occasionally enter the actual context of the customer in order to gather insights, the customer only interacts with the company throughout the customer journey or in the design studio. He or she does not, however, enter the context of the company. In the *company context*, insights are only processed and developed by *members of the company*. Here, the main objective is to refine the insights and to further explore the meaning for the organization and the customer journey.

2.5.3.2 Alternating Between a Broad and Narrow Approach to Generating Insights

The customer experience management process switches between a broad phase and a narrow approach, which both make distinct contributions to improving and innovating the customer experience.

The broad approach acknowledges that issues in customer experiences can be detected in all domains, i.e., problems with the customer experience can show an impact in the customer context, the customer experience, the customer journey, or the organizational context. The effects can be more indirect in the customer context or in the company context, or they can show immediately in the experience or in the journey. The company needs to be present in all of these domains in order to detect the causing problems. The broad approach can be observed in steps 1, 3, 7, and 11. When applying the broad approach, the customer experience management process crosses the customer and company context and involves relevant parties, such as the customer, employees across different levels, and management, in addition to the Customer Experience Design team. In the broad approach, the objective is to *collect and apply insights* in order to contribute to generating innovations. The results include a broad spectrum of problems and insights observed with regard to customer experience.

In the narrow approach, the design team steps back from considering the immediate problem and from gathering additional insights and instead *reflects on the problem*. The narrow approach acknowledges the importance of refocusing on the actual purpose of an interaction in order to create sustainable improvements in the customer experience. By reflecting on the fundamental purpose, ultimately, solutions address the interaction purpose and solve problems that arise from a lack of focus on this purpose. Thus, the solutions go beyond the initial problem and represent the fundamental purpose that has been defined. The narrow approach is applied in steps 5 and 6. The narrow approach takes place between the initial gathering of insights and those steps associated with developing a concrete solution. Here, only the Customer Experience Design team and the relevant members of the organization are involved, while outside parties are not involved. The results of the narrow approach are a clear definition of the problem to be solved as well as an approach to solving the problem. This may take the form of an elevator pitch that guides further development.

2.5.3.3 Shifting Insights Horizontally and Vertically Throughout the Process

In the customer experience management process, information from customers' experiences and context is gathered from the customer side, worked with in the organization, and finally the developed solution crosses from the company side to the customer side. A consistent pattern of creating insights with the customer and *moving this information from the customer into the organization* is observed. Insights regarding the subjective customer experience that are generated in the customer contact are crucial for developing innovations. Insights are generated in the direct contact between customers and members of the organization, including the Customer Experience Design team, project managers, and in selected instances top management and front-line employees. The first-hand experience of members of the organization is used to shift insights from the customer side to the company side, where they are further processed. In the organization's context, consequences for the general customer journey design are deduced. To facilitate the process of creating first-hand experiences in the customer context and shifting them into the company, the mediation by the Customer Experience Department is necessary. In this role, the Customer Experience Department bridges the subjective customer experience and the company's approach to managing the customer experience.

Vertically, the insights generated throughout the different steps in the process are *shifted throughout the process by means of the feedback loops* (see Section 2.5.2.3). Throughout the process, a line can be drawn from the root cause of problems in the organization through effects in the customer journey and impacts on the experience to the effects on the organization. Establishing these links facilitates continuous learning and improvement.

2.5.3.4 Anchoring Customer Experience Management in the Organization

The customer experience management process at OCBC anchors the customer experience management in the organization by fostering employee and management buy-in for the relevance of customer experience management and by creating a pull effect among employees, who proactively aim to improve customer experience in their projects. Anchoring customer experience management in the entire organization makes it a strategic priority across departments. It also lays the foundation for establishing a competitive advantage based on customer experience management. Moreover, customer experience management is anchored in the organization in order to create an impact that surpasses the capability of any single customer experience department. *Employee and management buy-in* for the relevance of customer experience management is created through the *direct experience of problems and the direct experience of the solution*. Buy-in is achieved by passing first-hand customer information into the organization. Involving managers across all levels, front-line employees, and project managers creates first-hand observations that foster the perception of relevance for the manage-

ment of customer experiences. Company and customer involvement in the problem identification process creates company buy-in for the reorientation towards experiences (steps 1, 3, and 7). In addition, it lays the foundation for buy-in for the developed solution (step 10). The buy-in is supported by relating the developed customer experience improvements to relevant KPIs that matter to the organization and by showing the impact on top- and bottom-line results, in addition to the impact on the customer (step 10). Projects are selected – among other criteria – with a focus on the high visibility of results and their ability to create quick wins.

Going one step further, an *employee pull* for customer experience management is achieved through the *direct experience of the impact of customer experience management on customers and employees*, in combination with the buy-in described above. An employee pull is observed when managers proactively approach the Customer Experience Design team with their projects. A pull is created by showing the impact of the department's work on the customer and on the organization according to dimensions that matter to project managers (especially concerning the project outcomes in steps 9 and 10). This comprises the changes in customer behavior and relevant KPIs. Employee pull can also result from improvement projects that address the employee experience and thus allow members of the organization to experience the benefits of the solutions themselves.

2.5.3.5 Developing Customer Experience Management in the Organization

OCBC has a central department that owns responsibility for the management of customer experiences. The Customer Experience Department fosters a common understanding of customer experience in the organization. A common understanding in the organization is achieved as the Customer Experience Design team consistently assumes a customer journey perspective when approaching projects (and not a product or functional perspective). The Customer Experience Department is responsible for developing customer experience management in the company. Therefore, *two development levels of customer experience management* are passed through.

In the *first development level*, the Customer Experience Department is involved in the entire process and guides project managers in the improvement process. As both members of the Customer Experience Design team and project managers are involved throughout the process, the project managers can learn from the approaches of the design team. Apart from the primary task of improving the customer experience, throughout this process the customer experience team is responsible for *educating employees on customer experience management and for creating the competencies in the organization* that are required for managing individual improvement projects in Phase I. The general guidelines developed by the customer experience team (e.g., the design principles) serve as a clear and easy-to-follow orientation for project managers. Moreover, for the Customer Experience Department, such employee education plays an important role in creating impact and momentum in the organization.

Once managers have learned the process and have acquired the associated competencies, the Customer Experience Department need no longer be involved in subsequent improvement projects. In this *second development level*, employees increasingly acquire customer experience management competencies. Once a solution has been developed with the project managers, the Customer Experience Design team is not immediately involved anymore as the primary actor in subsequent projects. Awareness of the impact of customer experience management is created and employees can apply the guidelines devised by the design team in their projects. Thus, basic customer experience improvements can be conducted without members of the Customer Experience Department. Instead of focusing on educating the organization on customer experience and accompanying projects, in the second development level, the Customer Experience Design team is tasked with creating new insights that can be applied across customer experience management projects, with iterating the learnings, and with scaling their impact in the organization. Therefore, the second development level that can be observed at OCBC shifts the *focus of the customer experience team to Phase II of the customer experience management process*.

Taken together, to accomplish the development of systematic and integrated customer experience management in the organization, the Customer Experience Department is critical for developing the competencies in the organization to master the tasks of Phase I. It is also responsible for implementing the tasks in Phase II to scale impact and to transfer insights.

2.5.4 Insights Transformation for Innovating the Customer Experience

OCBC implements a customer experience improvement process that extends solutions *beyond the original problem* and that uses these solutions to identify and address *additional similar problems* across customer journeys. As a result, not only the initial problem is solved throughout the process, but rather a larger amount of problems is solved, and the solution space is enlarged. Innovations at OCBC result from this specific approach to developing solutions to problems in the customer experience. The *practice of transforming insights throughout the customer experience management process* allows OCBC to go beyond fixing the apparent problem and in addition to extend the number of problems addressed and the solution space used to solve them. These practices of transforming insights throughout the development process are discussed below.

2.5.4.1 Transforming Insights Throughout the Customer Experience Management Process

The process of managing customer experiences repeatedly transforms the insights generated and departs from a specific and concrete problem formulation. By means of abstraction and generalization, insights are transformed and their significance for the customer-company interactions is thereby increased. The process at OCBC completes seven transformations of

insights. The transformations of insights are discussed below. Figure 2-19 (page 96) provides an overview of the insight transformation throughout the process.

1. Observing problems regarding the customer experience

Improvement processes of the customer experience usually start with a specific problem and are aimed at fixing this problem with a concrete solution. This is also observed in OCBC's customer experience improvement process. It begins with a specific problem in the customer journey that yields a negative impact on the customer experience. The problem is analyzed by members of the Customer Experience Design department, by employees, and by managers of OCBC. These members of the organization observe customers to gain concrete insight into their experience. The resulting insights are *specific* and *concrete* and concern *single projects*.

2. Placing observations into the context of the journey and the organization

Next, the problem with the customer experience is placed into the context of the journey's properties and that of the organizational causes of the issue (step 4, Figure 2-17, page 82). The problem is not considered in isolation. Rather, causes and effects are also gathered. This process is still focused on the *specific* issue at hand and aims to find the *concrete* causes for the case. The insights are *specific* and *concrete* and concern *single projects*.

3. Refocusing on the original interaction purpose (extended problem solving)

Usually, once issues have been identified, they are solved in order to eliminate their negative impact in the journey. OCBC departs from this usual process and instead a specificity of its improvement process can be observed. Rather than developing solutions right away, the Customer Experience Design team takes one step back and refocuses on the original purpose of the interaction. Thus, while staying with the *specific* problem, an *abstraction process* can be observed that questions the actual purpose of the interaction and finds an abstract answer for this. The answer is formulated as an elevator pitch. One example is that once customers' issues with filling in the forms had been observed, their purpose was redefined as "communication." The insights are *specific* and *abstract* and concern *single projects*.

4. Applying insights and developing extended solutions

The insights gathered during abstraction are used to determine the solution. This means that the insights resulting from the abstraction are translated back into *concrete* actions to improve the *specific* experience. As the underlying objective of the interaction has been determined during the previous abstraction process, finding a solution now means applying this as a principle to the entire interaction. As such, the developed solutions extend beyond merely fixing the symptoms of the initial problem. Instead, they take a broader perspective at reorienting the interaction towards the principle. This addresses the fact that problems in the interactions do not necessarily stem from issues in the interaction itself, but instead can also arise due to a misalignment of the underlying objectives and principles for the interaction. Staying with

the example of the forms, once these have been reoriented towards the principle of a conversation, not only did error rates decrease, but customers were better able to align other related journeys (such as cancelling redundant contracts at the right time). The insights are *specific* and *concrete* and concern *single projects*.

5. Generalizing findings and developing guidelines (repeated problem solving)

In the following, the insights from single projects are combined with other project insights. The solutions are interconnected and links are observed, in what has been termed “connecting the dots” by the Customer Experience Design team. This step is crucial for subsequent innovative outcomes, as it *generalizes* the insights from individual specific projects to general learnings that have been made. These learnings are still formulated in a *concrete* form. For example, there are concrete but general guidelines that determine a certain way in which language qualifies as “human” and is understood by customers. The insights are *general* and *concrete* and concern *multiple projects*.

6. Aggregating: Identifying relevant applications across journeys

To further utilize the generalized learnings, the design team again steps back from the concrete problem in order to abstract the insights. To abstract insights, the design team asks what these concrete solutions mean when applied to a different context and throughout the customer journey. Thus, they aggregate the findings but disaggregate from concrete actions. This *abstraction* and *generalization* of insights allows finding new opportunities to apply the learnings throughout the customer journey. The insights are *general* and *abstract* and concern *multiple projects*.

7. Applying insights: Iterating and extending solutions

All forms of insights from the previous steps are applied in combination as new customer experience management projects are taken on. The combined insights are incorporated into *concrete* solution development for *specific* problems. As a result of the broadened understanding and extended solution approaches, more problems that are suited to the implemented solutions are identified and solved across journeys. Through the iteration of insights during different projects, the solution scope is extended and insights are gained both on the concrete and on the abstract level. The insights are *specific* and *concrete* and concern *multiple projects*.

Abstraction and generalization processes for innovation are conducted by the Customer Experience Department and by members of the organization, but without the involvement of the customer. The customer is only involved on the concrete and specific level in order to test and provide feedback on the concepts and solutions developed.

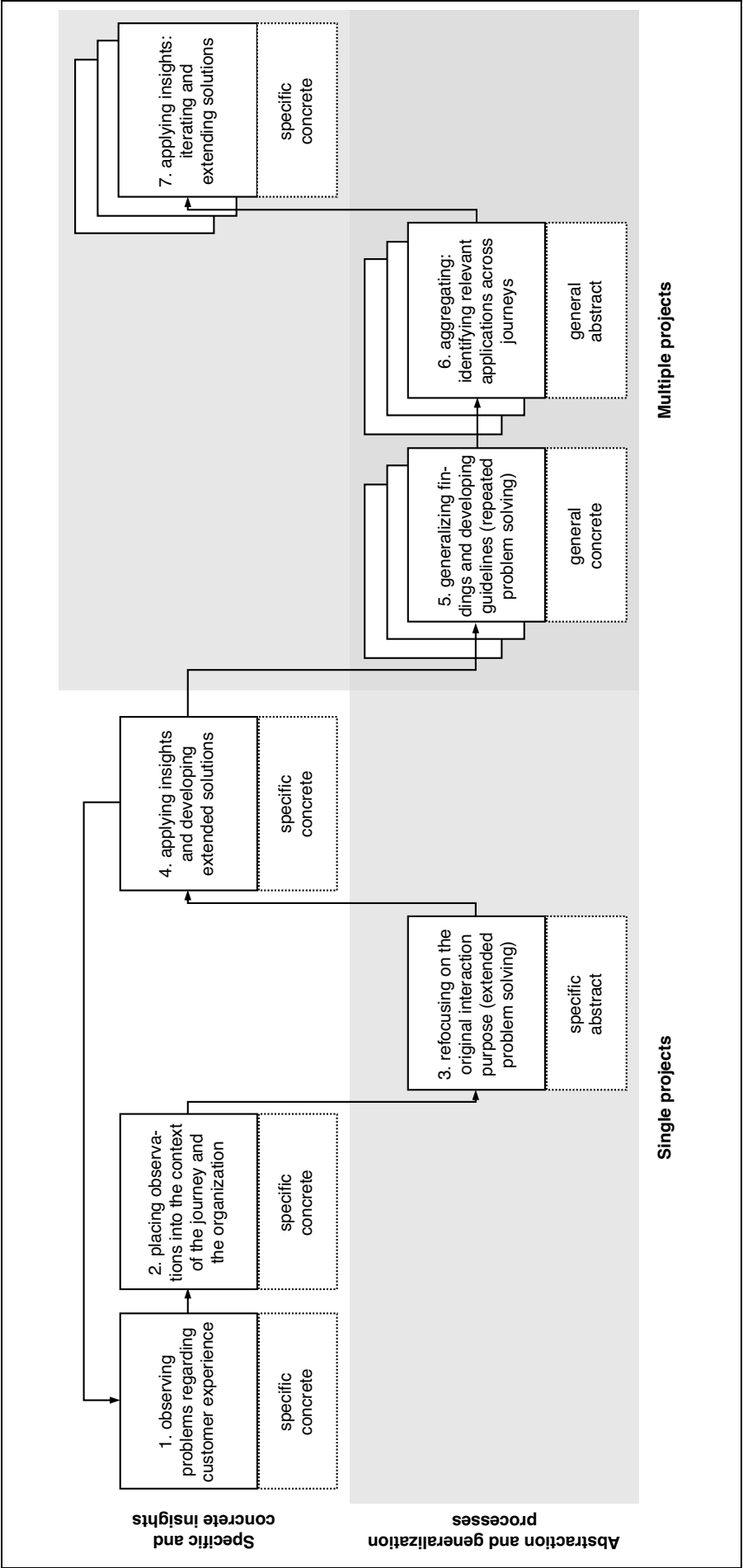


Figure 2-19 Steps of transforming insights for innovating the customer experience

2.5.4.2 Practices for Transforming Insights

Repeatedly switching between the four different forms of insights (concrete, abstract, specific, and general) that are applied throughout the customer experience management process supports innovations. The transformation of insights between these different forms yields solutions and applications of those solutions that are considered innovative. Figure 2-20 shows the *paths for the transformation of insights*. Fixing negative incidents in the customer journey involves finding *concrete solutions to a specific problem*. With this focus, the customer experience management addresses problems at selected touchpoints in the customer journey. Solutions are incremental in nature. In the process of OCBC, solution approaches take diverse forms, such as specific but abstract insights, general and concrete insights, and general and abstract insights. Throughout the process, insights can take the form of tacit or explicit knowledge.

The first path of transforming insights goes from a *concrete to an abstract perspective* on solutions to a specific problem. Besides concrete solutions, which are used to address a specific problem with the customer experience, abstract concepts are used to approach the problem. To improve the customer experience, the first transformation of insights required for developing a solution uses such an abstraction process. Basing the solution approach on insights concerning a specific problem, this abstraction allows extending the impact of the solution. It is important that, initially, OCBC stays with the specific issue and that abstracting the purpose of an interaction happens with the specific problem in mind. This ensures that the formulated principle is relevant and fits the specific demands of the situation.

The second path of transforming insights goes from a *specific to a general consideration of problems* regarding the customer experience and aims to develop concrete solution approaches that can be applied across several projects. Solutions and insights throughout the improvement process can be applied to the specific problem with the customer experience. Or they can be generalized to hold true across different customer experience improvement projects. Through iterating concrete solution approaches across projects, universally valid guidelines are developed. Importantly, the generalization first happens while staying on the level of concrete solutions to identify patterns that work across projects.

The interpretation of specific and concrete insights first only happens on either of the dimensions at a time. Moreover, the processes of abstraction and generalization are separate and successive. Only afterwards are the general and abstract perspectives combined.

After the successive paths of abstraction and generalization as separate processes, a *simultaneously abstract and general perspective* on the problems and the associated solutions is assumed. Here, the solution concepts are considered from a longitudinal customer journey perspective. A systematic approach to the management of the customer experience considers the

insights in a generalized form across projects and on an abstract level. This abstraction and generalization takes insights a step forward, and hence beyond the immediate solution.

The process does not stop once the abstraction and generalization processes have been conducted. Instead, the *transformation of insights evolves continuously*. Insights are developed further throughout the process in order to extend their impact and application potential, and thus learning about managing customer experiences also continuously progresses.

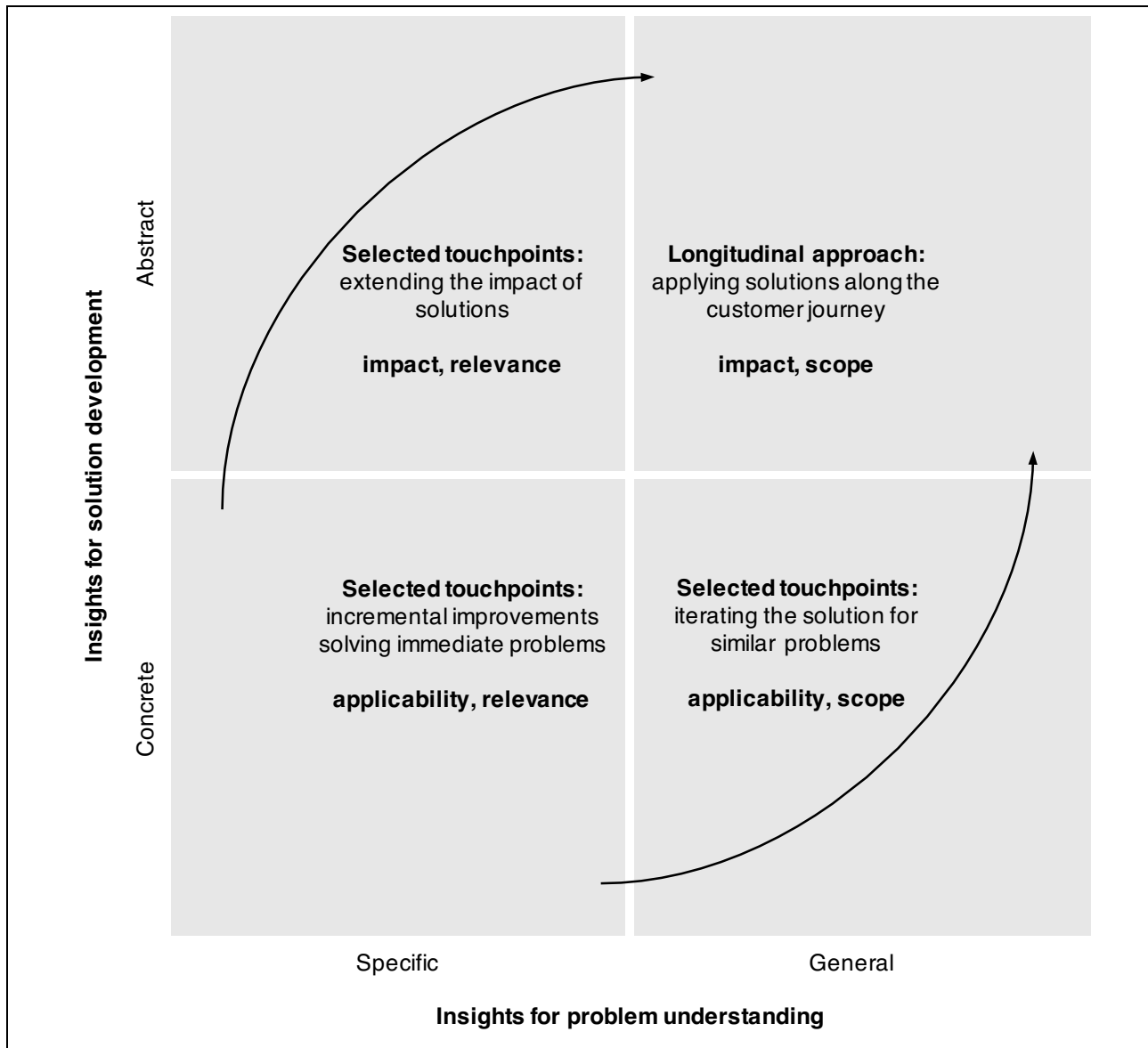


Figure 2-20 Insight transformation in the customer experience management process

The framing of insights varies along two dimensions: Insights into understanding a customer-experience-related problem can be specific or general (horizontal axis) while insights into developing a solution can be concrete or abstract (vertical axis).

The different forms of insights contribute to developing innovations by increasing the *scope*, *impact*, *relevance*, and *applicability* of solutions.

The results of the transformation processes indicate that the *abstraction* of insights allows *extending the impact* of developed solutions. The *generalization* of solutions allows identifying more opportunities for implementing the solutions, thereby *extending the scope* of developed solutions. As a result, not only are more problems detected and approached than in usual

improvement processes, but the solutions developed more strongly impact the customer and the company.

Repeatedly switching between specific and general, concrete and abstract, ensures that the developed solutions are relevant and have an impact. Specifically, the process repeatedly stays with *specific* problems with the customer experience, and thereby ensures the *relevance* of the solutions. The fact that the process considers *concrete* solution approaches ensures the *applicability* of the developed solution insights in the customer journey.

2.5.4.3 Methods Supporting the Insight Transforming Practices

Different methods are applied in the process in order to enable the transformation of insights.

For *abstraction of insights*, the Customer Experience Department develops principles for the design of customer experiences and looks for different applications of these principles. Abstraction is also achieved by refocusing on the fundamental and original purpose of an interaction with the customer and by questioning it. The results of the abstraction process can take the form of an elevator pitch.

For *concretization of insights*, cause-and-effect relationships are established for detected problems and concrete solutions that fix the problem are developed. Concretization may also involve applying the principles developed during abstraction to a problem.

For *generalizing insights* across problems, links between projects are established. Considering the problems and solutions of different projects along the customer journey helps to establish these links. Commonalities and differences between projects provide a reference point for establishing generally valid guidelines.

For *making insights concerning problems specific*, the main method used by the Customer Experience Department is customer observation. A problem with the customer experience is deconstructed and subsequently defined, thereby making the understanding of the problem specific and detailed.

2.6 Implications

Based on analyzing the management of customer experiences at OCBC, this study developed processes and practices specific to customer experience innovation. They have implications for theorizing customer experience management and for practitioners aiming to improve customer experiences.

2.6.1 Theoretical Implications

The results show that the customer experience management process includes attributes of innovation processes, which are necessary to continuously improve the customer experience.

Considering this insight, it appears valuable to look at customer experience management from an innovation perspective. Specifically, considering how improvements and innovations are devised throughout the customer experience management process, and also which practices are implemented throughout the process, revealed how companies bridge the individual and general customer experience perspective in practice.

Analysis shows that to study customer experience innovations, management practices and practices for transforming insights are both revealing and need to be considered. Combining these practices allow generating and advancing insights throughout the process, and thus should be studied simultaneously. Moreover, findings show that managing and improving the customer experience cannot be adequately described by considering single practices in isolation. Instead, the interactions and synergies between practices need to be examined.

When considering the practices for managing the customer experience, research should not be limited to the immediate practices needed to manage different customer experiences per se. Instead, findings show that practices also need to be considered with regard to their contribution to improving the overall customer experience by generating and transforming insights. This points to the need to deliberately determine the outcome variable under which practices and their effects are studied. Differentiating between types of management practices with a view to innovating the customer experience is crucial in order to deepen current understanding of practices for improving the customer experience.

2.6.2 Managerial Implications

Analysis shows practices and approaches that organizations should implement in order to innovate the customer experience. Table 2-3 depicts the must-haves and the differentiating factors that should be implemented.

Table 2-3 Management recommendations for innovating the customer experience

Must-haves	Differentiating factors
<ul style="list-style-type: none"> ▪ Customer focus: Put humans at the center and avoid striving for innovation per se ▪ Flexible innovation processes: Emphasize learning and adaptation, e.g., by applying a design thinking process ▪ Involve stakeholders: General involvement of employees and customers ▪ Fix problems in the customer journey: Specific and concrete solution approaches 	<ul style="list-style-type: none"> ▪ Triple focus: Emphasize process, management practices, and insight transformation in combination ▪ Drive to create and exploit insights: Abstract and generalize problems and associated solutions ▪ Establish a meta-cycle: Continuous transformation of insights and feedback loops in the process ▪ Active role of stakeholders: Ensure management-, employee-, and customer involvement at selected meaningful instances ▪ Anchor customer experience management and create a pull: Common understanding, direct experience, visible results

Must-haves for innovating the customer experience

A customer focus that “puts humans at the center” in all activities orients customer experience management towards customer needs. Putting humans at the center means focusing on the core purpose of customer interactions from the customer perspective (instead of, e.g., a mere focus on selling to the customer). A focus on the customer reveals potential for implementing relevant improvements and innovations. Therefore, managing the customer experience involves improving interactions for the customer, instead of developing innovations per se.

OCBC has implemented a design thinking process in its customer experience management. Flexible innovation approaches have become a necessity in the industry and are not alone sufficient to create differentiating customer experiences. Rather, a flexible process is required to generate the insights and solutions that are used to differentiate. Companies in the industry have used flexible innovation approaches, such as design thinking or scrum. Organizations need to change in order to make their operations agile, i.e., to enable quick change, adaption, and overcoming internal barriers such as silos. A flexible and agile setup increasingly becomes a condition for instead of a driver of developing successful customer experiences.

Following the previous point is the increasing involvement of stakeholders in the customer experience management process. While different options for this involvement exist, and can be chosen according to situational requirements, involving customers and employees increases the relevance and speed of insight generation. Customers and employees possess valuable knowledge of customers’ needs and purposes throughout the customer journey.

Finally, a focus on fixing problems is required to generate customer experiences that meet customers’ expectations. Once a specific problem with the customer experience is identified, a concrete, workable solution needs to be developed to prevent negative experiences in the customer journey. Fixing these problems is necessary to avoid falling behind competitors in terms of the customer experience. However, merely focusing on fixing problems in the journey does not seem to suffice to compete on customer experience.

Differentiating factors for innovating the customer experience

First, analysis shows that the combination of an effective customer experience management process, the implementation of adequate management practices, and the continuous transformation of insights throughout the process is required to innovate the customer experience. This comprises setting up a customer experience management process that comprises the five process attributes. It also means implementing the five customer experience management practices that have been identified and transforming the insights gathered during the process along the dimensions of specific and general as well as concrete and abstract insights. This *triple focus concurrently manages the three key elements* (processes, practices, insight transformation) that have been identified for successful customer experience management and that can yield customer experience innovation.

Second, especially a strategic approach to managing insights is required to differentiate from competitors through customer experience management. Developing a solution to a customer experience issue in the journey is an extensive step, which is approached with design thinking at OCBC. It requires combining many insights from different sources and is accelerated through experimentation and customer feedback. However, the design thinking process in itself is not the root of innovations. Rather, the steps in which insights are transformed and, most importantly, abstracted and generalized from their initial form, are important. The insights into these different forms are worked with in the customer experience management process and in the design thinking process. The increase in the scope, impact, relevance, and applicability achieved through the *transformation of insights* appears key to finding innovative solutions able to impact the company and the customer.

Third, a customer experience management process creates much of its impact through the feedback loops that are implemented in the process. A *meta-cycle* is observed: An initial problem is approached and answered by a solution that solves the original problem and also extends its impact to related problems. By creating a solution to the initial problem, the solution can then be extended to similar problems, including problems that might not even have been recognized before. Throughout the process, a broader understanding of problems is achieved, and thus a larger variety of problems can be approached and the scope and impact of solutions is increased. Thus, the process starts with a narrow focus on small and distinct problems. Solution development extends the impact of solutions and enlarges the scope of problems that can be tackled.

Fourth, to innovate the customer experience, a strategic and *intentional involvement of stakeholders* is required. Customers bring insights from the customer side, and managers and employees contribute insights and capabilities from the organizational side. Both make unique contributions to the customer experience management process from their respective angles and backgrounds. Customers report on their experiences and the context of those experiences. Employees are crucial for interpreting these insights and for extending the impact of customer experience management into the organization. Finally, immediate management involvement during customer encounters ensures the necessary buy-in and support in the organization. Importantly, strategically managing the involvement of stakeholders also means determining at which points stakeholders should not be involved in the process.

Finally, to create impact across the activities of the organization, it is important to *anchor customer experience management* in the company. The basis for this is to create a common understanding of the meaning of customer experience management for the organization. This is facilitated by a central customer experience department. Creating a buy-in and ideally an *employee pull* for customer experience management in the organization requires demonstrating the effects of customer experience improvement projects, measuring the results with rel-

evant KPIs, and making them visible in the organization. A driver for buy-in is direct employee and management involvement in experiencing the impact of solutions to problems with the customer experience – and the value these solutions create for both customer and company. A pull is created as members of the organization recognize the potential to implement customer experience improvements effectively and efficiently in their own projects. This allows spreading the responsibility for managing the customer experience in the organization and increases the impact of initiatives for improving the customer experience. Through these efforts, the customer experience is managed by a central department while at the same time customer experience management becomes an organic part of the organization.

2.7 Conclusion and Further Research

Strategically managing the customer experience can yield innovations that create a competitive advantage for companies. A main challenge exists in bridging customers' subjective perspective on their experiences and the organization's approach, which aims to design customer journeys that generally elicit favorable customer experiences. To achieve the link between the individual and general perspective, this study identified the interplay between the customer experience management process, specific management practices, and a continuous transformation of insights as crucial factors. Embedding these three pillars in the organization allows strategically managing the customer experience and innovating the customer experience. Linking the process, management practices, and practices for transforming insights ensures that experiences are managed in their broader context and that solutions are sustainable and impact the customer and the company.

Study 2 has considered the case of customer experience management at OCBC, which can be considered a critical case. The single case approach has, however, also its limitations, which mainly relate to the generalizability of findings (Yin, 2014, pp. 20-21). The context in which the OCBC Customer Experience Design Team operates is well suited to studying the management of customer experiences in a large organization. This case is valuable in particular due to the high relevance of managing customer experiences in the financial services industry in general and the competitive emphasis on customer experiences in the local market. Future research would need to study the process and practices for innovating the customer experience in different contexts in order to extend the generalizability of findings. Studying companies in other industries and organizational approaches that do not implement a central customer experience department would be of interest. Moreover, research should further investigate the links between process attributes, management practices, and the insight transformation practices whose interplay leads to innovative customer experience. Concerning the insight transformation practices, a focus could lie on determining to what extent the order in which insights are transformed impacts process outcomes, to what extent this path can be varied, and what the respective consequences for the customer experience innovation results are.

3 Options for Strategically Innovating the Customer Journey

3.1 Introduction

Improving the customer experience is critical for generating value for customers and companies. Offering better customer experiences has become a main objective for companies and is key to remaining competitive. How the customer perceives the company becomes increasingly the focus of competition.

However, while an increasing amount of companies are committing resources to improving the customer experience, they are still tending to focus merely on apparent problems in the customer journey. Companies struggle to improve the customer experience beyond these immediate fixes and to create innovative approaches to the customer journey that would further improve the customer experience and set them apart from the competition. If companies fail to innovate the customer experience throughout the customer journey, this poses the threat of being disrupted by companies that offer better customer experiences. In the financial services industry, FinTech companies, for example, have entered the industry with a strategy of taking a new and innovative approach to the customer journey that translates into better customer experiences.

While both practitioners and academics have developed approaches designed to assess the quality of a customer journey and the resulting customer experience, how to develop a customer journey that yields positive customer experiences and how to change an existing customer journey in order to improve the customer experience largely remains a trial-and-error process. For these reasons, it is crucial for companies to better understand how to effectively invest the resources dedicated to creating favorable customer experiences. Companies are looking for guidance on where in the customer journey potential for improving customer experiences through innovation exists and what changes prove valuable to both the customer and the company.

From a practical perspective, the results of this study guide managers in analyzing their customer journeys and allow recognizing and acknowledging potential in the journey that benefits both the company and the customer. By taking innovative paths towards the customer journey, managers can seize this potential and access new sources of value for their company and the customer. The innovation strategies developed in this study can make the previous trial-and-error process more efficient. They also involve approaches for effectively deploying changes throughout the customer journey and thereby allow effectively applying resources to change the customer journey. Not least, this can enhance companies' competitiveness in terms of a superior customer experience and create value for the company.

From a theoretical perspective, the study advances the literature on touchpoint management by suggesting a sequence perspective centered on customer purpose. It goes beyond analyzing the quality and effect of touchpoints by suggesting proactive change measures for combinations of touchpoints that are formulated in the form of nine strategies. In this way, the study creates insights into which sequences in the customer journey are relevant to the customer experience and which options for designing these sequences exist. The study thus addresses a gap that was identified both by the literature on customer experience management and by that on touchpoint management (Lemon & Verhoef, 2016, pp. 88-89; McColl-Kennedy et al., 2015, p. 432).

Two consecutive studies were conducted to address the research gaps. In the first study, strategies for innovating the customer experience throughout the customer journey were developed. For this, a multiple case study of 92 FinTech companies were performed. The innovative touchpoints and touchpoint sequences provided insights into successful innovation approaches in the customer journey and nine recurring innovation strategies were developed based on an extensive analysis of the approaches. In the second study, the nine innovation strategies were investigated from the customer perspective. The results of a choice-based conjoint analysis with 419 respondents indicate two customer segments that respond differently to the strategies.

This chapter is organized as follows. First, the challenge of improving customer experiences is discussed and the relevant literature is reviewed. Second, the methodology is introduced and the two research studies are presented. Third, the findings are discussed and implications for theory and practice are formulated. Finally, opportunities for further research and an outlook are provided.

3.2 Customer-Company Interactions for Experience Management

Companies identify customer experience as a means of establishing a competitive advantage and of increasing customer loyalty and engagement. As customer experiences are subjective and individual (Meyer & Schwager, 2007, p. 118), companies target touchpoints as an approximation to impact experience. Here, the challenge is to develop innovation approaches that can effectively improve the customer experience.

3.2.1 Background and Problem Formulation

Customers gain experiences during every interaction with a company. Managing the customer experience aims to improve and change these customer-company interactions (McColl-Kennedy et al., 2015, p. 432). Interactions are individual encounters between a company and a customer. Interactions take place at touchpoints that allow describing the encounters in a more general way, independently of the individual customer. Touchpoints can be managed

and designed more strategically than individual interactions, and thus help to influence the experience of all customers who pass a certain touchpoint. Therefore, touchpoints are the focus of this analysis. Together, the touchpoints that a certain customer has with a company form this customer's customer journey (Zomerdijk & Voss, 2011, p. 74).

Value is created in the direct or indirect interactions between the company and the customer (Baxendale, Macdonald, & Wilson, 2015, p. 236; Duncan & Moriarty, 2006, pp. 237-238). As the purpose of this study is to identify ways in which companies can change the interactions with the customer for creating better experiences, only direct touchpoints that can be controlled are analyzed. This is because other forms of touchpoints can be managed only indirectly by companies. Companies aiming to differentiate through better experiences need to change customer interactions in a way that they create superior customer value (Grønholdt et al., 2015, p. 91). At the same time, they need to yield benefits for the company (ibid.). To innovate the customer experience, companies aim to implement service innovations that improve the quality of the interactions with customers and that optimize the customer journey that the customer passes through. Service innovations can be new either to the company, to the customer, or to both, and can create benefits for both company and customer (Ostrom et al., 2010, p. 5; Snyder et al., 2016, p. 2405). Service innovations have been related to superior financial returns and to sustained competitive advantage and growth (Biemans et al., 2016, p. 382; Snyder et al., 2016, p. 2401; Storey et al., 2016). Similarly, improved customer experiences are related to higher customer satisfaction, the realization of financial benefits, and a sustained competitive advantage (Grønholdt et al., 2015, p. 95; Klaus & Maklan, 2013, pp. 235-236).

While customer experiences are recognized for their competitive relevance, research is needed to better understand at which touchpoints what actions resonate well with customers and create value for the customer and the company (McColl-Kennedy et al., 2015, p. 432). This study addresses this question.

3.2.2 Relevance of Changing Customer-Company Interactions

3.2.2.1 Practical Relevance

Many companies recognize opportunities for differentiating themselves from their competitors by innovating their service offering and by improving and changing the customer experience. The aims are to increase customer satisfaction, loyalty, and word-of-mouth on the customer side, and to realize financial benefits and create sustained competitive advantage on the company side (e.g., Bruhn & Hadwich, 2012a, p. 21). However, a preliminary qualitative study conducted with managers from various industries revealed that companies lack clear innovation approaches and objectives (for a full discussion of the results of Study 1, please refer to Section 1.4.2.2). The interviewed managers broadly identified two possibilities for

value creation: enriching or simplifying the customer experience. Both possibilities provide broad orientation but lack specificity when applied to improving the customer journey. The managers described the innovation process as a trial-and-error process that is typical of service innovations and that usually starts with recognizing and improving a negative customer experience. For companies, the greater challenge is to improve those interactions that already yield a satisfactory experience. Adapting currently satisfactory experiences is important, though, not least as customers adapt their expectations according to their experience with competitors and with other industries. Therefore, companies need to continuously enhance the experience they offer in order to keep up with these changing expectations and ideally even to proactively shape customer expectations. In this regard, improving customer experience also helps companies to stay ahead of the competition and to remain competitive.

Previous research has indicated that a clear innovation strategy is one of the success factors for guiding the innovation process in service innovation (Storey et al., 2016, p. 536). It is thus important to know how the process of improving customer experience can be strategically approached. This includes creating an understanding of what types of service innovations in which parts of the customer journey most effectively yield positive customer experience. Thus, the contribution of service innovations to improving customer experience needs further investigation.

3.2.2.2 Theoretical Relevance and Research Gaps

Companies aiming to improve customer experience often do so by implementing service innovations throughout the customer journey. Therefore, the literature from the areas of touch-point management, customer experience management, and service innovation is considered to approach the issues described above.

Considering the customer experience helps to shed light on how customers perceive a service innovation and in which value is created. To effectively improve the customer experience, companies need to ensure that customers notice the impact of the implemented changes. Service innovations that are directly experienced by the customer can create a sustained competitive advantage (Salunke et al., 2013, pp. 1091-1092). Nevertheless, the specific relationship between the service innovation and its effects needs further investigation. Only little research in the field has focused on the value that is created through innovation, i.e., the value experienced by the customer and that generated for the company (Snyder et al., 2016, p. 2402). The literature on service innovation allows describing innovations that are implemented in the customer journey. However, so far the descriptions of service innovations are not specific enough in order to anticipate their effects on customer experience.

The literature on customer experience management approaches the challenge of improving customer experiences by managing interactions along the customer journey. Here, research has called for a dynamic approach that recognizes multiple actors, customers' co-creating

role, and the relevance of a holistic view on all touchpoints over time (McColl-Kennedy et al., 2015, p. 431). In the customer processes, sequences of interactions need to be considered to identify where service innovations resonate with customers and create a lasting effect on the overall experience (McColl-Kennedy et al., 2015, pp. 432-433).

Taking a touchpoint perspective allows bringing these streams of literature together and addresses the gaps mentioned above. The concept of touchpoints breaks down the customer-company interactions in a way that allows analyzing the effect of company and customer activities on the customer experience. The literature on touchpoints includes attempts to describe this relationship. Still, existing categorizations of touchpoints do not allow making inferences on their potential to improve the customer experience through targeted changes. Therefore, the research question is formulated as follows: *Which innovation options for touchpoints exist in the customer journey for creating positive customer experience and how do these innovations affect the customer and the company?* In addressing this question, two sub-questions will be answered. First, which touchpoints should be addressed by different types of service innovations? Second, how do changes at touchpoint interactions impact the customer?

3.2.3 FinTech Companies' Focus on the Customer Experience

The financial services industry is of particular interest for studying innovation in customer experience due to its specific characteristics. Prior research has shown that service innovations vary between different industries (Kuester et al., 2013, p. 538). The present study is set in the financial services industry, which is a non-experiential core service (Storey et al., 2016, p. 533). Several current developments in the financial services industry make the role and potential of service innovations and customer experiences particularly relevant. This industry is facing a commoditization process, which is making it more difficult for companies to differentiate based on product offerings alone. Thus, the industry generally aims to achieve efficiency through the introduction of service innovations, often uses Internet-enabled service innovations rather than human-enabled service innovations, and tends to rely on internal sources to develop an innovation (Dotzel et al., 2013, p. 260; Kuester et al., 2013, pp. 537-538).

The increasing implementation of technological innovations is emphasized by the growing number of FinTech companies entering the industry with technology-based innovative service offers. Since the financial services industry has traditionally been strongly based on personal interactions with the customer, the reduction of personal interactions poses the challenge of replicating positive customer experiences in the digital sphere and of finding innovative solutions to this task. Additionally, the large number of competitive FinTech companies reinforces the shift of focusing the differentiation from the product offering towards the customer experience. This makes the guiding research question of identifying and implementing types

of service innovations with the objective of improving the customer experience especially critical in the financial services industry.

Several characteristics describe the shift in the industry. Alt and Puschmann (2016, pp. 95, 99) observed four trends among FinTech companies. Their innovations address specific customer needs and processes, they are to a large degree launched by companies without a banking license, they include a focus on customer-to-customer interactions, and they provide mostly isolated solutions that are not integrated with each other. While some FinTechs bypass traditional financial service companies, due to which incumbents may feel the threat of being disintermediated (Morrison et al., 2015, p. 274), most FinTech companies offer services that are complementary to traditional banks (Dietz, Moon, & Radnai, 2016). The offers of FinTech companies are disruptive for the financial services industry. They offer new value propositions with a view to improving the customer relationship, efficiency, or adherence to regulations. While before, innovations in the financial services industry largely targeted selected interactions with the customer, FinTech companies are now offering a highly diverse set of innovative services (Alt & Puschmann, 2016, p. 94).

3.3 Extant Literature on Touchpoints and Journey Management

Service innovations create value for both the customer and the company (Snyder et al., 2016, p. 2407; Storey et al., 2016, p. 527). Specifically, value is created in the direct or indirect interactions between the company and the customer, which take place at touchpoints throughout the customer journey and yield the customer experience (Lemon & Verhoef, 2016, p. 74; McColl-Kennedy et al., 2015, p. 431). Customer experiences are recognized for their competitive relevance, but further research is needed to better understand at which touchpoints which actions resonate well with customers and create value for the customer and the company (McColl-Kennedy et al., 2015, p. 432). Specifically, the question is how service innovations should be designed and implemented in the customer journey in order to improve customer experience.

3.3.1 Role of Touchpoints in the Customer Journey

3.3.1.1 Defining Touchpoints

Touchpoints describe those moments in which a company and a customer meet. They can be understood as moments of interaction between the company and the customer, all of which produce an experience (Belz, Schögel, Rutschmann, & Binder, 2010, p. 4; Bitner, Brown, & Meuter, 2000, p. 139). Designing and orchestrating the different touchpoints is important as the interactions that take place at those touchpoints together form the customer journey and impact customer experience. Customers have a positive experience and increase their engagement with a company if the customer journey is smooth, meets or exceeds their expectations,

and fulfills their needs. Definitions of touchpoints differ in the literature. In a first step, the conceptualization of touchpoints and the delineation of related concepts are discussed. In the next section, a more detailed categorization of touchpoints in terms of their characteristics will follow.

The extant literature has not agreed on the exact definition and delineation of touchpoints. Moreover, definitions are sometimes used interchangeably with those of channels or customer interactions. Some authors use the terms (customer) contact points, points of contact, and moments of contact to refer to touchpoints. In a more narrow view, touchpoints are considered as the immediate interactions between the customer and the company or its offerings (D. Grewal et al., 2009, p. 1; Rawson et al., 2013, p. 90). Other authors, such as Meyer and Schwager (2007, p. 119), take a broader perspective and include interactions with any representation of the company and also with third parties. Homburg et al. (2017, p. 384) emphasized that customers need to perceive this interaction and to be aware of its connection with the brand. The definition of touchpoints that will be used in this dissertation is based on these existing conceptualizations in the literature. *It defines a touchpoint as the interaction between the customer and any representation of the organization and its offerings that is consciously perceived by the customer.* Taken together, the touchpoints that a customer passes through form the customer journey (Anderl, Schumann, & Kunz, 2016, p. 185; Zomerdijs & Voss, 2011, p. 74).

Several concepts are related to touchpoints. Some have even been used synonymously in the literature and include service encounter, customer interactions, customer journey, marketing channel, brand touchpoints, moments of truth, service blueprinting, and customer experience.

Lemon and Verhoef (2016, p. 83) indicated that before the term touchpoint was used in the literature, interactions were referred to as *service encounters*. During service encounters, companies emit experience clues (also referred to as sensory cues (Bolton et al., 2014, p. 265)) that can be perceived and sensed by customers. Berry et al. (2002, pp. 85-86) investigated how the orchestration of clues impacts the customer experience. It has been found that companies can use stimuli and design elements of the setting in which an encounter takes place to shape customer experience (S. Gupta & Vajic, 2000, p. 48; Stein & Ramaseshan, 2016, p. 8). Stein and Ramaseshan (2016, p. 9) summarized that while companies orchestrate cues, stimuli, and service encounters for the customer from a company perspective, touchpoints capture the actual interaction between firm and company from the customer perspective.

Company-customer interactions are closely linked to the concept of touchpoints as they take place at touchpoints. Individual *customer interactions* take place at touchpoints (Bitner et al., 2008, p. 70). While customer interactions are specific to one customer, touchpoints aggregate individual interactions and generalize them in order to make them manageable for the company. Therefore, customer interactions are customer-specific, while touchpoints are aggregated across customers.

Together, touchpoints form the *customer journey* (Anderl et al., 2016; Zomerdijk & Voss, 2011, p. 74). Zomerdijk and Voss (2010, p. 74) stated that “the customer journey involves all activities and events related to the delivery of a service from the customer’s perspective.” Touchpoints occur in the pre-purchase, purchase, and post-purchase phase (Lemon & Verhoef, 2016, p. 77). A customer journey perspective considers all customer interactions in an end-to-end process. It captures the effects of individual touchpoints on other touchpoints and on the entire the journey (Rawson et al., 2013, p. 92), and thus complements the concept of touchpoints.

From the company perspective, interactions take place through *marketing channels* and media (Lemon & Verhoef, 2016, p. 69) that are frequently switched by the customer. A marketing channel describes the “path which a service takes from the manufacturer to the end consumer according to the way in which work is divided between distribution partners” (Schögel & Pernet, 2010, p. 18). From the company perspective, the customer journey needs to be coordinated with the sales funnel or buying cycle. While Neslin et al. (2006, p. 96) described a channel as a customer contact point, Baxendale et al. (2015, p. 236) emphasized that touchpoints go beyond and “may include but are not limited to channels.” Resolving these different conceptions, Lemon and Verhoef (2016, p. 69) and Zomerdijk and Voss (2010, p. 74) suggested that interactions take place at touchpoints across channels. A marketing channel allows bringing a service from the company to the customer. In this sense, a marketing channel serves as a “means of communication, transaction and/or distribution” (Frambach, Roest, & Krishnan, 2007, p. 28). The path that the service follows depends on the involved distribution partners and their respective roles (Schögel & Pernet, 2010, p. 18).

Definitions in the literature on touchpoints vary between an understanding of customer touchpoints as a channel or medium for interaction (Neslin et al., 2006), a definition from the company perspective (e.g., Baxendale et al., 2015, p. 235; Stein & Ramaseshan, 2016, pp. 9-10), and a definition from the customer perspective (e.g., Duncan & Moriarty, 2006, p. 237). A channel describes the general means by which the service is brought to the customer. By comparison, a touchpoint describes a specific interaction in a channel. While the company describes the interaction at a touchpoint from a perspective that is generalizable over different customers, the customer perspective describes the action of interacting at a touchpoint. The different conceptualizations are compared in Table 3-1 and can be illustrated with the examples of advertising. Advertisements in general are a marketing channel. For a company, a specific ad that is perceived by a customer becomes an interaction. From a customer perspective, seeing an advertisement is an interaction with a company. In this dissertation, which aims to identify possibilities of modifications of a touchpoint by companies, a touchpoint is considered from a company perspective.

Table 3-1 Comparison of marketing channels and touchpoints

Marketing channel	Touchpoint (Company perspective)	Touchpoint (Customer perspective)
Advertising: Display, banner advertising, mobile advertising, email advertising, in-game / in-app advertising, video	Advertising (specific)	Noticing brand on display, seeing an advertisement, viewing an online ad, clicks on online ads
Retail store	Distribution location, in-store communication	Walking into store, in-store experience
Television, radio, magazine, newspaper, catalogue	News report (specific)	Reading a news report, watching a video commercial
Word-of-mouth	Peer-to-peer discussions on the company	Speaking about a company with a peer

Compared to the general notion of touchpoints discussed before, *brand touchpoints* specifically consider the exposure to the touchpoints of a specific brand. A brand, however, is not a touchpoint. Thus, Duncan and Moriarty (2006, p. 237) conceptualized brand touchpoints as “operant resources [...] and value-producing communication events/acts.”

The concept of *moments of truth* was first developed by Carlzon (1987, p. 39). While some authors have used the term touchpoints interchangeably with moments of truth (e.g., Gentile et al., 2007, p. 397; Stein & Ramaseshan, 2016, p. 8), differences exist. Moments of truth refer to a subset of touchpoints. Moments of truth are those touchpoints that are distinguished due to their higher relevance and critical role in the overall customer journey (Jenkinson, 2007, p. 165; Lemon & Verhoef, 2016, p. 82). Duncan and Moriarty (2006, p. 240) state that a moment of truth (which they refer to as a critical touchpoint) leads to a connection on an emotional level. McColl-Kennedy et al. (2015, p. 431) stated that the shortcomings of the concept for managing the customer experience lie in its static nature and because it underemphasizes the customer’s role.

Similar to the concept of moments of truth, many companies use *service blueprinting* as a technique for visualizing services and for managing the customer experience. Compared to a journey perspective, service blueprinting and service mapping take a narrower approach (Zomerdijs & Voss, 2011, p. 74). With service blueprinting, touchpoints throughout the customer journey are collected and mapped along the customer journey. For each touchpoint, a blueprint of its ideal configuration from the company side (including company actions and processes) and of its physical components and setting (the servicescape) is developed to match customer actions (e.g., Bitner, 1992, p. 67; Bitner et al., 2008, pp. 72-73). Similar to the concept of moments of truth, the limitations of service blueprinting have been pointed out. Critics have pointed out that service blueprinting emphasizes the company perspective and fails to acknowledge the dynamic exchange between company and customer (McColl-Kennedy et al., 2015, p. 431).

From a customer perspective, interactions follow the customer process and ultimately create a *customer experience*. During the purchasing process, the customer passes through these touchpoints and forms experiences during each interaction. The interplay of experiences at all touchpoints forms the overall customer experience (D. Grewal et al., 2009, p. 1). In this way, customer experience arises from the contacts between company and customer, while customer experience is considered a dynamic process (Lemon & Verhoef, 2016, pp. 70-71, 74).

3.3.1.2 Managing Customer Interactions at Touchpoints

An increasing number of different touchpoints between a company and a customer exists and needs to be coordinated (Gentile et al., 2007, p. 395). Particularly technological developments strongly increase the number of touchpoints, result in new opportunities to communicate with customers, and alter the mode of interaction with customers (Schögel, 2010, p. 1; Straker, Wrigley, & Rosemann, 2015, p. 111). By implication, the design of touchpoints and their effect on the customer need to be carefully managed. Derived from interactions at touchpoints, customer experience becomes an increasing focus of competition. Duncan and Moriarty (2006, p. 238) considered customer experience the “primary value” of touchpoints.

Following this notion, Homburg et al. (2017, p. 386) identified four firm capabilities that are needed to renew customer experience and that all concern touchpoint management: touchpoint journey design, touchpoint prioritization, touchpoint journey monitoring, and touchpoint adaptation. Attributing relevance to managing the touchpoints is needed, as successful touchpoint management requires building specific firm capabilities that help the company advance in its ability to manage touchpoints (ibid.). Grønholdt et al. (2015, pp. 96-97) found that while touchpoints have the strongest impact on customer experience management, the ability of companies to manage touchpoints has the lowest. It has been acknowledged that the capability to manage the rational components of touchpoints is already well advanced among companies. However, the ability to manage more emotional components of interactions and of the experience needs to improve (Grønholdt et al., 2015, p. 98).

Managing touchpoints not only influences the immediately affected interactions, but also has a larger impact on the entire customer journey. As discussed, managing touchpoints strategically affects the company’s differentiation and positioning and can help to detect and drive the firm’s future-oriented innovation activities.

3.3.1.3 Managing Customer Experience in the Customer Journey

Customer experience, as a response to interactions, can be cognitive, affective, emotional, social, and physical (Gentile et al., 2007, p. 397; Schmitt, 1999, p. 60; Verhoef et al., 2009, p. 32). It is the sum of all experiences that accumulate through a customer’s contact with a

company over time and is inherently holistic (Rawson et al., 2013, p. 92; Verhoef et al., 2009, p. 32). Customer experiences inevitably arise through the interaction between customer and company, but they are not necessarily consciously reflected on by the customer. The individual experiences from all interactions over time are integrated into a customer's overall experience with a company. Managing customer experience throughout the customer journey aims to elicit favorable customer responses to interactions and to ensure these responses have a positive cumulative effect. Positive customer experiences have been linked to higher customer value and superior firm performance, as well as to customer satisfaction, loyalty, and word-of-mouth (e.g., Maklan & Klaus, 2011, pp. 783-784). In addition, practitioners indicate that they improve customer experience in order to increase customer engagement.

There are three broad factors that influence customer experience: the company and the customer, as the two relevant actors, and the context of the interaction (Bruhn & Hadwich, 2012a, p. 18; Teixeira et al., 2012, p. 363). First, for a *company*, managing the customer experience means managing the interface between company and customer (Fawcett et al., 2014, p. 462; Klaus & Edvardsson, 2014, p. 70). As M. Srivastava and Kaul (2014, pp. 1033-1034) demonstrated in their study, at these interaction points, convenience and social interaction impact the customer experience. In order to shape the interfaces, companies can impact the complete service system that serves as the platform where companies, customers, and other actors interact and create value (Klaus & Edvardsson, 2014, p. 70). On the other side, every *customer* brings in individual characteristics, expectations, and prior perceptions that influence the experience. The impact of the customer on the experience can be considered as a continuum ranging from customers acting as recipients of experiences developed by the company through customers participating as co-creators in developing the experience together with the company to customers constructing experiences independently of the company (Carù & Cova, 2007, p. 13). With regard to the *context* in which the customer experience is formed, several specifications have been attempted in the literature: physical and relational context (Pullman & Gross, 2004, p. 554; Teixeira et al., 2012, p. 363), situational and environmental determinants (Bruhn & Hadwich, 2012a, p. 18), service delivery process (Teixeira et al., 2012, p. 363), and technical interface (Schmitt & Mangold, 2004, p. 135). Generally speaking, context can refer to the servicescape that is arranged by the company, as well as to mechanics and humanics, location, product design and quality, level of individualization, employee competence and attitude (Berry et al., 2002, p. 86; Bitner, 1992, p. 60; Ezech & Harris, 2007, p. 64; Pullman & Gross, 2004, p. 554). Alternatively, context may refer to more customer-related aspects such as customer experience in the past or in other channels (Verhoef et al., 2009, p. 32). While the impact of the determinants of customer experience has been established, the role of the company, customer, and context determinants for customer experience innovations needs to be further analyzed and synergies between these determinants need to be considered.

Existing research has provided initial insights into this issue. For example, Beltagui et al. (2016, p. 763) identified six design strategies that help to develop a general approach to improving service offerings and to enhancing customer experience. These strategies fall into two groups: ones for “accommodating” customers, others for “empowering” them (ibid.). Although these strategies do not address specific parts of the customer journey, they provide innovation options for companies. Challenging the dominating conceptualizations, McColl-Kennedy et al. (2015, p. 431) called for a more dynamic and multi-actor-centric perspective on customer experience. This means accounting more for the different phases of the customer journey and requires taking a touchpoint perspective that considers developments over time (ibid.). Studying sequences of touchpoints is suggested for further research to provide further insights into the links and potential complementary effects between several touchpoints (McColl-Kennedy et al., 2015, p. 433).

3.3.1.4 Service Innovations for Innovating the Customer Journey

3.3.1.4.1 Overview of Service Innovations

To improve the customer experience, service innovations that change the interactions with customers are implemented throughout the customer journey. Service innovations can affect the customer journey in several ways. Touchpoints in the journey may be added, eliminated, or modified. Analogous to the three determinants of the customer experience, these changes to the customer journey can affect the interaction itself, which includes the *customer role* and the *company role*, or the *context* in which the interaction takes place. As service innovations change company-customer interactions, they impact customer experience.

Service innovation is defined as the *development of new or enhanced intangible offerings that involves the firm’s performance of a task/activity intended to benefit customers* (Storey et al., 2016, p. 527). It entails changes in value for the company and the customer (ibid.). As indicated by managers in Study 1 (see Section 1.4.2.2), companies often aim at innovations that customers may perceive as enriching or simplifying their path through the touchpoints, while companies may perceive the value of such innovations most immediately in terms of cost reduction and resource efficiency, as well as in terms of altered customer behavior. Prior research has shown that for companies, service innovations contribute to superior short-term financial returns and long-term sustained competitive advantage (Storey et al., 2016, pp. 543–544). In addition to creating value for the company, service innovations create value for customers (Snyder et al., 2016, p. 2407). The role of customers is recognized as one of actively co-creating value during interactions with the service innovation (ibid.). As customers co-create the value of a service innovation, this involves an interaction with the company (or its representation) and thus inevitably yields an experience for the customer.

3.3.1.4.2 *Categorizations of Service Innovations*

Different types of innovations are distinguished in the literature. As service innovations affect customer-company interactions throughout the customer journey, a majority of categorizations attempts to describe these changes. In his conceptual paper, Den Hertog (2000, p. 4) identified four dimensions of service innovation novelty. He found that service innovations can occur along the dimensions of the service concept, the client interface, the service delivery system, and technology. Salunke et al. (2013, pp. 1087-1088) distinguished innovations in terms of the changes in customer-company interactions. They described service innovations with a focus on the customer and distinguished two types of service innovations that vary in their effect on the customer, namely, interactive service innovations and supportive service innovations. The former are directly experienced by the customer and may, for instance, be related to service delivery and customization options, while the latter affect value creation more indirectly, for instance, through changes in the back-end. Customers are especially affected by innovations that are noticeable in interactions. These interactive service innovations in particular directly affect the value experienced by customers by influencing their cognitive, affective, and behavioral responses (Salunke et al., 2013, p. 1087). Moreover, they can create a sustained competitive advantage for the company (Salunke et al., 2013, p. 1092).

In their comprehensive review, Snyder et al. (2016, pp. 2402, 2407) found that service innovations can be categorized based on the consequences of changes at touchpoints (e.g., innovations new to the market or new to the firm), on the type of innovation (e.g., product or process innovations), and on the degree of change (e.g., radical or incremental innovations). Finally, they categorized innovations based on the means of provision, which concerns the distinction between high-tech and high-touch innovations. In this vein, Dotzel et al. (2013, p. 260) differentiated between Internet-enabled (“e-innovations”) and human-enabled service innovations (“p-innovations”), which both positively affect customer experience (Dotzel et al., 2013, p. 262; Snyder et al., 2016, p. 2407). Scherer, Wunderlich, and Wangenheim (2015, p. 184) and Barrett et al. (2015, pp. 143-144), who integrated research on service innovation and information system research, found that combining digital and personal elements works best for service innovations.

3.3.1.4.3 *Value of Service Innovations*

Despite the value of service innovations for both companies and customers, the process of developing different types of service innovations usually possesses little formal structure. In a meta-analysis, Storey et al. (2016, p. 536) identified success factors of service innovations. The most important ones comprise the company’s proficiency in launching the innovation, the absorptive capacity to acquire and learn from new knowledge, the ability of the organiza-

tional design to encourage innovation, the innovation strategy, and the efficiency of the development process (ibid.). Moreover, service innovativeness, the involvement of front-line employees, external relations and internal communication, and a structured and formalized development process also contribute to innovation success. Similarly, Kuester et al. (2013, p. 540) conducted a meta-analysis to identify success factors for new service development, which were grouped into service-related success factors (incl. experience quality), process-related success factors, company-related success factors, and market-related success factors. For companies that are so-called “efficient developers,” which comprise banks and insurances, especially service-related success factors like superior service and high-quality service experience are decisive. Moreover, company-related factors like high customer orientation and internal coordination contribute to the innovation success of such companies (ibid.).

However, a more precise understanding of the relationship between service innovations and the value thereby created for the company and its customers is needed (Snyder et al., 2016, p. 2407). Only little research in the field has focused on the value that is created through innovation, i.e., value in terms of what is experienced by the customer and the value that is generated for the company (ibid.). Considering customer experience illuminates how customers perceive a service innovation. Especially the literature on customer experience management approaches the challenge of improving customer experiences by managing interactions along the customer journey. Thus, this study suggests investigating the impact of innovations at individual touchpoints and during touchpoint sequences on customer experience.

3.3.2 Characterizations of Touchpoints

When strategically implementing innovations throughout the customer journey, it needs to be established which touchpoint categories exist and which of their characteristics can be affected. Three main approaches towards categorizing touchpoints can be observed in the literature. The first categorizes touchpoints based on their descriptive intrinsic characteristics. The second categorizes touchpoints in terms of differences in their design quality. The third distinguishes different touchpoints based on the elicited customer response. Each group is discussed below. Discussion focuses on their strengths and shortcomings in terms of indicating innovation potential.

3.3.2.1 Categorization Based on Descriptive Characteristics

The literature has suggested various touchpoint categorizations in terms of descriptive characteristics. Table 3-2 provides an overview of the approaches introduced by different authors. Often, touchpoints are distinguished based on company influence, i.e., whether they enable direct or indirect customer interactions (Baxendale et al., 2015, p. 236; Meyer & Schwager, 2007, p. 118). Another frequent distinction is whether interactions can be controlled by the company or not (Verhoef et al., 2009, p. 32). Other authors have highlighted the customer

side of the interaction, e.g., whether customers plan the interaction (Meyer & Schwager, 2007, p. 118). Interactions themselves can be described, e.g., whether the intensity of company-customer contact varies. Taking the company, customer, and potential third parties into account, touchpoints have been described in terms of the actors involved in the interaction. Alternatively, the direction of the interaction at the touchpoint between the involved parties has been considered (Baxendale et al., 2015, p. 235; Straker et al., 2015, p. 114). From a more abstract perspective for describing touchpoints, the mode of interaction characterizes a touchpoint, e.g., whether a customer interacts with another human or faces a digital interface. Finally, some authors have described touchpoints in terms of the marketing activity required to create an interaction (Duncan & Moriarty, 2006, p. 237).

Table 3-2 Touchpoint characterization based on descriptive characteristics

Characterization	Dimensions
Company and customer influence	<ul style="list-style-type: none"> ▪ Controllable, uncontrollable (Baxendale et al., 2015, p. 235; Esch & Knörle, 2010, p. 3) ▪ Direct, indirect (Helkkula, 2011, p. 375; Johnston, 1999, p. 104; Meyer & Schwager, 2007, p. 118) ▪ Planned, unplanned (Meyer & Schwager, 2007, p. 118) ▪ Pre-purchase, post-purchase (e.g., Dhebar, 2013, p. 202; Lemon & Verhoef, 2016, p. 77)
Interaction intensity	<ul style="list-style-type: none"> ▪ Frequency (Baxendale et al., 2015, p. 238; Straker et al., 2015, p. 114)
Involved parties	<ul style="list-style-type: none"> ▪ One-way, two-way, peer-to-peer (Baxendale et al., 2015, p. 235; Straker et al., 2015, p. 114) ▪ Brand owner/ retailer/ third party touchpoints (Baxendale et al., 2015, p. 236) ▪ Brand-, partner-, customer-owned, social, external, independent (Lemon & Verhoef, 2016, p. 76) ▪ Company, employees, customers, technology (Bitner et al., 2000, p. 141) ▪ Store, sales force, partner, written information, machine (e.g., ATM), newspaper, radio, mail, e-home (Grimm & Röhrich, 2003, p. 39)
Mode of interaction	<ul style="list-style-type: none"> ▪ Personal, non-personal (Johnston, 1999, p. 104) ▪ Interpersonal, human-environment (Hui & Bateson, 1991, p. 174) ▪ Verbal, nonverbal (Homburg et al., 2017, p. 384) ▪ Human, product, service, spatial, electronic, communication (Dhebar, 2013, p. 200) ▪ Online, offline (Straker et al., 2015, p. 112)
Marketing activity	<ul style="list-style-type: none"> ▪ Marketing, non-marketing (Duncan & Moriarty, 2006, p. 237) ▪ Paid, earned, traditional, new (Baxendale et al., 2015, p. 235; Quesenberry, Coolson, & Wilkerson, 2012, p. 62)

Together, these touchpoint categorizations enable a differentiated and multi-faceted approach to characterizing interaction points. Describing touchpoints according to these dimensions helps managers to better understand the enabled company-customer interactions. These dimensions create awareness of how far touchpoints influence the customer journey, of how far they need to be actively managed, and of how different touchpoints require different management approaches.

While describing touchpoints is an important step for managing them, categorizations based on descriptive characteristics are only a starting point and do not guide ideal touchpoint configuration. Moreover, the categorizations are strongly focused on the individual touchpoints rather than on their role in the customer journey. As such, they fall short in guiding managers on how to configure touchpoints and in indicating potential changes, with a view to improving their role in shaping customer experience.

3.3.2.2 Characterization Based on the Design Qualities of Touchpoints

The shortcomings of descriptive touchpoint categorizations are in part addressed by characterizations based on design quality, which also consider the role of touchpoints in the customer journey (see Table 3-3). Characterizations addressing the relationship between touchpoints can guide managers by indicating good practices for modifying touchpoints in the customer journey. Ideally, a company's different touchpoints should be integrated with each other to enable seamless experience (Esch & Knörle, 2010, p. 3; Straker et al., 2015). This means that the different touchpoints in the customer journey should be interrelated rather than siloed. Academics and practitioners agree that high consistency (in terms of the design, interaction, communication, and interaction process) among touchpoints and their context-sensitivity (in terms of information, convenience, customizability, and flexibility) are crucial (Homburg et al., 2017, p. 390). The content of touchpoints is distinguished according to their role in the customer journey. Especially in the different phases of the buying cycle, touchpoints cater to different customer needs (Schögel & Pernet, 2010, p. 80). This allows making general recommendations on touchpoint design, either when creating new or when improving existing interactions. Recognizing the objective of the touchpoint from the company's perspective makes it possible to further sharpen the profile of a touchpoint (Esch & Knörle, 2010, pp. 4-5).

Table 3-3 Touchpoint characterization based on design qualities

Characterization	Dimensions
Relationship between touchpoints	<ul style="list-style-type: none"> Consistency (in terms of the design, interaction, communication, interaction process) (Homburg et al., 2017, p. 390) Context-sensitivity (in terms of information, convenience, customizability, flexibility) (Homburg et al., 2017, p. 390) Level of integration (Esch & Knörle, 2010, p. 3; Straker et al., 2015)
Content	<ul style="list-style-type: none"> Information, promotion, support, revenue (Straker et al., 2015, p. 114) Awareness, information, transaction, image (Esch & Knörle, 2010, p. 5) Attracting attention, boosting purchase interest, sale preparation, purchase completion, customer service, purchase processing, after sales/ customer care (Schögel & Pernet, 2010, p. 80)
Objective of touchpoints	<ul style="list-style-type: none"> Presence touchpoints, brand experience touchpoints, eliminate touchpoints, innovation touchpoints (Esch & Knörle, 2010, pp. 4-5)

The design quality characteristics of touchpoints correspond to customer expectations in the journey. By characterizing touchpoints, the characteristics discussed above go beyond describing the touchpoint and additionally guide managers on how to design a touchpoint in context (e.g., by taking into account its function and position in the journey). This involves judgment, e.g., that a high level of integration is desirable and that touchpoints should meet content expectations. In this sense, considering the design qualities of touchpoints also indicates design principles for managers. Managing touchpoints to ensure these principles are respected is crucial for good customer experience.

Following these principles helps to improve touchpoint design, but managers receive little guidance on how to innovate the customer journey in order to facilitate the creation of superior and differentiating customer experiences. Moreover, design characteristics stress the company's perspective. While customer experience changes only as a result of following these general design guidelines, how exactly design and its modification affects the customer is not explicitly considered.

3.3.2.3 Approaching Touchpoints Based on the Customer Response

Beyond describing touchpoints and principles for their design, they can also be approached by considering their relevance for the customer (see Table 3-4). The moment of truth concept aims to identify those touchpoints that are highly relevant to forming customer experience in the journey (Carlzon, 1987, p. 39). The zero moment of truth (Z-mot) is the first interaction through social media (Wolny & Charoensuksai, 2014, p. 318). Further key touchpoints include the first moment of truth, which is important for gaining customer attention, and the second moment of truth, which concerns interaction during actual service consumption

(Löfgren, 2005, pp. 109-110). Building on the Kano model, Esch and Knörle (2010, p. 4) considered customer expectations for touchpoints that include expected minimum standards, performance requirements, and unexpected factors that delight the customer. Baxendale et al. (2015, p. 238) considered the dimensions of touchpoint positivity, which captures the customer's immediate affective response to the touchpoint.

Table 3-4 Touchpoint characterization based on customer response

Characterization	Dimensions
Moments of truth	<ul style="list-style-type: none"> Zero moment of truth, first moment of truth, second moment of truth (Löfgren, 2005, pp. 109-110; Wolny & Charoensuksai, 2014, p. 318)
Customer expectations	<ul style="list-style-type: none"> Expected requirements, normal requirements, delightful requirements (Esch & Knörle, 2010, p. 4)
Affective response	<ul style="list-style-type: none"> Touchpoint positivity (Baxendale et al., 2015, p. 238)

Considering customer response complements the tendency towards company-focus in previous characterizations. Characterization based on customer response can be applied to understanding the meaning of a touchpoint for a customer. Interconnecting touchpoint characteristics, design, and customer response is the basis for implementing improvements in the journey. It allows analyzing the existing customer journey, and thus also learning about and planning future interactions.

3.3.2.4 Summary of Strengths and Shortcomings of Touchpoint Categorizations

The above-collated characteristics of touchpoints have the advantage that they give managers a better understanding of a company's interactions with its customers. They imply several insights for improving the customer experience. First, characterizing touchpoints in this way analyzes the relevance of different types of touchpoints for the customer experience in different phases of the customer journey. Second, those types of touchpoints that influence the customer experience emerge and allow approaching changes to the customer journey more strategically. Third, the results of the characterization analysis indicate optimization options at different touchpoints in order to improve customer experience.

However, while improving and optimizing touchpoints is supported by the characterizations, they do not provide sufficiently specific recommendations on how to innovate touchpoints. Assessing touchpoints according to the discussed characterizations gives managers little innovation guidance. In this regard, characterizations fall short in that they do not establish a link between the touchpoint characteristics and their effect on the customer. Alternative approaches that go beyond a classification and description of touchpoints to facilitate innovation could extend to not-yet-existing touchpoints and touchpoint combinations. For managers, this would allow distinguishing touchpoints in the customer journey that have high potential to create value and those touchpoints that yield little value for innovation.

3.3.3 Approaching Customer Experience Through Touchpoints

The discussed conceptualizations of touchpoints indicate improvement options that companies have when optimizing their interactions with the customer. They allow classifying and describing the interactions in order to gain an in-depth understanding of the points of contact in the customer journey. Moreover, they guide improvements in the interactions along the identified dimensions. However, the discussed conceptualizations of touchpoints and the customer journey reveal only very limited information on innovation potential for touchpoints in the customer journey.

Improving the customer experience beyond incremental improvements and immediate fixes in the customer journey is achieved by innovating customer interactions. As customer experience is formed dynamically throughout various interactions over time (e.g., Dhebar, 2013, p. 200; McColl-Kennedy et al., 2015, p. 432), innovations of the interactions always need to take into account not only individual touchpoints but also constellations of touchpoints throughout the customer journey. Innovating customer interactions requires first, to understand *meaningful interrelations* of touchpoints that can be innovated and second, to understand *how changes in interactions impact* customer experience.

Addressing the need to look into meaningful interrelations between touchpoints, McColl-Kennedy et al. (2015, p. 432) emphasized that more research is needed on how individual customer-company interactions form a process. It is important to consider interactions at touchpoints dynamically over time (ibid.). Considering individual touchpoints tends to be static and neglects interrelations between touchpoints. On the other end, attempting to orchestrate the entire customer journey is an extensive and highly complex task given the rapidly growing number of touchpoints. Therefore, the authors suggested that sequences of touchpoints should be considered (ibid.). As McColl-Kennedy et al. (2015, p. 433) stated, “the patterns of sequences of interactions which characterize customer experiences” need to be determined. The present research will consider *how meaningful sequences can be defined and delimited* in the customer journey. The main objective in determining sequences is that they are meaningful and manageable in practice. Such sequences are part of the customer journey that managers can identify, that allow them to infer corresponding innovation options, and that – if changed – have a significant impact on the customer.

Emphasizing the need to understand the impact of changes in the sequences on the customer experience, Lemon and Verhoef (2016, p. 83) asserted that the impact of interactions on customer experience is a “neglected area.” In a similar vein, McColl-Kennedy et al. (2015, p. 433) indicated that research should address the question of how experiences can “be optimized at the various touch points in the customer journey.” Considering the effect on the customer experience also helps to address the call for research on the value created by service innovations for the customer (Snyder et al., 2016, p. 2402). Addressing these research gaps

builds on the answers of the previous point, i.e., instead of considering how individual touchpoints affect customer experience, it is necessary to acknowledge how the interplay of touchpoints in meaningful sequences affects customer experience. This research thus considers *which changes of the constellation of touchpoints in a sequence improve the customer experience* and how changes are perceived by the customer.

3.4 Study 3.1: Innovation Options for Touchpoints and Touchpoint Sequences

Two subsequent studies were performed and a sequential design was chosen (Srnrka & Koeszegi, 2007, p. 33). Study 3.1 involved a qualitative inductive content analysis aimed at analyzing the collected data of a multiple case study. This resulted in devising strategies for innovating the customer journey. Following a generalization model (Srnrka & Koeszegi, 2007, p. 33), the qualitative data were further investigated quantitatively. The derived categories formed the basis for the subsequent quantitative analysis in Study 3.2. In this quantitative analysis, the innovation strategies were studied based on a choice-based conjoint analysis.

3.4.1 Methodology of the Multiple Case Study

3.4.1.1 Case Selection

The first study presented in this chapter explored how customer interactions should be changed to improve customer experience, in order to create value for the customer and the company. To answer this question, a qualitative exploratory research study was conducted in the form of a multiple case study design with a holistic approach. This approach allows taking into account rich information on the customer interactions as well as the context in which they take place. By comparing the cases, different approaches and common patterns can be identified that companies take to innovate customer-company interactions to improve customer experience. The goal is to identify innovation patterns for companies and to analyze their effects on the customer and the company. The study therefore evaluates successful service innovations and their role in the customer journey.

The sampling process identified critical cases for successful service offerings in the financial services industry in terms of their innovativeness and their impact on the customer experience (Miles et al., 2014, p. 32). In order to qualify the selection of companies as “innovative” within the financial services industry and to restrict the focus of the study, the service offerings of FinTech companies in particular will be considered. FinTech companies offer innovative services in the financial services industry (e.g., Alt & Puschmann, 2016, p. 20). Successful FinTechs have proven their ability to create value for the company and for the customer, e.g., through their survival in the market, their ability to attract funding, and their establishment of a new service that is accepted by customers. In 2016, H2 Ventures and KPMG

(2016, p. i) identified 100 leading FinTech companies, selected as “those companies using technology to their best advantage and driving disruption within the financial services industry. These companies have a commitment to excellence, superior customer experience and a demonstrated ability to do something in a market better than everyone else.” This selection of companies forms the basis of analysis. The level of analysis is individual services offerings of FinTech companies.

The selected sample of FinTech companies is diverse in terms of the representation of different fields of the financial services industry, different geographic regions, and company age. The sample includes both companies that are active in B2B and B2C markets. This presents a balanced set of companies that reflect industry structure, and thus avoids bias towards specific characteristics that only apply to a limited number of companies in the industry. The choice of the sample seeks to ensure that the results are not only valid under specific conditions, but rather hold across different fields of focus in the industry, across different regulations in the countries, across varying forms of competition, and across various cultures that may affect customer needs. Thereby, the findings can be replicated to satisfy external validity of the results (Yin, 2003, p. 36).

3.4.1.2 Data Collection

To analyze successful innovative service solutions by FinTech companies, the study used secondary data identified through desk research. For each case, different sources were analyzed in order to account for different perspectives and to gain a holistic view of customer-company interactions. The main sources were company information (e.g., websites and apps, webinars, interviews with managers and employees), customer reviews (e.g., experience evaluations, tutorials on using the services, service comparisons), and third-party reviews (e.g., reviews by specialized news outlets) for each company in the sample.

Where necessary, the information gathered on the service offerings was translated into English for further analysis. Of the 100 FinTech companies identified by H2 Ventures and KPMG (2016), those companies that were not accessible through a company website (one case) and companies where the majority of information could not be adequately translated (seven cases) were excluded. This led to a final sample of 92 companies (please refer to Table 3-5 for the overview of companies in the sample).

Table 3-5 Multiple case study: Sample overview (H2 Ventures and KPMG, 2016)

Sector	Company	Country	Year founded	Number of employees	Website
Lending	Affirm	United States	2012	201-500	https://www.affirm.com/
	Atom Bank	United Kingdom	2014	201-500	https://www.atombank.co.uk/
	Avant	United States	2012	501-1'000	https://www.avant.com/
	Brighte	Australia	2015	11-50	https://brighte.com.au/
	Doreming	United Kingdom	2015	2-10	http://www.doreming.com/
	Finova Financial	United States	2015	11-50	https://www.finovafinancial.com/
	Funding Circle	United Kingdom	2010	201-500	https://www.fundingcircle.com/
	Grow	Canada	2014	11-50	https://www.poweredbygrow.com/
	GuiaBolso	Brazil	2012	51-200	https://www.guiabolso.com.br/
	HashChing	Australia	2015	2-10	https://www.hashching.com.au/
	iwoca	United Kingdom	2011	51-200	https://www.iwoca.co.uk/
	Kabbage	United States	2008	201-500	https://www.kabbage.com
	Kreditech	Germany	2012	201-500	https://www.kreditech.com/
	Kueski	Mexico	2012	51-200	https://kueski.com/
	Lending Club	United States	2007	1'001-5'000	https://www.lendingclub.com/
	LendingKart	India	2014	201-500	https://lendingkart.com/
	Lendix	France	2014	11-50	https://en.lendix.com/
	LendUp	United States	2012	201-500	https://www.lendup.com/
	OnDeck	United States	2007	201-500	https://www.ondeck.com/
	Point	United States	2014	11-50	https://point.com/
	Prospa	Australia	2012	51-200	https://www.prospa.com/
	Prosper	United States	2006	501-1'000	https://www.prosper.com/
	SocietyOne	Australia	2011	51-200	https://www.societyone.com.au/
	SoFi	United States	2011	1'001-5'000	https://www.sofi.com/
	solarisBank	Germany	2016	51-200	https://www.solarisbank.de/
	Spotcap	Germany	2014	51-200	https://www.spotcap.com/
	VivaReal	Brazil	2009	501-1'000	https://www.vivareal.com.br/
Payments	Adyen	Netherlands	2006	501-1'000	https://adyen.com/
	AfterPay	Australia	2014	51-200	https://www.afterpay.com.au/
	Ant Financial	China	2004	5'001-10'000	http://www.antgroup.com/
	Azimo	United Kingdom	2012	51-200	https://azimo.com/en/
	iZettle	United Kingdom	2010	201-500	https://www.izettle.com/
	Klarna	Sweden	2005	1'001-5'000	https://www.klarna.com
	Leetchi	France	2009	11-50	https://www.leetchi.com/en
	Nubank	Brazil	2013	501-1'000	https://www.nubank.com.br
	PayKey	Israel	2014	11-50	https://www.paykey.com/
	Payoneer	United States	2005	501-1'000	https://www.payoneer.com/home/
	Quantoz N.V.	Netherlands	2014	11-50	https://quantoz.com/
	Spriggy	Australia	2015	2-10	https://www.spriggy.com.au/
	Square	United States	2009	1'001-5'000	https://squareup.com
	Stripe	United States	2010	501-1'000	https://stripe.com/
	Tyro	Australia	2003	201-500	https://tyro.com
	Zoona	South Africa	2009	51-200	http://www.ilovezoona.com/
	ZooZ	Israel	2010	51-200	http://www.zooz.com/
Insurance	Anivo	Switzerland	2015	11-50	https://www.anivo.ch/
	Collective Health	United States	2013	201-500	https://collectivehealth.com/
	Compara Online	Chile	2009	201-500	https://www.comparaonline.com/
	Fluo	France	2013	11-50	https://www.fluo.com/
	Knip	Switzerland	2013	51-200	https://www.knip.de/
	League	Canada	2014	51-200	https://league.com/toronto
	Lemonade	United States	2015	11-50	https://lemonade.com/
	Oscar	United States	2013	501-1'000	https://www.hioscar.com/
	OSeven Telematics	United Kingdom	2015	11-50	https://www.oseven.io/about/
	PAIR Finance	Germany	2015	11-50	https://www.pairfinance.com/
	Policybazaar	India	2008	1'001-5'000	https://www.policybazaar.com/

Table 3-5 Multiple case study: Sample overview (H2 Ventures and KPMG, 2016) (continued)

Sector	Company	Country	Year founded	Number of employees	Website
RegTech	AQMetrics	Ireland	2012	11-50	http://www.aqmetrics.com/
	BlackSwan	United Kingdom	undisclosed	11-50	http://blackswan-technologies.com/
	Droit	United States	2012	11-50	http://droitfintech.com/
	Feedzai	Portugal	2009	201-500	https://feedzai.com/
	NewBanking	Denmark	2015	2-10	https://newbanking.com/
	Ravelin	United Kingdom	2014	11-50	http://www.ravelin.com/
	Rippleshot	United States	2013	11-50	http://www.rippleshot.com/
Data and analytics	SecureKey Technologies	Canada	2008	51-200	http://securekey.com/
	Credit Karma	United States	2007	501-1'000	https://www.creditkarma.com/
	Credit Kudos	United Kingdom	2015	2-10	https://creditkudos.com/
	Data Republic	Australia	2013	11-50	https://www.datarepublic.io/
	DMWay	Israel	2015	11-50	http://dmway.com/
	Hello Soda	United Kingdom	2013	11-50	http://hellosoda.com/
	Innovative Assessments	Israel	2015	2-10	http://www.iassessments.com/
Wealth	Lenddo	Philippines	2011	51-200	https://www.lenddo.com/
	North Side Inc.	Canada	undisclosed	11-50	http://northsideinc.com/
	EasyEquities	South Africa	2014	51-200	https://www.easyequities.co.za/
	Motif Investing	United States	2010	51-200	https://www.motifinvesting.com/
	Tink	Sweden	2012	51-200	https://www.tinkapp.com/en/
	TipRanks	Israel	2012	11-50	https://www.tipranks.com/
	Wealthfront	United States	2011	51-200	https://www.wealthfront.com/
Blockchain	WealthSimple	Canada	2014	51-200	https://www.wealthsimple.com/
	Bluzelle	Singapore	2014	2-10	http://bluzelle.com/
	ConsenSys	United States	2014	51-200	https://consensys.net/
	Digital Asset Holdings	United States	2014	51-200	https://digitalasset.com/
	I/O Digital Identitii	Netherlands Australia	2014 2015	2-10 11-50	https://iodigital.io/ https://identitii.com/
Digital currencies	Circle	United Kingdom	2013	51-200	https://www.circle.com
	Coinbase	United States	2012	51-200	https://www.coinbase.com/
	HitBTC	Netherlands	2013	undisclosed	https://hitbtc.com/
	itBit	United States	2012	51-200	https://www.itbit.com/
	Xapo	Switzerland	2014	51-200	https://xapo.com/
Capital markets	AlMin	India	2014	undisclosed	http://aimin.co/
	Overbond	Canada	2015	11-50	https://www.overbond.com/
Crowd funding	OurCrowd	Israel	2012	51-200	https://www.ourcrowd.com/
	Wealth Migrate	South Africa	2010	11-50	https://www.wealthmigrate.com/
Accounting	Xero	New Zealand	2006	1'001-5'000	https://www.xero.com/

3.4.1.3 Case Analysis

Case analysis followed the systematic procedure of a qualitative inductive content analysis with the goal of structuring the data (Mayring, 2000; Titscher & Jenner, 2000, p. 64). Content analysis is the empirical method of making inferences from recorded communication (such as documents, interview records, texts, or videos) by analyzing the primary content as well as the context of the communication (Mayring, 2000). The criterion for analyzing the information and for building categories is the configuration of touchpoints with the customer journey. Throughout the analysis, categories of innovative touchpoint configurations were established. Analysis was iterative, to ensure category reliability (Mayring, 2000).

In order to assess customer interactions, service offerings were analyzed in terms of the touchpoints involved throughout the customer journey. In many cases, added value from innovative offerings arose from changes at a combination of touchpoints. Therefore, not only individual touchpoints but also their connections within sequences were collected. For the purposes of analysis, only direct and controllable touchpoints involving either one- or two-way company-customer interactions were considered, as these are the touchpoints that companies can most immediately influence and manage. This is a necessary condition for ensuring high feasibility and strategic impact of the developed innovation approaches in practice.

The categories of innovation and touchpoints that have been identified in the literature so far do not fully describe the innovation inherent in interactions. Consequently, this research applies an inductive coding approach, since this allows for the codes to emerge during the process in order to fully capture interactions. This approach supports the emergence and development of the perspective that is best suited to capturing the essence of the respective innovations (Miles et al., 2014, p. 81).

First-cycle coding involved collecting and reviewing all customer-company interactions of each company in the sample. Innovative touchpoints and touchpoint sequences were determined based on a comparison with traditional offers and procedures in the industry. The newness of offerings, and their perception as innovative, was further verified by reviewing company and customer communications on these innovations. For example, a blog was considered a non-innovative touchpoint. In comparison, the possibility of splitting regular payments into installment payments was considered innovative because this creates new value for the customer and because the company uses it as point of differentiation. Once the innovative touchpoints were identified, they were coded with open coding, which remains open to data content (Saldaña, 2013, p. 100). Each touchpoint was then assigned to that stage in the customer journey where it took place (based on the customer experience lifecycle identified by Ponsignon et al. (2015, p. 305)). Second-cycle coding applied pattern coding, which seeks to explain first-order codes and their themes (Miles et al., 2014, p. 86; Saldaña, 2013, p. 210). For this, visualizations of how innovative services affect touchpoints within the journey were used to support analysis. Consistent with the overall goal to be manageable and close to the customer, the study concentrated on the specific configuration of touchpoints that characterize the innovations identified in the first-order analysis. One focus that emerged were company actions that change the traditional configuration of touchpoints and sequences. From this, recurring patterns of innovative changes made to the traditional processes in the customer journey were developed. Second-cycle analysis thus yielded a systematic analysis of the strategies employed by companies in their innovative service offering to improve customer experience.

Analysis used within-case analysis to gain a deep understanding of the innovation patterns inherent in each case (Eisenhardt, 1989, p. 540). This was combined with cross-case analysis, where the observed innovations were clustered and groups of similar approaches towards

changing interaction processes at touchpoints throughout the customer journey were formed (Miles et al., 2014, p. 103). According to the procedure for forming typologies (Kelle & Kluge, 2010, pp. 91-92; Kluge, 2000), touchpoints that were affected by a certain innovation pattern were compared to identify commonalities and differences. Next, their characteristics were contrasted to touchpoints unaffected by that innovation pattern. These two comparisons yielded types of innovation strategies that were based on those characteristics that were common among affected touchpoints but differentiated them from those touchpoints unaffected by the strategies. These approaches were then condensed into change strategies that companies can apply to touchpoints and touchpoint sequences.

Each of these strategies was described and defined by its key properties. Importantly, based on the results of first- and second-cycle coding, the description included the selection of touchpoints involved by the strategy and the value generated for the company and the customer. The ultimate goal was to improve customer experience and to provide companies with targeted, flexible strategies for improving interactions and for managing the relevant touchpoints affected in delivering a specific service offering. Care was taken to formulate the strategies in a way that makes them actionable for practitioners, by allowing companies to recognize untapped potential in the customer journey.

3.4.2 Findings of the Multiple Case Study

Two questions facing companies when implementing innovation strategies in the customer journey were considered and answered by the results of the analysis. First, which innovations exist in the customer journey to improve the customer experience? Second, how do these innovations impact customer and company?

3.4.2.1 Overview of the Nine Innovation Strategies

When aiming to improve customer experience, companies can apply different approaches. The preceding analysis of FinTech companies has identified nine recurring patterns of innovations. The patterns describe how either sequences of touchpoints or individual touchpoints of a customer journey are transformed. They form nine innovation strategies, which are distinguished according to the changes in the configuration of touchpoints in the customer journey that they encompass. The strategies are formulated independently of the specific company's circumstances, of customer characteristics, and of the phase in the customer journey. The nine innovation strategies concern either changes across different journeys (and as such *bridge journeys*) or changes that occur *within* a single journey. Within single journeys, changes can be either company- or customer-initiated. According to the three factors determining customer experience (please refer to Section 4.3.1), the nine innovation strategies can be divided into three groups, each of which addresses changing the context, the company role, or the customer's role in the interactions. The first three strategies concern changes that bridge

different journeys and change the context of interaction. These strategies comprise 1) integrating, 2) brokering, and 3) connecting. The next three strategies concern company-initiated changes within a journey. These innovations change the company's role in interactions and comprise 4) complementing, 5) consolidating, and 6) anticipating. Finally, the last three strategies refer to customer-initiated changes within a journey. Here, the customer assumes new roles in the respective interactions. These are 7) positioning, 8) empowering, and 9) co-creating. An overview of the strategies can be found in Table 3-6.

Table 3-6 Definitions of the nine innovation strategies

Strategy	Definition	Example
Changed context: Bridging journeys		
Integrating	Integrating sequences from different journeys. Sequences from different journeys that are usually not connected are now connected and placed in the same context.	Alipay (now AntFinancial) rigorously follows an integrating strategy. Within its service offer of an integrated payment platform, the company combines many functionalities, such as paying bills and splitting bills ("going Dutch"), managing investments, and even ordering services (e.g., ordering a taxi or booking hotels). The company continuously strives to expand the offer. To do so, it often partners with providers of complementary services.
Brokering	Creating synergies between sequences of different journeys (or between recurring sequences within a journey). Sequences that recur for the customer yet are not part of the same process are connected.	SecureKey Technologies is an identity and authentication provider that applies the brokering strategy in its core service. The company addresses the fact that people tend to forget passwords of online services that are less often used and instead allows users to login with a password of another online service that is more frequently used. When accessing a government online service, users can login with their bank credentials. The identity identification during a login process is connected between different journeys with "SecureKey Concierge," while no private information is exchanged between government, bank, and SecureKey.
Connecting	Creating intersections between journeys of different customers. A social network is replicated and customers benefit from access to resources, knowledge, and relationships.	SoFi is a company that provides student loans, mortgages, and personal loans. The company uses the connecting strategy to extend its service offer. SoFi offers an unemployment protection to its members that builds on the same strategy. In case one customer becomes unemployed, SoFi uses the network of customers to search for matching job offers. The connecting strategy is also applied in other service offers, such as in the form of organizing network events that are organized for members. The professional networking with fellow customers helps expand customers' network with relevant persons for their career.
Changed company role: Company-initiated changes		
Complementing	Offering touchpoints that allow the customer to pass through the journey in a logical process. The assortment of possible touchpoints is tailored to match customers' varying and individual needs.	Oscar Health is a health insurance company that applies the complementing strategy. Every customer has the opportunity to receive information on diseases through the app, for more support they can get medical advice through the app by calling a doctor for free, and they can upload pictures of their disease through the app for better consultation and receive prescriptions through the app. In case a visit to the doctor is necessary, the patient receives a cost estimate and can organize an appointment through the app. The options for patients to receive help are thus staggered in terms of support received and the patients' efforts and costs, which means that different versions of touchpoint sequences address the same customer purpose. These sequences can be passed through in any order, so that the customer journey is logically adjusted according to the patient's needs.

Table 3-6 Definitions of the nine innovation strategies (continued)

Strategy	Definition	Example
Consolidating	Reducing the number of touchpoints, effort, or time at touchpoints. Touchpoints can often be eliminated, automated, or pushed to the back-end.	Lemonade is an insurance company that uses the consolidating strategy consistently throughout the customer journey. This can be observed in the insurance claim process, which is entirely completed through a chat in an app and without any forms that need to be filled in by the customer. To make a claim, the customer sends Lemonade information on the incident through the chat, e.g., by describing the incident via a video recording, by sending a picture of the incident, or by sending a picture of the police report. Once all information for a claim has been provided, the customer receives an instant decision: the claim is processed within seconds and the money can be sent within minutes.
Anticipating	Collecting and providing information on touchpoints in the future customer journey. Alerts can be provided before the customer arrives at an anticipated touchpoint in the journey.	Wealthfront is a digital investment advisor that applies the anticipating strategy to tailor the investment plans for its customers. Customers enter expected events that significantly affect their finances (e.g., college expenses, retirement). Moreover, Wealthfront analyzes customer accounts in order to detect patterns of financial expenses. Based on this information, the investment plans are adapted in a way that they not only match the customer's saving goals but also account for the customer's anticipated financial movements.
Changed customer role: Customer-initiated changes		
Positioning	Allowing the customer to shift the position of touchpoints in the journey. Customers can determine the position of touchpoints within a predetermined scope.	Klarna is a provider of payment services that applies the positioning strategy in three ways. First, Klarna allows customers to pay after the delivery of items that have been purchased in a partnering online store. Thus, the payment is shifted to a new position in the journey at which the customer has received the good and can assess its quality. Second, at the check-out in an online store, customers can delay part of the payment by transforming a regular payment into a payment in installments. While Klarna pays the online merchant immediately, customers make the installment payments to Klarna. Third, the repayment process is structured flexibly as customers can make additional payments, and change or delay the date of due payments without penalties.
Empowering	Providing customers with the tools or knowledge to take responsibility for touchpoints in the journey. Customers' scope of influence on the course of the individual journey is increased.	LendingClub is a peer-to-peer lending platform that brings together investors and borrowers (individuals and small companies). LendingClub applies the empowering strategy in the form of automated investments. The company provides tools so that investors do not require a lot of knowledge about investing and research on the investment opportunities. LendingClub assigns the loans to three groups of investment options that differ in risk (and thus interest rate). Investors can choose to invest in one of these groups, without the need to consider the individual loans. Filters are provided by which investors can adjust the loans in the groups. LendingClub offers investors additional tools to further help them understand and modify their investments: the company collates and analyzes information on the investment options, assigns them to classes of risk, and visualizes investment options in infographics.
Co-creating	Designing or co-creating the interface at touchpoints. Customers assume the task of matching the front-end of the interaction with their own preferences, logic, and requirements.	Atom Bank bases its differentiation strategy largely on the co-creating strategy. Customers can give an individual name to the bank and can change the appearance of the app interface by changing the colors. The app interface is designed in a modular way that allows customers to make these adaptations without affecting the underlying processes and functions of the app.

3.4.2.1.1 *Innovation of Touchpoints and Touchpoint Sequences*

Analysis has shown that every touchpoint can be innovated, but not every touchpoint needs to be involved in an innovation. For those touchpoints that are innovated, different innovation strategies can be applied. Touchpoint changes not only address the characteristics of individual touchpoints, but also often concern the relationship between touchpoints. The approaches made to touchpoint innovation by companies in the sample take into account individual touchpoints as well as sequences of touchpoints. This approach allows identifying innovation potential not only in individual customer-company interactions but also in entire sections of the customer journey. It thus points to potential for improving customer experience.

This can be illustrated with one particular example of customer-company interaction: using a credit card. As a stand-alone touchpoint, its purpose is to facilitate paying for goods or services. Some companies, such as Nubank, leave this touchpoint in its traditional, unchanged way and integrate it within innovative offers. Other companies in the sample, in comparison, decided to change this touchpoint to various degrees. Spriggy allows customers to adjust part of the interaction interface by letting them choose their own credit card design (co-creating strategy). Affirm introduced a virtual credit card that is valid for only 12 hours (positioning strategy). Alipay decided to eliminate the touchpoint of a credit card altogether and instead introduced payments through an app to meet customer needs (consolidating strategy).

Many of the innovative solutions devised by FinTech companies address multiple stages in the customer journey. Each of the innovation strategies can be applied to touchpoints at any stage in the customer journey. According to Ponsignon et al. (2015, p. 305), a typical customer experience lifecycle in the financial services industry comprises the stages of awareness, interest, apply, welcome, serve, deepen, concern, defect, and return. While all of these stages are addressed by solutions offered by FinTech companies, the innovative elements of their offer usually focus on only few stages, while serving the other stages in a more traditional way. Most innovative service offers of the FinTechs in the sample address the utilization phase. Analysis shows that FinTech innovations frequently aim to improve the serving stage, especially at those touchpoints that allow customers to trade and transact and at touchpoints that concern the online services offered. Still, innovations can also be observed in the other phases. For the awareness, interest, application, and welcoming stages, FinTech companies in the sample tend to focus on increasing convenience and speed for the customer by predominantly applying the innovation strategies of consolidating and empowering. In many cases, a traditional customer advisor was not present. Instead, easily comprehensible information was provided, while many processes were simplified or automated and pushed to the back-end. Nor is customer welcoming attached major importance. Rather, the focus mostly lies on a seamless and effortless onboarding process.

3.4.2.1.2 *Affected Touchpoints and Value Created*

The nine innovation strategies describe how a touchpoint or sequence of touchpoints can be changed. The question for managers then arises where these changes should be addressed in the customer journey. Put differently, the challenge for managers is to recognize potential for innovation in the existing customer journeys, before implemented any changes. To address this challenge, touchpoints have to be described in a way that indicates the innovation potential of touchpoints and that indicates which innovation strategies can be applied at the identified sequences or touchpoints.

Effect on customer purpose at touchpoints

According to their definition (see Section 3.3.1.1), touchpoints aim to fulfill a customer purpose either in part (as part of a sequence of touchpoints) or in full (as single touchpoints). Changing touchpoints thus means changing how a customer purpose is fulfilled and innovating and enhancing the experience accordingly. When innovating these touchpoints so as to better fulfill customer purpose, touchpoints are added, altered, or eliminated within the customer journey. By recognizing the effect of possible innovations on the purposes in the journey, the respective touchpoints can be investigated in context and the application of the respective innovation strategy can be probed.

Customer value and value for the company

According to their definition, innovations have to create value for the company to be recognized as an innovation. The extant literature links innovations to higher financial performance and the creation of a sustained competitive advantage. The companies in the sample distinguish themselves from their competitors by applying the innovation strategies in a way that fits their company strategy. By implementing innovation strategies, companies impact their strategic positioning and customer perception.

Innovations yield not only benefits for the company, but also for the customer. That is, the customer notices the changes in the customer journey and derives value from them. Compared to traditional customer journeys, the value of innovative touchpoints and touchpoint sequences for customers is increased. Customer value is the added benefit that a customer derives from interacting with a company (Kasper, van Helsdingen, & Gabbott, 2006, p. 144; Kotler & Keller, 2012, p. 10; Woodruff, 1997, p. 142). If companies realize a competitive advantage, e.g., through innovations, this also implies a customer advantage (Kasper et al., 2006, p. 250; Kotler & Keller, 2012, p. 289). Customer value is based on any advantages and disadvantages a customer receives from interacting with a company, whereas the value for companies ultimately derives from customers' perception of and response to the service value (Kasper et al., 2006, p. 250; Kotler & Keller, 2012, p. 10). Taken together, through innovation, companies engage in value creation for customers and value appropriation, which captures value for companies (Mizik & Jacobson, 2003, p. 64).

The nine strategies are discussed in detail below. In each case, the effect on purpose fulfillment at touchpoints is described, as is the value for the customer and for the company.

3.4.2.2 Strategies Changing the Context: Bridging Journeys

3.4.2.2.1 *Integrating Innovation Strategy*

Integrating: Overview

Integrating is defined as a strategy that integrates sequences from different journeys. With this strategy, sequences from different journeys that are usually not connected with each other are now connected and put into one context. This strategy is suited to situations in which the customer usually deals with many different journeys (from the same company or from different companies) that all belong to one ecosystem of related purposes. With this strategy, the focal company attempts to provide an interface (e.g., in the form of a platform or by replicating some of the offers from other journeys within the own portfolio) in order to allow the customer to have an integrated journey that allows fulfilling the related purposes. Table 3-7 provides an overview of the characteristics of the integrating strategy, which are discussed below.

Table 3-7 Summary of the integrating strategy

Definition	Integrating sequences from different journeys. Sequences from different journeys that are usually not connected are now connected and placed in the same context.
Primary outcome	Touchpoints related to an ecosystem of customer purposes are integrated into one journey.
Related concepts	Service integration
Purpose fulfillment	Scope increase when fulfilling customer purpose
Customer advantage	Convenience, coordination
Value for the company	Retention, penetration, customer data

Integrating: Strategy and sample application³

The integrating strategy describes an approach that takes sequences from different contexts and integrates them into a common customer journey (see Figure 3-1). These touchpoints were previously part of different customer journeys and are now interrelated and may form a single customer journey. The customer can benefit from the integration and alignment of the

³ Further examples for strategy applications are provided in Section 3.4.2.5.

different journeys. This strategy extracts touchpoints from their traditional context and combines them in one context. As such, integrating allows a stronger interplay between individual touchpoints or sequences. Sequences that are formed by the affected touchpoints are not necessarily changed with this strategy. Rearrangement in the integrated journey can maintain or replicate the constellation of the integrated touchpoints or sequences.

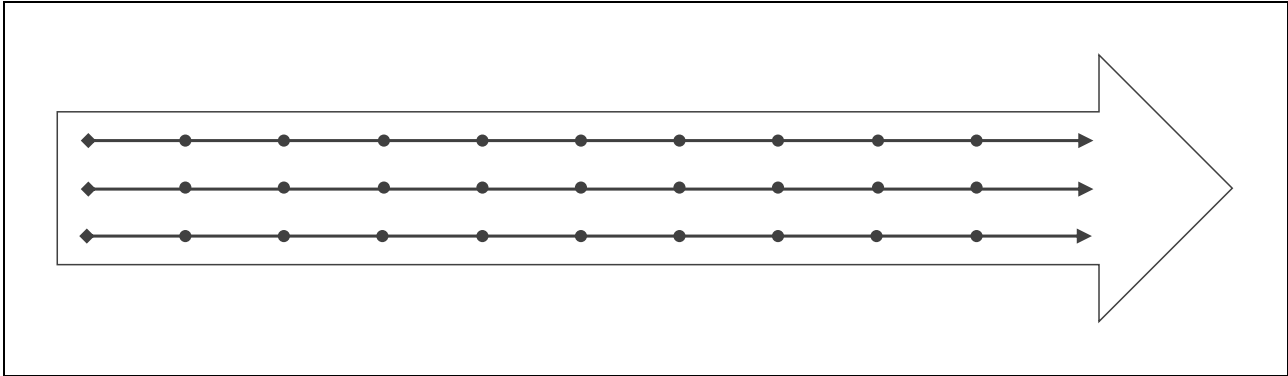


Figure 3-1 Schematic depiction of the integrating strategy

Companies that apply this strategy aim to accommodate all purposes that a customer may want to fulfill when interacting with their service offer. For example, a health insurance company may integrate all journeys that a patient encounters when faced with health concerns. This might include information about illnesses and providing access to and information about a network of doctors. Also, integrating the sequence of going to the pharmacy for handing in the prescription and receiving the medication can be integrated on one platform to enable smooth transition between these sequences. For the customer, this greatly eases the search activity, concerns, and insecurities throughout the journey. As information is made available to the relevant parties, the customer journey may become much more efficient (in this regard, companies may even shorten the respective journeys; see also “consolidating” strategy). Often, companies extend and improve the scope and quality of their service portfolio with this strategy, but also use it to improve control over the service delivery.

While this strategy offers integrated individual journeys, the individual journeys themselves usually remain largely unchanged. Customers may follow their journeys as in traditional offers, but benefit from the connection between the journeys. Put differently, the changes that this strategy entails often integrate the journeys (or sequences) end-to-end. While only minor changes are made to the journeys, major changes are made to their connections. Usually a focal company that is responsible for managing the information and resources associated with the integration initiates the changes associated with this strategy.

The integration strategy is related to integrated solutions (Slywotzky, Morrison, & Andelman, 1997, pp. 245-246). Adding to integrated solutions, the integrating strategy gives managers insights where in the customer journey integration is most valuable in terms of improving customer experience.

Integrating: Effect on fulfilling customer purpose

The integrating strategy is applied to those touchpoints at which the integration with other journeys can increase the scope by which a customer purpose can be fulfilled. Companies apply the integrating strategy with the objective to offer all services related to a customer purpose from one hand. Specifically, this can take two forms.

In the first option, the company integrates all touchpoints related to the same customer purpose in its own service offer. In terms of the customer journey, the company identifies the purpose a customer aims to fulfill and then integrates all the touchpoints related to this purpose into one sequence offered by the company. Thereby, it bundles service offers and can create synergies between them. Among the companies in the sample, this approach was applied when the customer mainly fulfills a purpose by using the company's own offers.

The second form applies when the customer predominantly fulfills a purpose that is addressed by the focal company's offer by using the related services of another company. In this case, the focal company aims to be conveniently accessible for the customer and offers its own touchpoints in the other company's value system. In terms of the customer journey, the focal company's touchpoints are integrated into another company's more intensely used sequence. As such, the focal company offers many touchpoints in different system and thereby diversifies.

Integrating: Value creation

Customer value. For customers, the integration of different journeys can have different facets. It may mean that they need to interact with fewer companies and can thus benefit from synergies when aiming to fulfill related purposes. Furthermore, by integrating different journeys, companies can ensure they are similar to each other, reducing the customer's effort to understand them. Therefore, integration predominantly affects customer *convenience*. By relating the fulfillment of related purposes, companies reduce customer effort. Introducing a common interface for previously different journeys also improves *coordination* for customers. The different but related tasks they need to fulfill are now also logically aligned in one service offer. The more customers use integrated services, the more they can derive the value associated with the integration.

Value for the company. Integrating different customer journeys creates more situations for potential points of interaction with customers. The company allows customers to fulfill more and more diverse purposes, meaning the company is considered in an increasing number of instances. Customers do not need to switch providers to fulfill a related yet different purpose; instead, they can remain with the company. Customer *retention* is thus enhanced. As services within this ecosystem are expanded, customer loyalty may increase as they can fulfill more purposes, which translates into up- and cross-selling opportunities for the company. The value

of integrating is exponential. While small integration efforts yield positive effects, their enlargement amplifies the effects of retaining customers within the ecosystem and may even lead to a lock-in effect. The increase of touchpoints with customers in different contexts increases the amount of *customer data* a company receives. Not least, this provides valuable customer insights and allows better designing the customer journey for the customer. Finally, new options for the customer can be created because information and the risks of previously unconnected journeys can be shared. As the scope of offers is extended, the market *penetration* of the focal company can increase.

3.4.2.2.2 *Brokering Innovation Strategy*

Brokering: Overview

The brokering strategy creates synergies between similar sequences of different journeys of the customer, or between recurring sequences within a journey. It connects sequences of journeys: Although these recur, they do not form part of one process for the customer. By approaching these journeys with a brokering strategy and connecting touchpoints or sequences across different journeys, this strategy allows reducing redundant steps and creating added value through synergies. That is, the company places these sequences in one common context. The touchpoints thereby connected can be offered by one company or form part of different companies' journeys. In either case, the company that applies the brokering strategy enters the customer's journeys of interest, embeds its own service offer in the existing journeys, and thereby creates new opportunities for the customer. Connecting and shifting information and risk across these journeys creates new value. Table 3-8 summarizes the key attributes of the brokering strategy.

Table 3-8 Summary of the brokering strategy

Definition	Creating synergies between sequences of different journeys (or between recurring sequences within a journey). Sequences that recur for the customer yet are not part of the same process are connected.
Primary outcome	Touchpoints that are not part of a common process are handled together.
Related concepts	Outsourcing
Purpose fulfillment	Risk reduction of fulfilling a purpose
Customer advantage	Security, control
Value for the company	Retention, penetration, customer data

Brokering: Strategy and sample application

The brokering strategy aims to create new value for the customer by connecting the steps of different independent customer journeys that the customer passes through. Although steps

recur, they were not previously connected. Alternatively, the strategy may connect recurring yet unconnected sequences within one journey. The strategy aims to create synergies between similar touchpoints or touchpoint sequences recurring in different customer journeys (see Figure 3-2). With the brokering strategy, one company takes advantage of these recurrences and enters the respective customer journeys with a service offer that connects them to create value. In contrast to the integrating strategy, the brokering strategy does not take the affected touchpoint sequences out of their original context, but creates a new context around the recurring sequences, which are now connected. Thus, the brokering strategy also changes the touchpoints or sequences in order to now accommodate the new service.

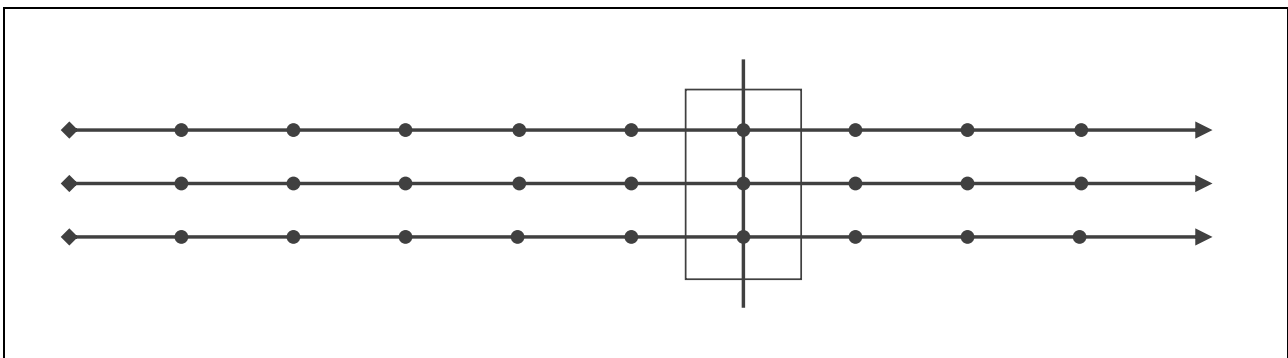


Figure 3-2 Schematic depiction of the brokering strategy

For example, this strategy is frequently implemented by payment services companies, which combine the brokering strategy with the positioning strategy. These companies transform customer payments in a store into an installment payment (positioning strategy) and connect the information and risk from the individual payments to create value for the customer (brokering strategy). Here, companies apply the brokering strategy by entering customer journeys offered by other companies. The repeated paying sequences are connected. They combine the information and spread the risk across these sequences, and thus create new value for customers. For the customer, not any single, one-off use, but rather the repeated use of an offer in different journeys enhances value. In the example, using a brokering company's services across different online shops may enhance the risk assessment associated with installment payment, because the brokering company gathers the information and for example provides an overview of outstanding payments. For the customer, control is increased due to the combination of information from payments at different online shops. For the brokering company in the example, access to a customer's payment history over various instances allows offering more attractive and personalized conditions over time.

The brokering strategy changes the context of the touchpoint, and in some instances also the affected touchpoints themselves are modified. In the above example (payment services), the context of the touchpoints is changed with the brokering strategy. Here, payments can be made through brokering companies and as such form now part of a service offering that the customer chooses for the sake of the combination of information and reduction of risk. The brokering strategy does not target entire journeys but rather concerns selected touchpoints or

sequences, which qualify for the brokering strategy due to their recurring nature. The company applying the brokering strategy is usually the main initiator in negotiating with third-party companies and in offering services to customers.

The brokering strategy is loosely related to an outsourcing strategy (from the perspective of third-party companies) (Ostrom, Parasuraman, Bowen, Patrício, & Voss, 2015, p. 136). One difference of the brokering strategy is that the initiative of connecting journeys usually comes from the company offering the new service. Moreover, outsourcing tends to be a broader concept that encompasses the structure of service provision, but does not guide managers in redesigning the customer journey. In this regard, the brokering strategy provides additional insights.

Brokering: Effect on fulfilling customer purpose

The brokering strategy addresses touchpoints at which the risk associated with fulfilling a customer purpose can be reduced. Companies in the sample target two types of touchpoints with the brokering strategy: first, touchpoints at which customers face a high risk associated with data and second, touchpoints at which customers face a high monetary risk.

Touchpoints including risks associated with data may, for instance, occur when the customer needs to provide credit card data in order to make a payment. In this case, a company applying the brokering strategy can connect the various payment sequences by saving the customer's data in one place (on its own servers) and by providing payment providers with anonymous data. It thereby reduces the risk for customers and at the same time acts as a safeguard for payment providers. In general, at touchpoints associated with high data-related risk, a company can apply the brokering strategy to rebundle customer data and to shift the risk from the customer to the company.

At touchpoints involving high monetary risk for customers, the brokering strategy can equally be applied. Touchpoints with high monetary risks occur, for example, with installment payments, where customers do not pay the entire amount at once. The company receiving the payment also faces risk of payment defaults. A company that applies the brokering strategy can enter the payment sequence and manage the risk of both parties to the transaction (see the example above), while it diversifies the risk across payments and customers. For customers, repeated payment via the brokering company can be used for additional services that ensure higher transparency, for example, by providing bundled information on upcoming payments and the credit status. Often, the company applying the brokering strategy pays the payment receiver the full amount at once, thereby also reducing the monetary risk on this side.

Brokering: Value creation

Customer value. The brokering strategy makes available information that can be shifted between the focal company, the third-party provider, and the customer. The customer receives information on the interplay between the connected sequences and the insights derived from

combining the information of the sequences. The customer has access to more or better information. Also, simplicity can be increased due to the fact that the task of collating information is shifted from the customer to the focal firm. The higher amount of information and new insights from this combination may yield better-informed customers. This in turn may lead to customers' greater perceived or actual *control* over the consequences of the affected sequences. Brokering includes shifting risks between the involved parties. By combining similar recurring sequences, the relevant data can be used to assess the risk involved. Moreover, companies using the brokering strategy may assume some risk for their customers (as they can spread part of the risk over their customer base). This enables them to reduce risk and to increase perceived or actual *security* for their customers. The more sequences are connected, the higher the value that can be derived from the brokering strategy.

Value for the company. Brokering often occurs with companies that enter third-party customers' journeys in which they previously were not present. Companies applying the brokering strategy receive the benefits either from the parties whose sequences are connected or from customers. Bundling risk or information provides customers with information and tools that aid their financial decisions and provide them value. By building this system of connected sequences, companies may increase customer *retention*. Similarly to integrating, the value from brokering for companies increases as more sequences of more customers are connected. Expanding offers over a multitude of third parties increases attractiveness and value for customers. For third-party companies, collaborating with a broker that has a large partner and connects their journeys also increases attractiveness as the network of collaborating companies expands. Companies that have built this customer base and partnering network may benefit from market *penetration* that is difficult to replicate. Finally, the unique combination of various usually non-connected sources of *customer data* may prove valuable and serve as the basis of this strategy.

3.4.2.2.3 Connecting Innovation Strategy

Connecting: Overview

The connecting strategy is defined as creating intersections between the journeys of different customers. A social network that exists privately is replicated on a large scale and connects previously unconnected people. Customers benefit from increased access to and the interplay of knowledge and relationships. When using largely digital service offers by FinTech companies (and the increasingly digital offers of traditional financial service providers), customers rarely meet or interact. The connecting strategy aims to overcome the disadvantages associated with a lack of social relationships by providing digital or physical opportunities for customers to meet and exchange knowledge. The network can be built either with customers as an active part (e.g., member events, networking events) or with customers as passive contributors (e.g., unemployment protection through bundling resources). The journeys of these

customers are aligned so as to intersect at critical points. This may benefit either individual customers or several customers at the same time. The key attributes of the connecting strategy are presented in Table 3-9.

Table 3-9 Summary of the connecting strategy

Definition	Creating intersections between journeys of different customers. A social network is replicated and customers benefit from access to resources, knowledge, and relationships.
Primary outcome	Joining journeys of different customers for resources and synergies.
Related concepts	Community management
Purpose fulfillment	Resource access when fulfilling a purpose
Customer advantage	Community, relationship
Value for the company	Retention, reference, acquisition

Connecting: Strategy and sample application

The connecting strategy harnesses the social value accessible through connecting the journeys of different customers. In contrast to the previous two strategies, which affected a single customer's journeys, the connecting strategy affects the journeys of different customers. It creates intersections between the journeys of different customers in order to create synergies between them (see Figure 3-3). Intersections can concern single touchpoints or entire sequences of touchpoints, which are aligned between customers and interrelated. By creating such intersections, the role of the customer changes into creating the service for oneself but also for other customers. By bringing customers together, existing offers can be enhanced and new offers become possible. The company assumes a mediating, enabling, or organizing role.

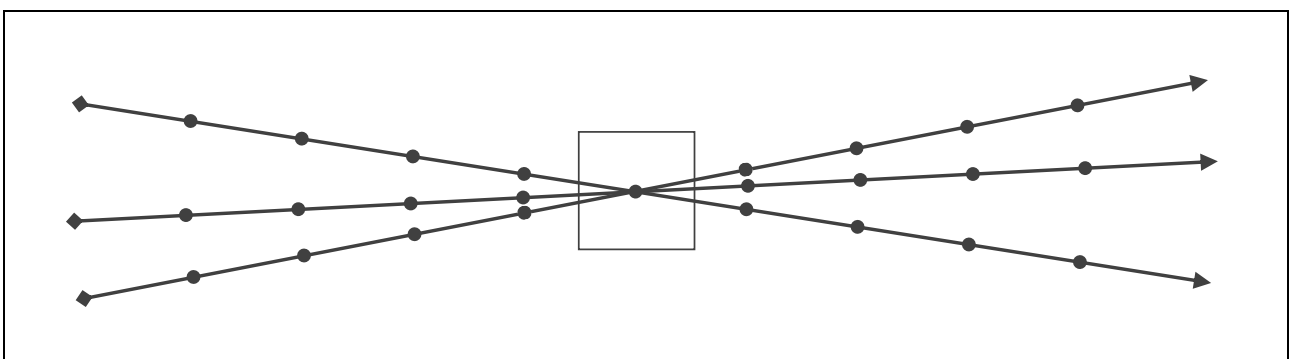


Figure 3-3 Schematic depiction of the connecting strategy

This strategy is, for example, applied by crowdfunding companies, which allow users to connect in order to evaluate investment opportunities. When making investment decisions, users benefit from pooling different opinions and knowledge together. For example, users can connect with other users, e.g., by selecting and adding them to a discussion board via an app. The option of connecting with experts may also exist. In this example, users can discuss options and rate or vote on opportunities. Pooling and exchanging knowledge captures other users'

information and opinions, and thus can complement other tools provided by the company to help users make informed decisions.

The connecting strategy often adds touchpoints or sequences of touchpoints to an existing customer journey in order to improve the service offered and thus also customer experience. This strategy can be applied at the beginning of the customer journey, e.g., in the form of networking events, where potential customers are addressed in the interest phase, or in the serving stage, where exchange with other customers becomes part of the service offer. With this strategy, the company organizes and provides the platform and technology for exchange.

A related concept is customer community management (Bagozzi & Dholakia, 2002, pp. 5-6). This, however, only addresses one facet of the connecting strategy. The connecting strategy is actually more diverse and aims to create a new service, which is provided by customers for other customers and can assume different forms, for instance, that of an active customer community. It can include interactions that are to a stronger degree managed or initiated by the company or that involve one-to-one customer interactions.

Connecting: Effect on fulfilling customer purpose

The connecting strategy is applied to touchpoints at which connecting different customers' journeys improves their access to resources required for purpose fulfillment. This can take two forms. The strategy targets either touchpoint sequences where customers want to fulfill an immediate need or ones where they face a persisting need.

At touchpoints at which customers seek to fulfill an immediate need, companies apply the connecting strategy by providing tools to access their customer network. This is the case, e.g., when customers want to ask other customers a question before proceeding in the customer journey. Designated features at these touchpoints (e.g., a dashboard through which questions can be asked) enable customers to easily connect with other customers and thus to benefit from the pooled knowledge.

At touchpoints at which customers seek to fulfill a persisting or recurring need, companies provide tools that enable customers to build their own personal network. This is the case, e.g., when customers want to learn about investing and want to continuously improve their investing strategy. Here, various tools for building a personal network among customers can be applied, such as facilitating group chats in an app or enabling customers to follow and discuss other customers' investment decisions.

Connecting: Value creation

Customer value. Connecting replicates the benefits of a social network of customers on a larger scale. For customers this means that they can build social ties with other customers and that these social ties create a benefit that surpasses the one provided by the company offer

alone. Customers are contributors to these networks, but also receivers of their benefits. Benefits may include a safety net (based on the social cohesion of a network) or an increased network (through access to a larger pool of people and their willingness to share this network). The *relationships* and the community that become accessible through the network constitute the main customer advantage. The benefits of this translate mainly into the use of information and knowledge from the network. Moreover, it may translate into the possibility of sharing risk.

Value for the company. Network membership builds social ties among fellow customers. These ties might lower customer's willingness to change providers and instead remain in the network. The connecting strategy may thus be used as a means of increasing customer *retention*. If applied to potential customers, who are at the beginning of their customer journey, the connecting strategy may be used as a means of *customer acquisition*. For example, customers may be invited to networking events where they can meet existing customers and learn about their experience. The potential additional benefits for the customer may trigger word-of-mouth behavior and thus may increase customer *reference* behavior.

3.4.2.3 Strategies Changing the Company Role: Company-Initiated Changes

3.4.2.3.1 *Complementing Innovation Strategy*

Complementing: Overview

The complementing strategy is defined as offering touchpoints that allow the customer to pass through the journey in a logical process. It addresses the changing intensity of interactions that is needed by customers throughout their journey. The range of possible touchpoints is tailored to match customers' varying and individual needs. To apply the complementing strategy, a company may create parallel sequences that all allow customers to achieve the same purpose but in different ways. For this, the company creates a flexible choice of touchpoints for customers that allows them to choose between various types of interaction to achieve the same purpose. Or it may set up one sequence that flexibly caters to all potential customer needs. Creating these structures allows the company to vary the intensity of attending to customer needs. It is crucial that the possible touchpoints are logical for customers to understand. A summary of the complementing strategy can be found in Table 3-10.

Table 3-10 Summary of the complementing strategy

Definition	Offering touchpoints that allow the customer to pass through the journey in a logical process. The assortment of possible touchpoints is tailored to match customers' varying and individual needs.
Primary outcome	Aligning touchpoints among each other and according to changing needs.
Related concepts	Customer intimacy
Purpose fulfillment	Optimizing purpose fulfillment
Customer advantage	Simplicity, relationship
Value for the company	Retention, trust

Complementing: Strategy and sample application

The complementing strategy describes the company's effort to orchestrate the touchpoints in a way that matches customers' changing and situational needs. The touchpoints of similar dependent customer journeys or those within one journey are newly interrelated (see Figure 3-4). In this way, the touchpoints may be staggered to increase the interaction intensity with which the customer is accompanied through the journey. Another way is to offer touchpoints that display consistent intensity in that they are prepared to even meet extreme customer needs, which can arise throughout the customer journey, and to surpass customer expectations or needs in regular instances. This provides the customer with a sense of consistency throughout the journey. It is crucial that all optional touchpoints are aggregated in a logical process for the customer. According to the implemented alternative, this may concern the choice or sequence of interactions.

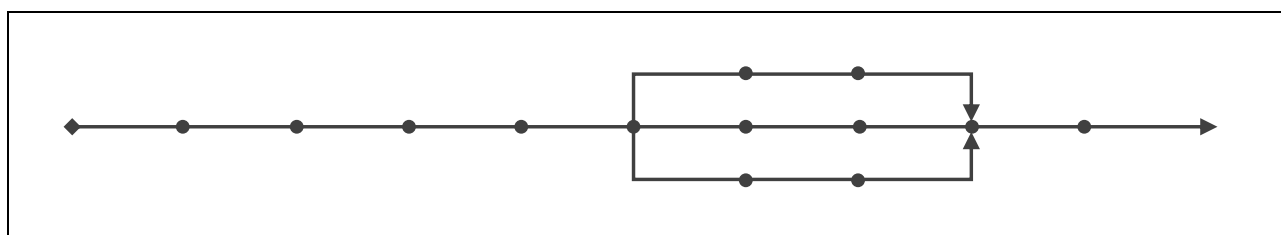


Figure 3-4 Schematic depiction of the complementing strategy

To apply the complementing strategy, several of the investigated companies have created consistent help teams (consisting of a small number of persons). These teams are assigned to particular customers and are equipped to respond to any need these customers might encounter. The help teams are consistently available and accompany the customers throughout the journey. Customers gain a sense of being looked after, as the help teams know them and are familiar with previous interactions. The teams might supplement other options for contacting the company and receiving assistance. For the company, this means more effort and resources compared to a traditional help desk, even though closely attending to customer needs might

not be required in all instances. Team selection and organization are oriented towards the needs customers may encounter throughout the journey.

The complementing strategy may affect the entire customer journey, from start to finish. This strategy means that touchpoints need to be set up to create a logical process for the customer throughout the entire journey. Therefore, the complementing strategy concerns the structural design of the customer touchpoints.

A related concept is customer intimacy (Treacy & Wiersema, 1993, pp. 87-89). Complementing is a strategic option for implementing the concept of customer intimacy in designing the customer journey. The individual customer needs can be recognized and addressed individually in all interactions.

Complementing: Effect on fulfilling customer purpose

The complementing strategy is applied to optimize customers' ability to fulfill a purpose in their journey. This concerns either analogous recurring sequences of touchpoints that address a similar need or selected touchpoints in the customer journey at which the customer journey can be optimized.

In the first case, the strategy addresses different touchpoints in recurring sequences, in which the intensity of interactions changes. Here, the company accounts for the different intensity by which customers want to fulfill a purpose by varying how a purpose can be fulfilled and by letting customers influence how they fulfill it. For example, an insurance brokering app may provide customers with different options for handling recurring needs in the journey, for instance, filing a claim (via a broker or directly with the insurance provider). By applying the complementing strategy, the customer can choose on a case-by-case basis which interaction form is preferable.

The complementing strategy is also applied to non-recurring touchpoints in the customer journey where purpose fulfillment in the journey can be optimized, e.g., in response to changing needs. The company monitors the customer journey in order to inform the customer once optimizations are possible, such as when an insurance broker identifies gaps in a customer's insurances. Moreover, the company can enrich the customer journey with proactive information on optimization potential, such as when the insurance broker proactively informs the customer about cheaper insurances or proactively adapts insurances due to changing customer requirements.

Complementing: Value creation

Customer value. The main advantage of the complementing strategy for customers lies in its *simplicity*. The customer journey is designed so that customers can intuitively choose that specific touchpoint (or sequence) most conveniently and most effectively suited to achieving their goals. The fact that customers can easily understand the possible touchpoints and that

they follow the customer logic may lead to peace of mind and a low effort when pursuing a purpose and interacting with the company. As in the example of a consistent help team, the strong orientation towards customers' needs and close attention to customers may contribute to building the customer *relationship*. It helps customers to feel that their individual needs are being cared for.

Value for the company. Close attention to customer needs, which follows from the complementing strategy, allows companies to acquire a better knowledge of their customers' individual histories and needs. Catering to these, they may reduce the risk of customer defection and increase *retention*. Close attention to needs may even go so far that employees who support a customer's decision process can increase their impact on the decision outcome. As the architecture of the customer journey is simple to understand, and as customers feel that they can interact with the company exactly according to their needs, they are less inclined to switch and instead tend to build loyalty. The increase in loyalty often goes hand in hand with building customer *trust*, as customers trust that the company is prepared to fulfill their current and future needs.

3.4.2.3.2 Consolidating Innovation Strategy

Consolidating: Overview

The consolidating strategy is defined as reducing the number of touchpoints, effort, or time that customers spend at touchpoints. It is often driven by two goals: to reduce the number of steps it takes customers to fulfill a purpose and to make the remaining steps more convenient. To achieve this, touchpoints can be eliminated, automated, or pushed to the back-end. This is regularly triggered by advances in technology, which enable changed interactions in the customer journey. Table 3-11 gives an overview of the consolidating strategy.

Table 3-11 Summary of the consolidating strategy

Definition	Reducing the number of touchpoints, effort, or time at touchpoints. Touchpoints can often be eliminated, automated, or pushed to the back-end.
Primary outcome	Automation, elimination, or reduced customer input at touchpoints.
Related concepts	Lean consumption
Purpose fulfillment	Activity completion when fulfilling a purpose
Customer advantage	Speed, effort reduction
Value for the company	Transaction costs, lower barriers to entry

Consolidating: Strategy and sample application

The consolidating strategy reduces the number of steps, effort, or time it takes for customers to pass through the customer journey in order to fulfill a purpose (see Figure 3-5). Companies can achieve this through process automation, touchpoint elimination, or reduced customer input at touchpoints, or by a combination of these. In many cases, this means that responsibilities previously assumed by the customer are now shifted to the company. The consolidating strategy often comes along with changes in the back-end, which allow changing the interface of single touchpoints and the set-up of touchpoint sequences. The consolidating strategy can also entail reducing those touchpoints that are perceived as inconvenient by the customer, e.g., touchpoints that request customer information that customers do not have conveniently at hand. The consolidating strategy may imply the introduction of alternative touchpoints that replace inconvenient touchpoints.

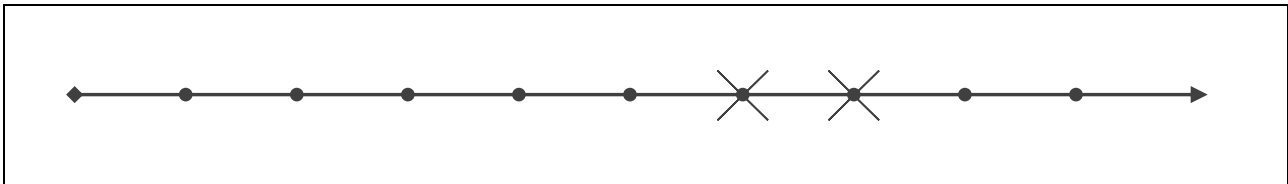


Figure 3-5 Schematic depiction of the consolidating strategy

The consolidating strategy is frequently applied by companies and can thus often be observed in new and improved customer journeys. For example, many companies use the consolidating strategy to increase the convenience with which customers can use their service. With this objective, the login process of many apps has been changed from entering a user name and a password to instead using biometric identification (e.g., fingerprint, voice, or face recognition), thus reducing the amount of information that needs to be typed, the information the customer has to remember, and the time spent completing this step in the journey. While the login process is not eliminated altogether, inconvenient touchpoints are eliminated and touchpoints that are easy to pass through (while attaining the same security standards) are included instead. Also, the introduction of one-click payments for registered customers is an application of the consolidating strategy. While the customer needs to still provide input, doing so becomes much simpler and faster.

The consolidating strategy can address individual independent touchpoints or sequences of related touchpoints in the customer journey. The changes that are implied by this strategy require restructuring the customer journey. Due to the required restructuring and the associated changes in the back-end, the consolidating strategy is initiated by the company.

The consolidating strategy is related to the concept of lean consumption (Womack & Jones, 2005, pp. 60-61). Both are aimed at creating a smooth process in which inefficiencies are avoided by eliminating superfluous process steps and by preventing process disruptions. Compared to lean consumption, where high efficiency is desirable, the consolidating strategy strikes a balance between consolidating the customer journey to improve customer experience

and company internal processes on the one hand, and providing enough opportunities for the company to actively influence customer experience on the other.

Consolidating: Effect on fulfilling customer purpose

The consolidating strategy is applied at three different types of touchpoints. It can be applied to touchpoints that demand customer activity, to ones that force customer inactivity, and to ones that can be integrated or replaced by other touchpoints.

At many touchpoints in the customer journey, the customer has to be active to fulfill a purpose. The main objective of applying the consolidating strategy at these touchpoints is to reduce customer effort during the activity. This is the case, for example, during the login process, where customers need to provide identification and authentication, traditionally in the form of a user name and password. Frequently, the consolidating strategy is applied by using new technologies to allow users to login with biometrical information, thus eliminating the need to remember and type passwords.

Similarly, at many touchpoints the customer has to be inactive and wait for a company reaction in order to proceed with fulfilling a purpose. At these touchpoints, the main objective of the consolidating strategy is to reduce the time of forced inactivity. This is the case, for instance, when credit worthiness is approved or when credit payment is transferred, traditional processes that involve different parties and may take several days. Applying the consolidating strategy in these cases, companies have automated many of the processes involved in order to reduce the time until a decision is made to a few hours or even to instant reactions.

Finally, the consolidating strategy affects those touchpoints that can be integrated in other existing touchpoints or that can be replaced by new touchpoints that are better suited to fulfill a customer purpose. Here, the company eliminates superfluous touchpoints in the customer journey. This is the case with mobile wallets, which integrate all functions required for making a payment in a smartphone app, thus allowing customers to skip the use of credit cards or cash.

Consolidating: Value creation

Customer value. The main advantage for the customer lies in the simplification of the customer journey. Specifically, reducing the number of touchpoints requiring active customer input, as well as automating processes and shifting them to the back-end, increases the *speed* of passing through a sequence and achieving a purpose. At the same time, reducing customer input and only asking for conveniently available customer input *reduces customer effort*.

Value for the company. The automation of processes may reduce *transaction costs* for the company. Moreover, as the consolidating strategy reduces the time and effort spent in the process of completing a transaction, it becomes easier for customers to interact with the company. In the financial services industry, complicated and time-consuming interactions with

providers make interactions unattractive for customers and does not encourage switching providers. Reducing time and effort in this regard may increase customers' switching propensity. When entering a market as a new player, as FinTech companies do in the financial services industry, the consolidating strategy may encourage switching behavior in customers and may increase attractiveness over other players. Thus, this allows companies to overcome *barriers to entry*.

3.4.2.3.3 *Anticipating Innovation Strategy*

Anticipating: Overview

The anticipating innovation strategy is defined as a strategy in which companies collect and provide customers with information on touchpoints in the future customer journey. Alerts can be provided before the customer arrives at an anticipated touchpoint. With this strategy, companies adjust touchpoint sequences according to expected upcoming touchpoints and thus prepare for expected future customer paths. The customer may be informed early on about relevant events in the customer journey while the company can anticipate and prepare relevant changes in the customer journey, thus reducing uncertainty for both company and customer. To implement this strategy, companies collect and analyze information that may prove relevant for anticipating future touchpoints. Customers may grant access to a larger amount of information and may be asked for information earlier in the customer journey than usual. Table 3-12 provides an overview of the characteristics of the anticipating strategy.

Table 3-12 Summary of the anticipating strategy

Definition	Collecting and providing information on touchpoints in the future customer journey. Alerts can be provided before the customer arrives at an anticipated touchpoint in the journey.
Primary outcome	Preparing for future directions of the individual journeys
Related concepts	-
Purpose fulfillment	Planning for future purpose fulfillment
Customer advantage	Individualization, control, transparency
Value for the company	Customer data, risk reduction

Anticipating: Strategy and sample application

The anticipating strategy allows the company to adjust touchpoint sequences according to expected upcoming touchpoints in the customer journey. Companies collect information on how an individual customer journey may evolve. Information on future touchpoints is collected early in the customer journey (see Figure 3-6). Companies analyze corresponding data from various sources and ask customers for relevant information. With the gained insights,

companies can advise customers early on in the customer journey based on the anticipated future path of their personal journey. Not only does this information help companies to prepare for the customer journey, but it can also be used to simulate and thus to concretize possible future scenarios for the customer and to anticipate uncertainties. Customers encounter a customer journey that is tailored to their expected future requirements. The path of the customer journey can thereby become more consistent and at the same time more transparent. The anticipating strategy is applied in situations where the customer journey can take significantly different future paths and where these differences strongly impact the company or the customer.

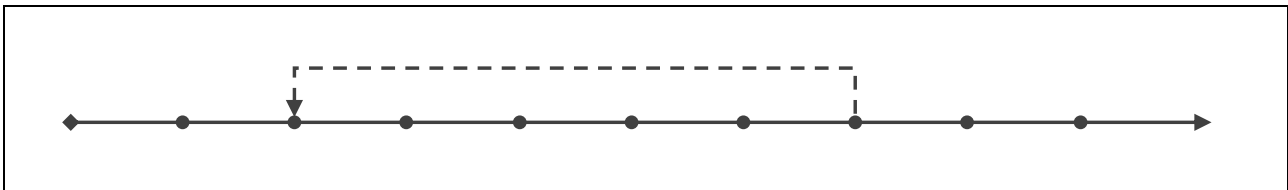


Figure 3-6 Schematic depiction of the anticipating strategy

Several FinTech companies use the anticipating strategy to create alerts for customers if anticipated events have a relevant impact on the future customer journey. This may occur when changing life events (e.g., going to university, house building, retirement) are expected that change the terms of a contract. When customers are informed as early as possible about these effects, the perceived uncertainty throughout the customer journey decreases. Moreover, early anticipation of such events can be used by companies to prepare and tailor the customer journey according to the gained insights. To operationalize this strategy, companies access diverse data sources, which include asking customers directly for relevant information (e.g., about life events) or gathering this information indirectly (e.g., by analyzing social media data).

The anticipating strategy concerns interrelated touchpoints throughout the entire customer journey. The touchpoints that are affected by anticipated events are preceded by those touchpoints that collect relevant information on these events. With the anticipating strategy, the links between these touchpoints are actively created and strengthened by the company. Thus, the anticipating strategy is driven by the company. While the customer provides relevant information, the company works with this information to anticipate future paths in the customer journey and to adjust the customer journey according to the obtained insights.

Anticipating: Effect on fulfilling customer purpose

The anticipating strategy is applied at touchpoints that allow planning ahead for the future fulfillment of customer purposes. The strategy is applied to sequences that allow the company to prepare for future events in the customer journey and to sequences during which the possible paths in the future customer journey are shaped.

The anticipating strategy can be applied to touchpoints that are affected by future events in the customer context that can be anticipated by the customer. In this case, the company asks for information about events which will impact the customer journey during interactions that

occur before the anticipated event. This means that the effects of events in the customer context are anticipated and that the further customer journey is prepared accordingly. This is the case, for example, when companies ask customers for anticipated life events and adjust their service offer to match the anticipated effects.

The anticipating strategy is applied differently to events that cannot be predicted reliably, but that nevertheless affect the path that the further customer journey might follow. In this case, the company informs the customer, e.g., in the form of an alert, once a change due to a particular event is encountered or recommended in the customer journey. At those touchpoints that precede the event, customers and companies determine which events could significantly affect the customer journey and which alerts will be provided for. For example, customers may predetermine desirable journey paths that should be pursued once a stock that they invested in changes in a certain way or in case a large investment is to be made.

Anticipating: Value creation

Customer value. As the anticipating strategy prepares for changes and events that are unique to individual customer journeys, the strategy devises customer journeys in an *individualized* manner. As the customer journey is prepared according to events that can be anticipated, customers are able to better *control* the path of their customer journey. Also, as the impact of events and possible changes on the customer journey is communicated and made clear, the *transparency* of interactions is increased.

Value for the company. For the company, the anticipating strategy provides access to additional *customer data*. Based on this customer data, the company can devise better tailored and individual service offers for its customers. Moreover, on the company side, the company can align processes and plan resources for future interactions. Uncertainty and *risk reduction* can be achieved in the processes and customer interactions become more *predictable*.

3.4.2.4 Strategies Changing the Customer Role: Customer-Initiated Changes

3.4.2.4.1 *Positioning Innovation Strategy*

Positioning: Overview

The positioning innovation strategy is defined as allowing customers to shift the position of touchpoints in the journey. They can determine the position of touchpoints within a predetermined scope. The positioning strategy is applied to reduce upfront commitment for customers in situations where they are concerned with future uncertainties. Customers are often presented with choices that affect the customer journey but that involve uncertainty, as with choices that concern future events. The positioning strategy addresses customers' insecurities with regard to these choices and allows for shifting decisions and commitments within the customer journey to a point where customers can make them with greater confidence. This

can also be operationalized by dividing what was originally one decision into several decisions throughout the customer journey. Applying the positioning strategy aims to ask for customer decisions that affect the further journey only once they become relevant to the customer and to the following sequences of the journey. The positioning strategy can also be applied by allowing customers to (partly) adjust initial decisions over the course of the journey. Table 3-13 summarizes the positioning strategy.

Table 3-13 Summary of the positioning strategy

Definition	Allowing the customer to shift the position of touchpoints in the journey. Customers can determine the position of touchpoints within a predetermined scope.
Primary outcome	Flexible commitment to touchpoints, possible exemptions.
Related concepts	-
Purpose fulfillment	Preference determination for fulfilling a purpose
Customer advantage	Flexibility, relief
Value for the company	Penetration

Positioning: Strategy and sample application

With the positioning strategy, customers can determine the position of touchpoints (or touchpoint sequences) in the customer journey. Customers receive the opportunity to shift the position of touchpoints or entire touchpoint sequences to predetermined places in the customer journey (see Figure 3-7). More specifically, customers may bring touchpoints affecting their further journey either forward or delay them in the journey. Also, a touchpoint may be multiplied and positioned at more than one instance in the journey, e.g., when allowing customers to split one-time payments into installment payments. The strategy thereby accounts for uncertainty that the customer faces in the journey. The strategy shifts the time at which a customer needs to make a decision that affects the further customer journey. With this strategy, the relationship between touchpoints is altered and interdependencies of touchpoints are modified.

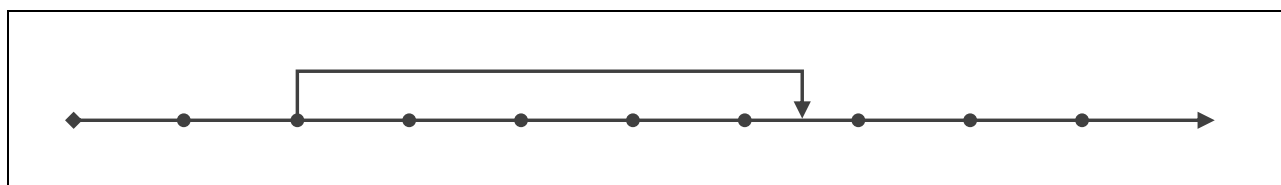


Figure 3-7 Schematic depiction of the positioning strategy

The positioning strategy becomes especially relevant to those touchpoint sequences that usually have a fixed position in the journey. Several FinTech companies have applied the positioning strategy to credit repayments. Instead of fixing repayment dates, these companies account for customers' changing life situations throughout the process and allow customers to flexibly shift due payments forward and backward in the customer journey. As long as these

shifts happen within predetermined limits, they can be made without additional charges. Other FinTech companies have applied the positioning strategy to offer timely limited services, such as in the form of a credit card only valid for a short time. In this form, customers receive the desired service but require less commitment and need to fulfill less strict terms to receive the service.

The positioning strategy affects touchpoint sequences that require customer commitment. The positioning strategy may be applied at one or more sequences in the journey and will always affect the architecture of the subsequent sequences and potentially also the preceding sequences. This means that the positioning strategy affects interdependencies between different touchpoints in the customer journey. The possibility of shifting a commitment is provided for by the company. The customer in turn initiates the actual touchpoint shifts that encompass decisions and commitments.

Positioning: Effect on fulfilling customer purpose

The positioning strategy is used at touchpoints at which customers determine their preference for fulfilling a customer purpose. The strategy is applied both to touchpoints where customer preferences are context-dependent and to ones where customer preferences are context-independent.

At touchpoints where preference structures are context-independent, customers are able to make decisions and to indicate their preferences for interactions before knowing their situation when they pass the touchpoints. In these cases, companies can ask customers early on in the customer journey for their preferences concerning future interactions. As customer preferences are not dependent on situational factors, customers are able to commit early on to the content and time of future interactions. For companies, this provides additional information and thus increases the predictability of future interactions, while customers do not need to be concerned with these decisions throughout the further customer journey. This is the case, for example, with investment platforms that automate customers' investment choices according to preset preferences.

The positioning strategy is also applicable to touchpoints at which the preference structures are context-dependent and that customers find difficult to assess before they know the actual situational context of the interaction. In these instances, companies ask customers to commit content-wise but granting time-flexibility. This means that customers can shift the touchpoints in the customer journey forward or backward once they know their preferences. This form of the positioning strategy is applied, e.g., to installment payments, where companies allow customers to flexibly shift the payment dates of installment payments within preset limits, without needing to commit to fixed due dates upfront.

Positioning: Value creation

Customer value. The option to repeatedly change and adjust the positioning throughout the journey creates *flexibility* that allows the customer to react to changing circumstances. Especially as touchpoints approach, they may be adjusted to situational demands. For the customer, the positioning strategy reduces committing themselves to decisions involving future uncertainties. It creates customer *relief*, as customers are burdened neither with making assessments nor with committing to them. Instead, with the positioning strategy, companies account for the uncertainty faced by customers. At the same time, the positioning strategy can also be applied to allow customers to commit early on in the customer journey and at one point in time, thereby releasing the customer from future decisions and increasing predictability for companies.

Value for the company. With this strategy, companies reduce risks and account for uncertainties for customers, which encourages purchases and a continuing relationship. It might therefore create higher sales conversion. Moreover, since customer potential can be better accessed, *penetration* value increases. At the same time, the risk for the company in the customer relationship is reduced, as customers are able to provide more accurate information at touchpoints.

3.4.2.4.2 *Empowering Innovation Strategy*

Empowering: Overview

The empowering strategy provides customers with the tools or knowledge to take responsibility for touchpoints in the journey. With the empowering strategy, the company transfers tasks to customers, and thereby increases their scope of influence at the respective touchpoints and on the course of their individual customer journey. The empowering strategy improves customers' ability to achieve their purposes at touchpoints. This may involve educating customers, building new skills, or providing tools that compensate for lacking skills. It may also include providing new information at touchpoints, changing the presentation of information, or providing customers with new insights that impact the further journey. As a result, this strategy enables customers to better deal with future touchpoints and increases their effectiveness in passing through the journey. An overview of the empowering strategy is provided in Table 3-14.

Table 3-14 Summary of the empowering strategy

Definition	Providing customers with the tools or knowledge to take responsibility for touchpoints in the journey. Customers' scope of influence on the course of the individual journey is increased.
Primary outcome	Enabling customers to assume additional tasks.
Related concepts	Customer empowerment
Purpose fulfillment	Skill adaptation to fulfill a purpose
Customer advantage	Transparency, control
Value for the company	Cross-selling

Empowering: Strategy and sample application

The empowering strategy enables companies to equip customers with the means needed to proactively devise future interactions according to their needs. Companies provide customers with tools or knowledge or build customers' competencies, which allows customers to effectively pass through the journey and to fully capitalize on interactions to their benefit. The increase in competency also implies that responsibility is shifted from the company to the customer. The customer role changes and customers become more proactive in shaping their own customer journey. The responsibility that is passed on to customers implies that customers can change the customer journey. Thus, to operationalize the strategy, the company modifies touchpoints in the customer journey or adds new touchpoints in order to prepare customers for taking responsibility for upcoming future touchpoints (see Figure 3-8).

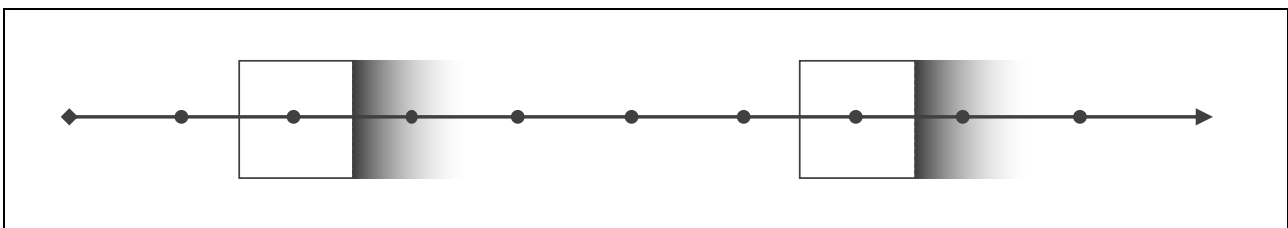


Figure 3-8 Schematic depiction of the empowering strategy

Several FinTech companies operating in the investment business have implemented the empowering strategy by offering educational services that go beyond standard customer information in the industry. Next to educational materials (e.g., webinars) and automated tools (e.g., based on robo advice), these companies offer free mentoring services aimed at educating customers. Customers who use these mentoring services improve their skills to manage their investments, which benefits both the company and the customer in future interactions.

The empowering strategy affects the immediate touchpoints at which customers can increase their scope of influence as well as subsequent touchpoints in the customer journey. Therefore, the empowering strategy always concerns sequences of connected touchpoints. The main premise of the empowering strategy is to enable customers to exploit the opportunities in the

customer journey. To this end, companies increase the scope of customer influence in the customer journey and thereby increase customer responsibility for interactions. Customers using these offers therefore initiate the changes in the subsequent interactions.

The empowering strategy is related to the concept of customer empowerment (Prentice, Han, & Li, 2016, p. 38). Contributing to the premise that customers feel in control of the customer journey when they are empowered, the empowering strategy equips customers with the prerequisites for achieving this objective.

Empowering: Effect on fulfilling customer purpose

The empowering strategy is applied at touchpoints at which the level of customer skills determines the ability to fulfill a purpose. The strategy is especially critical when customer skills are inadequate for fulfilling a purpose or need to be adapted in order to fulfill a purpose. The application of this strategy varies between touchpoints requiring data-based decision skills and touchpoints requiring qualitative information assessment skills.

When applying the empowering strategy at touchpoints where data-based decisions are required, decisions that customers take can often be expressed through algorithms. Companies therefore use this strategy to compensate for a lack of customer skills. They do so by providing tools and applications that assume the task of structuring and analyzing data in a way that prepares customer decision making. The strategy is especially relevant at touchpoints where higher skills in making data-based decisions positively affect the decision outcome and further customer journey, such as in the case of managing personal expenses with a personal finance app. By tracking and analyzing data on income and expenses, customers are enabled to budget and plan expenses even when they do not have the confidence or skills to perform the corresponding analyses themselves.

When applying the empowering strategy at touchpoints at which a qualitative assessment of information is required, it is more difficult to automate the assessments. Instead, companies therefore aim to build and improve the relevant customer skills. This can be achieved by presenting information prior to assessment, with the goal of educating customers and by making relevant information accessible during the assessment. For example, a qualitative assessment of investment options is a necessary assessment for choosing an investment strategy. Providing customers with webinar training or mentors allows them to learn about the necessary considerations in order to make more informed and thus better assessments and choices.

Empowering: Value creation

Customer value. The empowering strategy creates competencies that allow customers to better take *control* of the interactions in the journey. With financial services, this means that customers are in charge of their financial decisions. Depending on customer prerequisites,

lacking skills are either built or compensated for. In both approaches, the goal is that customers can understand the touchpoints in a way that they are perceived as simple. In this regard, the empowering strategy provides customers with higher *transparency* at touchpoints.

Value for the company. With the empowering strategy, the company develops its customers into a well-informed customer base. Customers are better able to use services and may invest in the relationship. Stronger engagement allows companies to specifically target each customer and opens up opportunities for *cross-selling*. Specifically, many companies applying the empowering strategy were observed to make use of higher customer expertise to offer complementary and more advanced services.

3.4.2.4.3 *Co-creating Innovation Strategy*

Co-creating: Overview

In the co-creating strategy, customers design or co-create the interface at a touchpoint. This strategy gives customers the possibility to shape interactions according to their individual needs, preferences, and logic. To implement the co-creating strategy, the company designs the touchpoint to allow customers to modify the interface. Customers can change the front-end of the interaction without impacting the back-end. Designing the interface enables customer to create value and to form a stronger attachment. Table 3-15 summarizes the attributes of the co-creating strategy.

Table 3-15 Summary of the co-creating strategy

Definition	Designing or co-creating the interface at touchpoints. Customers assume the task of matching the front-end of the interaction with their own preferences, logic, and requirements.
Primary outcome	Enabling customers to assume additional tasks.
Related concepts	Co-creation
Purpose fulfillment	Touchpoint accessibility for purpose achievement
Customer advantage	Individualization, accessibility, emotional value
Value for the company	Acquisition, customer feedback

Co-creating: Strategy and sample application

The co-creating strategy allows customers to actively shape the interface at specific touchpoints. It provides customers with the opportunity to either design or co-create the interface, without affecting the interaction itself or the further customer journey (see Figure 3-9). Thus, similarly to the empowering strategy, the co-creating strategy shifts tasks to the customer. However, in contrast to the former, where customer influence is expanded so as to impact the

customer journey, the co-creating strategy only allows customers to impact individual touchpoints (or a limited range of touchpoints). Thus, it affects the context in which a touchpoint is embedded, without changing the interaction itself at the touchpoint. To implement the co-creating strategy, a modular touchpoint interface is created. The customer can choose or combine modular elements to create a personal touchpoint interface. Thus, the front-end of the interaction can be designed or modified by the customer, while neither the interaction itself nor the involved back-end processes are affected.

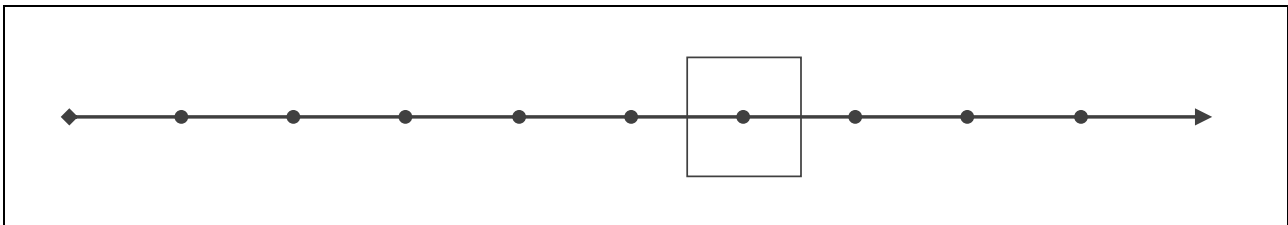


Figure 3-9 Schematic depiction of the co-creating strategy

Several FinTech companies that offer stock trading platforms apply the co-creating strategy. Customers can apply their own logic to organize their portfolio, such as an organization around a common theme or perceived trend. As this logic is applied to personal portfolios, stocks can be managed and traded accordingly. While the company offers the functionality for applying a personal logic to the portfolio, the customer assumes the task of creating and applying the logic to the portfolio. The changes implemented by the customer affect the appearance of the portfolio, while company processes are not impacted.

The company offers options for modification at touchpoints in the front-end and sets up the processes to facilitate the options associated with the co-creation in the back-end. The customer actively collaborates and shapes the touchpoint, in order to derive benefits from the co-creating strategy. The co-creating strategy is mostly applied to touchpoints that the customer interacts with regularly, as the customer is most inclined to invest the time and effort required for those interactions regularly providing the benefits of the co-creating strategy.

The co-creating strategy builds on the concept of customer co-creation (Prahalad & Ramaswamy, 2004, p. 5). This strategy actively involves customers in designing a touchpoint interface that appeals to them. As companies do not need to identify customer needs and preferences on the level of the individual customer but instead receive this information from the customer, this strategy reduces the risk for companies and saves resources. Companies apply the co-creation principles to selected narrow aspects of customer interactions.

Co-creating: Effect on fulfilling customer purpose

The co-creating strategy is applied to improve customer access to those touchpoints that are required for fulfilling a purpose. Tailoring touchpoints to the customer preferences enhances touchpoint accessibility and allows customers to better achieve a purpose. Usually, the strategy concerns recurring touchpoint interfaces that are repeatedly encountered by customers.

Strategy application varies between touchpoints where different preferences result from different customer logics and understandings and ones where customer preferences vary according to taste.

At touchpoints at which interaction logic varies for different customers, the co-creating strategy can be applied to allow customers to shape the interaction according to their own logic without the company having to know these preferences upfront. The company allows customers to indicate their own logic and then presents the interactions accordingly. This is the case for personal finance management applications, which let customers determine groups in which their expenses should be analyzed and that present all subsequent information according to these indicated groups.

At touchpoints at which customers' taste regarding the interface differs, the co-creating strategy allows customers to design the interface according to their own preferences. In this case, the co-creating strategy affects the design but not the content of the interface. For example, a banking app that is set up in a modular way may allow customers to change its appearance according to their own taste. These modifications improve customers' subjective and perceived touchpoint accessibility, and thus also subjective customer experience.

Co-creating: Value creation

Customer value. The co-creating strategy enables customers to express their preferences and thus to *individualize* the service. Customization according to individual needs increases service *accessibility*. Apart from these practical improvements, it was observed that this strategy gives customers the possibility to express their individuality. It provides a sense of a highly customized service, which therefore also has *emotional value* for customers.

Value for the company. The co-creating strategy allows customization tasks to be transferred to the customer. Especially the emotional value that customers attach to customizing the interaction serves as a differentiating factor and enables companies to attract new customers. Therefore, the co-creating strategy eases *customer acquisition*. The co-creating strategy allows the company to offer a customized service without having to assess customers' individual preferences. Analyzing the customizations undertaken by customers allows making inferences on their different needs and thus indirectly provides the company with *customer feedback* on an individual level.

3.4.2.5 Examples of the Strategies

Figure 3-10 depicts first-order examples and the second-order themes as well as the aggregated dimensions that were developed in the analysis and that have been discussed above. The first-order examples in this figure illustrate the nine innovation strategies with examples for implementations by the studied FinTech companies.

Aggregated dimension	Changed context: Bridging journeys			Changed company role: Company-initiated changes			Changed customer role: Customer-initiated changes		
Second order themes	Integrating	Brokering	Connecting	Complementing	Consolidating	Anticipating	Positioning	Empowering	Co-creating
	<div>Grow</div> <div>Offers an ecosystem of FinTech solutions for established financial institutions.</div>	<div>Wealthfront</div> <div>Analyzes financial habits by combining information from all linked financial accounts.</div>	<div>HashChing</div> <div>Connects and groups borrowers with similar loan needs, so that they can get better rates from lenders.</div>	<div>Anivo</div> <div>Provides an insurance check that reviews customers' insurance contracts and suggests cheaper alternatives.</div>	<div>TipRanks</div> <div>Applies natural language processing to aggregate masses of information on investment options through AI.</div>	<div>Credit Karma</div> <div>Offers a credit simulator which anticipates how the credit score is affected based on customer information.</div>	<div>Azimo</div> <div>Allows international money transfers where the receiver chooses how the money is received after it has been sent.</div>	<div>Easy Equities</div> <div>Uses a demo investment account for education purposes that teaches customers about investing.</div>	<div>Motif Investing</div> <div>Allows investors to group stocks in baskets of stocks. The groups can be determined and labeled by the user.</div>
First order examples	<div>League</div> <div>Integrates health benefits with wellness benefits in one health insurance. All services are accessible through League.</div>	<div>Payoneer</div> <div>Provides one common local banking interface for all international money transfers.</div>	<div>OurCrowd</div> <div>Connects users in a digital "deal room" where they can evaluate investment opportunities.</div>	<div>Fluo</div> <div>Shows gaps and redundancies in insurance coverage. Users can purchase alternative insurances possible via the app.</div>	<div>Kabbage</div> <div>Simplifies the application for business loans by automating the processing of various sources of information on performance.</div>	<div>Hello Soda</div> <div>Predicts likely occurrences of events in customers' life that affect the financial behavior.</div>	<div>Doreming</div> <div>Transforms a monthly salary into daily payments, so that employees can access earnings before the actual pay day via an app.</div>	<div>Fluo</div> <div>Explains cover of insurances (e.g., through visualizations, infographics) to make cover immediately visible.</div>	<div>Tink</div> <div>Allows users to set own categories of expenses, which are then used to analyze financial patterns.</div>
	<div>Tink</div> <div>Integrates different bank accounts into one. All accounts can be managed via Tink.</div>	<div>NewBanking</div> <div>Stores customer data centrally. Customers can manage this data and financial institutions can access selected information.</div>	<div>Spriggy</div> <div>Offers a prepaid card and mobile app for children that can be accessed and managed by parents.</div>	<div>Knip</div> <div>Provides alternatives for making a claim with the insurer via the Knip app: directly with the insurer or with support by Knip.</div>	<div>Kueski</div> <div>Simplifies the registration process. Asks for information that customers have easily at hand (e.g., identity is verified with a "selfie").</div>	<div>Motif Investing</div> <div>Allows predetermining a price (change) of invested stocks at which customers are alerted or at which stocks are sold.</div>	<div>Funding Circle</div> <div>Allows investors to set bidding preferences for opportunities before the actual bid which is automated.</div>	<div>HashChing</div> <div>Helps customers understand financial processes, e.g., by a section dedicated to make calculations (e.g., for borrowing capacity).</div>	<div>Quantoz</div> <div>Uses an open API, so that customers can design their own digital wallet.</div>

Figure 3-10 Examples for implementations of the nine innovation strategies

3.4.2.6 Relationship between the Strategies

3.4.2.6.1 *Frequencies of the Strategies*

The frequency with which each of the nine strategies was applied in the sample (92 FinTech companies) is shown in Figure 3-11. In total, two-thirds of those companies (66%, i.e., 61 out of 92 companies) applied the consolidating strategy in the customer journey, making this the most frequently applied strategy. This does not come as a surprise, as FinTech companies predominantly enter the financial services industry with technology-based innovations, which are often aimed at automating processes and at reducing the steps needed to fulfill a purpose. Companies in the sample frequently use the empowering strategy (52%). The use of technology enables customers to take responsibility for touchpoints in the customer journey, either through the provision of the respective tools or through education. Technology enables companies to process massive amounts of data from many different sources. This is a prerequisite for the brokering strategy (43%) and the integrating strategy (38%) and might explain that these strategies form part of many FinTechs' business. Technology can also be applied to make the customer process almost modular, which is the basis for the complementing strategy (34%) and the positioning strategy (29%).

The strategies of co-creating (17%), anticipating (12%), and connecting (11%), however, were less frequently applied in the sample. These strategies encompass personalized, individual-level interactions, which require flexible touchpoints and touchpoint sequences that are adapted either based on deep customer insight or directly by the customer. Thus, these strategies might be perceived as more resource-intensive or as requiring more company investments.

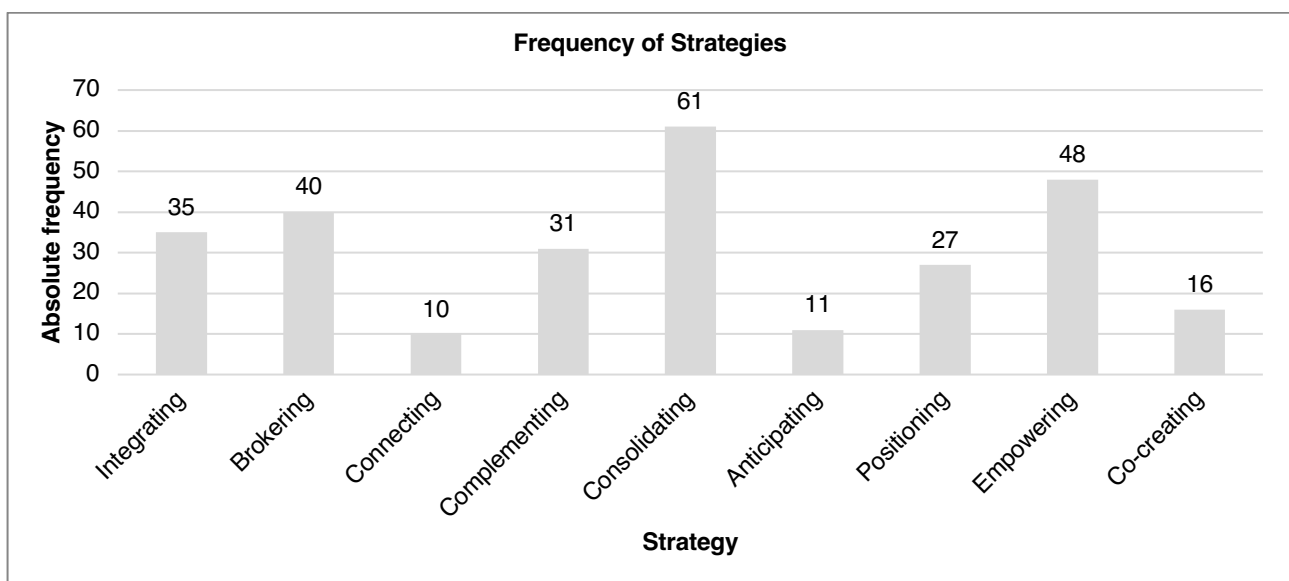


Figure 3-11 Frequency of the nine innovation strategies applied by companies

3.4.2.6.2 *Frequencies of Combinations*

The number of innovation strategies applied by a single company is displayed in Figure 3-12. An analysis of the sample of successful FinTechs shows that it is possible to innovate the customer journey even when applying only one strategy. At the same time, many companies apply several strategies to set themselves apart from the competition, and to create new customer value. The majority of companies focuses on applying two to three strategies throughout the customer journeys. The combination of strategies creates a focused approach towards changing the customer journey. The changes in the journey mark specific modifications to the traditional customer journey with a central customer promise. More than five strategies are only very rarely applied in the journey. These companies profoundly distinguish their service offers from traditional providers, and thus offer their customers superior functionalities and more convenient and better tailored interactions.

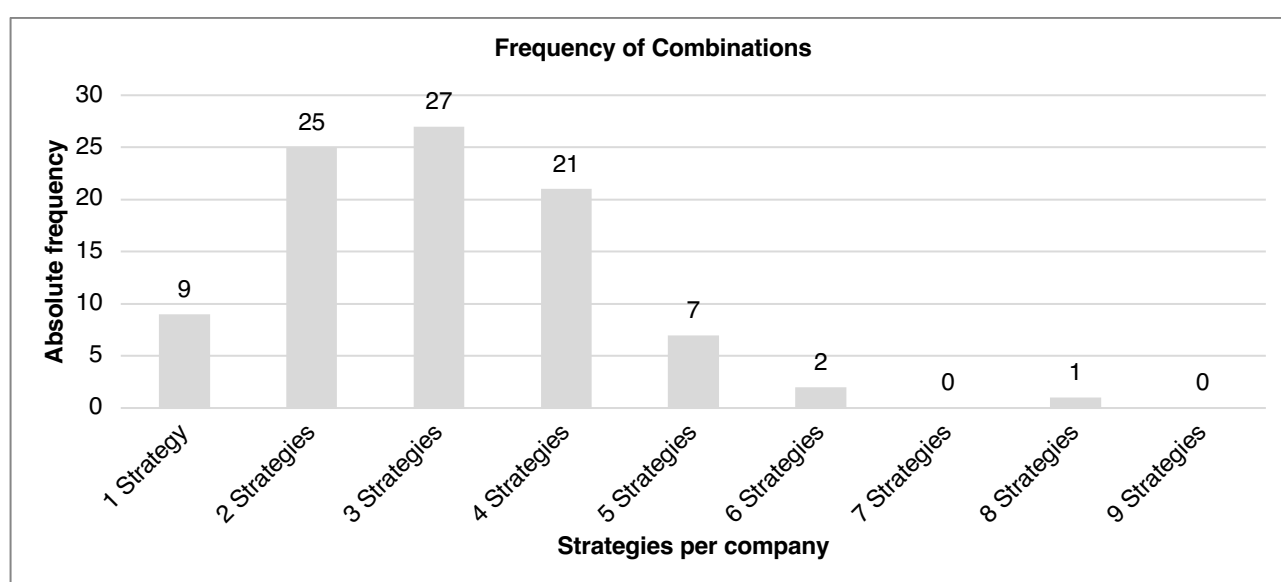


Figure 3-12 Number of innovation strategies applied by a single company

3.4.2.6.3 *Correlations of the Strategies*

The strategies describe different types of innovative constellations of touchpoints in the customer journey. As such, it is expected that they are either not or only weakly correlated. The relationship between the different strategies (measured as “applied” vs. “not applied” by a company) was tested using the Pearson product-moment correlation coefficient. As expected, most strategies are not correlated. Four exceptions were observed.

First, the brokering and the anticipating strategy are weakly correlated, $r = .217$, $n = 92$, $p < .05$, meaning that they tend to be applied in combination. This did not affect the same touchpoints in all cases. A qualitative review of the companies in the sample indicated that where companies explicitly combined the strategies, relevant insights obtained from the brokering strategies were then applied to better anticipate future touchpoints. Second, the connecting and the co-creating strategy are also weakly correlated, $r = .208$, $n = 92$, $p < .05$. Thus, these

two strategies tend to go hand-in-hand. Where the two strategies were explicitly combined, the co-creation strategy facilitated connecting different customers. Co-creating enabled customers to more easily communicate preferences and understandings to their fellow customers. Third, connecting and consolidating exhibit a medium negative correlation, $r = -.342$, $n = 92$, $p < .01$. These two strategies tend to be applied separately. A potential explanation is that while connecting aims to enrich the customer journey through interpersonal interactions, the consolidating strategy aims to reduce touchpoints in the journey. To this end, the consolidating strategy often applies automation, which precludes personal contact. Finally, positioning and co-creating are weakly negatively correlated, $r = -.233$, $n = 92$, $p < .05$. Companies tend not to combine these strategies. Both strategies allow the customer to make modifications to the touchpoints in the customer journey. A potential explanation is that companies limit the amount of modification opportunities to either of the strategies in order to avoid giving customers too many choices. This prevents offering irrelevant modification options that may discourage customers from using them due to a choice overload.

3.5 Study 3.2: Customer Response to the Innovation Strategies

Study 3.1 identified nine recurring innovation strategies that are applied by FinTech companies. Study 3.2 analyzed the effect of these innovation strategies on the customer. Specifically, it aimed to identify how innovation strategies affect customers' choice of services, how the strategies compare in terms of importance, and which utilities are associated with different forms of strategy implementation. Moreover, these assessments were expected to differ between customer groups. Thus, the objective was to identify customer segments with similar preferences.

3.5.1 Methodology and Data of the Conjoint Experiment

3.5.1.1 Conjoint Design

To investigate the role of the nine innovation strategies in customers' choices, a choice experiment was conducted. In a discrete choice conjoint experiment, respondents are presented with a limited number of product alternatives, which form the choice set, and are asked to choose one of them (Train, 2009, p. 11). Respondents assess product alternatives based on the product attributes. It was assumed that they would choose that option that yielded the highest utility to them (Train, 2009, p. 14). The choice-based conjoint study resembles a real-life purchase situation in which customers make trade-offs between product alternatives based on their attributes. This indirect approach of conjoint studies is more realistic and minimizes response bias compared to direct attribute assessment (Roest & Rindfleisch, 2010, p. 15).

Consistent with the setting of Study 3.1, the choice experiment in Study 3.2 was set in the financial services industry. The subject of the study was a digital personal finance manager

that assists users with organizing their finances. Among the FinTech companies analyzed in Study 3.1, the nine innovation strategies were repeatedly applied to this type of service. Moreover, most respondents in the conjoint study indicated that they used several financial products (e.g., bank account, credit card, saving plan). Thus, respondents were familiar with the context of the study.

Nine attributes were used to reflect the nine innovation strategies developed in Study 3.1. To operationalize the innovation strategies, they were applied to the personal finance manager by drawing on examples from the FinTech companies observed in Study 3.1. For each attribute, three levels were defined, namely, an “absent,” “weak,” and “strong” intensity of strategy implementation. As the number of levels remains constant across attributes, the number of level effect can be avoided (Wittink, Krishnamurthi, & Nutter, 1982, pp. 473-474). In the descriptions given to respondents, no innovation was indicated on the base level. For a weak form, the innovation strategy was applied to a limited degree. In the strong form, several characteristics of the strategy were applied. An overview of the nine attributes and levels can be found in Appendix B.1. A pretest ($n = 10$) showed that respondents assessed the scenario as relatable and the choice tasks as understandable.

Based on the pretests, the number of attributes shown in each choice task was determined and the wording was refined. To account for the complexity of the choices and for the relatively high number of attributes, stimuli were presented in a partial profile design. The choice sets were created by using a randomized design with the balanced overlap procedure in Sawtooth Software v9.5.3, which preserves near orthogonality and balance in the design (Chrzan & Orme, 2000, p. 7; Huber & Zwerina, 1996, p. 309; Lusk & Norwood, 2005, p. 772). Each choice task contained three product options. Three attributes were shown for every option. Since this study aimed to detect preference structures for the nine innovation approaches (rather than to assess the market performance of the financial manager), no none-option was included. This approach yields more stable results despite decreasing realism (Backhaus, Erichson, & Weiber, 2015, p. 238). The order of the attributes was randomized to account for the attribute-order effect. In total, each respondent was shown eight choice sets.

In the choice experiment, respondents assumed the role of customers choosing a digital personal finance manager. The survey questionnaire was composed of three sections. In the first section, the scenario was introduced and the choice tasks were explained. The following section contained the choice tasks. Respondents answered eight tasks, of which one was a fixed holdout task and one a random holdout task. In the final section, respondents answered questions related to customer characteristics (an overview of the construct measures and Cronbach’s alpha can be found in Appendix B.2). It was suggested that customers’ convenience orientation, innovativeness, and risk aversion would affect choice of innovative digital finance managers. It was also expected that the frequency of searching the Internet would indicate appreciation of digital services and influences choice. Moreover, demographics were

gathered in this section. This included gender (male/ female), age (in years), and education (school diploma/ occupational training). Finally, respondents were asked how well they could imagine themselves in the scenario's context (measured on a 7-point Likert scale).

3.5.1.2 Sample and Data Collection

The conjoint study was implemented and analyzed with Sawtooth Software v9.5.3. The study was administered as a web-based choice experiment and responses were collected through a market research company in Germany in 2017. The sample was representative of the population of Germany in terms of age and gender. In total, 419 respondents completed the survey (51.07% women, $M_{\text{age}} = 47.73$). Participants reported that they could imagine themselves in the scenario's context ($M_{\text{scenario}} = 5.13$).

3.5.2 Utility Estimation

This study uses hierarchical Bayes estimation to estimate customers' preferences for the nine innovation strategies. The results are presented in an aggregated form. To account for heterogeneity among customers and to identify according customer segments, a latent class analysis was conducted.

3.5.2.1 Analysis

The study used the hierarchical Bayes procedure to estimate individual level part-worth utilities for the attributes. To make these parameter estimates, the procedure recursively drew from the distribution (Arora & Huber, 2001, p. 282; Sawtooth Software, 2000, pp. 4-7). In total, 20'000 iterations were run. The first 10'000 iterations were used to achieve convergence, while the next 10'000 iterations were used for analysis. In the conjoint experiment, three choices were shown per task, with a probability of .33 to be chosen randomly. The average root likelihood (RLH) value was almost double this amount with a value of .62. The percent certainty expresses to what extent the model is better than a random model with a value of 0, relative to a perfect model with a value of 1 (Hauser, 1978, pp. 418-419). The value of .564 indicates that the model has a good fit. Following the approach of Steiner, Wiegand, Eggert, and Backhaus (2016, p. 282), importance weights, which were based on part-worth utilities estimated with the hierarchical Bayes procedure, were used to facilitate the comparability of segment-specific values, which were calculated next.

A latent class analysis was performed to detect customer segments with similar preference structures (DeSarbo, Ramaswamy, & Cohen, 1995, pp. 139-140). Specifically, latent class analysis computes part-worth utilities on the segment level, and segment membership probabilities for respondents (Sawtooth Software, 2004, p. 1). Since with latent class analysis the number of segments is not determined a priori, the information criteria AIC, CAIC, BIC, and

ABIC (Andrews & Currim, 2003, pp. 236-237, 242) and an entropy measure (Ramaswamy, Desarbo, Reibstein, & Robinson, 1993, p. 109) were calculated for up to seven segments. An overview of the criteria for the different segment solutions can be found in Appendix B.3. Based on the common information criteria (in particular the BIC value) and the entropy score, the two-segment solution was selected for further analysis.

3.5.2.2 Validity and Reliability

To test the predictive validity of the model, a fixed holdout task was included in the choice tasks. This task was held constant across all respondents and used to assess the ability of the estimated model's individual utility values to accurately predict product choice. For this, the part-worth utilities estimated with the hierarchical Bayes procedure were used. To predict product choice, the first choice rule was applied, which predicts that customers always choose the option with the highest utility (Huber, Wittink, Fiedler, & Miller, 1993, p. 109). Comparing actual and predicted choice yielded a hit rate of 42.72%, which exceeded the hit rate of 33.33% for a random model. The mean absolute error (MAE) compares the share of product choices between the actual and the predicted choices. MAE had a rather high value of 13.21%, which indicates the percentage amount by which the predicted preference share differs from the actual share. To test the reliability of respondents' answers, a random holdout task was included in the choice tasks (Theysohn, Klein, Völckner, & Spann, 2013, p. 483). For every respondent, one of the regular choice tasks was repeated to test for consistency of answers. The test-retest reliability was 64.44%. Given the exploratory nature of this study and the innovative product and complexity of the tasks, it was decided to proceed with the analysis.

3.5.3 Results and Discussion of the Conjoint Experiment

Table 3-16 shows an overview of the aggregate model and the two customer segments in terms of the importance of the strategies (results from the latent class analysis), indicating whether the group means differ (Papies, Eggers, & Wlömert, 2011, pp. 785-786; Steiner et al., 2016, p. 282). Importance scores were defined as the utility range of a strategy (i.e., the difference between the highest and lowest utility) over the sum of ranges of all strategies (Karniouchina, Moore, van der Rhee, & Verma, 2009). The utility estimates of the aggregate model and the two segments are presented below (Figure 3-13 to Figure 3-15) (Meise, Rudolph, Kenning, & Phillips, 2014, p. 514). In all models, none of the strategies was dominant, as all of the importance scores were lower than 20%, indicating that each of the strategies has a relevant impact on choice. The four most important strategies in the aggregate model focus on changes in context, company role, and customer role. Generally, stronger forms of implementation of the innovation strategies were found to increase utility. However, differences were observed between the two segments regarding the importance of and the utility derived from the different strategies.

Table 3-16 Customer perception of the innovation strategies: Segment characteristics

	Aggregate model based on HB (n = 419, 100%)	Latent class analysis		
		Group 1 <i>proactive path changers</i> (n = 156; 37.23%)	Group 2 <i>customized accessibility seekers</i> (n = 263; 62.77%)	Sig. level (a,b)
Changed context	30.89%	22.79%	30.57%	
Integrating	14.27%	10.52%	15.06%	***
Brokering	11.39%	4.61%	11.29%	***
Connecting	5.23%	7.66%	4.22%	
Changed company role	34.97%	36.63%	36.52%	
Complementing	12.53%	11.58%	13.65%	***
Consolidating	9.75%	13.02%	9.27%	***
Anticipating	12.69%	12.03%	13.60%	***
Changed customer role	34.15%	40.58%	32.93%	
Positioning	12.43%	12.53%	11.74%	***
Empowering	10.70%	18.02%	9.03%	***
Co-creating	11.02%	10.03%	12.16%	***
Covariates				
Convenience orientation	4.51	4.57	4.48	
Innovativeness	3.24	3.23	3.24	
Risk aversion	5.67	5.54	5.75	*
Online information search	6.06	5.84	6.20	***
Age	47.73	45.96	48.78	*
Gender (male)	48.93%	51.28%	47.53%	
Higher education	48.21%	42.31%	51.71%	*

Note: a) Differences between segments (importance ratings: Mann-Whitney-U-test; customer characteristics: independent samples t-test). b) Significant levels are indicated by the number of asterisks: * = significant at 10% level, ** = significant at 5% level, *** = significant at 1% level.

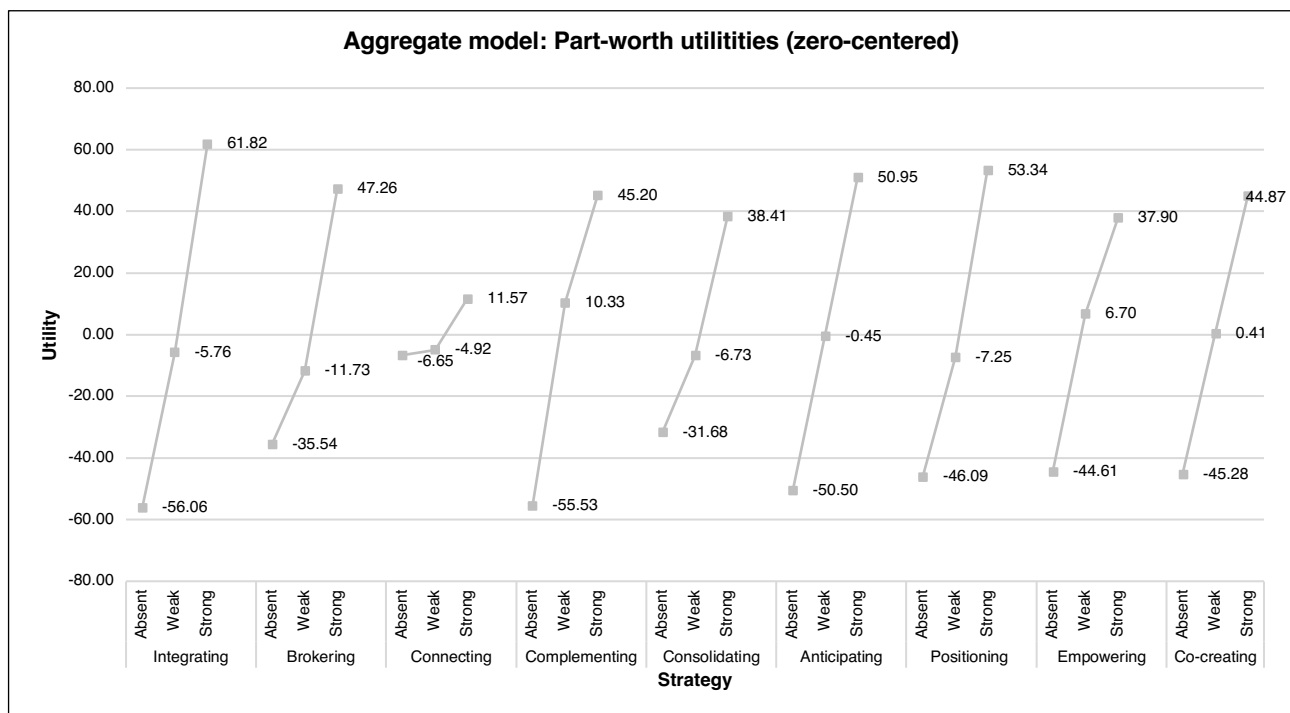


Figure 3-13 Utility estimates for the aggregate model of the conjoint experiment

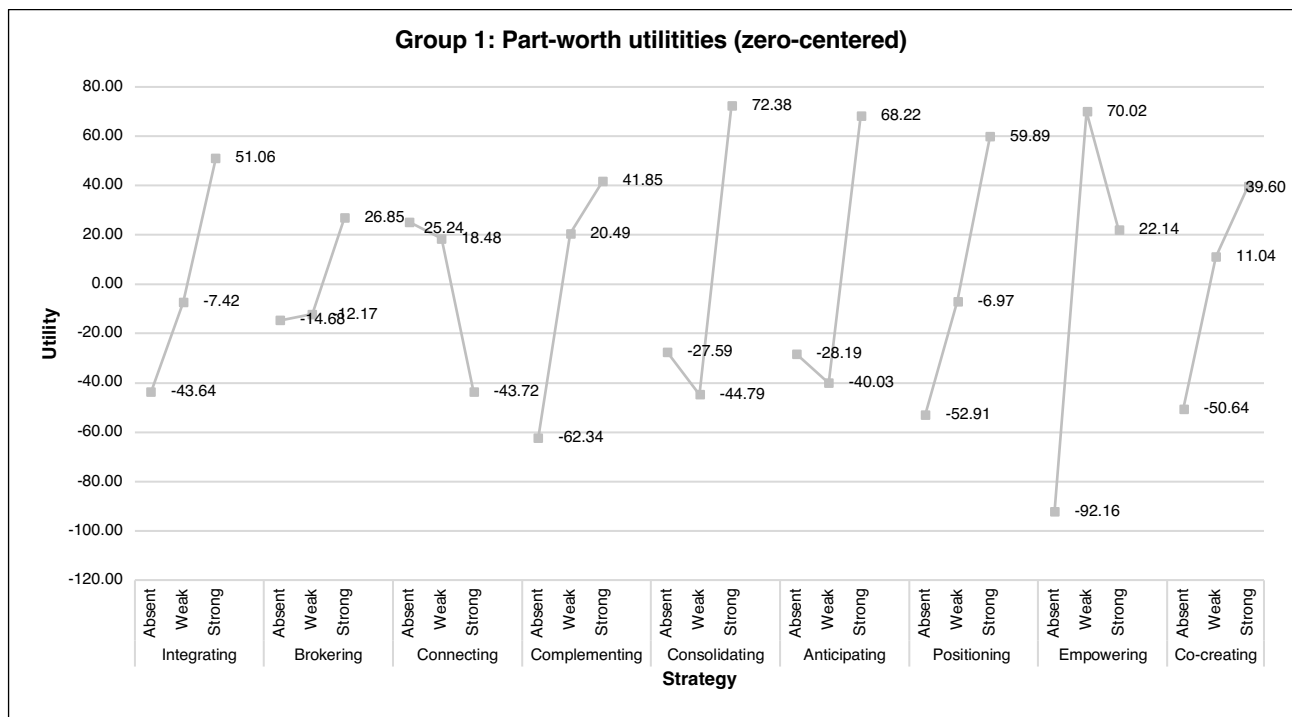


Figure 3-14 Utility estimates for Group 1 of the conjoint experiment

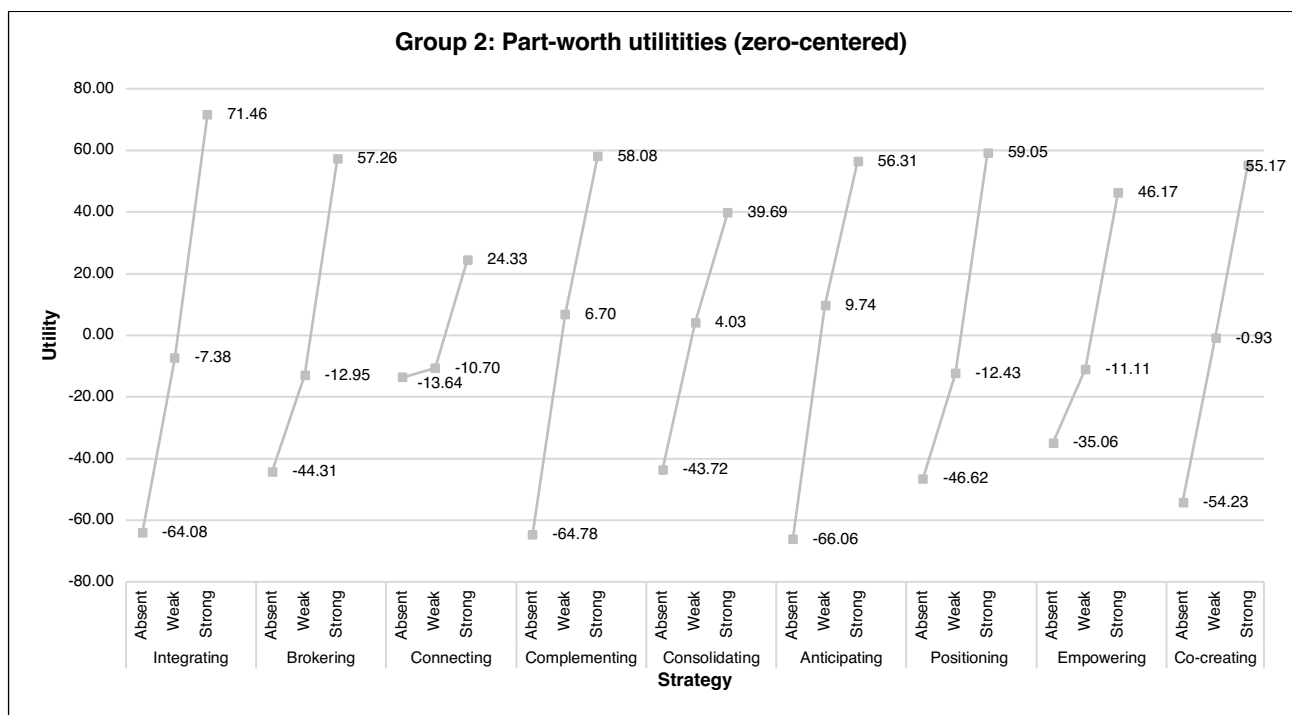


Figure 3-15 Utility estimates for Group 2 of the conjoint experiment

Group 1: Proactive path changers

Group 1 is labelled “proactive path changers” and consists of 37.23% of respondents in the sample. For this group, strategies that allow changing the constellation of touchpoints, and thus modifying the path through the customer journey, were most important. The empowering strategy (18.02%), consolidating strategy (13.02%), positioning strategy (12.53%), and anticipating strategy (12.03%) ranked highest in their impact on choice. These strategies, which either change the company’s or the customer’s role, allow customers to proactively take con-

trol of entire sequences in the customer journey in order to smoothly pass through a personalized journey. For these customers, the co-creating strategy (10.03%), connecting strategy (7.66%), and brokering strategy (4.61%), which do not allow customers to pro-actively change the path through the journey, were least important.

When innovating the touchpoint sequences in the journey for this customer group, special attention should be paid to strategy intensity. For several strategies, already a weak form of implementation was associated with a substantial rise in utility. This is especially the case for the complementing strategy and the empowering strategy (where the weak form was even associated with a higher utility than the strong form of implementation). For the consolidating and anticipating strategies, however, a weak form does not strongly change utility (and in the study even led to a small decrease compared to the base level of the absent strategy). Instead, only the strong form of implementation was associated with a steep rise in utility. With the exception of the connecting strategy, which was not valued by customers in this group and even decreased utility, a stronger intensity of implementation was associated with a higher utility for all remaining strategies.

Group 2: Customized accessibility seekers

Group 2 is labelled “customized accessibility seekers” and consists of 62.77% of respondents, thus comprising the majority of customers. Members of this group considered strategies that allow modifying the content of interactions and that thereby increase access to and availability of information and support as most important. For Group 2, the most important strategies were the integrating strategy (15.06%), complementing strategy (13.65%), anticipating strategy (13.60%), and co-creating strategy (12.16%). These strategies change the company’s or the customer’s role, or also the context. These strategies change interactions so that customers receive content and support tailored to their changing requirements throughout the customer journey. Less important for this customer segment were the consolidating (9.27%), empowering (9.03%), and connecting (4.22%) strategies, which do not focus on enriching interactions through accessible content and support.

For this group, a more intense implementation of the strategies was consistently associated with higher utility. Customers in this group generally valued a higher intensity of strategy implementation. Contrary to the previous group, no decreases in utility were observed for intensifications of strategy implementation. While strong implementation should be favored due to its higher associated utility, already weak implementation of these strategies (with the exception of the connecting strategy) had a substantial positive impact on utility.

Group comparison

The results show that all types of strategies, i.e., those that change company role, customer role, and context, matter for customers. Still, the importance associated with these strategies differed between the two segments, and thus segment-specific application is key to better

targeting customers. The co-creating strategy was among the least important strategies for Group 1, but among the most important ones for Group 2, while the opposite was true for the consolidating and empowering strategies. The anticipating strategy was the only strategy that was among the most important strategies in both groups.

Besides the importance scores, utility patterns also differed between groups. While in the aggregate model, intensification of the strategy implementation was generally associated with higher utility scores, important deviations from this were observed in Group 1 (see discussion above). Thus, depending on the company's envisaged target groups, the level of implementation needs to be applied carefully to increase utility. For several strategies (e.g., brokering in both groups), weak implementation only had a minor effect on utility. Strong implementation was required to improve utility levels, indicating that these strategies are best implemented in their strong form. For other strategies (e.g., complementing in both groups), already a weak implementation can have a substantial positive impact on utility and allows gradually implementing the strategy.

Comparing the customer characteristics of the two segments showed that Group 1 customers use the Internet less for searching information than Group 2 customers ($M_1 = 5.84$, $SD_1 = 1.29$, $M_2 = 6.20$, $SD_2 = 1.03$, $t(270.96) = -2.960$, $p < .01$). This indicates that customers in Group 2 turn to the Internet as a digital source more often to acquire information. The other customer characteristics were not statistically significant at the .05 level. The two groups do not differ in terms of risk aversion ($M_1 = 5.54$, $SD_1 = 1.28$, $M_2 = 5.75$, $SD_2 = 1.14$, $t(417) = -1.68$, $p < .10$). Their demographic characteristics were also similar (with a tendency towards age and educational differences). Surprisingly, neither customer innovativeness ($M_1 = 3.23$, $SD_1 = 1.66$, $M_2 = 3.24$, $SD_2 = 1.61$, $t(417) = -.04$, $p = .97$) nor customer convenience orientation ($M_1 = 4.57$, $SD_1 = 1.55$, $M_2 = 4.48$, $SD_2 = 1.30$, $t(281.37) = .59$, $p = .56$) were statistically significant for distinguishing the groups.

The results indicate that, generally, an increase in the level of strategy implementation is associated with higher utility for customers. However, in the first cluster, exceptions for four strategies emerged. For the empowering strategy, weak implementation showed the highest utility levels, while for the consolidating and anticipating strategies, weak implementation resulted in the lowest utility levels. The connecting strategy added no utility in either implementation. Further research would be needed to reveal the underlying reasons for this and to identify the unaccounted dimensions that impact utility. Possible explanations for the exceptions in terms of the expected preference order in the results could be the impact of customer characteristics, such as privacy concerns or confidence with regard to financial services, but also the set-up of choices in the conjoint experiment, as the provided choices represent typical yet only exemplary strategy implementations. The customer characteristics tested here – innovativeness and convenience orientation – do not significantly explain differences between clusters. The results of this study are exploratory and provide a first indication for customer

responses to the nine innovation strategies. The results generally support the fact that customers acknowledge and benefit from the innovation options and also that different preference structures exist. While this study investigated initial differences between clusters, the dimensions responsible for the different preference patterns require further investigation. Follow-up research should also aim to rule out alternative explanations for the observed results due to the set-up of this study. Within the scope of this study, a partial profile design was chosen, as the goal was to reduce complexity and to only present the innovated attributes to respondents. Supposedly, these attributes differentiate an option, which corresponds to a frequent application in practice. For this set-up, the sample was rather small and follow-up research with a larger scale sample and more choice tasks per respondent could improve the validity of the results. Also, alternative applications of the strategies should be tested to establish whether the effects found here hold beyond the typical strategy application investigated by this research.

Taken together, the results show that all nine strategies are generally appreciated by customers and that they impact choice. The results also show that distinctions exist between the most frequently implemented strategies and those perceived as most valuable by customers. This finding is discussed in the following chapter.

3.6 Overall Discussion

This study aimed to identify options for innovating touchpoint sequences or touchpoints in the customer journey that yield positive customer experiences. It also aimed to investigate the options' effects on company and customer. The results indicate that innovations in the customer journey are based on nine recurring patterns that are applied by companies. These innovation patterns are applied to sequences of touchpoints in the customer journey and can also be combined. The results consider both the company and the customer perspective on these innovation approaches by studying the company application and customer preference structures.

3.6.1 Company Application of Innovation Patterns

The preliminary interviews in Study 1 have shown that companies predominantly tend to recognize the possibility of simplifying or enriching existing customer interactions at touchpoints to create a better customer experience (see Section 1.4.2.2). The nine strategies identified include specific measures for achieving simplification (e.g., through the consolidating strategy) and enrichment (e.g., through the co-creating strategy). However, extending these two objectives, the innovation strategies provide additional options for improving customer experience. These options are applied by FinTech companies to outperform traditional offers

in terms of customer experience. Going beyond simplification and enrichment, the nine innovation strategies indicate alternative ways of innovating customer experience and of adding value in terms of improved customer experience.

The results of Study 3.1 show that FinTech companies use nine recurring innovation strategies to innovate the customer journey and to improve customer experience. The strategies fall into three groups. The integrating, brokering, and connecting strategies change the context of the interaction. While this group is applied across customer journeys, the other two groups are applied within the customer journey. Complementing, consolidating, and anticipating are strategies that change the company's role and the corresponding changes to the journey are mainly initiated by the company. Finally, positioning, empowering, and co-creating are strategies that change the customer's role and the corresponding changes are initiated by the customer. Companies often apply their chosen strategies at different sections of the customer journey. As the strategies are not mutually exclusive, several strategies can be applied at the same section in the customer journey. The strategies can be realized in any combination, which in itself can create innovative solutions for the customer journey.

3.6.2 Touchpoint Sequences Delimited by Customer Purpose

The identified strategies are not bound to specific phases in the customer journey and are applicable to any place in the customer journey. All the strategies can be applied to sequences of related touchpoints. A touchpoint sequence is delimited by comprising those touchpoints that together fulfill a customer purpose. Some strategies are also applicable to individual touchpoints (all except for the anticipating and positioning strategies, which always concern several touchpoints). Only one (the integrating strategy) is applicable to the entire customer journey. Thus, the results emphasize the need to consider touchpoint sequences as a middle ground between individual touchpoints (which tend to neglect important links between different touchpoints) and the entire customer journey (this perspective is often too broad to capture innovations in the customer journey).

Customer experience is dynamic because, over time, a customer journey involves different actors and different touchpoints that are encountered by the customer. To account for the effects that changes through service innovation in the journey have on the customer experience, it is important to consider this dynamic component. Innovating the sequences or individual touchpoints within the journey not only creates immediate benefits for customer and company, but also impacts the entire customer journey. This translates into changes in the overall customer experience. Innovating a touchpoint sequence in a way that improves customers' purpose fulfillment reflects back on the overall customer experience.

To identify innovation potential in the customer journey, the purpose fulfillment of sequences should be considered. It can identify customer purposes in the journey and suggest the asso-

ciated possible applications of the innovation strategies. This provides an additional perspective for identifying relevant touchpoint sequences and for evaluating innovation potential in the customer journey.

3.6.3 Customer Heterogeneity in the Perception of the Innovations

The results of Study 3.2 have shown that the innovation strategies are not equally perceived among customers. While generally, all strategies influenced choice and stronger strategy implementation was preferred, important differences exist. Two customer segments were identified that should be targeted according to their preferences. While across the groups, none of the nine innovations was dominant, and while all nine increase utility levels, notable differences were observed between customer segments.

Preferences for innovations vary depending on customers' need to access information and its availability in interactions and on their willingness to adapt interactions in the customer journey in a personalized way. Moreover, differences were observed depending on the amount of control over interactions sought by customers and on the level of engagement involved in taking charge of their personal journey.

3.6.4 Discrepancy Between the Company and Customer Perspective

The dual observation of the company and the customer perspective yields important insights. Particularly, differences were observed between the company's implementation and the customer's perception of the nine innovation strategies (see Figure 3-16).

The most important strategies for customers (integrating and anticipating) were not among the most frequently implemented strategies (ranking as the fourth and eighth most frequently applied strategies). Conversely, the two most frequently implemented strategies (consolidating and empowering) were not among the most important for customers (ranking as the seventh and eighth most important strategies). Even when accounting for segment-specific differences, the discrepancies between company implementation and customer perception indicate strong potential for companies. Broadening the perspective when innovating and considering all nine innovation strategies will allow accessing new innovation potential and prioritizing that potential according to the expected costs and benefits for companies and customers. Strategy implementation should consider the impact on the customer to ensure that innovations are valued by customers and yield differentiation from the competition.

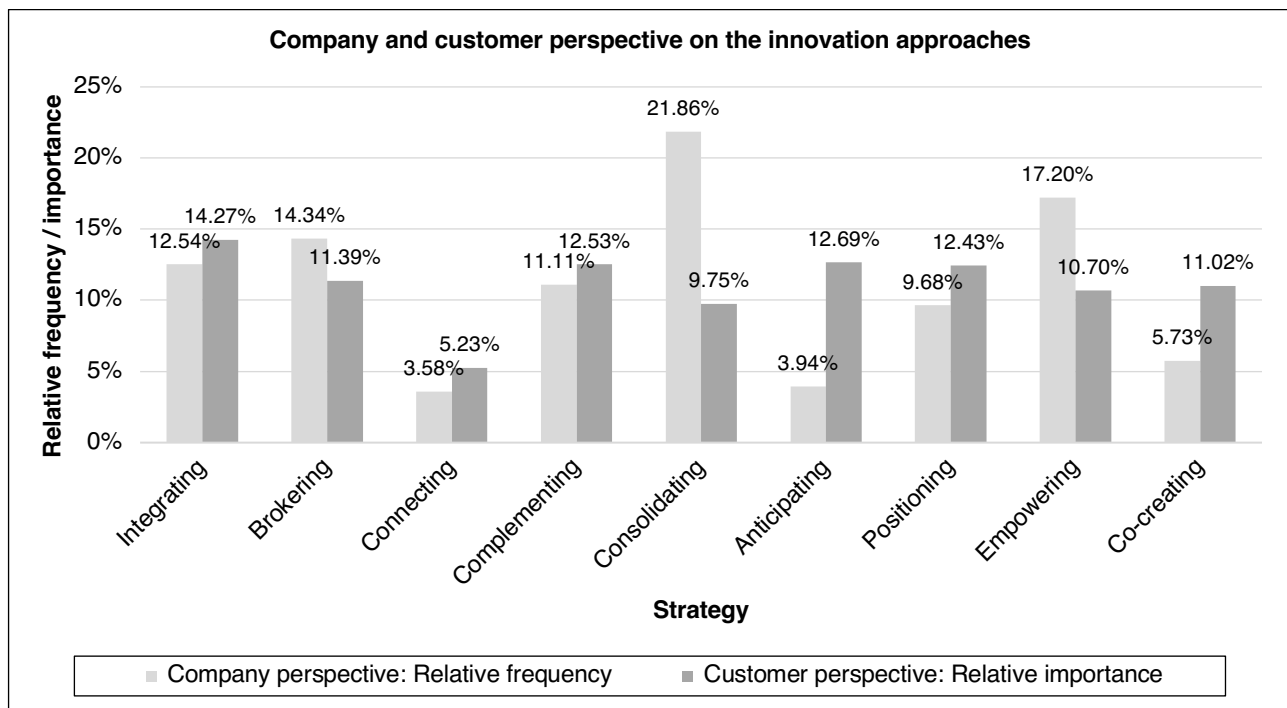


Figure 3-16 Company and customer perspective on the nine innovation approaches

3.7 Implications

The results of the two empirical studies have several theoretical and managerial implications.

3.7.1 Theoretical Implications

3.7.1.1 Conceptualization and Effects of Innovation in the Customer Journey

The current study suggests framing innovation options in the customer journey based on the constellation of touchpoints within the customer journey. It thereby extends the existing literature on customer journey and touchpoint management by introducing a perspective that emphasizes the interrelation of touchpoints within sequences of related touchpoints. This perspective allows detecting and characterizing recurring innovation approaches to customer-company interactions in the customer journey.

Specifically, this study has identified nine recurring innovation approaches that are applied to touchpoints in the customer journey. The resulting changes in customer-company interactions serve to improve customer experience. The nine approaches consist of innovations that change interactions across different customer journeys and of ones that change interactions within single journeys. Building on the conceptualizations established in the literature to determine customer experience, the approaches change the context of interaction (integrating, brokering, connecting), the company's role (complementing, consolidating, anticipating), or the customer's role in interactions (positioning, empowering, co-creating).

In general, the innovation approaches create new value for company and customer. However, the study has revealed important differences between customer preferences for innovation in

customer-company interactions. Customer segments differ strongly in their perception of innovation in the customer journey, and the results showed that, in one case, one innovation strategy was even perceived negatively by one segment. These heterogeneous customer preference structures should be acknowledged when studying innovation in the customer journey. The characteristics of customer segments were found to differ in terms of their online search behavior. They also tend to differ in terms of the demographic variables age and education.

3.7.1.2 Touchpoint Sequences to Capture Touchpoint Interrelations

The research suggests considering the constellation of touchpoints in order to describe innovation in the customer journey. While some of the identified innovation strategies can be applied at individual touchpoints or the entire customer journey, all of the strategies are applicable to sequences of touchpoints. The results respond to calls in the literature (Lemon & Verhoef, 2016, p. 83; McColl-Kennedy et al., 2015, p. 432) and define a perspective of sequences of touchpoints that together fulfill a common customer purpose. Taking the perspective of sequences accounts for the dynamic and interrelated nature of touchpoints and allows making their impact on the customer experience more explicit.

Current conceptualizations that are used to manage the customer-company interactions tend to focus on the individual touchpoint or the overall journey. The literature has called for alternative ways of dividing the customer journey into meaningful parts and advocates looking at sequences of touchpoints. Analysis has shown that this view significantly advances the ability to innovate the customer experience, as innovations were found to often stem from the sum of changes at a number of touchpoints rather than from changes at individual touchpoints. It is the distinct combination and constellation of touchpoints that enables the strategic innovation of interactions, and consequently of customer experience.

A journey consists not only of individual touchpoints, but can also be conceptualized as consisting of touchpoint sequences. Compared to entire customer journeys, sequences only describe a small section of the customer journey and are thus more specifically manageable segments. Whereas the characterization of single touchpoints cannot accommodate, and thus tends to omit, important interrelations and dependencies between touchpoints, approaching experience management through sequences of touchpoints can solve this issue. Sequences admit sufficient detail to manage touchpoints, and at the same time, they are concerned with the entire set of touchpoints that belong to a meaningful sub-section of the customer journey.

Analysis has shown that in order to describe innovations in the customer journey, the journey needs to be divided into sequences that are based on customer purpose. Taking the purpose perspective allows capturing combinations of touchpoints that belong together in customer logic. Customer purpose comprises both the intention to act and the reason for acting. This reason for and directedness towards an action makes a purpose different from a customer need. Although the concepts are closely related, the latter has been defined as recognizing a

“difference between a consumer’s actual state and some ideal or desired state” (Solomon, Marshall, & Stuart, 2008, p. 9). Customers cannot always fulfill one purpose at a single touchpoint. If a customer’s purpose can be fulfilled at a single touchpoint, this is the main focus for innovation, but if it can be fulfilled only by a combination of different touchpoints, then this sequence becomes the focus of consideration for managers.

The focus of touchpoint sequences lies on fulfilling a specific customer purpose and is managed by considering all touchpoints involved in the process. In addressing the purpose of a touchpoint in context, the perspective shifts from touchpoints as means to touchpoints as levers for innovation. Thus, the goal is not to innovate touchpoints, but to innovate the process of which the touchpoint is part. To improve customer experience, the primary objective is first, to serve customer purpose, which underlies any company-customer interaction and second, to improve the process of purpose fulfillment. Considering the sequences of interactions that are necessary to fulfil a specific customer purpose supports finding potential for innovations through improved constellations of touchpoints. When innovating sequences, touchpoints are modified, rearranged, or added within the sequence they belong to, thereby taking into account the effects on related touchpoints.

3.7.1.3 Extending the Definition of Touchpoints

One contribution from the studies conducted here is gaining further insight into how experience management can be approached strategically by considering touchpoints in the light of sequences combined with purpose. It appears that what drives innovation is the combination of touchpoints in sequences catering to a specific purpose. Such a conceptualization of touchpoints is informed by a customer perspective and emphasizes a dynamic and flexible approach to managing customer experience. It acknowledges that a touchpoint may be part of different sequences and may serve fulfilling more than one purpose. Meaningful sequences of touchpoints can thus be shifted according to purpose, which is unique to each customer.

Based on the analyses of innovation patterns in the financial services industry, the insights of this study suggest an extension to the current conceptualization of touchpoints. It has been established in the literature that touchpoints are the interactions between the customer and any representation of the organization and its offerings, and that although the customer does not necessarily consciously reflect on individual interactions, he or she needs to *consciously perceive* an interaction for it to elicit an experience. This study has shown that touchpoints also contribute to *fulfilling a specific customer purpose*. Where a purpose cannot be fulfilled at a single touchpoint, a customer passes through several touchpoints that together fulfill a purpose and thus are interconnected. In order for companies to manage the impact of touchpoints on the experience, the interrelated nature of touchpoints is accounted for by defining meaningful *sequences of related touchpoints* that together fulfill customer purpose. Taken

together, touchpoints can be characterized as follows: they are interactions that are consciously perceived by the customer, they contribute to a specific customer purpose, and they are interconnected in sequences that together can fulfill a customer purpose.

3.7.2 Managerial Implications

3.7.2.1 Strategic Innovation of the Customer Journey

The results have shown nine strategic patterns that companies apply to innovate the customer journey and thus to improve customer experience. Findings can help managers to detect potential for innovation and to guide the changes that should be implemented at touchpoints. The nine innovation approaches focus on the constellation of touchpoints in the customer journey and their meaning for customer experience. To differentiate themselves from competitors, managers need to evaluate the experiential effects of innovations and to apply them in a way that supports the positioning of the company. Also, their effects on existing touchpoints need to be taken into consideration when devising and modifying innovation initiatives. By innovating the customer journey, the nine strategies support a structured development of customer experience innovations, keeping in mind the unique customer purpose they serve.

By considering the application of the nine innovation strategies, managers can systematically rethink existing customer journeys and identify potential for improvements. The typology of innovation patterns allows approaching innovations in the customer journey in a more systematic and structured way. This is due to the simultaneous consideration of the changes in the customer journey and the consideration of their effects on the customer journey, the company, and the customer. Considering the taxonomy of customers in the financial services industry when devising service innovations allows companies to explicitly target customers' different preference structures for innovations. Also, dividing the customer journey into sequences of related touchpoints connected by a shared customer purpose, whose fulfillment they enable, helps companies to approach innovations in the customer journey. A sequence perspective breaks the customer journey down into more manageable units, while still accounting for important dynamic interrelations between touchpoints.

3.7.2.2 Three Complementary Approaches to Customer Journey Innovations

The results provide practitioners with three complementary options for approaching innovations in the customer journey.

3.7.2.2.1 *Approach Based on Touchpoint Sequences*

Companies can start by considering existing touchpoint sequences in the customer journey and by evaluating the options and associated effects of applying any of the innovation strategies to these sequences. Existing touchpoint constellations are analyzed, while the problems potentially encountered by customers as well as associated improvement options based on the identified strategies may be probed. This approach may also be viable for companies aiming to strategically manage existing (i.e., already implemented) innovations. To this end, existing innovations in the customer journey are assessed and categorized in terms of the nine strategies. Analyzing innovations may increase understanding of innovation. It may also create a more strategic approach to managing innovation and may indicate options for further improvement. Thus, such a post-hoc analysis of innovations and their effect on the customer journey, and thus on customer experience, can constitute a targeted and comprehensive approach to managing innovations in the customer journey. This approach builds on *analyzing the existing customer journey and on applying the strategic perspectives of the nine innovation strategies*. This approach stresses a company perspective.

3.7.2.2.2 *Approach Based on Innovation Strategies*

In a second approach, companies can start by considering the available innovation strategies and by assessing the possibilities for applying them in the customer journey. This may be particularly suitable for companies aiming to create new innovations in the customer journey and to identify innovation potential in the customer journey. These companies may consider potential applications for each of the innovation strategies at various sequences in the customer journey and assess the value that such an application would entail. Creating scenarios by considering possible strategy applications may structure and direct the process of innovating the customer journey. The scenarios can guide the innovation approach and create a systematic frame, and thereby overcome the possible drawbacks of less structured approaches (e.g., in an extreme case compared to a greenfield approach). This approach creates *possible application scenarios and designs those that are considered beneficial* for customer and company in the customer journey. This approach constitutes an interaction perspective.

3.7.2.2.3 *Approach Based on Customer Preference Structures*

Companies may also opt to consider innovation potential based on assessing customer preferences. With this approach, companies acknowledge heterogeneous customer preferences and aim to dissolve the discrepancy between company implementation and customer importance ratings of the various innovation strategies (see above). Further, this approach enables companies to innovate the customer journeys of different customers separately. It yields

different journeys for different customer segments and allows targeting customers by implementing innovations that match their preference structures. This approach *segments customers according to their preference structures and designs innovations in the customer journey in a segment-specific way*. This approach focuses on a customer perspective.

When companies approach innovation based on touchpoint sequences or on innovation strategies, heterogeneous customer preferences should also be taken into account, as not all customers pay attention to the same strategies or display different implementation preferences. Such differences between customer preferences should be assessed to anticipate the expected effects. Moreover, communication with customers should be targeted accordingly once innovative solutions for the customer journey have been developed.

3.7.2.3 Changing Customer-Company Interactions in Context

Innovating the customer journey takes place in the context of customer journey design and of other innovation forms. To innovate the customer journey, managers need to focus on changing company-customer interactions. While the resulting innovations occur within a larger context, they can be implemented independently of context conditions. The innovation strategies of the customer journey may find application in different organizational settings, as the strategies are independent of the business model. Applying the presented innovation strategies to the customer journey aims to improve customer experience. By creating superior customer experience, these innovation strategies can support an existing business model rather than create a new one. Also, customer journey innovation can be combined with other forms of innovations. In this sense, for example, the innovation strategies developed here could be combined with, but do not require, business model innovations.

The innovation approaches can be applied independently of other concepts used to describe or design touchpoints. The innovation strategies may be applied at touchpoints whose descriptive characteristics differ and that are shaped by the company with a focus on their design qualities and customer response. While the different perspectives on touchpoints in the customer journey may support and complement each other, they are not prerequisites for implementing the various innovation approaches.

3.8 Conclusion and Further Research

Increasing requirements for companies to create positive customer experiences have led companies in the financial services industry to develop innovative responses. Studying FinTech companies in this industry has shown that companies adapt the customer journey by applying nine recurring approaches. These form coherent patterns for innovating the customer journey and can be applied strategically to improve customer interactions and the resulting customer experiences. Broadly speaking, these innovation approaches can be differentiated according

to where the impact of the changes is: context, company role, or customer role. Each of the suggested strategies forms a coherent approach to changing company-customer interactions and can be applied separately or in combination with other strategies.

Analysis has shown that the nine innovation approaches go beyond the broad objectives often stated by practitioners: either to simplify or to enrich customer experience. The nine approaches make the changes applied by leading innovative companies to customer-company interactions explicit. As such, they indicate structured options for improving customer experience, along with other forms of value that are created for company and customer. Applying the innovation strategies provides options for approaching innovation in the customer journey to improve customer experience in a strategic way. Doing so reduces relying on trial and error, which is often observed during innovation processes. To identify innovation options in the customer journey, analysis shows the benefits of taking a sequence perspective. This perspective considers those sub-sections of the customer journey that are relevant to innovation due to their focus on short but meaningful sections within a journey. In this way, this perspective overcomes the limitations of an isolated touchpoint perspective or of a broad journey perspective.

The results show the need for managers to evaluate the diverse spectrum of innovation options available and to set innovation priorities for the customer journey that match customer segment preferences. Customer preferences for innovation approaches vary considerably, and distinct customer segments were observed in the study. Moreover, preference structures indicate that not all strategies need to be applied, and that a selective approach may be taken instead. The strategies can be applied selectively according to the objectives in the customer journey and the targeted customer group. With regard to the focus on specific innovation strategies, companies' focus on strategies and the importance of these strategies for customers should be aligned. In this regard, customer preferences translate into innovation recommendations for companies for configuring interactions in the customer journey.

Taken together, the nine innovation approaches and associated customer preferences allow companies to systematically approach customer journey innovation in order to impact customer experience. Applying strategies focused on sequences informed by customer purpose helps to implement coherent improvements to the customer journey that benefit both company and customer.

This research has some limitations and suggests directions for further research. First, the two studies are set in the financial services industry. While this industry is highly relevant to studying how to innovate the customer journey, in order to improve customer experience, further research should aim to replicate the proposed innovation approaches in other industries in order to determine how far they are transferrable between industries. Second, the innovation approaches adopted by the studied companies were observed in the B2C and B2B context. Since customer response to these approaches was only studied in the B2C context, further

research should consider the preference structures of B2B customers. Possible differences between the two contexts would complement the current findings and allow managers to account for potential differences between these types of customers. Since the multiple case study was conducted using an international sample, while the conjoint experiment was performed in the German-speaking region, further research should also account for cultural factors, in order to rule out possible biases stemming from the cultural context. Third, this study mostly considered digital innovations in the customer journey, as FinTech companies largely enter the financial services industry with digital and technology-based service offers. The innovation strategies may concern any change to the customer journey that affects the customer-company interaction and thus the customer experience. Therefore, they are not confined to digital interactions. This applicability of the innovation strategies in the offline context should be further investigated. Finally, while this research found differences between two segments in terms of customers' online affinity and a tendency for differences in terms of demographic variables, future research should investigate the drivers of different preference structures. Moreover, for one customer group, negative attitudes towards selected ways of implementing the innovation approaches were observed. Qualitative research and specific quantitative methods could deepen understanding of the underlying drivers of these segment-specific preference structures.

4 Devising Digital Interaction Strategies for Building Trust⁴

4.1 Introduction

The financial services industry is experiencing a strong shift towards digital interactions with customers. Digital interactions are increasingly complementing or even replacing personal interactions with financial advisors. Furthermore, new digital services, such as digital comparisons of financial solutions, configurators, investment advice and digital claim processing, are becoming part of service portfolios. The trend towards digitization is being accelerated by various developments. Not only have new and innovative entrants, called “FinTech” companies, entered the market with new, mainly digital business models, but established companies are also facing the challenge of having to rethink and digitize previously personal customer contacts. This development is both company-driven and customer-driven. Increasing digitization in the financial services industry indicates that companies are responding to the changing competitive environment, which also allows for cost savings and possibly for reaching new customer segments. At the same time, customers, who have experienced and grown used to highly professional digital services in other industries, are increasingly demanding digital service elements. Moreover, technology is evolving so rapidly that new possibilities are emerging for companies to design digital customer interactions. In this process, it is crucial that technological solutions are employed to make digital services trustworthy and to maintain credibility, which was previously established through personal interaction.

While digitization is expected by customers and promoted in the market, it involves various challenges. Although transparency and comparability are increasing and switching costs are decreasing for customers, companies are facing the challenge of having to rethink their traditional customer interactions throughout the customer journey and of representing them digitally. Moreover, it is crucial to establish trust in the digital customer processes. This is even more pronounced in the financial services industry, which is fundamentally based on customer trust. Companies have long established trust in personal relationships between customers and their financial advisors. Digitization complements or even replaces this personal relationship with digital interactions. Companies now need to build the same level of trust in the

⁴ Sections of Chapter 4 have been published with modifications:

Schögel, M., & Knaak, M. (2017). Digitalizing the customer process – Opportunities and risks for financial services. In M. Bruhn & K. Hadwich (Eds.), *Dienstleistungen 4.0: Konzepte – Methoden – Instrumente. Band 1. Forum Dienstleistungsmanagement* (pp. 455-482). Wiesbaden: Springer Fachmedien. Reprinted/adapted by permission from Springer: Springer, *Dienstleistungen 4.0* by Bruhn, M. and Hadwich, K. (Eds.). Copyright (2018).

Schneider, B., Iff, S., Schögel, M., Knaak, M., & Mrkwicka, K. (2017). *Is trust powered by a heartbeat or a beep? A study about trust and digitalization*. Ernst & Young.

digital context. This is further complicated by the trust crisis that the industry recently experienced, and which led to customers tending to be generally suspicious about their financial service providers.

These dynamics create both opportunities and risks for the financial services industry that require re-examining trust-building strategies in the interplay between on- and offline interactions throughout the customer journey. Since trust building in digital interactions takes place in different conditions compared to trust building through personal interactions, financial service providers are currently looking for specific recommendations on how to create trust digitally. Previous research has identified various trust-building mechanisms for digital interactions. However, it has been less studied how in a largely trust-based industry, such as financial services, companies can better enable trust creation in personal and digital interactions at different stages in the customer journey. The present research aims to *identify trust-building strategies that enable companies to successfully build trust in different customer-company interactions*. The two studies in this chapter seek to identify the consequences of including digital or personal elements in such interactions throughout the customer journey on customer trust.

This chapter is structured as follows. First, the role of trust in the financial services industry and the digitization of customer interactions are discussed. The subsequent literature review identifies two strategies for companies to build trust in digital customer-company interactions and their antecedents. This is followed by two empirical studies. The first involved interviewing twelve experts. Analysis identifies trust-inducing features that influence three groups of trust enablers in the digital context. The role of trust enablers in building trust throughout the increasingly digital customer journey was further investigated in an experiment in the second study. After discussing the results of the two studies, implications for theory and practice are developed, followed by a discussion of the limitations and a conclusion.

4.2 Relevance of Trust in the Financial Services Industry

Specific to the financial services industry is the highly immaterial and the highly customer-specific nature of the service (Friedrich et al., 2013, pp. 16-17). Services are per se high in experience and credence qualities, making them difficult to evaluate prior to purchase (Zeithaml, 1981, p. 186; Zeithaml et al., 1985, pp. 33-34). Customers therefore assess service quality before personal experience and thus need to trust the service provider (Ahlert, Kenning, & Petermann, 2001, pp. 281-284). They need to rely on cues such as advertising, company reputation, competency, or employees in order to infer an evaluation of the service. Trust therefore plays a crucial role in building the customer relationship and loyalty.

Since the global financial crisis of 2008, trust in banking services has decreased. Earning and restoring trust has therefore become a priority in the financial services industry (Jansen,

Mosch, & van der Cruisen, 2015, pp. 128-129; Tripp, 2015, pp. 2-4). Poor decision making, a lack of integrity and ethical consideration, as well as a lack of transparency and disclosure, among others, were some of the reasons for a substantial decrease in trust in the industry, which persists until today (Friedrich et al., 2013, pp. 11, 16). Nonetheless, as Swift and Littlechild (2015, p. 29) reported, trust in personal financial advisors remains high, which contrasts strongly with the low overall trust in the industry. This creates a challenge as due to the increasing digitization of processes, the level of personal contact with customers decreases and financial service providers are required to find new ways of building trust through digital interactions.

4.3 Extant Literature on Digital Interactions and Trust

4.3.1 Digital Interactions with Customers

Interactions between customers and companies in the financial services industry are increasingly digital instead of personal. This development concerns the entire customer process, from information seeking through contract conclusion to the utilization phase. The changing nature of interactions impacts building customer trust.

4.3.1.1 Customer-Company Interactions in the Customer Process

Throughout the customer process, the customer regularly interacts with the financial service provider in different ways. These interactions determine the touchpoints a company has with its customers. A touchpoint is defined as the interaction between the customer and any representation of the organization and its offerings that is consciously perceived by the customer (D. Grewal et al., 2009, p. 1; Homburg et al., 2017, p. 384; Meyer & Schwager, 2007, p. 119; Rawson et al., 2013, p. 90). Touchpoints occur throughout the entire customer journey and across multiple channels (Verhoef et al., 2009, pp. 33, 37; Zomerdijs & Voss, 2010, p. 74). Interactions can be offline and involve personal interaction or be mediated by digital media (Dhebar, 2013, p. 200). Every interaction and touchpoint contributes to the overall level and nature of customer trust (Ahlert et al., 2001, pp. 288-289; Aldiri, Hobbs, & Qahwaji, 2008, p. 62; Rousseau, Sitkin, Burt, & Camerer, 1998, pp. 398-399).

In the financial services industry, touchpoints are traditionally personal and most interactions occur in the pre-sales phase. Financial service providers have long advised customers before and during the conclusion of a banking or an insurance contract. They have assisted customers in the utilization phase in case of a claim or change of contract. In both the pre-sales and utilization phases, usually a personal advisor interacts with the customer face-to-face (Alt & Puschmann, 2016, p. 29). To date, the digital offers of FinTech companies as well as of established traditional companies still mainly focus on the pre-sales phase. Nonetheless, contracts can mostly not yet be fully concluded digitally, and switching to offline channels might

be necessary for legal reasons. While interactions in the current customer process are being increasingly digitized, beginning recognition of the potential of extending interactions to the utilization phase can be observed.

4.3.1.2 Drivers of Digitization in the Financial Services Industry

One driver of digitization is *changing customer expectations*. Customers have grown familiar with interacting digitally with companies from other industries, such as retail and travel (Capgemini & Efma, 2015a, pp. 13-14). They have also developed a preference for digital channels and now increasingly expect to be able to interact through digital channels also with their financial service provider (Albesa, 2007, pp. 500-501; Capgemini & Efma, 2015a, p. 15; Morrison et al., 2015, p. 274). With technological developments enabling mass customization, customers have come to expect personalized information that is relevant to their specific situations and needs. In terms of behavior, customers tend to frequently switch channels and to expect a smooth and consistent experience (Lemon & Verhoef, 2016, pp. 79-80).

The characteristics of company-customer interactions are also changing, as *customers tend to be better informed and are increasingly independent* of traditional personal contact, and thus seek complementary interactions through diverse channels. Digital media enable customers to collect information without directly contacting the company, e.g., through online communities and comparison websites (Friedrich et al., 2013, pp. 26-27). Customers frequently research various offers before contacting a company and are thus better informed about specific offers (Alt & Puschmann, 2016, p. 105). In the financial services industry, the fact that customers are more knowledgeable about financial matters than previously also impacts the role of the personal advisor. Once they understand a service, many customers do not primarily look for advice anymore but rely on their own research and peer recommendations instead. Financial advisors are primarily assuming an expert role and are asked to provide additional consultation (Alt & Puschmann, 2016, p. 29). However, customers are reluctant to share their personal data with financial providers digitally (Bansal, Zahedi, & Gefen, 2016, p. 9; Chiou & Shen, 2012, p. 868). For companies, this development, combined with the tendency towards channel switching, can cause problems. Therefore, companies are challenged to learn fast and to provide consistent service across the various online and offline interactions.

Technological developments are another driving force. They create new opportunities, which may alter the characteristics of existing company-customer interactions (Morrison et al., 2015, p. 280). Many companies are already automating large amounts of their marketing by applying algorithms and sophisticated marketing measures. They are also investing in intelligent systems that continuously refine their algorithms and their underlying assumptions through self-induced learning (Jordan & Mitchell, 2015, p. 259) and that also help to refine and personalize digital customer interactions (Verhoef, Kooge, & Walk, 2016, pp. 206-211). The use of artificial intelligence allows replacing many tasks that were previously assumed

by employees, e.g., in the form of robo advice or insurance management apps that automate customer advice (Alt & Puschmann, 2016, p. 116). Companies are in the process of incorporating these technologies in their customer interactions and are continuing to advance their ability to leverage customer data.

While these developments create new touchpoints with customers, they also challenge the customer-company relationship and the company's competitive position. As the personal component decreases, and as many interactions become digitized and automated, companies need to find new ways of differentiation and to strengthen the digital underpinning of their customer relationship and their competitive advantage. Moreover, research in the retail sector shows that companies still lack the ability to retrieve relevant customer data, which would allow sensing customer needs early on and achieving a higher level of personalized and meaningful content in digital interactions (Verhoef et al., 2010, p. 122).

4.3.1.3 Differentiation in Digital Interactions

Due to their corporate contexts, established and FinTech companies appear to follow different motives when digitizing the customer journey. While for established companies, changes in technology and consumer behavior create a need to digitize, in order to secure their market position, FinTech companies aim to build their business model around digital interactions. Established companies and FinTech companies have different legacies, which furthermore impact the strategic options available to them. Accordingly, they face different challenges with regard to generating trust in digital interactions.

Most established companies have set up new digital channels. Compared to new entrants, they have a strong existing brand reputation and trust. Their established relationships from offline operations can enhance trust in the company's online services, independent of customers' attitude toward technology (Chiou & Shen, 2012, p. 868). The existence of offline channels and a network of local branches allows established companies to combine on- and offline services and to expand their service portfolio by providing the possibility of enriching data from digital interactions with data and insights from offline interactions (Crittenden, Crittenden, & Crittenden, 2014, pp. 76-77). The introduction of digital channels also influences offline interactions. For example, with the increasing use of technology, customers turn to digital sources to inform themselves. As a result, the role of the advisor shifts from providing information to much richer communication, in the shape of consultation and customer education (Crittenden et al., 2014, p. 79; Sharma & Sheth, 2010, p. 127). Yet, traditional companies often face limitations in leveraging their full digital potential. They often fail to create actual customer value when substituting existing approaches instead of redesigning the entire value chain and channel portfolio accordingly. Moreover, the threat of offline channels being cannibalized further weakens potential digitization initiatives. Overall, while established banks and insurance providers have earned customer trust, they still have difficulties

in keeping up with new, dynamic market entrants, as they have to integrate legacy systems while developing new capabilities.

FinTech companies do not have an existing legacy and are therefore more agile (Capgemini & Efma, 2015b, pp. 17,23). FinTechs follow the shift in user behavior towards digital media and respond both to the need for simplicity and convenience (Albesa, 2007, pp. 495, 502) and to that for information aggregation and transparency. Many FinTech companies are highly skilled in leveraging data from digital interactions. They often offer elaborated customer engagement programs and are strong at messaging and designing digital interactions. Yet while they try to compete with established companies through new, innovative products and through providing digital customer experience, they still need to establish the same level of trustworthiness and credibility (Capgemini & Efma, 2016b, pp. 19-22).

As a result of these developments, the financial services industry now has to convey its trustworthiness increasingly through digital channels. And as the amount of personal interaction decreases, and digital interactions increase (to the point of completely digital services and even machine-to-machine interactions), this creates a new challenge but also an opportunity to generate customer trust.

4.3.2 Strategies for Building Trust Digitally

High levels of trust have been related both directly and indirectly to the customer's intent to act, such as the purchase intention or adoption behavior of technology (Bart, Shankar, Sultan, & Urban, 2005, pp. 142-145; Gefen, Karahanna, & Straub, 2003, p. 72; Schlosser, White, & Lloyd, 2006, p. 143; Wunderlich, Wangenheim, & Bitner, 2013, pp. 11-13). Trust has furthermore been found to moderate the relationship between problem resolution and customer satisfaction (Shankar, Sultan, Urban, & Bart, 2002 as cited in Shankar, Urban, & Sultan, 2002, p. 335). These factors emphasize the relevance of trust for differentiation in the financial services industry. Hence, in order to fully leverage digital interactions with customers, companies in the financial services industry have to find effective measures to build customer trust in digital interactions.

4.3.2.1 Defining Trust

Trust allows mitigating risk, which is perceived in situations of uncertainty (Pavlou, Liang, & Xue, 2007, pp. 107-108, 126). Uncertainty occurs when customers cannot predict the actions of their counterparts. The perception of asymmetrically distributed information, the fear that sellers might behave opportunistically, and concerns about information privacy and security are factors that can lead to a perception of uncertainty (Pavlou et al., 2007, p. 106). Risk can be associated with the seller's behavior, the online context, or other entities (Pavlou

& Gefen, 2005, p. 8). In such a context, trust is a method for reducing the complexity associated with risky situations (Luhmann, 2014, p. 38).

Many definitions and conceptualizations of trust exist. Most commonly used is the definition of Mayer, Davis, and Schoorman (1995, p. 712), who defined trust as “*the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party.*” Alternatively, Moorman, Deshpandé, and Zaltman (1993, p. 82) defined trust as “a willingness to rely on an exchange partner in whom one has confidence,” and thus included both trusting beliefs and trusting intentions. *Trusting beliefs* express the perceived trustworthiness of other parties and comprise their perceived ability, benevolence, and integrity (Mayer et al., 1995, pp. 717-720; McKnight, Cummings, & Chervany, 1998, p. 474; Moorman, Zaltman, & Deshpandé, 1992, p. 315). Trustworthiness is assessed through cognitive and affective processes and impacts behavior (Lewis & Weigert, 1985, pp. 970-972). *Trusting intentions* refer to the willingness to depend on the other party (McKnight et al., 1998, p. 474) and can trigger actual behavior. Further aspects impacting the level of trusting beliefs and trusting intentions, and thus also trust-related behavior, are a person’s individual disposition to trust as well as institution-based trust (McKnight, Choudhury, & Kacmar, 2002, pp. 336-337; McKnight et al., 1998, p. 475). The *disposition to trust* describes a person’s inherent willingness to trust and to depend on others. *Institution-based trust* refers to the belief that the structural characteristics of the institutional environment are trustworthy. For the financial services industry, this form of trust has been severely affected by the financial crisis.

Throughout the customer journey, several more specific forms of trust can be distinguished. These take on different importance at different stages. Initially, *calculus-based trust* is critical in establishing the customer relationship, which refers to trust based on the company’s reputation, information from third parties or certifications, and the company’s own communication. *Relational trust* is then needed to maintain the relationship (Ahlert et al., 2001, pp. 288-289; Rousseau et al., 1998, pp. 399-401). A customer builds this stronger form of trust through the experiences of interacting with the company and the emotions in the relationship. The presence of institution-based trust can support the formation of both calculus-based and relational trust, while the customer’s disposition to trust further determines the level of overall trust. Finally, the increasing mediation of interactions through digital technology, and decreasing personal contact, for example due to the customer’s use of e-commerce, leads to *interpersonal trust* being replaced ever more by *trust in systems* (Ahlert et al., 2001, p. 285).

4.3.2.2 Two Trust-Building Strategies

Increasing digitization requires new approaches to trust building. According to Birkhofer, Schögel, and Tomczak (2000, pp. 172-174), companies can follow two distinct strategies (see

Figure 4-1): In a *transaction-based strategy*, companies employ the latest technologies to optimize transaction-processing and user experience. In a *trust-based strategy*, companies build on established buyer-seller relationships in order to exploit the added value of existing brands and relationships.

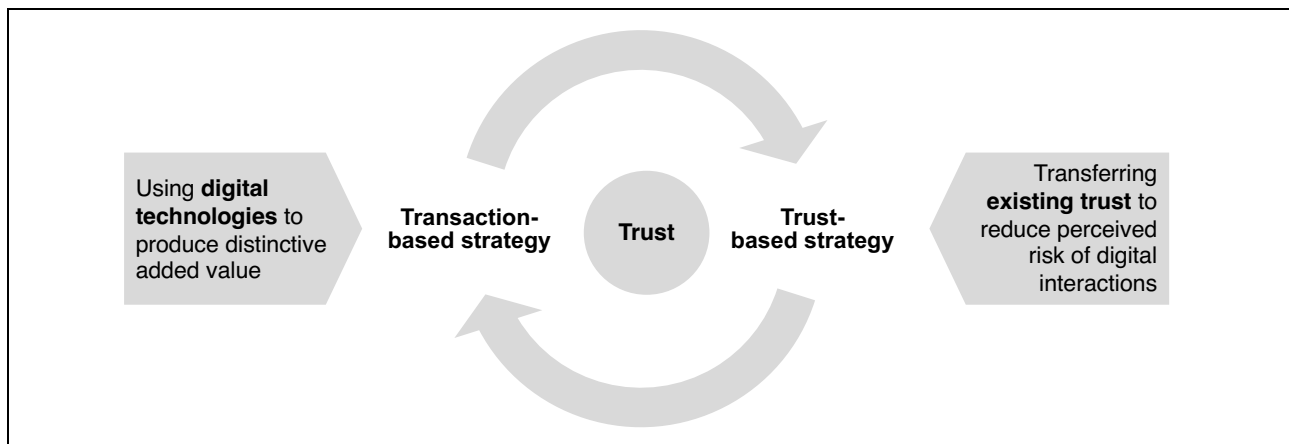


Figure 4-1 Transaction and trust-based strategies in the digital context

Source: adapted from Birkhofer et al., 2000, p. 172

A transaction-based strategy can be followed both by established companies and by FinTech companies. Typically, this strategy is followed by start-up companies, who enter the market with innovative and sophisticated digital services (Birkhofer et al., 2000, p. 172). Customers receive added value through ongoing interaction. But also established companies may follow a transaction-based strategy, for example, by separating their traditional offline business from their digital interactions. In this way, they can overcome challenges imposed by their legacy and reduce the risk of negatively impacting their offline interactions.

A trust-based strategy is initially reserved for traditional companies, which have established a reputation of being trustworthy through offline interactions with their customers. Thereby, the risk perceived by the customer can be significantly reduced. They can offer added value through additional digital interactions and by integrating digital and offline services. As this strategy transfers already existing trust to digital interactions instead of regaining it over a prolonged period, this strategy is very effective and preferable to a transaction-based approach (Birkhofer et al., 2000, p. 173).

4.3.2.3 Antecedents for Digital Trust Building

Trust generally plays a critical role in the use of digital services (Urban, Amyx, & Lorenzon, 2009, p. 179). In digital processes, the personal factor, which is crucial for building relationships, is strongly reduced or omitted. Therefore, most digital efforts aim to find new ways of conveying messages previously communicated personally and also to discover alternatives to substitute the missing personal trust. Both interaction partners, i.e., the company and the customer, as well as the interaction medium and context, influence the resulting level of trust.

Accordingly, the literature broadly distinguishes between trust antecedents related to the company, the technological aspect of interaction, and the customer (Beldad, de Jong, & Steehouder, 2010, pp. 861, 865-867; Shankar et al., 2002, p. 336).

4.3.2.3.1 *Company-Related Factors*

Companies pursuing a hybrid strategy, i.e., that interact both offline and through digital channels with their customers, have the advantage of transferring trust from their offline activities to their online channels (Beldad et al., 2010, pp. 866-867; Darke, Brady, Benedicktus, & Wilson, 2016, p. 11). Such companies can enhance trust transfer by using their offline presence as an additional information cue for customers, which contributes to trust creation (Beldad et al., 2010, pp. 866-867; Darke et al., 2016, p. 11). One example is embedding pictures of a physical store on the website. Stewart (2003, p. 13) found that the existence of an offline store reassures customers in their trusting intentions (i.e., that the company is trustworthy in its delivery of a purchase) while it does not significantly add to building general trusting beliefs about the company.

Reputation is another relevant company-related factor. Reputation has been defined as deriving from third-party “referrals or ratings” or as a comparative assessment of the degree to which a company delivers on its promises (Beldad et al., 2010, p. 866). An existing positive reputation of companies leads to higher trust formation in the relationship between company and customer, while a negative reputation is adversely reflected in customer trust (Beldad et al., 2010, p. 866; Teo & Liu, 2007, p. 34).

Apart from possibilities of transferring trust, companies need to build trust through digital interactions. Companies in the financial services industry need to convey their trustworthiness through digital media and to establish trust during interaction. At the beginning of the customer journey, trust largely depends on cues that signal trustworthiness to the customer, while it is later based on experiences from previous interactions (S. Wang, Beatty, & Foxx, 2004, pp. 55, 65).

4.3.2.3.2 *Technological Elements*

Much research has focused on the trustworthiness that is established through the company website, which often serves as primary source of information for customers. The features of the interface impact the perception of trust cues (Aldiri et al., 2008, pp. 73-74). These are embedded in the website and relate to the design of social presence cues, to the content and structure of the website, to the graphical design, and to the level of customization (Beldad et al., 2010, pp. 861, 865; Y. D. Wang & Emurian, 2005, p. 116).

Including social presence cues in digital interactions helps to make highly automated interactions through digital media more personal (Hassanein & Head, 2007, pp. 690, 703). It transfers some elements of the social presence characteristic of offline interaction to the online context (Beldad et al., 2010, p. 865). Perceiving other persons as socially present allows building trust and increases the effectiveness of other trust-building cues (Gefen & Straub, 2003, p. 12). For example, the presence of virtual sales agents increases trust (Beldad, Hegner, & Hoppen, 2016, p. 70). Research has focused on the ability of texts, pictures, and videos to convey social presence (Aldiri et al., 2008, p. 73; Hassanein & Head, 2007, pp. 690, 704). Moreover, the different forms of interactivity of media, i.e., synchronous interactions with other persons (e.g., live chats or video calls) and asynchronous interactions (e.g., reviews), determine the ability to transmit social presence. When combined, they yield the highest perceived social presence (Cyr, Hassanein, Head, & Ivanov, 2007, p. 50).

Website content and structure also influence customer trust. Companies should include relevant content on their website and communicate interaction-related information right at the beginning (Y. D. Wang & Emurian, 2005, p. 118). Especially the impact of providing information on privacy disclosures and security issues has been investigated. Customers rely on privacy disclosures to assess trustworthiness, in particular when the context is associated with high risk (Pan & Zinkhan, 2006, p. 336). Other studies have found that such disclosures impact customers' willingness to provide personal information rather than trust (S. Wang et al., 2004, pp. 64-65). Despite the fact that customers often do not read privacy statements, it has been repeatedly shown that their presence increases trust (Beldad et al., 2010, p. 865). Also, including third-party guarantees, certifications, and seals of approval on the website build trust, given that customers consider them as trustworthy and are able to establish a connection with the transaction partner (Beldad et al., 2010, p. 866). Finally, possibilities for customers to provide active feedback increase trust (Gefen & Pavlou, 2004, p. 12).

The design and quality of digital interaction, and more specifically of websites, is one of the most important trust-building factors (Urban et al., 2009, pp. 181-182). Professional and well-designed websites encourage customers to spend more time on the website and therefore provide companies with more trust-building opportunities (Urban et al., 2009, p. 182). Customers should perceive the website as simple, consistent, and easy to navigate (Y. D. Wang & Emurian, 2005, p. 117). Tools enhancing customers' ability to manage or comprehend information (e.g., product comparison tools, filters, buying guides or glossaries) also increase trust, especially of new customers (P. Gupta, Yadav, & Varadarajan, 2009, pp. 163, 173).

Finally, customizing and personalizing digital interaction can also build trust. At the same time, however, this requires collecting personal information, and therefore Beldad et al. (2010, p. 865) suggested an opposing negative effect on trust that exists besides its benefits.

4.3.2.3.3 *Customer Characteristics*

Customers' individual disposition to trust and their familiarity, i.e., understanding of the actions of the other party, impact their level of trust (Beldad et al., 2010, pp. 858, 867; Gefen, 2000, p. 733; Teo & Liu, 2007, p. 35). The experience with using digital media and its effect on trust has also been analyzed in several studies. Internet experience has been found to follow an inverted U shape in its impact on trust (K. D. Aiken & Boush, 2006, p. 320). Initially, repeated digital interactions increase trust. However, as customers accumulate knowledge, they become more aware of privacy and security risks, and trust decreases as a result. Trust is a central part of decision making of customers who have not experienced any conflicts in digital interactions, while for those who have experienced conflicts, the focus shifts towards risks (Gefen & Pavlou, 2004, p. 12).

In the highly sensitive financial services context, privacy concerns are crucial for building trust (Bansal et al., 2016, p. 11). Privacy refers to "the right to control and decide what personal information is transmitted to others" (Bansal et al., 2016, p. 3). While during digital exchanges, private information is usually required, customers tend to have concerns about sharing their information online. Such concerns are also determined by a customer's personality traits (Bansal et al., 2016, p. 12).

The objective of interacting with a company online can vary between searching, when customers have a specific purpose for gathering information, and browsing, which is more exploratory and recreational (Schlosser et al., 2006, pp. 134-135, 139). As the task of browsers is more personal, for these customers benevolence beliefs are highly important. For searchers, on the other hand, in particular those who associate high risks with their specific task, only their ability beliefs about the company influence their trusting intentions.

4.4 Study 4.1: Trust Enablers in Customer-Company Interactions

To answer the question of which trust-building strategies exist and how they contribute to building customer trust in personal and digital customer-company interactions, a sequential design was applied (Srnrka & Koeszegi, 2007, p. 33). In Study 4.1, expert interviewing was chosen to identify trust-building approaches in the financial services industry. The results of this first study point to the existence of three trust enablers, which are further investigated in Study 4.2. Based on the results of the first study, hypotheses are developed and tested with an experiment in the second study.

4.4.1 Methodology of the Expert Interviews

4.4.1.1 Respondent Selection and Data Collection

In order to identify digital trust-building approaches in the financial services industry, a qualitative exploratory research study was conducted. Primary data was collected in the form of semi-structured in-depth expert interviews. Expert interviews allow gathering rich data on the phenomenon to be studied (Eisenhardt & Graebner, 2007, p. 28). Experts possess relevant knowledge in their field and have a detailed understanding of systemic interrelations (Hitzler, 1994, p. 26). The experts were chosen based on their expertise in their specific field. The group of experts was diverse in terms of hierarchy, function, and geography, which mitigated potential bias due to the interviewing technique (Eisenhardt & Graebner, 2007, p. 28). Moreover, experts from different backgrounds were selected in order to draw a holistic picture of practical experience and possible underlying mechanisms. The data collection took place in 2016. In total, 12 experts were interviewed. Interviews lasted between 30 and 70 minutes. The list of experts can be found in Appendix C.1. Interviews were added until they did not contribute new information and redundancy was achieved (Glaser & Strauss, 2010, pp. 67-77; Lincoln & Guba, 1985, p. 202).

The expert interviews provided a strategic view of trust-building initiatives in digital interactions and allowed identifying their effects and underlying principles (Pfadenhauer, 2009, p. 452). The questions were altered to account for experts' background. First, financial service providers (in particular senior managers) from both traditional and start-up companies in the financial services industry provided insights into their digital strategies and the associated challenges and learnings. Second, for the purpose of comparison, managers from best practice companies in already highly digitized industries provided insights based on their experience. Finally, experts from academia and applied research in the field of trust research provided further knowledge about the effectiveness of trust building strategies in the customer process from a behavioral and from a neuroscientific perspective. The interview guidelines are provided in Appendix C.2.

The insights gained from the expert interviews were complemented with publicly available information, such as company documents and reports.

4.4.1.2 Data Analysis

The data collected during the interviews was analyzed with two focuses in mind: the impact of increasingly digital customer-company interactions on trust and the trust-building strategies used in the particular environment. An inductive coding approach was applied in order to ensure openness towards the expert perspective, which was captured by letting the codes

emerge during analysis (Miles et al., 2014, p. 81). The process of analysis iterated between theoretical considerations and the data gathered from practice (Eisenhardt, 1989, p. 546).

During first-cycle coding, structural coding was applied to analyze the data collected during the expert interviews (Saldaña, 2013, p. 84). Using this type of coding, the information was segmented into the topics of interest, focusing predominantly on customer-related, company-related, and interaction-related factors, which all impact the formation of trust. The results of this step were further analyzed with causation coding, which allows identifying reasons for certain effects as well as the relevant context and conditions of these cause-and-effect relationships (Miles et al., 2014, p. 79; Saldaña, 2013, pp. 163-164). Causation coding was used to identify the processes either leading to or preventing the formation of trust in an increasingly digital context.

In subsequent second-cycle coding, pattern coding was used to further investigate the results of first-cycle coding. Pattern coding captures themes and explanations that emerge throughout data analysis (Miles et al., 2014, p. 86; Saldaña, 2013, p. 210). Throughout analysis, patterns of relevant features and attributes of customer-company interactions, which explain the formation of trust in a highly sensitive and increasingly digital context, were formed.

Analysis iterated between within-case analysis and across-case analysis (Eisenhardt, 1989, p. 540; Miles et al., 2014, p. 103). Each interview was first analyzed separately to gain a deep understanding of the trust-building processes described by experts. Across-case analysis then uncovered commonalities and differences between interviews, which were used to generate an understanding of common processes and deviating processes, for example, for certain types of companies or customer groups. Combining these insights led to describing the features and strategic characteristics of the trust-building process in an increasingly digital environment.

In the expert interviews, strategies for generating trust in a time of increasing digitization were investigated in the financial services industry. Analysis revealed that experts distinguish between specific elements of interaction, e.g., tools or content that a company uses to support trust building (“trust inducing features”), and strategic characteristics, which effectively create trust, such as transparency or relevance (“trust enablers”).

4.4.2 Findings of the Expert Interviews

4.4.2.1 Trust Inducing Features as Drivers of Trust Enablers

A first objective of the study was to learn about the features that financial service providers employ in order to digitally build trust. Managers described different options available for managing customer interaction and for implementing specific trust-building measures. The

trust-inducing features can be summarized in three groups: tools, content, and technical functioning and design. The experts stressed the relevance of these trust-inducing features in customer interaction as prerequisites for realizing trust-enabling strategies.

First, frequently used *interaction tools* include chat modules, videos, or FAQ sections. These tools allow companies to manage their interaction with the customer and allow the customer to retrieve relevant information directly from the company's digital presence. The need for the high interactivity of such tools was consistently stressed in all interviews, as this allows companies to continuously identify and respond to customer needs. Likewise, the need for social presence cues in interactions was strongly discussed. While the involvement of a person is considered to contribute positively to trust, it is not necessary in every situation. One critical distinguishing factor appears to be task complexity: the more complex the product, the more important a customer advisor's social presence is. When complexity is high, the advisor can respond to the customer's questions, provide explanations, and guide customers through the process in a conversation. A similar rationale explains the positive effects of videos, as they are an effective tool for guiding customers through a process and for explaining difficult contexts verbally and graphically. In addition, social presence cues given by other customers were considered highly effective by all experts. Offering tools to connect with a peer group and to meet fellow customers fosters sharing experiences and enhances a company's reputation in the digital sphere.

The choice of interaction tools changes with context. At the beginning of the customer journey, social presence is considered more important than later on, when the customer is familiar with the product and has created an understanding of it. All experts indicated that interaction tools will be further automated in future. So far, a fully automated, highly interactive communication with the customer, such as with an avatar, is not yet feasible, as many customers resent the idea of interacting with a machine. Nevertheless, experts suggest that this could change in future. Since customers are generally highly familiar with digital interactions, approaches such as gamification are additional options for enriching communication with customers and for educating them in a highly valued manner. By providing a variety of digital interaction tools, companies are able to reach more customers as their preferences and choice of interaction tools are determined by personal characteristics and experiences. Different options allow companies to account for contextual factors, task-related characteristics, social relationships, customers' personal characteristics, and tool implementation.

Second, interaction *content* should be presented in a clear and transparent way in line with customer logic. Content should be intuitive to understand and be adapted to the customer's needs in terms of the right format at the right time and place. Intelligent systems and monitoring customers' online behavior enable customized content, for example, by modifying communication based on the information from interactive tools. As experts from non-financial industries and academia in particular suggested, content relevance can be achieved by

asking customers questions throughout the digital interaction to understand their needs and preferences. A great strength of digital media in communicating relevant content is that it is becoming easier to aggregate information from large amounts of sources. Content should therefore not only be limited to information related to the company and its offer, but also include complementary information that is considered relevant by customers, e.g., information from other customers (e.g., reviews).

Third, trust-inducing features related to the *technical functioning and design* of interactions refer to the technical realization, optical standards, and messaging of the company's digital communication. Although these features were considered a precondition for trust by experts, they were not deemed sufficient for building trust directly on their own. For example, as one expert from the financial services industry stated, start-ups tend to be highly skilled in design and messaging, yet this does not suffice to building customer trust in the start-up's ability to settle claims. Instead, message content matters more, as long as technical realization and design meet customer expectations and correspond to what is considered normal by customers.

4.4.2.2 Trust Enablers in the Financial Services Industry

Depending on the nature, content, and implementation of the interaction tools, trust is built through different strategies. Three trust-enabling strategies were identified throughout the expert interviews: the first concerns establishing trust through competency and transparency, the second through ease and accessibility, and the third through relevance and relationship.

4.4.2.2.1 *Trust-Enabling Effects of Competency and Transparency*

Companies need to communicate that they are competent in their field of business and need to report their conduct and product offers transparently. Establishing competency and transparency is a basic but most important requirement for building trust in digital interactions. In case companies fail to display these trust enablers, trust in the company will decrease and customers will not interact further with the company. This observation holds true for both traditional and FinTech companies.

All groups of experts agreed on the necessity of *competency*, especially at the beginning of the customer process. A manager from a FinTech company noted that without conveying competency (as well as accessibility and ease), digital interactions create no added value for customers. Another manager from a direct bank confirmed that to establish a dialogue on social media, for example, it is crucial to answer customer requests competently. In the case of established companies, one manager referred to their advisory competency as a key differential resource, especially in personal contacts, which are enhanced through digital media.

Transparency was considered in the interviews as a means of providing information on the company and of aggregating information on product offers. FinTech managers framed transparent communication as a requirement for digitally guiding customers through the customer process, from initial information-seeking to contract conclusion. Managers also highlighted the importance of being consistently transparent at all touchpoints. A manager from an established company equally acknowledged the role of transparency in building trust. Notably, however, he also added that transparency creates a rather fact-based form of trust. This appears to confirm that transparency and competency are two crucial requirements for establishing trust in the digital context.

With particular regard to ongoing digitization, transparency also means informing customers about how the company treats the personal data collected during digital interactions. Moreover, the barrier for switching provider decreases, and experts from the financial services industry noted that companies do not get second chances to demonstrate their competency and to give customers the feeling that they have access to honest and relevant information. This has several consequences. In addition to higher customer centricity, experts observed a need to disclose more information than was common in traditional interactions. This development is due to the characteristics of digital media, most importantly the possibility of making large amounts of information available in an easily accessible and aggregated way. This brings with it both challenges and opportunities. On the one hand, companies now need to account for the fact that websites enable direct comparison between different providers. On the other, by enriching the available communication they share with the customer, companies create new value, i.e., value that was not present in offline interactions. Since trust is decisive in conditions of uncertainty, some managers pointed out that full transparency would mitigate the need for trust, which is not possible to achieve in practice, however.

One related possibility of building trust is to give customers control over the data they share. Experts from both practice and academia suggested that assuring customers that their data is safe is not enough. This shift in data control is a change compared to the traditional situation in the financial services industry. As a side effect, when handing over some data management to the customer, companies can also learn about customer preferences and optimize their interactions accordingly, for example, in terms of communication frequency and content.

In sum, the role of the competency and transparency trust enablers is to establish the foundation for the customer relationship.

4.4.2.2.2 *Trust Enabling Effects of Ease and Accessibility*

Customers use digital media instead of face-to-face interactions largely due to its ease and accessibility. Meeting this preference enables trust building in digital interactions. Accordingly, providing the right information conveniently at the right time and place appeared as a key priority for the interviewed companies.

Experts recognized that customers' use of digital media is driven by its ability to make things easier, faster, or cheaper. Among others, this can be achieved by shifting tasks previously performed by the customer to the company. According to interview partners, it is often this simplification that customers perceive as high service quality and what makes them choose a certain company. As became evident from the interviews, offline and digital services are not separated in customers' eyes, but are frequently combined to answer a need. Customers' behavior and channel choice is strongly driven by convenience. Along the different touchpoints, channels are frequently switched. Companies therefore need to ensure that the channels are highly integrated, provide consistent information, and avoid duplicated customer efforts.

In designing their digital offers, companies make use of the characteristics of digital channels and respond to customers' expectations of simplicity and convenience, which derive from their experiences with other industries. The development towards increased *ease* and *accessibility* is strongly leveraged by FinTech companies. Many of these companies have entered the financial services industry by simplifying the customer process and by increasing convenience, and have thereby created new value for customers. For established companies, the interviewed experts noted that including digital options in their service portfolio is generally considered added value. However, one academic expert on trust also indicated that the provision of digital options does not automatically enhance trust. On the contrary, building trust becomes more complex due to digital media as customers can collect and evaluate more information much faster, which challenges companies to make information adequately available through different channels.

Overall, ease and accessibility are key to preventing disruptions in the customer relationship.

4.4.2.2.3 *Trust Enabling Effects of Relevance and Relationship*

The most effective way of building trust is through face-to-face interactions. These create a form of personal relationship as the company representative and customer respond directly to each other's messages and behaviors. Translating this personal element and responsiveness to digital interactions has been found to be of key concern for interview partners from the financial services industry. Providing relevant information and engaging with customers allows strengthening the customer relationship, while a perceived relationship supports the formation of trust.

The *relationship* component is a major determinant of trust building. As one trust researcher stated, interacting with a real person or for that matter even perceiving a personal interaction is important in eliciting trust. Similarly, a manager from a non-financial industry confirmed that customer relationships are becoming more automated but also more personal. According to managers from established financial service providers, key to building the relationship is a seamless integration of personal and digital interactions. A manager from one established

company observed that FinTech companies are also starting to target the customer relationship through improved interfaces and stronger customer engagement. While managers acknowledged the difficulty of building a strong relationship through purely digital means, such means are aimed at accompanying the customer over the entire customer process. Here, personalizing the interactions based on data collected throughout the process is considered key. However, one FinTech manager added that while his company enhances its ability to personalize the offer, it will not change the business model to include personal interactions.

Another important factor in building the customer relationship is *relevance*. Customizing the offer and communication to match customer needs was referred to by experts as a way of enhancing trustworthiness. An interview partner from one of the non-financial industries stated that when the right information is provided in the right situation, customers appreciate this as relevant and value-adding rather than as mere advertising. There was a consensus across interviews that a company's goal should be to identify those moments in which customers are open to receiving information. Thus, rather than creating awareness, the goal should be to target customers in moments of awareness. As one industry expert commented, the ability to sense and react to changing needs allows for better customer understanding and enables effective engagement with the customer. Specifically for established companies, experts pointed to the need to adapt the front-end rather than the back-end, referring for instance to the changing role of the customer advisor in the digital context.

With regard to the specifics of the digital context, experts from the financial services industry highlighted that maintaining a sense of personal contact is important for building the customer relationship, as otherwise interactions appear too anonymous. In this regard, digital media mediates the contact between a customer and a company representative. While these interactions are less immediate than personal contact, one manager noted that they have the advantage of greater availability so that customer requests are answered more promptly. Given the advances in digital service offers, experts consistently asserted that some customer groups no longer need personal contact. For those groups, the experts suggested that the perceived anonymity of digital interactions might instead contribute to perceived trustworthiness.

In summary, creating relevance and building a relationship digitally is key to maintaining and prolonging the customer relationship.

4.4.3 Discussion of Expert Interviews

This study investigated trust-building strategies aimed at building trust in different customer-company interactions. Specifically, the goal was to understand the potential and the limits of digitization in interactions regarding trust-building capacity. In the customer process, interactions at every touchpoint are impacted by the increasing presence of digital interactions.

In the financial services industry, one of the key factors of a company's trustworthiness is competency. Experts stated that a company's ability to fulfill its promises is a precondition for customers to consider engaging with the company. The effect of transparency is similar: Transparent communication can reduce the uncertainty that customers perceive with regard to complex services such as in the financial services industry. Moreover, transparency increases comparability between companies and evokes the impression of honesty. Taken together, the interviews revealed that customers expect *competency and transparency* as preconditions for engaging with companies digitally. These two factors have thus been grouped together as a first trust enabler, one that constitutes the *basic values* sought by customers. Only when competency and transparency form the basis of the interaction can other trust enablers effectively add to trust building.

The second group of trust enablers identified in the study, *ease and accessibility*, refers to characteristics that are particularly emphasized in digital interactions. The interviewed managers asserted that customers choose digital interactions as they expect these to be fast, simple, convenient, and intuitive. The successful positioning of such offers by FinTech companies has made the demand for this form of value evident. However, as established companies are also increasingly emphasizing ease and accessibility in their customer interactions, FinTechs now face the challenge of creating value by introducing innovative offers and continued technical advancements, while at the same time focusing on essential customer needs with regard to financial services. As such, FinTech companies strongly follow a *transaction-based strategy*. This creates new added value for customers and corresponds to the second group of trust enablers ease and accessibility. Nevertheless, this group is also recognized as a relevant priority by established companies.

With regard to the third group of trust enablers, a focus on communicating relevant information and gradually building a relationship is prevalent both among start-ups and among established companies in the industry. Both established and FinTech companies aim for high relevance in interactions. The interviewed experts repeatedly highlighted the importance of proactively providing relevant and if possible customized information in the right situations in order to create added value for customers. Throughout the interviews, experts indicated that many customers are still looking for personal elements in their interactions with their financial service providers, i.e., elements that strengthen the perception of a more direct relationship. Therefore, the trust enablers *relevance and relationship* correspond to the *trust-based strategy*, which is pursued intensively by traditional companies, but is also attracting increasing attention from FinTech companies.

In sum, once the basic requirements of competency and transparency are satisfied, companies can pursue different strategies for adding value through their online channels, which in turn strengthens their competitive position. Birkhofer et al. (2000) identified two strategies adopted by companies to create trust in digital interactions: transaction-based and trust-based

(see Figure 4-2). These strategies correspond to the two groups of trust enablers mentioned above: ease and accessibility to a transaction-based approach, and relevance and relationship to a trust-based one.

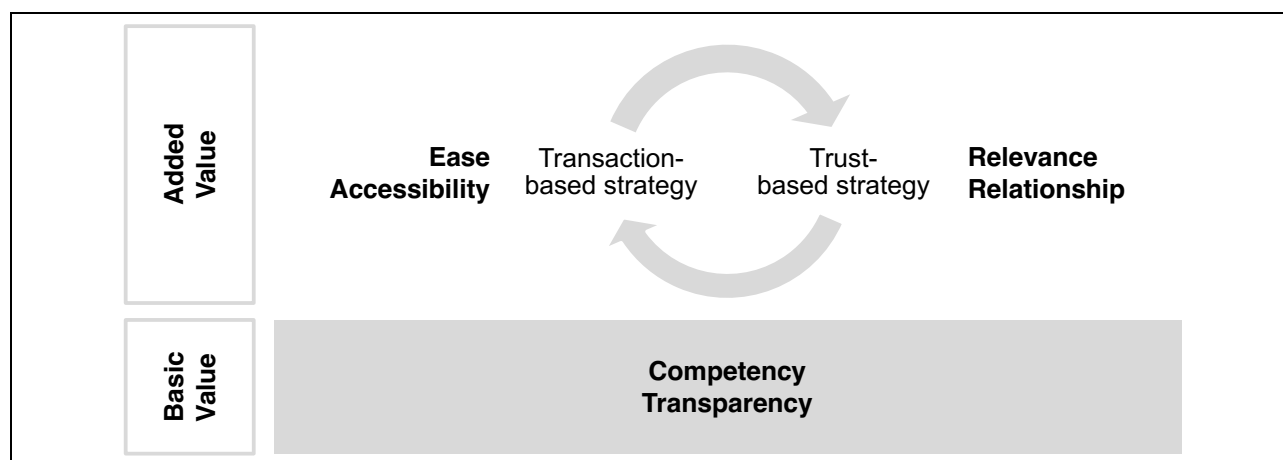


Figure 4-2 Basic and added value through different trust enablers

As shown, the transaction-based and the trust-based strategy can be followed by established companies as well as by FinTech companies, although to varying degrees. Emphasizing one of the two strategies depends on the company's legacy, on the characteristics and current needs of the target group, and on the specific context. Often, as shown in the interviews with representatives of the financial services industry, new FinTech companies initially follow a transaction-based approach in order to build trust as a consequence of a number of interactions. Once a relationship exists, it is strengthened by emphasizing and leveraging trust.

The results of this study show that established companies strongly emphasize the relational aspect of interactions. They aim to retain a strong presence of personal elements and to build on trusting relationships that have already been established offline. At the same time, they also invest in ensuring ease and accessibility in their digital interactions. FinTech companies mainly entered the financial services market with business models relying on offers that make interactions simple and accessible. They are increasingly also focusing on creating relevance and are investing in building the relationship. Thus, FinTech companies are beginning to turn towards a trust-based strategy. This is in line with experts indicating that it will be increasingly difficult for financial service providers to differentiate their company based on ease and accessibility alone, and that digital interactions will need to focus on being highly relevant and on conveying a sense of relationship with the customer.

4.5 Study 4.2: Effects of Interaction Strategies on Customer Trust

Study 4.2 aimed to investigate how increasing digitization throughout the customer journey affects trust through the three trust enablers identified in the qualitative first study.

As customer journeys become increasingly digital, companies need to decide where in the customer journey digitization efforts are best employed and where personal contact options

should be maintained. The results of Study 4.1 have shown that digital or hybrid interactions affect the trust that customers place in a company by affecting the three trust enablers “competency & transparency,” “ease & accessibility,” and “relevance & relationship.” Moreover, the three trust enablers are expected to act differently for start-ups and incumbent companies.

4.5.1 Developing Measurement Instruments

Before investigating the effect of digitization on trust, measurement instruments were developed for the three groups of trust enablers (“competency & transparency,” “ease & accessibility,” and “relevance & relationship”) found in the qualitative study in Study 4.1. Procedure followed recommended scale development procedures (Churchill, 1979, p. 66; DeVellis, 2003; Gerbing & Anderson, 1988, p. 187). The results of the qualitative study serve to identify and to specify the constructs that act as trust enablers. The instruments used to measure these constructs were based on established measurement scales. To assess the reliability and validity of the measurement instruments, exploratory factor analysis was applied, followed by a confirmatory factor analysis.

4.5.1.1 Data Collection and Sample

To empirically test the measurement instruments, a survey among customers was conducted. Since the study investigated the effect of digitization on trust in the financial services industry, the survey was set up to match this context. Respondents were introduced to a fictional financial services company “Alpa” and were asked to assume the role of (potential) customers considering investing with Alpa.

The survey was administered in Switzerland and Germany in the form of an online questionnaire and was distributed through a market research company. Respondents were representative of the two countries in terms of age and gender. In total, the sample consisted of 660 completed questionnaires (61.2% Swiss, 50.2% women, $M_{\text{age}} = 43.45$).

4.5.1.2 Operationalizing Trust Enablers

In order to measure the trust enabler constructs identified in the expert interviews, corresponding equivalents in the existing literature were sought. The selection of measurement scales was determined based on the theoretical congruence of the measurement scales with the identified trust enabler constructs. Where possible, scales previously applied in a similar research context were selected. When required, the wording of the scale items was adapted to fit the context of a financial service provider. For all scales, a 7-item Likert scale ranging from “strongly disagree” to “strongly agree” was used. An overview of the construct measures can be found in Appendix C.3.

The interviewed experts considered *competency* as a company's ability to perform a task in a way that meets customer expectations. For competency, the scale by Cho (2006, p. 35) was used. In the questionnaire, participants assessed the items "Alpa is an expert in the financial services business," "Alpa knows what it is doing," "Alpa is competent," and "Alpa is proficient." Scale reliability was measured with Cronbach's alpha and the resulting value of .94 can be considered high (Hair, Black, Babin, & Anderson, 2014, p. 125; Malhotra, 2007, p. 285). Creating *transparency* in customer-company interactions means reducing the information asymmetry between company and customer. Experts emphasized the need to openly share information in customer communication. Thus, transparency was operationalized as communication openness and assessed with the items "Alpa keeps me very well informed about what is going on with my finances," "Alpa explains financial services in a meaningful way," "Alpa always offers me as much information as I need," and "Alpa always explains to me the pros and cons of the offers it recommends to me" by Auh, Bell, McLeod, and Shih (2007, p. 363). Cronbach's alpha was .95.

Ease considers customers' effort when interacting with a company. Participants indicated the perceived ease as part of service quality by indicating their perception of the items "I am very comfortable with Alpa," "I can get helpful guidance from the employees," "I only need to exert the smallest possible effort," "I keep the stress that is connected to financial decisions as low as possible," and "I receive service and guidance from experts at Alpa." These items are based on the scale used by Homburg, Wieseke, and Hoyer (2009, p. 51). This scale was reliable with Cronbach's alpha equal to .93. *Accessibility* describes the convenience of initiating interaction with a company. Thus, accessibility was operationalized as access convenience, measured with the items "I am able to reach Alpa quickly and easily," "Alpa's contact options are convenient for me," and "Alpa can be accessed conveniently at any time" based on the scale used by Seiders, Voss, Godfrey, and Grewal (2007, p. 148). Cronbach's alpha for this scale was .95.

Relevance characterizes the quality of advice provided to customers in interactions. The interviewed experts emphasized the need to provide customers with personalized information, i.e., that matches their needs. Relevance thus considered the advice provided and was measured with the items "Alpa provides me with sufficient information to make a purchase decision on all products being offered," "The investment option by Alpa can be personalized to my needs," "Alpa can recommend products based on previous purchase," "Alpa allows me to create products or services to exactly fit my needs," and "The site is helpful to me in reaching my buying decisions." The scale is a shortened version of the scale used by Bart et al. (2005, p. 149) and reached a Cronbach's alpha of .94. Finally, *relationship* refers to customers' perception that they are interacting with a real person. Therefore, relationship considered the perceived social presence in the interaction and asked respondents to assess the items "There is a sense of human contact at Alpa," "There is a sense of personalness at Alpa," "There is a

sense of sociability at Alpa,” “There is a sense of human warmth at Alpa,” and “There is a sense of human sensitivity at Alpa.” This scale, developed by Gefen and Straub (2003, p. 24), had a Cronbach’s alpha of .96.

4.5.1.3 Exploratory Factor Analysis

To test the measurement instruments, in a first step, the three trust enablers (“competency & transparency,” “accessibility & ease,” and “relevance & relationship”) were investigated through an explorative analysis. The items of the six individual trust enablers – competency (4 items), transparency (4 items), accountability (3 items), ease (5 items), relevance (5 items), and relationship (5 items) – were investigated using Principal Component Analysis. SPSS 23 was used for the calculations. The factorability of the correlation matrix was indicated by many correlations above .3, a Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy of .972 (exceeding the recommended value of .6), and a significant Bartlett’s test of sphericity ($p < .001$) (Backhaus et al., 2015, pp. 341-342; Malhotra, 2007, p. 614). Both a priori determination and the Kaiser criterion of Eigenvalues > 1 indicated a three-factor solution, which explains 76.85% of variance (Backhaus et al., 2015, p. 359; Hair et al., 2014, p. 109; Malhotra, 2007, p. 617). A principal components analysis with Varimax rotation was performed. As expected, all items of competency and transparency loaded high (i.e., $> .7$) on the first factor with low discriminant validity (i.e., $< .4$). Similarly, the items accountability and relationship showed high loadings on the second and third factors, each with low discriminant validity. However, as the items of ease and relevance showed substantial loadings on all three factors, they were removed from further analysis to avoid high cross loading. Principal components analysis was repeated with only four trust enablers (competency, transparency, accountability, and relationship). In the repeated analysis, the thresholds indicating factorability were reached (correlations above .3, KMO = .948, significant Bartlett’s test for sphericity ($p < .001$)). Again, three factors were extracted that together explain 83.41% of variance. Table 4-1 shows the rotated solution. Factor 1 showed high convergent validity of all items of competency and transparency with low discriminant validity. This factor is referred to as “competency & transparency” in the further analysis. Factor 2 showed high convergent validity of all items of the relationship scale with low discriminant validity, and is referred to as “relationship.” Factor 3 showed high convergent validity of all items of the accountability scale with low discriminant validity, and is referred to as “accessibility.”

Table 4-1 Factor loadings of the explorative factor analysis

Scale	Factor 1	Factor 2	Factor 3
Competency & transparency			
Alpa* is an expert in the financial services business.	.841	.228	.213
Alpa knows, what it is doing.	.829	.206	.235
Alpa is competent.	.863	.230	.238
Alpa is proficient.	.806	.217	.108
Alpa keeps me very well informed about what is going on with my finances.	.747	.353	.343
Alpa explains financial services in a meaningful way.	.803	.285	.297
Alpa always offers me as much information as I need.	.715	.317	.377
Alpa always explains to me the pros and cons of the offers it recommends to me.	.745	.311	.324
Accessibility			
I am able to reach Alpa quickly and easily.	.350	.215	.865
Alpa's contact options are convenient for me.	.294	.270	.860
Alpa can be accessed conveniently at any time.	.331	.229	.862
Relationship			
There is a sense of human contact at Alpa.	.288	.838	.272
There is a sense of personalness at Alpa.	.340	.813	.289
There is a sense of sociability at Alpa.	.207	.879	.145
There is a sense of human warmth at Alpa.	.251	.904	.135
There is a sense of human sensitivity at Alpa.	.301	.875	.187

Note: Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Sample size: n = 660

*Alpa is the name of the fictional financial service provider in the customer survey.

4.5.1.4 Confirmatory Factor Analysis

Next, confirmatory factor analysis was performed. This kind of analysis formulates specific hypotheses for the relationship between items and factors. By associating latent variables with these factors, the model fit can be probed. Confirmatory factor analysis was conducted with SPSS AMOS 23.

The results for the full model (including all six individual trust enablers) replicated the findings of the exploratory factor analysis. While factor loadings were satisfactory, the overall model fit was considered poor. Therefore, the items of ease and relevance were eliminated again, which improved the overall model fit. The reduced model included items concerning “competency & transparency,” “accessibility,” and “relationship.” Overall, the model fit indicated some shortcomings, as pointed out by the various fit index values. χ^2/df equals 11.14, while it should be below or about 3.00 (Iacobucci, 2010, p. 95). The comparative fit index (CFI) is appropriate with a value of .92, as values above .92 are considered to demonstrate a good fit (Hair et al., 2014, p. 672). The root mean square error of approximation (RMSEA) equals .12, which is higher than the recommended .07 (ibid.). Finally, the standardized root mean residual (SRMR) is .05. As recommended, it is lower than .08 (ibid.). These results indicated that the items describing “competency,” which belong to the first factor, exhibit error terms that strongly covary. Residuals of the items of factor 1 show high covariances.

Excluding the items of “competency” from the model strongly improved the model fit. The further reduced model included items describing “transparency,” “accessibility,” and “relationship.” In this further reduced model, χ^2/df equals 5.30 and is thus still high, CFI equals .98, at .08 RMSEA is reasonable (Backhaus et al., 2015, p. 147), and SRMR is good with a value of .03. While not all thresholds are met, the model was still considered fair. It was decided to retain the three factors “transparency,” “accessibility,” and “relationship” for further analysis, as both theory and the results of the qualitative study supported the formulated model (Iacobucci, 2010, p. 95).

The scale reliabilities of this strongly reduced model are reported below (Table 4-2). The individual factor loadings, average variance extracted (AVE), composite reliability, and Cronbach's alpha were calculated. All factor loadings were very high with all but one value being at least .9. Both AVE and composite reliability related the variance explained by the model to the variance of the error terms. All AVE scores were higher than the minimum value of .5, and all composite reliability scores were higher than the threshold of .6 (Bagozzi & Yi, 1988, p. 80; Fornell & Larcker, 1981, pp. 45-46). Also, the values for Cronbach's alpha, which measures scale consistency and which is based on correlations of the items in the scale, indicated high consistency, as values should exceed .6 or .7 (Hair et al., 2014, p. 125; Malhotra, 2007, p. 285).

Table 4-2 Model fit values of the confirmatory factor analysis

Scale	Factor loading	AVE	Composite reliability	Cronbach's alpha
Transparency		.84	.95	.95
Alpa keeps me very well informed about what is going on with my finances.	.94			
Alpa explains financial services in a meaningful way.	.92			
Alpa always offers me as much information as I need.	.91			
Alpa always explains to me the pros and cons of the offers it recommends to me.	.90			
Accessibility		.87	.95	.95
I am able to reach Alpa quickly and easily.	.95			
Alpa's contact options are convenient for me.	.91			
Alpa can be accessed conveniently at any time.	.94			
Relationship		.83	.96	.96
There is a sense of human contact at Alpa.	.92			
There is a sense of personalness at Alpa.	.91			
There is a sense of sociability at Alpa.	.87			
There is a sense of human warmth at Alpa.	.92			
There is a sense of human sensitivity at Alpa.	.94			
Model fit				
$\chi^2 = 270.39$; degrees of freedom = 51				
CFI = .98				
RMSEA = .08				
SRMR = .03				

Finally, discriminant validity was considered to assess whether the three factors are distinct. To this end, the Fornell and Larcker criterion was applied, which suggested that the AVE value of a factor had to be larger than the squared correlation of this factor with the other factors (Backhaus et al., 2015, pp. 144-145; Fornell & Larcker, 1981, p. 46). This condition was met for all three factors, as indicated by the results depicted in Table 4-3.

Table 4-3 Analysis of discriminant validity of the confirmatory factor analysis

Factor	AVE	Squared correlation with other factors
Transparency	.84	(transparency * accessibility) ² = .46
		(transparency * relationship) ² = .43
Accessibility	.87	(accessibility * transparency) ² = .46
		(accessibility * relationship) ² = .31
Relationship	.83	(relationship * transparency) ² = .43
		(relationship * accessibility) ² = .31

The results of the exploratory and confirmatory factor analyses showed that while competency and transparency are highly correlated, especially transparency is suitable for describing this trust enabler. Ease and relevance are also related to their attributed group (ease and accessibility, relevance and relationship). They were, however, also found to have strong interrelations with the other groups, and are thus of limited explanatory power. Therefore, only *transparency*, *accessibility*, and *relationship* are considered as separate trust enablers for further analysis.

4.5.2 Hypothesis Development

Based on the results of the expert interviews, five hypotheses were developed and tested in a quantitative study. Analysis distinguished between FinTech companies and established, i.e., incumbent companies, between fully digital and hybrid interaction strategies, and between interactions in the pre-sales phase and the utilization phase of the customer process.

Direct Effects on Trust

The experts interviewed in the qualitative study affirmed that the level of digitization throughout the customer process influences trust. It appears more difficult to build trust when customers can only interact digitally with their financial service provider compared to when personal contact opportunities are offered. Customers appear to place higher trust in companies that they can encounter in face-to-face interaction and establish personal contact with. *It is therefore expected that both in the pre-sales and utilization phases, trust is higher when hybrid (i.e., digital and personal) interaction opportunities are offered compared to only digital interaction opportunities.*

- H1** The digitization level in a) the pre-sales phase and b) the utilization phase has a positive impact on trust, meaning that hybrid (vs. digital) interactions in the pre-sales phase lead to higher trust.

Mediating effects of the trust enablers

Three trust enablers have been identified: transparency, accessibility, and relationship. Following the argumentation of Study 4.1, these are expected to positively influence the perceived trust customers place in a financial services provider.

Interviewees reported that for customers, trust enabler transparency was fundamental for interactions (whether digital or personal) with a company. Displaying transparency is needed to convey honesty. The expert interviews revealed that conveying this trust enabler is more effectively achieved through personal contact. *Therefore, it is expected that both in the pre-sales phase and in the utilization phase, transparency is perceived higher for hybrid interactions than for purely digital interactions.*

Trust enabler accessibility was considered a strength of digital interactions in the expert interviews. However, it was also stated that customers value the possibility of contacting their financial services provider at any time and at any place that is convenient for them. Therefore, *it is expected that the option of contacting a company both digitally and personally is perceived higher in accessibility than are interactions that are only digital.*

The results of the first study showed that it is more difficult to create a sense of relationship through digital interaction compared to personal interactions. Moreover, it was acknowledged in the interviews that, ideally, customers can seamlessly switch between channels, where they receive personal and personally relevant information. *Therefore, it is expected that the trust enabler relationship is higher in hybrid interactions than in purely digital interactions, both in the pre-sales and utilization phases of the customer process.*

It is expected that the trust enablers transparency, accessibility, and relationship mediate the effect of the level of digitization in the pre-sales and utilization phases on trust.

H2 a) Transparency, b) accessibility, and c) relationship mediate the effect of the digitization level in the pre-sales phase on trust.

H3 a) Transparency, b) accessibility, and c) relationship mediate the effect of the digitization level in the utilization phase on trust.

Moderating Effects of Company Type

Generally, the results of the first study indicated that interacting either with a digital or hybrid strategy leads to a higher perceived transparency for incumbents than for start-up companies. At the same time, the experts acknowledged that FinTech companies are well equipped to leverage trust enabler transparency through their interactions. Moreover, when start-ups allow customers to interact with them personally, possible reservations against this type of lesser-known company may be reduced. *Overall, it is thus expected that the effect of the digitization level in the pre-sales phase and the utilization phase on transparency is stronger for start-up companies than for incumbent companies.*

Similarly, it is expected that interactions are considered higher in terms of accessibility for incumbent companies than for start-up companies. Still, accessibility is a trust enabler that is strongly emphasized by start-up companies. Such companies aim to create highly convenient interactions for customers and enter the market with a transaction-based strategy. Start-up companies can leverage their image of making things easier and more accessible when allowing for both digital and personal contact. *Therefore, it is expected that the effect of the digitization level in the pre-sales phase and the utilization phase on accessibility is stronger for start-up companies compared to incumbent companies.*

The results of Study 4.1 showed that incumbents are currently investing more than start-up companies in engaging with their customers to build a personal relationship. In this way, incumbent companies generate deeper customer knowledge and improve the ability to provide relevant content. While FinTech companies are focusing increasingly on the customer relationship, their business models usually do not emphasize personal communication. It is expected that incumbent companies can better leverage the relationship in digital and personal interactions in both phases of the customer process. *The effect of the digitization level in the pre-sales phase and the utilization phase on relationship is thus expected to be stronger for incumbent companies than start-up companies.*

Based on this argumentation, the indirect effect of the digitization level in the pre-sales and utilization phases – via the trust-enabling strategies – on trust is expected to depend on two company types.

- H4** An incumbent company (vs. start-up company) attenuates the effect of the pre-sales phase on a) transparency and b) accessibility and amplifies the effect of the pre-sales phase on c) relationship.
- H5** An incumbent company (vs. start-up company) attenuates the effect of the utilization phase on a) transparency and b) accessibility and amplifies the effect of the utilization phase on c) relationship.

Figure 4-3 depicts the hypotheses in the conceptual model of Study 4.2.

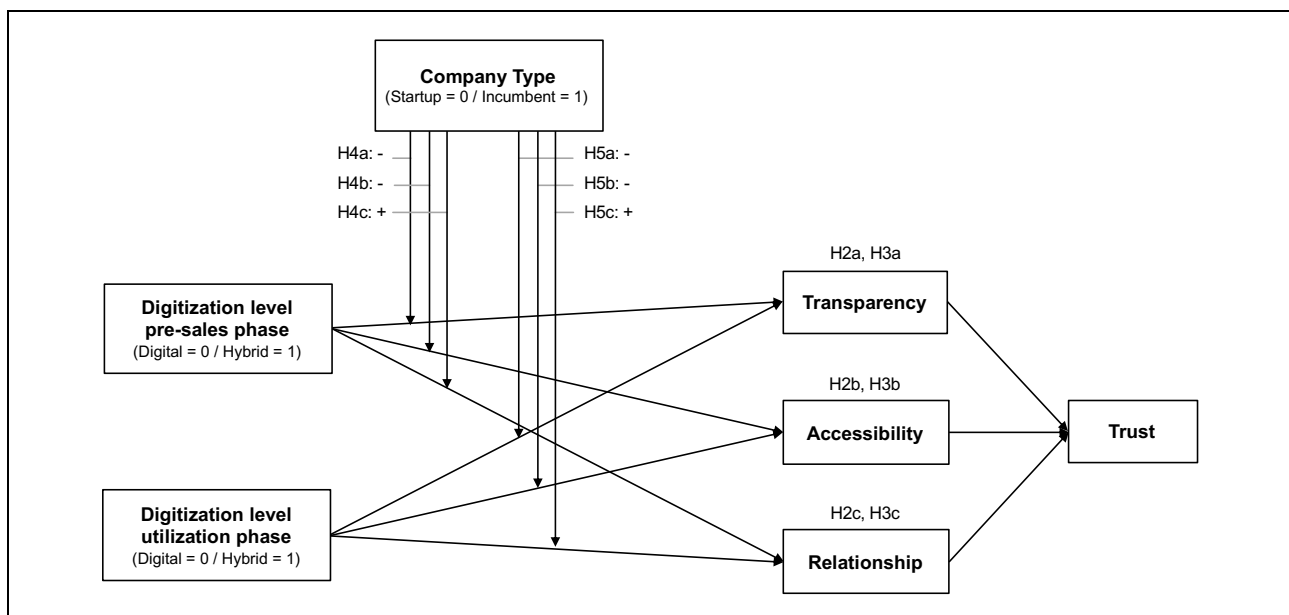


Figure 4-3 Conceptual model of Study 4.2

4.5.3 Methodology of the Experiment

4.5.3.1 Design, Participants, and Procedure

To test the hypotheses developed above, an experiment was conducted. The objective was to study the effects of digital vs. hybrid pre-sales and utilization phases on customer trust. A 2x2x2 ([pre-sales phase: digital vs. hybrid] x [utilization phase: digital vs. hybrid] x [company type: start-up vs. incumbent]) mixed design was used. The study was set up as a laboratory experiment and characterized by well controlled experimental conditions, high internal and external validity, and the ability to detect cause-and-effect relationships (Malhotra, 2007, pp. 226, 238-239). The approach to data collection is outlined in Section 4.5.1.1. After pretesting the questionnaire, responses were gathered through a market research company. The questionnaire was distributed online in Switzerland and Germany. The sample was representative of the two countries in terms of age and gender. In total, 660 responses were gathered (61.2% Swiss, 50.2% women, $M_{\text{age}} = 43.45$). For cases with missing values, listwise deletion was selected for analyses in the experiment. Therefore, the final sample size n equals 596.

Respondents were randomly assigned to one of eight different scenarios. In the experiment, respondents assumed the role of (potential) customers who were considering investing their money with fictional financial service provider “Alpa.” The objective was to create a situation that is relatable but also includes trust, as investing money involves risk and uncertainties. “Alpa” was presented to respondents either as a start-up company or as an incumbent company. To manipulate the interaction possibilities throughout the customer journey, respondents were told, depending on the scenario, that they could communicate either only digitally or digitally and personally with Alpa in the pre-sales and utilization phases. Afterwards, respondents indicated their perception of the mediating trust enablers. Moreover, they indicated their overall level of trust in the company. Finally, control variables a manipulation check were included to ensure that participants understood the presented scenarios. At the end of the questionnaire, respondents were thanked for their participation. Figure 4-4 (p. 210) shows an overview of the procedure of the experimental study.

4.5.3.2 Manipulation of the Independent and Moderating Variables

Companies in the financial services industry can follow either a digital strategy or a hybrid interaction strategy. Customer needs change throughout the customer process. In the pre-sales phase, customers are not yet accustomed to either the product or the company. In the following utilization phase, the purchase has been made and the customer has already interacted with the company. Due to the different needs, the opportunities for building trust through personal and digital interactions also differ in these phases.

1. Introduction to the study
Participants received information on scenario settings.
2. Manipulation of the company type (moderating variable)
The company “Alpa” was presented either as a <i>start-up</i> or as an <i>incumbent</i> financial service provider.
3. Manipulation of the pre-sales phase (independent variable)
Customers were asked to consider investment with “Alpa.” They could contact “Alpa” either only <i>digitally</i> or <i>personally and digitally</i> .
4. Manipulation of the utilization phase (independent variable)
Customers were asked to consider making a change to their investment at “Alpa.” They could contact “Alpa” either only <i>digitally</i> or <i>personally and digitally</i> .
5. Measurement of the mediating variables
Respondents evaluated their perception of the trust-enabling variables.
6. Measurement of the dependent variable
Respondents reported the trust they placed in “Alpa.”
7. Measurement of the control variables
Respondents answered questions regarding their use of and familiarity with digital and financial services, their general trust and privacy concerns, and demographic questions.

Figure 4-4 Overview of the procedure for the experiment

To manipulate the digitization level in the pre-sales phase, customers were asked to imagine that they were seeking to make an investment and should consider Alpa. They were presented with contact opportunities, which in the “digital” condition only included digital options (e.g., email, chat, video-call). In the “hybrid” condition, on top of the digital contact opportunities, customers received the option to contact Alpa personally (i.e., a customer advisor in a nearby branch). Analogously, the manipulation of the digitization level in the utilization phase was operationalized. Now, customers were asked to imagine they wanted to make a change to their investment plan. In the “digital” condition, customers could contact Alpa only digitally (i.e., technology-mediated interaction opportunities, such as email, chat, or video-call), while the “hybrid” condition also included personal contact opportunities (i.e., personal face-to-face contact with a customer advisor in a branch close by).

Incumbent and start-up companies have a different image, which influences customer trust. The presentation of Alpa differed in order to manipulate the moderating variable company type. Alpa was presented as a start-up company in the start-up condition, while in the incumbent condition it was presented as an established company. To ensure the credibility and comparability of the two companies, respondents were told that each had recently received an award among start-up or established companies in the financial services industry, and that

their services were similar. In the experiment, both company types could interact with their customers either hybrid or fully digital, depending on the scenario.

4.5.3.3 Operationalization of the Dependent and Mediating Variables

Where possible, the scales selected for the questionnaire to assess the dependent and mediating variables had already been used in similar research contexts. The variables of interest were overall trust and the trust enablers identified in Study 4.1. All scales were measured on a 7-item Likert scale ranging from “strongly disagree” to “strongly agree.” The items of the scales described below were slightly adapted from the original wording in order to fit the scenario at hand. The items of each scale were averaged in order to receive an overall value for each element of the trust enablers.

The dependent variable in the model was trust (see Appendix C.4). Respondents were asked to rate their perceived trust by assessing the items “Even if not monitored, I’d trust Alpa to do the job right,” “I trust Alpa,” “I believe that Alpa is trustworthy,” “I believe that Alpa would act in my best interest,” and “If I required help, Alpa would do its best to help me.” The first three items were taken from a trust-measuring scale by Gefen (2000, p. 735) and were complemented by the first two items of the scale for trusting beliefs by McKnight et al. (2002, p. 355). Both Gefen and McKnight et al. consider trust in the e-commerce context. The reliability of the scale used in the questionnaire was measured with Cronbach’s alpha, which indicated a high reliability with a value of .95 (Hair et al., 2014, p. 125; Malhotra, 2007, p. 285).

Next, the trust enablers, which act as mediating variables, were assessed. The instruments for measuring the trust enablers have been developed in Section 4.5.1. The results of the exploratory and confirmatory factor analyses have shown that *transparency*, *accessibility*, and *relationship* are suited to representing the trust enablers found in the qualitative study. The trust enablers were operationalized with established measurement scales from the existing literature (see Appendix C.3). These scales for the trust enablers have been developed and discussed in detail in Section 4.5.1.2.

4.5.3.4 Control Variables

The following covariates were gathered in the questionnaire in order to control for their impact (see also Appendix C.4). Demographic questions assessed participants’ gender (male/female), age, nationality (German/Swiss), educational level (school diploma/occupational training), employment status (unemployed/employed), and financial status (self-assessment of the statement “My family’s financial status is...,” as measured on a 7-point Likert scale ranging from “very poor” to “very wealthy” (Bansal et al., 2016, p. 8)).

Moreover, questions related to digital and financial services asked participants about their daily Internet usage in hours. This was subsequently referred to as “use” and based on a scale by Teo and Liu (2007, p. 29). Familiarity with digital financial services was assessed based on a shortened scale used by Gefen (2000, p. 735). Participants were asked to rate the statements “I am familiar with searching for financial services on the Internet” and “I am familiar with buying financial services on the Internet” on a 7-point Likert scale. The resulting familiarity scale had a Cronbach’s alpha of .86. Customers’ privacy concerns may also affect trust and were thus assessed with the item “I believe that online privacy is invaded when control is lost or unwillingly reduced as a result of a transaction,” which is adapted from the scales used by Malhotra, Kim, and Agarwal (2004, p. 351) and by Okazaki, Li, and Hirose (2009, p. 76). Finally, the general trust level of customers was assessed by five items: trust in financial services, online services, personal advice, start-up companies and established companies. Cronbach’s alpha for this general trust scale was .72.

4.5.4 Analysis and Results of the Experiment

4.5.4.1 Manipulation and Confound Checks

The ratings of trust in the financial service provider differed significantly across participants in the eight scenarios ($F(7, 652) = 8.1, p < .01$). Confound checks revealed no significant differences across the conditions. Participants considered the credibility of the scenarios as high ($p = .69, M_{\text{credibility}} = 4.62$), while perceived difficulty was also considered rather high ($p = .39, M_{\text{difficulty}} = 5.27$) across all groups. The hypotheses as developed above were tested in a regression analysis. Regression analysis assumes normality, homoscedasticity, linearity, and independence of error terms, and the absence of multicollinearity (e.g., Hair et al., 2014, pp. 182-185, 200-201). The premises were tested and met for the following tests.

4.5.4.2 Direct Effects on Trust

The first hypothesis considered whether the level of digitization in the pre-sales and utilization phase influences trust. A hierarchical multiple regression analysis was performed to test the impact of the digitization level in the pre-sales phase and that in the utilization phase on trust, after controlling for covariates (age, gender, nationality, education, employment status, financial status, daily Internet usage, familiarity, general trust, and privacy concern). The covariates were entered first, followed by company type, digitization level in the pre-sales phase, and digitization level in the utilization phase. This step-wise procedure of first entering the covariates (first model) and subsequently entering the predictor variables (second model and following) was applied in all following hierarchical regression analyses. The explained variance in trust of the first model was 28%, $F(10, 585) = 22.72, p < .01$. Including the digitization

level in the pre-sales and utilization phase, after controlling for covariates, increased the explained variance in trust by 4%, R^2 change = .04, F change (2, 583) = 16.60, $p < .01$. Therefore, the second model explains 32% of variance (F (12, 583) = 22.71, $p < .01$). As several of the covariates strongly impacted trust (especially the general trust level with $\beta = .48$, $p < .01$ and nationality with $\beta = -.20$, $p < .01$) and already explained a large proportion of the variance, this increase is rather small but significant. In the final model, the level of digitization in the pre-sales phase ($\beta = .08$, $p < .05$), and the level of digitization in the utilization phase ($\beta = .17$, $p < .01$) all significantly influenced trust. The coefficients indicate that the impact of the utilization phase on trust is stronger than the impact of the pre-sales phase. H1a and H1b are thus supported.

It was considered whether the three trust enablers “transparency,” “accessibility,” and “relationship” influence trust. A hierarchical multiple regression analysis that controlled for the covariates was used to investigate the effect of the trust enablers on trust. The results showed that including the three trust enablers increased the explained variance by 42%, R^2 change = .42, F change (3, 582) = 266.63, $p < .01$. The second model explains 70% of variance (F (13, 582) = 102.81, $p < .01$). Transparency ($\beta = .38$, $p < .01$), accessibility ($\beta = .07$, $p < .05$), and relationship ($\beta = .34$, $p < .01$) all have a positive impact on trust.

4.5.4.3 Role of Digitization in the Pre-Sales Phase

Next, the hypotheses referring to the pre-sales phase were investigated: Hypothesis 2 and Hypothesis 4.

4.5.4.3.1 *Mediating Effects of the Trust Enablers*

Mediation analysis was performed to test Hypothesis 2.

Mediation Analysis

It was investigated whether the level of digitization in the pre-sales phase influences the three trust enablers transparency, accessibility, and relationship. Three separate hierarchical regressions were run, each after controlling for covariates. The level of digitization in the pre-sales phase did not significantly affect the trust enabler transparency ($\beta = -.01$, $p = .73$). Nor did it increase the variance explained in the model (R^2 change = .00, F change (1, 584) = .12, $p = .73$), with the overall model explaining 16% of variance (F (11, 584) = 10.14, $p < .01$). Similarly, the level of digitization in the pre-sales phase did not significantly affect the trust enabler accessibility ($\beta = .03$, $p = .50$). Nor did it increase the variance explained in the model (R^2 change = .00, F change (1, 584) = .45, $p = .50$), with the overall model explaining 11% of variance (F (11, 584) = 6.21, $p < .01$). Finally, the level of digitization in the pre-sales phase was found to affect the trust enabler relationship ($\beta = .15$, $p < .01$). Including the pre-sales phase in addition to the covariates slightly increased the variance explained

in the model ($R^2 \text{ change} = .02$, $F \text{ change} (1, 584) = 15.38$, $p < .01$), with the overall model explaining 20% of variance ($F (11, 584) = 13.17$, $p < .01$).

Hypothesis 2 posits that the three trust enablers mediate the relationship between the pre-sales phase and trust. The level of digitization in the pre-sales phase was found to impact trust (see results for Hypothesis 1), but that in the pre-sales phase only significantly impacted the trust enabler relationship, though not transparency and accessibility. Therefore, only the role of relationship was further investigated (Muller, Judd, & Yzerbyt, 2005, p. 853). To test whether relationship acts as a mediator, both the level of digitization in the pre-sales phase and relationship were included as predictors in the regression model, with trust as the dependent variable. As the coefficient of relationship was significant ($\beta = .62$, $p < .01$), and as the coefficient of the pre-sales phase ($\beta = .01$, $p = .71$) was smaller than that found in Hypothesis 1 ($\beta = .08$, $p < .05$), this indicates that relationship does indeed mediate the effect of the level of digitization in the pre-sales phase on trust (Muller et al., 2005, p. 853).

To further investigate the mediating role of relationship, indirect effects were tested. The product term constituting indirect effect is not normally distributed (Edwards & Lambert, 2007, pp. 11-12). As this is not accounted for in the Sobel test, the indirect effect was instead tested by applying non-parametric bootstrapping (Edwards & Lambert, 2007, pp. 11-12; Zhao, Lynch, & Chen, 2010, p. 202). To this end, the procedure by Preacher and Hayes (2008) was followed. Bootstrapping constructs a confidence interval for the indirect effect by repeatedly taking subsamples of the data set, for which the indirect effect is calculated (Preacher & Hayes, 2008, p. 880). The results of the repeated estimations are used as an approximation for the indirect effect (ibid.). Model 4 of Hayes PROCESS macro for SPSS with bootstrapped estimates was used for this test (5000 bootstrap samples, 95% bias-corrected confidence interval) (Hayes, 2013, pp. 90-93, 100). All covariates were included in the model. The results supported the observation that the digitization level in the pre-sales phase has a positive impact on the relationship (path a: $b = .44$, $p < .01$) and that relationship has a positive impact on trust (path b: $b = .55$, $p < .01$). The 95% confidence interval for the indirect effect did not include the value zero (ab: $b = .25$, 95% CI = .12 to .37), and thus provided evidence for mediation. Once the mediator is included, the relationship between the pre-sales phase and trust becomes insignificant (path c': $b = .03$, $p = .71$), indicating full mediation by the trust enabler relationship.

Taken together, the results do not support H2a and H2b. H2c, however, is supported.

4.5.4.3.2 *Moderating Effects of Company Type*

For Hypothesis 4, a moderation analysis was performed, and the conditional indirect effects were investigated.

Moderation Analysis

It was considered whether company type moderates the relationship between the pre-sales phase and each of the three trust enablers. To test this, three hierarchical regression analyses were conducted, each with one of the three trust enablers as the dependent variable. As before, the first model only contained the covariates that were controlled for. In the second model, the independent variable pre-sales phase and the moderating variable company type were added. In the third model, the interaction effect of the independent and moderating variable was added, which – if significant – indicates a moderating effect of company type. The multicollinearity diagnostics indicated no violations, as all values of the variance inflation factor (VIF) were below the cut-off value of 10 and values for tolerance greater than 0.1 (Hair et al., 2014, p. 204). Despite these results, in a moderation analysis, the product term of the predictor variables can strongly correlate with the individual predictor variables (L. S. Aiken & West, 1991, p. 35; Hair et al., 2014, p. 204). Thus, the recommendation of L. S. Aiken and West (1991, p. 35) and J. Cohen, Cohen, West, and Aiken (2003, pp. 282-283) was followed and the predictor variables were mean-centered and b-coefficients instead of beta-coefficients were reported. An overview of the results is provided in Table 4-4 (page 217).

First, transparency was considered as dependent variable. The first model explained 16% of variance ($F(10, 585) = 11.16, p < .01$). It indicated a significant negative effect of the covariates nationality ($b = -.46, p < .01$) and financial status ($b = -.09, p < .05$) and a significant positive effect of the covariate general trust ($b = .52, p < .01$), meaning that regardless of the phase in the customer journey, transparency was perceived higher among customers with lower financial status, among German customers, and among customers with higher general trust levels.

Including the independent variable and moderating variable as predictors in the second model slightly but significantly improved the model (R squared change = .02, F change (2, 583) = 5.97, $p < .01$), with the second overall model explaining 18% of variance ($F(12, 583) = 10.45, p < .01$). The results replicated the previous finding that the digitization level in the pre-sales phase does not affect the perceived transparency ($b = -.04, p = .69$). However, company type was found to have a direct and significant impact on transparency ($b = .34, p < .01$). This means that incumbents were perceived significantly higher in terms of transparency than start-up companies. Including the interaction term of the pre-sales phase and company type did not further improve the model (R squared change = .00, F change (1, 582) = 1.04, $p = .31$). The third model explained 18% of variance ($F(13, 582) = 9.73, p < .01$) and the interaction term was insignificant ($b = -.20, p = .31$), thus indicating no moderating role of company type on the effect of the pre-sales phase on transparency.

Next, accessibility was chosen as the dependent variable. Repeating the previous procedure, the first model explained 10% of variance ($F(10, 585) = 6.80, p < .01$). It indicated a significant negative effect of the covariate nationality ($b = -.59, p < .01$), indicating that Swiss

respondents rated accessibility lower than German respondents. The negative coefficient of employment status ($b = -.34, p < .05$) indicated that employed respondents (as opposed to unemployed one respondents) perceived accessibility as lower. Familiarity ($b = .10, p < .01$) and general trust ($b = .23, p < .01$) had a significant positive effect, meaning that higher familiarity and higher general trust levels positively affect accessibility. Including the independent variable and the moderating variable as predictors in the second model marginally and significant at the 10% level improved the model (R squared change = .01, F change (2, 583) = 2.75, $p < .10$), with the second overall model explaining 11% of variance (F (12, 583) = 6.15, $p < .01$). The results showed that the pre-sales phase does not affect accessibility ($b = .07, p = .52$). However, a positive effect of company type on accessibility was found ($b = .26, p < .05$), indicating that incumbents were perceived higher in terms of accessibility than start-up companies. Including the interaction term of the pre-sales phase and company type did not further improve the model (R squared change = .00, F change (1, 582) = .31, $p = .58$). The third model explained 11% of variance (F (13, 582) = 5.70, $p < .01$) and the interaction term was insignificant ($b = .13, p = .58$), thus indicating no moderating role of company type on the effect of the pre-sales phase on accessibility.

Finally, relationship was considered as the dependent variable. The first model, which again consisted only of the covariates, explained 18% of variance (F (10, 585) = 12.64, $p < .01$). The covariates nationality ($b = -.51, p < .01$) and employment status ($b = -.39, p < .10$) had a negative effect on relationship. Privacy concerns also had a small negative impact on relationship ($b = -.06, p < .10$). The covariate general trust levels ($b = .61, p < .01$) had a positive impact on trust. Similar to the results for the previous two trust enablers, relationship was perceived lower among Swiss customers (compared to German ones), employed customers, and customers with higher privacy concerns, whereas general trust levels had a positive effect. When including further variables in the following models, the effects of employment status and privacy concern became insignificant. The second model added the variables pre-sales phase and company type and showed a significant improvement of the model (R squared change = .02, F change (2, 583) = 8.41, $p < .01$). The second model explained 20% of variance (F (12, 583) = 12.20, $p < .01$). This model found further support for the previous finding that digitization in the pre-sales phase affects the perceived relationship ($b = .44, p < .01$) and that a hybrid pre-sales phase leads to higher ratings in terms of relationship. However, no support for the effect of company type on relationship was found ($b = .14, p = .23$). Finally, no significant improvement of the model was observed when including the interaction effect between the pre-sales phase and company type (R squared change = .00, F change (1, 582) = .08, $p = .78$). The third model still explained 20% of variance F (13, 582) = 11.25, $p < .01$). The suggested interaction effect, which would indicate a moderating effect of company type, was insignificant ($b = .06, p = .78$).

Table 4-4 Hierarchical regression analysis: Effect of pre-sales phase on trust enablers

predictor	Dependent variable: Transparency						Dependent variable: Accessibility						Dependent variable: Relationship					
	Model 1		Model 2		Model 3		Model 1		Model 2		Model 3		Model 1		Model 2		Model 3	
	coeffi- cient	t-value	coeffi- cient	t-value	coeffi- cient	t-value	coeffi- cient	t-value	coeffi- cient	t-value	coeffi- cient	t-value	coeffi- cient	t-value	coeffi- cient	t-value	coeffi- cient	t-value
Constant	3.49	6.71 ***	3.46	6.69 ***	3.45	6.69 ***	5.55	9.25 ***	5.53	9.25 ***	5.53	9.24 ***	2.44	4.03 ***	2.48	4.15 ***	2.48	4.14 ***
Age	.00	.22	.00	.38	.00	.41	.00	-.07	.00	.07	.00	.06	-.01	-1.14	-.00	-.91	-.00	-.92
Gender	-.09	-.90	-.10	-.97	-.10	-.98	-.05	-.42	-.06	-.52	-.06	-.51	.06	.54	.04	.31	.04	.31
Nationality	-.46	-4.20 ***	-.45	-4.13 ***	-.44	-4.10 ***	-.59	-4.67 ***	-.58	-4.60 ***	-.58	-4.61 ***	-.51	-4.00 ***	-.50	-3.96 ***	-.50	-3.96 ***
Education	.18	1.52	.17	1.47	.17	1.40	.11	.80	.10	.75	.11	.79	.16	1.17	.15	1.10	.15	1.11
Employment status	-.00	-.01	-.01	-.08	-.00	-.02	-.34	-2.18 **	-.34	-2.17 **	-.34	-2.20 **	-.39	-2.47 **	-.36	-2.31 **	-.36	-2.32 **
Financial status	-.09	-2.35 **	-.09	-2.32 **	-.09	-2.33 **	-.03	-.63	-.03	-.61	-.03	-.61	-.03	-.70	-.03	-.75	-.03	-.75
Use	.02	.46	.03	.64	.03	.61	-.04	-.71	-.03	-.54	-.03	-.53	.00	.05	.02	.32	.02	.33
Familiarity	-.02	-.60	-.03	-.82	-.02	-.76	.10	2.93 ***	.10	2.73 ***	.09	2.69 ***	.02	.63	.01	.32	.01	.30
General trust	.52	9.09 ***	.53	9.27 ***	.53	9.22 ***	.23	3.46 ***	.23	3.47 ***	.23	3.49 ***	.61	9.15 ***	.59	8.93 ***	.59	8.92 ***
Privacy concern	-.02	-.74	-.03	-.88	-.03	-.86	-.04	-1.11	-.04	-1.17	-.04	-1.18	-.06	-1.63	-.06	-1.61	-.06	-1.61
Pre-sales phase			-.04	-.39	-.04	-.41	.07	.64	.07	.64	.07	.65	.44	3.91 ***	.44	3.91 ***	.44	3.91 ***
Company type			.34	3.44 ***	.34	3.45 ***	.26	2.25 **	.26	2.25 **	.26	2.24 **	.14	1.20	.14	1.20	.14	1.19
Company type * Pre-sales phase					-.20	-1.02					.13	.56					.06	.28
R Square	.16		.18		.18		.10		.11		.11		.18		.20		.20	
Adjusted R Square	.15		.16		.16		.09		.09		.09		.16		.18		.18	
F	11.16 ***		10.45 ***		9.73 ***		6.80 ***		6.15 ***		5.70 ***		12.64 ***		12.20 ***		11.25 ***	
R Square Change			.02		.00				.01		.00				.02		.00	
F Change			5.97 ***		1.04				2.75 *		.31				8.41 ***		.08	
N	596		596		596		596		596		596		596		596		596	

Note: The predictor variables have been mean centered. Therefore, unstandardized coefficients are reported. The constant represents the value for the case that x equals the mean (instead of x = 0), and thus the value is higher than in the uncentered case (Cohen & Levinthal, 1990, pp. 270-271).

Significant levels are indicated by the number of asterisks: * = significant at 10% level, ** = significant at 5% level, *** = significant at 1% level.

Conditional Indirect Effects

Hypothesis 4 posits that an incumbent company (vs. start-up company) attenuates the effect of the pre-sales phase on transparency and accessibility, while it amplifies the effect of the pre-sales phase on relationship, all of which explain trust. To test this hypothesis, the conditional indirect effects were investigated by applying mediated moderation analysis. To test the mediated moderation, Model 8 of Hayes PROCESS macro with bootstrapped estimates (5000 bootstrap samples, 95% bias-corrected confidence interval) was used (Hayes, 2013, pp. 372-378). All covariates were included in the model.

The effect of the mediators on trust replicated the previous results, showing that trust is affected by transparency ($b = .39, p < .01$), accessibility ($b = .06, p < .05$), and relationship ($b = .33, p < .01$). Further, the results replicated previous findings, indicating that the pre-sales digitization level only affects relationship ($b = .44, p < .01$), but not transparency ($b = -.04, p = .70$) and accessibility ($b = .07, p = .52$). Finally, the result of the moderation analysis was replicated, as the interaction term between pre-sales phase and company type did not significantly affect transparency ($b = -.20, p = .31$), accessibility ($b = .13, p = .58$), and relationship ($b = .06, p = .78$).

The conditional indirect effects were estimated for the different company types, considering the three trust enablers transparency, accessibility, and relationship as possible mediators. It was tested whether the 95% bootstrap confidence intervals provided by the PROCESS macro for SPSS differed significantly from the value zero (Hayes, 2013, pp. 372-373). The estimation results are provided in Table 4-5 for all three proposed mediators. As transparency and accessibility were not found to mediate the relationship between the pre-sales phase and trust, no conditional indirect effect of the company type was supported either, as each of the respective confidence intervals included the value zero. The confidence intervals of the conditional indirect effect of start-ups ($b = .14, 95\% \text{ CI} = .04 \text{ to } .24$) and incumbents ($b = .16, 95\% \text{ CI} = .05 \text{ to } .28$) for the mediator relationship were found to be different from zero. However, the effects of start-up companies and incumbent companies differ only marginally. Thus, no conditional indirect effect could be concluded either.

Taken together, the results led to the rejection of H4a, H4b, and H4c.

Table 4-5 Conditional indirect effects: Mediated moderation for the pre-sales phase

Conditional indirect effects of the pre-sales phase level of digitization on trust at levels of the moderator					
Mediator	Level Moderators	Effect	Boot SE	Boot LL CI	Boot UL CI
Transparency	Start-up	.02	.05	-.07	.13
	Incumbent	-.06	.06	-.18	.05
Accessibility	Start-up	.00	.01	-.02	.03
	Incumbent	.01	.01	-.01	.05
Relationship	Start-up	.14	.05	.04	.24
	Incumbent	.16	.06	.05	.28

Note: LL CI = lower limit 95% confidence interval; UL CI = upper limit 95% confidence interval.

4.5.4.4 Role of Digitization in the Utilization Phase

In the following, the hypotheses referring to the utilization phase are investigated. These are Hypothesis 3 and Hypothesis 5.

4.5.4.4.1 Mediating Effects of the Trust Enablers

A mediation analysis was performed to test Hypothesis 3.

Mediation Analysis

It was tested whether the level of digitization in the utilization phase influences the three trust enablers transparency, accessibility, and relationship. Three hierarchical regression analyses were run, each with one of the trust enablers as the dependent variable. Similar to the previous procedure, the covariates were first entered, and thus controlled for. Next, the level of digitization was entered and acted as the predictor variable. The level of digitization in the utilization phase was found to significantly affect transparency ($\beta = .17, p < .01$). Including the utilization phase in the model increased the variance explained (R squared change = .03, F change (1, 584) = 20.71, $p = .73$), with the overall model explaining 19% of variance (F (11, 584) = 12.37, $p < .01$). Further, trust enabler accessibility was affected by the level of digitization in the utilization phase ($\beta = .31, p < .01$). Accordingly, including the utilization phase increased the variance explained in the model (R squared change = .10, F change (1, 584) = 69.01, $p < .01$), with the overall model explaining 20% of variance (F (11, 584) = 13.17, $p < .01$). The level of digitization in the utilization phase had a positive effect on relationship ($\beta = .34, p < .01$). Including the utilization phase in addition to the covariates increased the variance explained in the model (R squared change = .12, F change (1, 584) = 95.08, $p < .01$), with the overall model explaining 29% of variance (F (11, 584) = 21.98, $p < .01$).

Under Hypothesis 3, it was tested whether the three trust enablers mediate the relationship between the utilization phase and trust. The previous results indicated that the utilization phase impacts trust (see Hypothesis 1). It was shown that the level of digitization in the utilization phase had a positive effect on each of the three trust enablers. To consider whether a trust enabler acts as a mediator, the level of digitization in the utilization phase and the respective trust enabler were considered as predictors of trust, with trust being the dependent variable. Mediation occurs when the effect of the mediator is significant and when the effect of the independent variable, i.e., utilization phase, is smaller than when it is the only predictor of trust (Muller et al., 2005, p. 853). For transparency, including both the level of digitization in the utilization phase and transparency as predictors in the regression model yielded a significant effect of transparency on trust ($\beta = .61, p < .01$). The coefficient of the utilization phase ($\beta = .08, p < .01$) was smaller than that found in Hypothesis 1 ($\beta = .17, p < .01$). Therefore, transparency mediates the effect of digitization in the utilization phase on trust. Next, the procedure was repeated considering accessibility instead of transparency. Accessibility showed a significant coefficient ($\beta = .46, p < .01$), while the coefficient of the utilization phase ($\beta = .04, p = .23$) was insignificant and thus smaller than when accessibility was not included in the model as in Hypothesis 1 ($\beta = .17, p < .01$), thus indicating a mediating role of accessibility. Finally, both the level of digitization in the utilization phase and relationship were included as predictors in the last regression analysis, with trust again acting as the dependent variable. The coefficient of relationship was significant ($\beta = .64, p < .01$), whereas the coefficient of the utilization phase was insignificant ($\beta = -.04, p = .20$), and thus smaller than that found in Hypothesis 1 ($\beta = .17, p < .01$), therefore fulfilling the conditions for mediation by relationship.

The indirect effects were tested using Model 4 of Hayes PROCESS macro for SPSS with bootstrapped estimates (5000 bootstrap samples, 95% bias-corrected confidence interval) in order to further investigate the mediating role of each of the trust enablers for the relationship between the utilization phase and trust (Hayes, 2013, pp. 90-93, 100). For each trust enabler, a separate mediation analysis was run. Each model included all covariates in order to control for them. The first analysis considered transparency as a mediator. Digitization in the utilization phase was found to have a positive impact on transparency (path a: $b = .44, p < .01$), and transparency showed a positive impact on trust (path b: $b = .64, p < .01$). As the 95% confidence interval for the indirect effect did not include the value zero (ab: $b = .28, 95\% \text{ CI} = .16 \text{ to } .41$), this provided evidence for mediation by the trust enabler transparency. However, since the relationship between utilization phase and trust remained significant (path c': $b = .21, p < .01$) when the mediator was included, transparency only partially mediated the relationship between the utilization phase and trust. The second analysis investigated the mediating role of accessibility. The utilization phase had a positive impact on accessibility (path a: $b = .89, p < .01$) while accessibility had a positive impact on trust (path b: $b = .43, p < .01$). As the 95% confidence interval for the indirect effect did not include the value zero (ab: $b = .39,$

95% CI = .28 to .50), accessibility mediated the relationship between the utilization phase and trust. The relationship between the utilization phase and trust became insignificant (path c': $b = .10$, $p = .23$) once the mediator was included in the model, which indicated full mediation by accessibility. The final analysis addressed the trust enabler relationship. The utilization phase had a positive impact on relationship (path a: $b = 1.03$, $p < .01$), and relationship had a positive impact on trust (path b: $b = .57$, $p < .01$). Inspecting the 95% confidence interval for the indirect effect showed that it was entirely above the value zero (ab: $b = .59$, 95% CI = .44 to .73), therefore indicating a mediating role of the trust enabler relationship. The insignificant relationship between the utilization phase and trust (path c': $b = -.10$, $p = .20$), which was observed once the trust enabler relationship was included, pointed to full mediation by the trust enabler relationship.

Taken together, the results supported H3a, H3b, and H3c.

4.5.4.4.2 *Moderating Effects of Company Type*

Under Hypothesis 5, a moderation analysis was conducted and the indirect effects were investigated.

Moderation Analysis

It was tested whether company type moderates the relationship between the utilization phase and each of the three trust enablers. To test this, three hierarchical regression analyses were conducted, each with one of the three trust enablers as the dependent variable. As before, even though multicollinearity diagnostics did not indicate any violations, the recommendations of L. S. Aiken and West (1991, p. 35) and J. Cohen et al. (2003, pp. 282-283) were followed in that the predictor variables were mean-centered and the b-coefficients rather than the beta-coefficients were reported. Following the same procedure as for the pre-sales phase, the covariates were first entered. Second, the independent variable utilization phase and the moderating variable company type were entered. Finally, the product term of the utilization phase and the company type was entered in the third model. Since the first model only contained the covariates but no predictor variables, the results of the three first models (with the respective dependent variables transparency, accessibility, and relationship) were identical to those of the pre-sales phase. Therefore, in the following, the results for the first model for each of the trust enablers are not repeated. An overview of the results can be found in Table 4-6 (page 223).

First, transparency acted as the dependent variable. In the second model, the independent variable and the moderating variable were added as predictors. Including these variables in addition to the covariates improved the model (R^2 change = .05, F change (2, 583) = 16.63, $p < .01$), with the second overall model explaining 21% of variance (F (12, 583) = 12.57, $p < .01$). The results showed a positive effect of the utilization phase on transparency

($b = .44, p < .01$) and a positive effect of company type on transparency ($b = .34, p < .01$), meaning that companies with a hybrid utilization phase and incumbent companies were perceived significantly higher in terms of transparency than companies with a digital utilization phase and start-up companies. The model was further improved by adding the interaction term of utilization phase and company type (R squared change = .01, F change (1, 582) = 4.97, $p < .05$). The third model explained 21% of variance (F (13, 582) = 12.06, $p < .01$). The interaction term of the utilization phase and company type was negative and significant ($b = -.43, p < .05$), thus indicating a moderating role of company type on the effect of the digitization level in the utilization phase on transparency.

Next, accessibility acted as the dependent variable. The second model, which included the utilization phase and company type as predictors, improved the model compared to the first model (R squared change = .10, F change (2, 583) = 37.59, $p < .01$). The second model explained 21% of variance (F (12, 583) = 12.64, $p < .01$). The results showed that the digitization level in the utilization phase affects accessibility ($b = .89, p < .01$), and that company type has a positive effect on accessibility ($b = .26, p < .05$), which shows that companies with a hybrid utilization phase and incumbents are perceived higher in terms of accessibility than companies with a digital utilization phase and start-up companies. Including the product of utilization phase and company type did not further improve the model (R squared change = .00, F change (1, 582) = 1.83, $p = .18$), and the third model still explained 21% of variance (F (13, 582) = 11.82, $p < .01$). The interaction term was insignificant ($b = .29, p = .18$). Therefore, company type was found not to moderate the effect of the utilization phase on accessibility.

Finally, relationship was considered as the dependent variable. Adding the variables digitization in the utilization phase and company type in the second model significantly improved the model (R squared change = .12, F change (2, 583) = 48.48, $p < .01$). This model explained 30% of variance (F (12, 583) = 20.32, $p < .01$). The model replicated the finding that the level of digitization in the utilization phase affects the perceived relationship ($b = 1.03, p < .01$), and that a hybrid utilization phase is rated higher in terms of relationship than a purely digital utilization phase. Company type, in comparison, did not significantly affect the relationship ($b = .14, p = .19$). A small but significant improvement of the model was observed when including the product of the utilization phase and company type (R squared change = .01, F change (1, 582) = 5.82, $p < .05$), with the third model explaining 30% of variance (F (13, 582) = 19.36, $p < .01$). The interaction term was positive and significant ($b = .52, p < .05$). Thus, company type moderates the effect of the level of digitization in the utilization phase on relationship.

Table 4-6 Hierarchical regression analysis: Effect of utilization phase on trust enablers

predictor	Dependent variable: Transparency						Dependent variable: Accessibility						Dependent variable: Relationship					
	Model 1		Model 2		Model 3		Model 1		Model 2		Model 3		Model 1		Model 2		Model 3	
	coeffi- cient	t-value	coeffi- cient	t-value	coeffi- cient	t-value	coeffi- cient	t-value	coeffi- cient	t-value	coeffi- cient	t-value	coeffi- cient	t-value	coeffi- cient	t-value	coeffi- cient	t-value
Constant	3.49	6.71 ***	3.41	6.73 ***	3.42	6.76 ***	5.55	9.25 ***	5.43	9.60 ***	5.43	9.60 ***	2.44	4.03 ***	2.32	4.12 ***	2.31	4.14 ***
Age	.00	.22	.00	.54	.00	.70	.00	-.07	.00	.30	.00	.20	-.01	-1.14	.00	-.87	.00	-1.04
Gender	-.09	-.90	-.11	-1.09	-.12	-1.19	-.05	-.42	-.07	-.65	-.07	-.59	.06	.54	.04	.39	.05	.49
Nationality	-.46	-4.20 ***	-.43	-4.03 ***	-.43	-4.10 ***	-.59	-4.67 ***	-.54	-4.56 ***	-.54	-4.53 ***	-.51	-4.00 ***	-.46	-3.91 ***	-.45	-3.86 ***
Education	.18	1.52	.16	1.42	.16	1.40	.11	.80	.09	.69	.09	.71	.16	1.17	.14	1.10	.15	1.14
Employment status	-.00	-.01	.02	.18	.06	.42	-.34	-2.18 **	-.28	-1.90 *	-.30	-2.04 **	-.39	-2.47 **	-.32	-2.17 **	-.35	-2.42 **
Financial status	-.09	-2.35 **	-.10	-2.61 ***	-.11	-2.72 ***	-.03	-.63	-.05	-1.08	-.04	-1.01	-.03	-.70	-.05	-1.25	-.05	-1.13
Use	.02	.46	.03	.74	.04	.85	-.04	-.71	-.03	-.49	-.03	-.55	.00	.05	.01	.27	.01	.16
Familiarity	-.02	-.60	-.03	-1.03	-.03	-1.15	.10	2.93 ***	.09	2.62 ***	.09	2.69 ***	.02	.63	.01	.22	.01	.35
General trust	.52	9.09 ***	.53	9.48 ***	.53	9.55 ***	.23	3.46 ***	.24	3.83 ***	.24	3.81 ***	.61	9.15 ***	.62	10.00 ***	.62	10.00 ***
Privacy concern	-.02	-.74	-.02	-.76	-.03	-.89	-.04	-1.11	-.04	-1.02	-.03	-.94	-.06	-1.63	-.05	-1.53	-.05	-1.39
Utilization phase			.44	4.59 ***	.44	4.58 ***	.89	8.34 ***	.89	8.34 ***	.89	8.36 ***	1.03	9.76 ***	1.03	9.76 ***	1.04	9.82 ***
Company type			.34	3.49 ***	.34	3.48 ***	.26	2.37 **	.26	2.37 **	.26	2.39 **	.14	1.32	.14	1.32	.14	1.35
Company type * Utilization phase					-.43	-2.23 **					.29	1.35					.52	2.41 **
R Square	.16		.21		.21		.10		.21		.21		.18		.30		.30	
Adjusted R Square	.15		.19		.20		.09		.19		.19		.16		.28		.29	
F	11.16 ***		12.57 ***		12.06 ***		6.80 ***		12.64 ***		11.82 ***		12.64 ***		20.32 ***		19.36 ***	
R Square Change			.05		.01				.10		.00				.12		.01	
F Change			16.63 ***		4.97 **				37.59 ***		1.83				48.48 ***		5.82 **	
N	596		596		596		596		596		596		596		596		596	

Note: The predictor variables have been mean centered. Therefore, unstandardized coefficients are reported. The constant represents the value for the case that x equals the mean (instead of x = 0), and thus the value is higher than in the uncentered case (Cohen & Levinthal, 1990, pp. 270-271).

Significant levels are indicated by the number of asterisks: * = significant at 10% level, ** = significant at 5% level, *** = significant at 1% level.

Simple Slopes Analysis

The results of the moderation analysis were further investigated. A simple slope analysis showed the relationship between the digitization level in the utilization phase and the trust enablers transparency and relationship for the different company types. Specifically, the lines were calculated to graphically depict these relationships. The procedure outlined by L. S. Aiken and West (1991, p. 31) was followed. To draw the lines, both the intercept (“simple intercepts”) and slopes (“simple slopes”) were calculated for the different levels of the moderator. As the moderating variable is dichotomous, the two values for the company type (i.e., start-up and incumbents) were selected to calculate the simple intercepts and simple slopes. The predictor variables were mean-centered for hierarchical regression analysis. Although this does not affect the slope, it affects the intercept of the lines (L. S. Aiken & West, 1991, p. 31). Thus, to make the interpretation of the lines more intuitive, the predictors were transformed again and depicted with their original values. The graphs below depict the impact of the predictor variables (without the impact of the covariates).

Figure 4-5 shows the simple effects for the trust enabler transparency. The results of the simple slopes analysis indicate that for start-up companies, the effect of the utilization phase on transparency is positive and significant ($b = .64, p < .01$), meaning that a hybrid utilization phase leads to higher perceived transparency. This effect does not hold for incumbent companies, as in this case, the level of digitization in the utilization phase does not significantly affect perceived transparency ($b = .20, p = .17$).

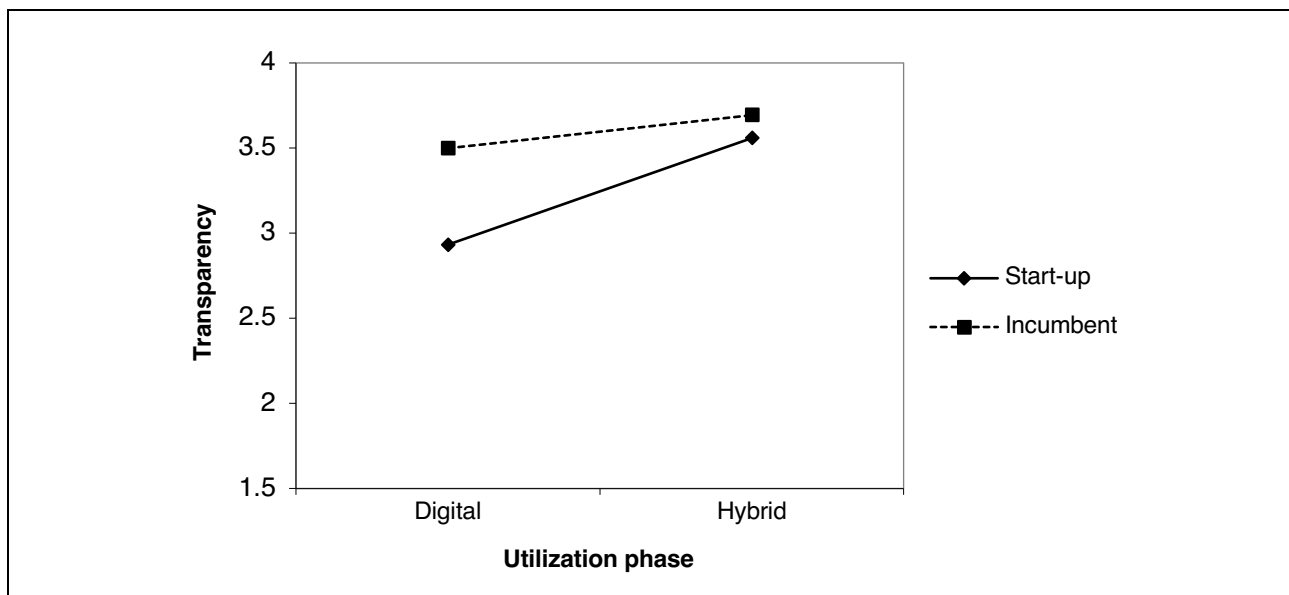


Figure 4-5 Relationship between the utilization phase and the trust enabler transparency for the different types of companies

Figure 4-6 shows the simple effects for the trust enabler relationship. For both start-up companies and incumbent companies, a positive effect of the level of digitization in the utilization phase on the perceived relationship can be observed, meaning that a hybrid utilization phase leads to higher ratings in relationship than does a fully digital utilization phase. This effect is smaller for start-up companies ($b = .82, p < .01$) than for incumbents ($b = 1.31, p < .01$),

indicating an advantage for incumbents in realizing the benefits of a hybrid utilization phase in terms of relationship.

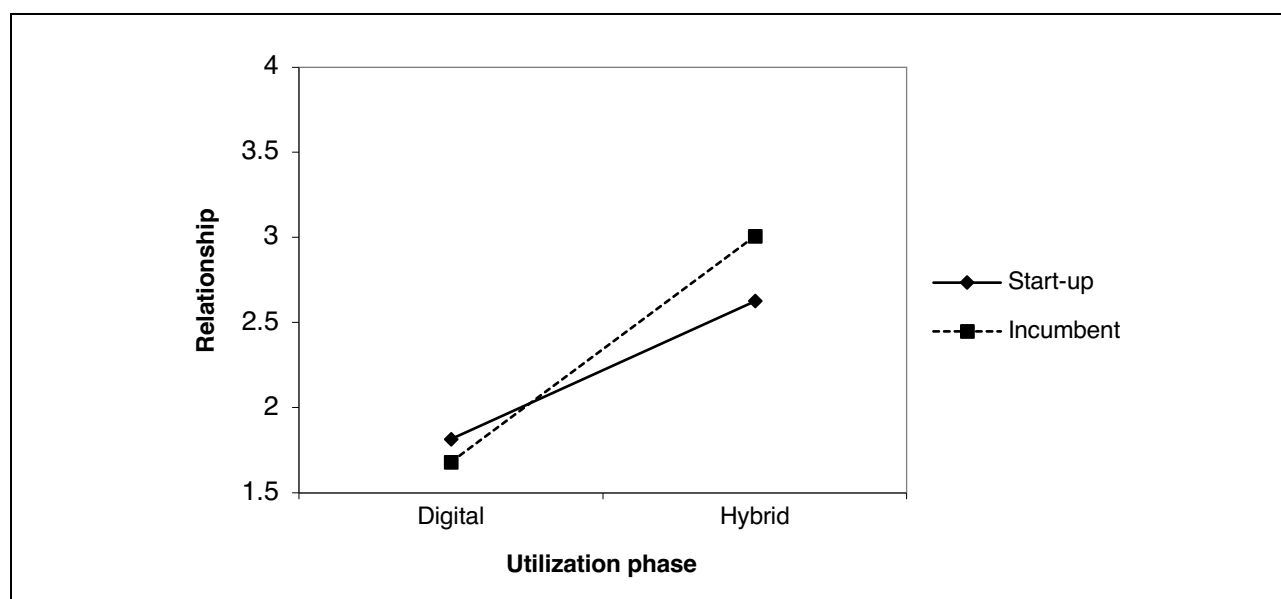


Figure 4-6 Relationship between the utilization phase and the trust enabler relationship for the different types of companies

Conditional Indirect Effects

Hypothesis 5 predicted that an incumbent (vs. start-up company) attenuates the effect of the digitization level in the utilization phase on both transparency and accessibility, while it amplifies the effect of utilization phase on relationship, all of which explain trust. The conditional indirect effects were investigated by applying a mediated moderation analysis in order to test this hypothesis. To test the mediated moderation, Model 8 of Hayes PROCESS macro with bootstrapped estimates (5000 bootstrap samples, 95% bias-corrected confidence interval) was applied (Hayes, 2013, pp. 372-378). Again, all covariates were included in the model.

The effect of the mediators supported the previous results, showing that trust is affected by transparency ($b = .37, p < .01$), accessibility ($b = .07, p < .05$), and relationship ($b = .35, p < .01$). The previous findings could be replicated and the digitization level in the utilization phase was found to affect transparency ($b = .44, p < .01$), accessibility ($b = .88, p < .01$), and relationship ($b = 1.03, p < .01$). Finally, the interaction term between the utilization phase and company type did affect transparency ($b = -.43, p < .05$) and relationship ($b = .52, p < .05$), but not accessibility ($b = .29, p = .17$). Thus, the result of the moderation analysis was replicated.

The conditional indirect effects were estimated for the different company types, considering the three trust enablers transparency, accessibility, and relationship as mediators. It was investigated whether the 95% bootstrap confidence intervals provided by the PROCESS macro for SPSS were different from the value zero (Hayes, 2013, pp. 372-373). The estimation results for all three mediators can be found in Table 4-7.

First, the conditional indirect effects were considered for transparency as the mediator. The conditional indirect effect for start-up companies was positive and the confidence intervals did not include the value zero ($b = .23$, 95% CI = .13 to .35), while the confidence interval for incumbents included the value zero ($b = .16$, 95% CI = .05 to .28). This indicates that while a moderating effect can be observed for start-up companies, this effect cannot be realized by incumbents.

Next, the conditional indirect effects were considered for accessibility as the mediator. The confidence intervals for the conditional indirect effect for start-ups ($b = .06$, 95% CI = .01 to .13) and incumbents ($b = .08$, 95% CI = .01 to .16) were different from zero. However, the coefficients indicated that the effects of start-up companies and incumbent companies differed only slightly.

Finally, the conditional indirect effects were investigated for relationship as the mediator. The conditional indirect effect for start-up companies was positive ($b = .29$, 95% CI = .17 to .42) but smaller than for incumbent companies ($b = .47$, 95% CI = .33 to .62). For both types of companies, inspecting confidence intervals showed that these did not include the value zero. This indicates that while both types of companies moderate the effect of the digitization level in the utilization phase on trust that is mediated by relationship, this effect is larger for incumbent companies.

Taken together, the results supported H5a and H5c, while no support was found for H5b.

Table 4-7 Conditional indirect effects: Mediated moderation for the utilization phase

Conditional indirect effects of the utilization phase level of digitization on trust at levels of the moderator					
Mediator	Level Moderators	Effect	Boot SE	Boot LL CI	Boot UL CI
Transparency	Start-up	.23	.06	.13	.35
	Incumbent	.07	.05	-.03	.18
Accessibility	Start-up	.06	.03	.01	.13
	Incumbent	.08	.04	.01	.16
Relationship	Start-up	.29	.06	.17	.42
	Incumbent	.47	.07	.33	.62

Note: LL CI = lower limit 95% confidence interval; UL CI = upper limit 95% confidence interval.

4.5.4.5 Summary of Findings

Table 4-8 summarizes the findings of the empirical study. It shows which hypotheses were supported by the analyses.

Table 4-8 Summary of the hypotheses of the experiment

Hypothesis	Result
H1 The digitization level in a) the pre-sales phase and b) the utilization phase has a positive impact on trust, meaning that hybrid (vs. digital) interactions in the pre-sales phase lead to higher trust.	H1 a) supported H1 b) supported
H2 a) Transparency, b) accessibility, and c) relationship mediate the effect of the digitization level in the pre-sales phase on trust.	H2 a) not supported H2 b) not supported H2 c) supported
H3 a) Transparency, b) accessibility, and c) relationship mediate the effect of the digitization level in the utilization phase on trust.	H3 a) supported H3 b) supported H3 c) supported
H4 An incumbent company (vs. start-up company) attenuates the effect of the pre-sales phase on a) transparency and b) accessibility and amplifies the effect of the pre-sales phase on c) relationship.	H4 a) not supported H4 b) not supported H4 c) not supported
H5 An incumbent company (vs. start-up company) attenuates the effect of the utilization phase on a) transparency and b) accessibility and amplifies the effect of the utilization phase on c) relationship.	H5 a) supported H5 b) not supported H5 c) supported

4.5.5 Discussion of the Experiment

The level of digitization affects trust throughout the entire customer journey. An interaction strategy that allows for personal and digital interactions is associated with higher perceived trust than purely digital interactions. Consequently, any change or innovation in the customer journey that affects the digitization level of company-customer interactions also affects the trust that customers place in the company. Generally, the results of Study 4.2 support the results of the expert interviews, that personal contact creates higher trust than digital interactions. Conversely, digitizing part of the customer journey without offering personal contact opportunities decreases trust in companies. Analyses detected differences based on whether such changes affect the pre-sales or the utilization phase. Trust creation is important in the pre-sales phase for customers to continue considering the company. Trust was found to be influenced even more strongly by prolonged interaction in the utilization phase. One reason for this effect could be that, in this phase, customers might need to perform more specific and more individual tasks with higher impact, such as investment decisions.

The results of Study 4.2 showed that the three identified trust enablers – transparency, accessibility, and relationship – positively impact trust. In contrast to the two-dimensional trust enablers identified in the first study, only one dimension of each of the trust enablers was suited to the model in the experiment. Especially transparency and relationship strongly influence trust, while accessibility has a comparably minor effect. As indicated in the expert interviews, accessibility is increasingly becoming a common feature among companies, unlike the variables transparency and relationship where more differences can still be observed. These findings were further distinguished for the different phases of the customer process.

In the pre-sales phase, only relationship acted as a trust enabler, while the level of digitization in this phase did not influence transparency and accessibility. This means that it is crucial to build trust through establishing a sense of personalness in personal and digital interactions. To leverage this effect, companies ideally should use personal interactions to build trust in a situation where customers have not yet experienced the company. This holds for both start-up companies and incumbents, which were found not to moderate this effect.

In the utilization phase, all three trust enablers contribute to perceived trust. Compared to digital interactions, hybrid interactions in this phase led to significantly higher ratings for transparency, accessibility, and the relationship.

In the interviews, transparency was referred to as a prerequisite for conveying accessibility and for building the relationship. The results support the assumption that a company's interaction strategy in the utilization phase influences perceived transparency and thereby trust, with both transparency and trust benefitting from a hybrid model. A substitute effect for transparency was observed as resulting from the significant main effect of company type on trust and from the negative effect of the interaction term between the utilization phase and company type on trust (G. B. Voss, Godfrey, & Seiders, 2010, p. 112). Thus, the choice of digitization level in the utilization phase has a lower impact on the perceived transparency of incumbent companies than of start-up companies. This also means that as a result, start-up companies tend to benefit more from applying a hybrid strategy in the utilization phase, in terms of building trust through transparency, than incumbent companies.

The digitization level in the utilization phase was found to significantly affect perceived accessibility. Accessibility is important to the customer and can be improved by offering personal contact in the utilization phase. Company type was not found to moderate this relationship. Therefore, no differences could be detected either for start-up companies or for incumbent companies regarding their ability to convey a sense of accessibility.

The strongest effect of the digitization level in the utilization phase is on relationship. Combined with the results of the pre-sales phase, this indicates that building the relationship hinges on the interaction strategy adopted throughout the entire customer process. Still, relationship is influenced even more strongly by the level of digitization in the utilization phase than in the pre-sales phase. As the expert interviews indicated, personal contact throughout the prolonged interactions in the utilization phase strengthens the relationship with the company and therefore improves the level of trust. For both types of companies, a higher availability of personal contact opportunities throughout the customer journey increases the perceived relationship strength with customers. A complementary effect was observed, though, as a hybrid strategy benefited incumbent companies more strongly than start-ups (G. B. Voss et al., 2010, p. 114). This effect indicates that the ability to build trust through improving the relationship in the utilization phase is stronger for incumbents than for start-up companies.

Overall, while the results of the experiment support the role of the trust enablers identified in the expert interviews, several of the expected effects were not supported. Specifically, neither the hypotheses about the mediating role of transparency and accessibility in the pre-sales phase, nor those about the moderating role of company type when including accessibility (in both phases) and transparency and relationship (in the pre-sales phase) were supported. Contrary to expectations, the level of digitization in the pre-sales phase only allows influencing trust through the relationship. Thus, the options for impacting trust through digitization are more diverse in the utilization phase. Further, company type affects the impact of interactions only in the utilization phase. This indicates that only once digitization has created a sense of relationship in the pre-sales phase does the formation of customer trust become more susceptible to additional elements of the interaction and those of its context. The model was largely based on experts' and managers' perceptions. Nevertheless, the insignificant results in a number of hypotheses might indicate that other important factors determining customer trust formation were not included. While lacking support for some hypotheses might point to a partial discrepancy between expert assessments and the customer perspective, further possible explanations should be tested. It should be investigated whether the low significances stem from the measurement of the trust enablers, i.e., whether these are influenced by the selected scales or by the excluded dimensions. Potentially, focusing on one dimension of each trust enabler might have impacted the results. Finally, further research could aim to draw a more fine-grained picture of the effects in the model, which might otherwise not have been captured by the set-up of this research. Above all, a more detailed inclusion of different forms of digitization in the customer journey, which would imply a more elaborate scenario, might help to capture such effects.

4.6 Overall Discussion

The results of the qualitative and quantitative empirical studies indicate different roles of customer-company interactions in the pre-sales and utilization phases. Both studies sought to investigate the impact of increasing digitization on customer interactions and in particular on customer trust in the company. Three trust enablers were identified. Each was shown to provide strategic options for enhancing trust formation. Overall, an increasing convergence between incumbent and start-up companies was observed with regard to accessibility, as well as a shifting focus towards relationship-building. The results suggest several conclusions.

4.6.1 Shifting Focus from the Pre-Sales to the Utilization Phase

The results of the expert interviews indicated that companies in the financial services industry have so far tended to focus mainly on improving the pre-sales phase. Experts emphasized the role of social presence in the pre-sales phase, where trust still needs to be established and influences whether customers continue to engage with the company. A similar picture

emerged from the results of the experiment, as in the pre-sales phase, whether the company communicates purely digitally or also personally affects trust only through relationship as a trust enabler.

Despite the relevance of the pre-sales phase, the experts indicated a strong potential for creating new value by focusing on interactions in the utilization phase. The results of the experiment support this. While the pre-sales phase plays an important role for building trust, potential exists especially in shaping the interaction strategy in the utilization phase. The interaction strategy in the utilization phase is decisive for overall trust and tends to be underemphasized in practice. In the utilization phase, the level of digitization affects trust through transparency, accessibility, and relationship. Once customers decide to engage with a financial service provider and to enter a prolonged relationship, the possibility of personal interaction helps to build trust. The interviews revealed that financial service providers still need to tap the potential existing in this phase.

4.6.2 Rising Importance of Transparency

The trust enablers “competency” and “transparency” have been found to constitute the basic values for customers. The transparency of a company’s interactions as perceived by customers strongly impacts their overall trust in the company. Experts considered competency and transparency as crucial, especially at the beginning of the customer journey, where the customer has not yet experienced interacting with the company. However, the results of the quantitative study have shown that the digitization level only influences perceived transparency in the utilization phase but not in the pre-sales phase. Thus, while in the pre-sales phase, creating transparency is not influenced by the chosen interaction strategy, in the utilization phase, transparency is perceived stronger in hybrid interactions. Moreover, in the utilization phase, start-up companies can strategically implement a hybrid interaction strategy in order to capitalize on the detected substitute effect. This effect allows start-up companies to reduce their disadvantage compared to incumbents with regard to perceived transparency by adding personal interactions. At the same time, the other trust enablers, and particularly relationship, should not be neglected due to their high impact on trust.

Added value in the interactions can also come from the trust enablers ease and accessibility. Companies that focus on these enablers typically follow a transaction-based trust building strategy. Today, digital interactions in the financial services industry are strongly focused on the trust enablers “ease” and “accessibility.” Especially FinTech companies devote significant efforts to creating easy and convenient customer access to information and support, as these are currently their perceived strengths. A manager from a non-financial industry whose digital activities have progressed very far confirmed the fundamental importance of competency and transparency. He also emphasized the role of perceived ease and accessibility as a source of

differentiation for customers. Accordingly, these concerns guide the development of digital interactions and determine how the front- and back-end are set up.

The expert interviews and the experiment showed that a company's perceived accessibility significantly affects the level of customer trust. Experts considered accessibility especially crucial in the pre-sales phase. Here, whether a company interacts purely digitally or with a hybrid interaction strategy does not influence perceived accessibility. In the utilization phase, however, accessibility is considered higher when personal contact opportunities are offered. Thus, providing relevant customer information at the right time and place is especially important in prolonged contact. Ideally, this goal is achieved by offering both digital and personal contact opportunities.

The need for high convenience is mainly realized through technological investments. Many of the processes that create a feeling of ease and accessibility are automated and driven by technology and are increasingly based on smart systems. While companies compete over their ease- and accessibility-creating competency, a high level is increasingly becoming the standard in the industry. Therefore, the strategic importance of ease and accessibility diminishes, even more so as with time, online and offline offers are considered to become more and more comparable. Both the expert interviews and the results of the experiment indicated that focusing on accessibility is no longer enough and that a trust-based strategy is required. Moreover, the experiment also showed that accessibility has a lower influence on trust compared to the other two trust enablers transparency and relationship.

4.6.3 Shift in Digital Trust Building Strategies Towards Relationship

As companies need to find other ways of differentiating themselves from their competitors, and of building customer trust, they are moving towards a more personal approach through digital media. In this process, "relevance" and "relationship" enablers are becoming more important. Similar to transparency, relationship strongly impacts overall trust. In the financial services industry, companies need to include cues in the digital context that convey that both the company and especially the digital interactions are trustworthy. This is most reliably achieved through embedding personal contact in digital touchpoints (e.g., app or e-mail contact). This may, however, also be achieved by offering customers the opportunity to use supplementary channels when needed (e.g., telephone phone contact or even referral to a local branch). As one manager noted, personal contact points integrated throughout the digital customer journey serve as trust elements that provide customers a sense of security, and thus may be decisive for financial products. Two academic interview partners found that customers will increasingly perceive digital representatives as equal to human actors, and thereby gain trust in digital media, not least because society is developing towards ever greater reliance on digital media.

Throughout the interviews, while many experts referred to personalization as a way of achieving relevance, this was also considered one of the most difficult tasks. Digital interactions need not be impersonal per se. Customer needs change with different contexts, and digital interactions need to be tailored accordingly to match the circumstances. One manager from a non-financial, digitally advanced industry pointed out that digital interactions are becoming more personal through customizing information as relevant to certain customers and through its communication through the appropriate channel. However, the costs this entails pose a key obstacle so that personalization is often limited to those touchpoints where it has the strongest impact. Differentiation by customizing communication to achieve relevance can also mean that customers can assume an active role in enriching interaction. Experts from established companies mentioned the possibility of involving customers and providing them with tools enabling the dynamic adaptation of digital content. For emerging FinTech companies, personalization is considered essential for building trust, as they cannot usually draw on an existing reputation or evidence for their abilities. They can increase the conversion rate through superior personalization options for their services, because this indicates care for the customer and potentially surprises customers positively. As one academic interview partner explained, FinTech is best able to provide a wide and flexible range of digital offers, and thereby to serve niche markets that are not actively addressed by established companies.

Despite these capabilities in the digital context, the need for some form of personal contact remains. As shown in the experiment, relationship is consistently rated higher throughout the entire customer journey when personal elements complement digital interactions. Both start-up companies and incumbents are increasingly prioritizing building customer relationship. One trust researcher mentioned to create personal customer contact, a potential lies in the flat and non-hierarchical structures of FinTech companies. However, when leveraging the combination of digital and offline interactions, established companies have an advantage, as they can use both types of interactions as sources for enriching their digital interactions with customers. Incumbents can make use of the complementary effect identified in the experiment, which gives them a trust advantage over start-up companies when choosing a hybrid interaction strategy in the utilization phase. These hybrid strategies are expected to become more important in the future. The goals remain unchanged: to build relationship and to maintain relevance.

4.7 Implications

The results of the studies reveal consistent developments with regard to digitization and trust in customer interactions that contribute to theory and practice. The results contribute to the theory on trust in the digital context by identifying three trust enablers. For practitioners, the results point to new opportunities for trust building in the digital context.

4.7.1 Theoretical Implications

The studies presented here aimed to elucidate how increasingly digitizing customer interactions is impacting trust in the financial services industry. The goals were to understand the changing dynamics through digitization and to derive insights into how they can best be leveraged. Customer trust was of central importance to the analyses as it is crucial to customer-company interactions in the industry and is largely affected by digitization.

Three trust enablers were identified. As shown, these are strategically applied by companies in the digital context and have a relevant effect on customers throughout the customer journey. Based on the insights gained in the expert interviews, three trust-enabling strategies were formulated: “competency and transparency,” “ease and accessibility,” “relevance and relationship.” The experiment showed that three elements – transparency, accessibility, and relationship – act as separate factors that influence trust. Identifying these three trust enablers contributes to the literature on trust in the digital context. The findings have added to the literature by specifying different options for building trust in a challenging, highly sensitive, and increasingly digital context.

Of the three trust enablers, transparency and relationship exert the strongest influence on trust, while accessibility was shown to have a comparably minor influence. Moreover, it could be shown that these three trust enablers are directly influenced by the level of digitization in the customer journey. Saying that, however, the pre-sales phase and the utilization phase exhibited different patterns. In the beginning of the customer journey, the digitization level only affects trust through the perceived relationship, while the two other trust enablers remain unaffected. In the utilization phase, customers gain experience with the provider. In this phase, the level of digitization affects trust through all three trust enablers (transparency, accessibility, and relationship). The differentiated effects of the trust enablers found in the experiment advance the literature with regard to how digitization affects the different stages of the customer journey.

Furthermore, with regard to the strategic application of the trust enablers, differences were discovered between different company types. Start-ups currently tend to follow a transaction-based strategy that emphasizes ease and accessibility, while incumbent companies tend to follow a trust-based strategy that emphasizes relevance and relationship in interactions. For both company types, competency and transparency in interactions were considered a precondition for building trust throughout the customer journey. The results of the empirical studies indicated that accessibility no longer suffices to create added value. In this respect, an increasing focus of companies on relationship-building in the digital context was observed. The results thus provide insights into the strategies applied by companies to compete based on their digital transformation. They also illuminate the potential of digital and hybrid strategies regarding company type and stage in the customer journey. The fact that customer perception

of the three trust enablers depends on experience (i.e., with incumbent or start-up companies) and on the stage in the customer process (i.e., pre-sales or utilization phase) provides important indications for touchpoint design and for focusing interactions throughout the customer journey.

4.7.2 Managerial Implications

In the digital context, the more functional, logical, and rational part of trust-building is achieved more easily than the relational aspect. However, advances in companies' analytics capabilities, i.e., their ability to better predict customer behavior and needs, mean that relational aspects can increasingly be incorporated into digital customer engagement.

While the interviewed experts agreed that trust can be achieved digitally to a certain extent, and while they highlighted the associated challenges, they also identified many diverse and new opportunities for creating value. All experts widely agreed that strategies including personal elements build trust more successfully than fully digital strategies. Especially when products are complex, or in times of crisis, customers need advice, which is best provided through personal contact. In digital channels, trustworthiness is most effectively created through social presence cues. Therefore, the experts expect that there will always be some form of personal interaction. A hybrid model is recommended that combines on- and offline interactions and allows customers to choose how they wish to interact with the company. This strategy helps to avoid forced switching between digital and offline channels. Instead, smooth transitions between channels should be allowed for but not required. For economic reasons, a hybrid strategy cannot always be realized. Moreover, companies offering a hybrid strategy tend to encourage customers to use their digital channels, as these interactions incur fewer costs. When companies need to focus which options they can provide for personal interaction, start-up companies should emphasize hybrid interactions in the utilization phase, as these influence transparency and help such companies to overcome their disadvantage regarding trust compared to incumbent companies. Moreover, both start-up companies and incumbents should emphasize relationship-building through hybrid interactions in this phase, as this strongly influences overall trust. Especially established companies can use this strategy to create a trust advantage over start-up companies.

The increasing acceptance and reliance on digital interactions in the financial services industry offers many opportunities for innovating relationship-building. The three trust enablers identified in this study point to strategic priorities in the interactions taking place throughout the customer journey. Trust-building measures are especially critical in the digital context, such as providing honest information and not pressurizing customers. Also, companies can build trust by informing customers when they do not have the best product – thereby, they create the basis for a possible transaction at a later point in time. Trust-building plays a par-

ticularly important role in customer acquisition. This is the case because in digital interactions, customers quickly switch to another provider when trust is not established. Moreover, companies often have no second opportunity to prove their trustworthiness. Companies can build trust in the early phases by offering both personal and digital interactions that build trust through relationship. For instance, trust is created by reducing information asymmetry, which in turn reduces customer uncertainty. Highly advanced technologies have been developed for this phase and help companies to detect customer needs. Later, in the utilization phase, the digitization level is even more important for building trust. Hybrid interactions are more effective in building trust through transparency, accessibility, and relationship compared to purely digital interactions. Still, digital interactions support companies in staying relevant. This aspect of continuous communication, in the form of a conversation, has been challenging companies in the financial services industry, both in digital and in offline interactions. One expert from an established company described how they successfully add value and build relationship by using their support and consultation competency after contract conclusion. At the same time, this practice helps companies to sense new or changing customer needs early on (not least because changes occur throughout the customer's life). Maintaining dialogue in the utilization phase, as the experts concluded, increases loyalty, turns customers into advocates, and lays the foundation for continued customer engagement.

Digital interaction can allow customers to actively influence product offerings. By contributing information and using self-service tools, customers develop from consumers to prosumers and co-create product design and personalize offers. Experts mentioned the potential for companies to connect digital interactions with data from other sources, in order to offer higher value and to create a win-win situation for both customer and company. When combining different data sources to offer additional services and offer better products, experts acknowledged that new data management approaches, ensuring that only specific data are disclosed, are required in future.

4.8 Conclusion and Further Research

This study has discussed the impact of digitization on the customer journey in an industry dealing with sensitive customer information and that is traditionally based on personal contact and in which customer trust is a key consideration. The financial services industry is currently undergoing severe transformations due to increased digitization, changing customer needs, and start-ups entering the industry with innovative service offers and new business models. Specifically, the research has analyzed the effects of digitization with regard to their impact on different phases in the customer process (pre-sales and utilization phase) and on different types of companies (incumbents and start-ups). As a key determinant of a strong customer relationship, trust was of particular interest. Interviews with experts from different relevant

backgrounds identified three trust enablers and current developments in the industry. The detailed effects were further analyzed and validated in an experiment, from which strategic recommendations for companies were derived.

The study has shown that while personal interactions are most effective in generating trust with customers, distinct strategies exist for building trust in the digital context. For both FinTech and established companies, displaying competency and communicating transparently is the basis for building trust digitally. While FinTech companies have mainly entered the market with a transaction-based strategy, which is based on ease and accessibility, established companies initially focused on transferring offline trust to digital interactions, following a trust-based strategy that emphasizes high relevance and relationship. Despite their different initial focus, both types of companies consider ease and accessibility in their interactions no longer as a differentiating factor and acknowledge the increasing need to strengthen the customer relationship in order to build customer loyalty and to create a competitive advantage. With a view to enriching the customer relationship, potential exists in actively involving customers as co-creators and in setting up new digital touchpoints that enable an ongoing and relevant conversation in the utilization phase.

Hybrid interactions enabling digital and personal interactions are associated with higher trust levels than purely digital interactions. Whereas in the pre-sales phase, a hybrid interaction strategy builds trust through relationship, in the utilization phase, a hybrid interaction strategy creates trust through all three trust enablers (transparency, accessibility, and relationship). FinTech companies can use hybrid interactions in the utilization phase to overcome their disadvantage with regard to perceived transparency compared to incumbents. Incumbents can use hybrid interactions in the utilization phase to create an advantage over FinTech companies in terms of perceived relationship. While at a disadvantage in this regard, FinTech companies should equally focus on this trust enabler due to its strategic relevance.

Given its objective to gain comprehensive insights into trust-building strategies in the digital context, the set-up of this study was based on in-depth expert interviews that cover the perspective of managers from established and FinTech companies, of managers from non-financial industries, and of academic researchers. Customer perception of trust-building strategies was not included. Even though the necessary precautions were taken, experimental studies face limitations with regard to external validity. Moreover, the model focused on testing the impact of the digitization level on trust, as mediated by the three identified trust enablers and as moderated by company type. Given this focus, the model did not include possible interactions between the three trust enablers.

The trust enablers can be distinguished as emphasizing relational aspects (such as relationship) or rather as addressing rational aspects (such as transparency and accessibility). The results have shown that the level of digitization influences trust through the relational elements of interaction. A better understanding of the differences between how digital and how

personal interactions create trust through the relationship as a trust enabler would allow identifying further options for improving both digital interactions and the synergies between digital and personal interactions with regard to improving the perceived relationship. Further, the rational elements of trust matter, as indicated by the role of the trust enablers transparency and accessibility. Still, while digital interactions can reach a certain level of transparency and accessibility, even these rational elements are better achieved through human interactions in the prolonged interactions characteristic of the utilization phase. For the pre-sales phase, no effect of the rational elements was detected. Further research needs to explore the different mechanisms that lead to trust creation through transparency and accessibility. It also needs to investigate options for translating these mechanisms into the digital context. Indications may come from the pre-sales phase, which companies are focusing their current efforts on, and where – despite a lower overall impact on trust – customers do not perceive a difference in transparency and accessibility between digital interactions and hybrid interactions.

Finally, the study has focused on the financial services industry. Since the need to build trust in digital interactions is especially pronounced in this industry, as well as particularly challenging due to the nature of the product and recent trust erosion, recommendations might differ for industries involving a different and less urgent trust-building context.

5 Convergence of Results and Conclusion

5.1 Synthesis of Perspectives for Customer Journey Innovation

This dissertation has aimed to identify success factors for improving customer experience by innovating customer-company interactions in the customer journey. Its specific goal was to identify management approaches required to strategically innovate the customer journey for improved customer experiences in the organization. For this, a three-step approach was selected (see overview in Figure 5-1). Chapter 2 took the organizational perspective to consider success factors for implementing a type of customer experience management in the organization that yields innovative solutions. Chapter 3 investigated the associated changes in the customer journey more closely and detected innovation patterns. Finally, Chapter 4 assumed the customer perspective to study the impact of changes in the customer journey on customers' trust in the company.

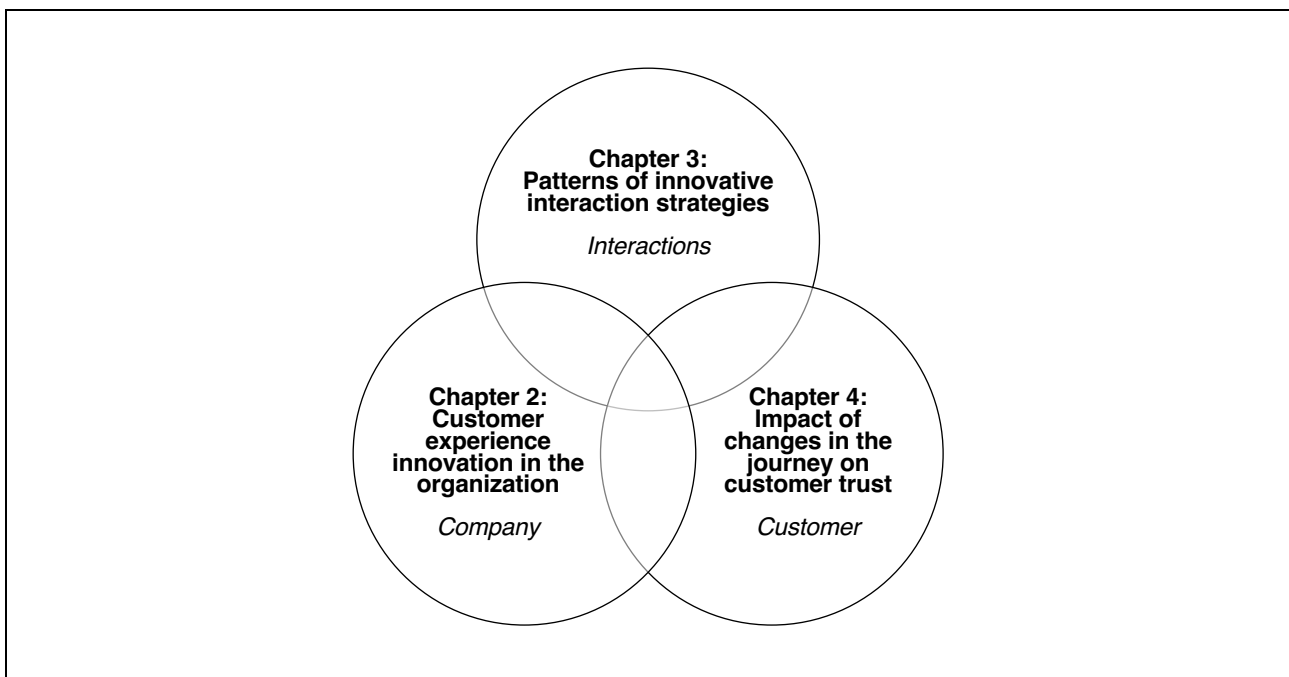


Figure 5-1 Three-step approach considering company, interactions, and customer

Customer experience management and customer journey management are closely interlinked. Customers' individual experiences arise from interactions with the company throughout the journey. Therefore, companies aiming to improve customer experience need to address the interactions occurring in the customer journey. This dual consideration – of experience and journey – is even more crucial when companies pursue innovation in order to improve customer experience and to differentiate themselves from their competitors.

On the *organizational* side, customer experience management entails establishing an organizational management approach that guides understanding and managing customer experience in the organization. Improving the customer experience becomes evident in changes in the

customer journey. It is precisely these customer-company *interactions* that can be purposefully innovated to affect customer experience. When aiming to affect the customer experience, changes throughout the customer journey significantly impact the *customer*. One important consideration in this regard is customers' trust in the organization, which is an especially critical consideration for companies in the financial services industry. Thus, improving customer experience needs to consider three key areas: customer experience management on the company side, innovating customer-company interactions that immediately address the customer journey, and customer impact, specifically customer trust.

The following chapter summarizes the results of this research and draws implications for research and practice. It summarizes the research findings for innovation in the context of customer journey management and customer experience management. Next, in combining the results, four pillars of successful customer journey management are outlined, specific levers are delineated from each of the three perspectives, and a management plan is developed. Finally, opportunities for further research resulting from a simultaneous focus on the company, the interaction, and the customer are discussed, followed by the overall conclusion.

5.2 Implications for Research

The results of the different studies in this dissertation allow answering the guiding research question and subquestions. The findings contribute to the existing literature in the fields of customer experience management, customer journey management, and service innovation.

5.2.1 Research Contribution

Guiding Research Question

Which success factors for customer journey innovations yield superior customer experiences and what are the implications for the company, for customer-company interactions, and for the customer?

Identifying success factors and process attributes for innovating customer experience shows that improved customer experience follows from innovating customer-company *interactions* throughout the customer journey. These interactions are influenced by a *company's* customer experience management and journey management. Further, they trigger customer experience on the *customer's* side. Therefore, these three elements – interactions, company, and customer – influence successful innovation and need to be purposefully managed. Specific implications result for each of the elements, i.e., for customer experience management that addresses the company's approach to customer-company interactions, for changing the customer journey through innovative customer-company interactions, and for managing the impact of changes in the customer journey on the customer. Therefore, the following findings for successfully

innovating the customer journey in order to improve customer experiences can be formulated to denote the theoretical and empirical observations in terms of the guiding research question:

- Finding 1: Customer experience is affected by changes in the customer-company interactions along the customer journey.
- Finding 2: Innovating these customer-company interactions yields improved and differentiating customer experiences.
- Finding 3: Managing the customer journey entails distinct success factors for the company side, for customer-company interactions, and for the customer side.

Research Question 1

How can customer experience innovation be anchored in the organization in order to integrate the individual customer experience and the organizational perspective on customer experience management?

The results show that innovating customer experience requires linking individual and subjective customer experience with general design implications for the customer journey. A successful customer experience improvement process displays distinct process attributes (including the strategic involvement of relevant stakeholders and feedback loops for shifting insights in the process) and the application of specific management practices (including transforming insights by iterating between information collection and reflection and by creating a pull effect for customer experience improvement efforts among employees). The improvement process continuously transforms the insights gathered throughout the customer experience management process. This ensures that the solution to a customer experience concern is extended in its impact and scope (through an abstract or general form), while at the same time ensuring its relevance and applicability (through a specific or concrete form). Taken together, the findings for implementing strategic customer experience innovation in the organization emphasize this distinct approach to managing people and managing insights:

- Finding 4: Innovating customer experience is achieved by implementing distinct customer experience management process attributes and management practices (Sections 2.5.1.2 and 2.5.3).
- Finding 5: To innovate customer experience, all stakeholders should be purposefully involved in generating, interpreting, and acting on information (Section 2.6.2).
- Finding 6: Innovating customer experience requires continuously and iteratively transforming insights throughout the process (Section 2.5.4).

Research Question 2

Which innovation options for touchpoints exist in the customer journey for creating positive customer experience and how do these innovations affect the customer and the company?

Improving customer experience by innovating the customer journey can be approached strategically by changing the context of customer-company interactions, the role of the company, or the role of the customer in such interactions. Specifically, nine recurring innovation patterns implemented by start-up companies in the financial services industry were observed: integrating, brokering, connecting, complementing, consolidating, anticipating, positioning, empowering, and co-creating. Importantly, these strategies are applicable to sequences of related touchpoints contributing to the same customer purpose (instead of single touchpoint adaptations). While all of these strategies can create value for the company and the customer, and are generally perceived positively by customers, distinct differences were observed among customers, of which some deviate greatly from the average preferences. These heterogeneous customer preferences for innovations in the customer journey need to be taken into account when innovating the customer journey. Therefore, the following findings for innovating interactions in the customer journey were made:

- Finding 7: Customer-company interactions can be innovated strategically with recurring innovation patterns (Section 3.4.2).
- Finding 8: Innovating the customer journey benefits from a sequence-perspective on the customer journey, besides a touchpoint- and journey-perspective (Section 3.7.1).
- Finding 9: Heterogenous customer preferences need to be taken into account when innovating the customer journey (Section 3.5.3).

Research Question 3

Which trust-building strategies enable successfully building trust in different customer-company interactions?

The results show that companies in the financial services industry implement trust-inducing features in customer-company interactions in order to affect three key trust enablers: transparency, accessibility, and relationship. While transparency is a basic requirement for building customer trust, the focus in the industry is shifting from a transaction-based trust building strategy, which emphasizes accessibility, to a trust-based strategy, which focuses on relation-

ship. Changing the interaction strategy was found to affect the level of trust. Further, complementing digital interactions with interpersonal interaction options generally leads to higher trust than a purely digital interaction strategy. It is particularly crucial to develop an interaction strategy that emphasizes trust building both through relationship (one of the key trust enablers) and in the utilization phase. Specific recommendations for building trust emerged for incumbent companies and start-up companies. The results lead to the following findings for managing the impact of changes in customer-company interactions on the customer:

- Finding 10: All changes to the interaction strategies in the customer journey affect customer trust (Section 4.5.5).
- Finding 11: Building trust increasingly shifts the focus towards building customer relationship (Section 4.6.3).
- Finding 12: Companies applying a purely digital strategy, as well as start-up companies, need to apply distinct interaction strategies aimed at reducing these companies' disadvantage with regard to building customer trust (Section 4.7.2).

5.2.2 Contribution to the Literature Streams

Contribution to the Field of Customer Experience Management

This dissertation makes three main contributions to the field of customer experience management. First, specific process attributes, management practices, and practices for transforming insights have been identified. These support the development of innovative customer experiences (see Section 2.5, in response to McColl-Kennedy et al. (2015, p. 431) and Zomerdijk and Voss (2011, p. 67)). The findings emphasize the interactions and synergies between practices and advocate the need for a triple focus on processes, practices, and insight transformation for developing and improving customer experience. Second, a sequence perspective has emerged as promising approach for analyzing company-customer interactions (see Section 3.7, in response to McColl-Kennedy et al. (2015, p. 431)). Due to its inherent orientation on the customer, and by focusing on meaningful sections of the customer journey, such a perspective constitutes a dynamic and flexible approach for managing customer experience. Third, the research accounts for the dyadic nature of customer experiences and emphasizes both the company's and the customer's role in this relationship (see Sections 2.5 and 3.6, in response to Kranzbühler et al. (2018, pp. 438-439)). The dissertation is not limited to one perspective but instead connects the perspectives of the company, the interaction, and the customer in order to account for the multi-dimensional nature of customer experiences.

Contribution to the Field of Customer Journey Management

This research makes three contributions to the field of customer journey management. First, it demonstrates the need to consider the constellation of touchpoints in the customer journey in order to improve customer experience (see Section 3.7). Considering the constellation of

touchpoints accounts for the interrelation between touchpoints within sequences of related touchpoints, which, besides individual touchpoints, influence customer experience. Second, such sequences of related touchpoints have been shown to be delimited by customer purpose (see Section 3.7). Touchpoint sequences thus form meaningful sections in the customer journey, as they are formed according to customer logic. As a consequence of this perspective, any changes that are made to touchpoints in a sequence influence how customer purpose is fulfilled. Third, the findings show that depending on where in the customer journey changes are implemented, they have a distinct effect on the customer (see Section 4.6, in response to Lemon and Verhoef (2016, p. 83) and McColl-Kennedy et al. (2015, p. 433)). Specifically, the results have demonstrated that changing the level of digitization in customer-company interactions distinctly affects customer trust, depending on whether changes are made in the pre-sales phase or in the utilization phase.

Contribution to the Field of Service Innovation

The findings contribute to the field of service innovation in three ways. First, service innovation in the customer journey is driven by changing the combination of touchpoints in sequences. In their role as innovation levers, these touchpoints (or touchpoint sequences) affect customer experience. This research thus suggests considering the value of service innovations in the customer journey in terms of customer experience (see Sections 3.3 and 3.6, in response to Snyder et al. (2016, p. 2402)). This means that the resulting customer experience expresses an important aspect of the value created by a service innovation. Second, the findings address the need to analyze specific practices for service innovation by suggesting management practices, process attributes, and practices to transform insights that together support developing service innovation (see Section 2.5, in response to Biemans et al. (2016, p. 395) and Barrett et al. (2015, p. 144)). Third, the findings emphasize the need to consider the heterogeneity of customers and companies for managing service innovations (see Sections 3.6 and 4.6). Customers differ in their preferences for and responsiveness to different forms of service innovations. They may even negatively perceive some forms of innovation that others perceive positively. The results also indicate that innovations that change interactions in the customer journey have diverse effects on different types of companies.

5.3 Implications for Practice

The results provide specific recommendations for managers and guide their efforts to innovate the customer journey and to improve customer experience. Four overarching pillars inform the management approach to customer journey innovation: approaching digitization as a means to an end, accommodating unpredictability of the customer relationship, acknowledging dynamics of the customer journey, and assuming an evolutionary management approach. These pillars are collectively encountered from the company-, interaction-, and customer per-

spective. For each of these three perspectives, a central lever of successful innovation is identified. This manifests itself in the organizational mindset. Finally, the results have been condensed into a management plan for strategically approaching customer journey innovation in a company.

5.3.1 Pillars of Customer Journey Innovation

Converging the results from the different parts of this dissertation has revealed four pillars of customer journey innovation that contribute to improving customer experience. These pillars point to the fundamentals of devising customer experience innovations. These pillars are important for all of the different perspectives. The four overarching pillars are discussed below (see Figure 5-2).

First, to *approach digitization in customer-company interactions as a means to an end*. Digitization is not the objective of successful customer journey innovation. Further, personal customer contacts in the interactions remain crucial to customer experience innovation. Therefore, rather than purely aiming to digitize interactions, innovating the customer journey needs to be justified in terms of content. Digitization is often a means for improving customer experience. Moreover, it allows addressing the other pillars of customer experience innovation.

The second pillar of customer experience innovation is to *accommodate the unpredictability of the customer relationship*. The customer relationship is steadily evolving, and the associated developments cannot be planned by the company. The results have shown that customer preferences are heterogenous and change continuously. As a consequence, there is no ideal customer journey. Rather, the ideal of customer journey management is to flexibly prepare for different customers and their changing demands.

The third pillar of customer journey innovation for improved customer experiences is to *acknowledge the dynamics of the customer journey*. The results have shown that touchpoints are interlinked and that all touchpoints may play an important role in customer experience innovation. Touchpoints are dynamic, form part of a longitudinal sequence, and are influenced by context. Considering sequences of related touchpoints accounts for these characteristics and avoids focusing on single prominent touchpoints (such as selected moments of truth). As a consequence, when innovating to improve the customer experience, the focus in the customer journey is dynamically adjusted according to those touchpoint sequences that are considered relevant to fulfilling customer purpose.

The fourth pillar of customer journey innovation is to *assume an evolutionary management approach*. Managing the customer experience is an iterative process. This frequently switches methods and perspectives to account for the dynamic nature of customer-company interactions and to enable both a structured and flexible approach. The results have shown that companies dynamically bridge considering individual customer interactions and deducing general

implications for journey design. Further, the results have established that the generated insights are continuously further developed. As a consequence, such change and continuous evolution in the process are used as method for innovating customer experience and should be anchored in a company's customer experience management.

Pillars of customer journey innovation:

- Approach digitization as a means to an end
- Accommodate unpredictability of the customer relationship
- Acknowledge dynamics of the customer journey
- Assume an evolutionary management approach

Figure 5-2 Four pillars for innovating the customer journey

Considering these four pillars in an organization's efforts to innovate the customer journey, and thereby to improve customer experience, should guide managers' actions. They support the implementation of the core levers and the specific management guide discussed below.

5.3.2 Core Levers for Innovating the Customer Journey

Customer journey innovation can be approached from the company-, interaction-, or customer side. Each side suggests a particular understanding of customer journey innovation that benefits the innovation process and its outcome. Embracing the different perspectives helps companies' innovation efforts, as these require specific levers and add focus to management efforts. While the above-mentioned pillars constitute overarching principles for approaching customer experience innovation regardless of perspective, the following levers address the specific management focus, which is important for the respective perspectives. The pillars and levers for successful customer journey innovation are summarized in Figure 5-3.

On the organizational side, the focus is on customer journey innovation as a continuous and iterative development process. Emphasizing the development process highlights three key factors: considering problems as opportunities, repeatedly transforming insights, and passing on responsibility for customer journey innovation. Framing problems as opportunities is not aimed merely at solving the encountered problems. Instead, a problem is only the starting point for customer journey innovation. Any problem may trigger a more extensive process in order to extend the scope of the solution by detecting related problems beyond the context of the original problem. The insights generated in this process are transformed between an abstract and concrete state, and between a general and a specific one. With each transformation, new insights are created. The applicability and relevance of the solution approaches are extended beyond their initial scope. Finally, new insights into and general guidelines for customer journey innovation are used to educate other members of the organization, who can increasingly assume responsibility for the innovation throughout the process. This frees up

additional resources to further professionalize customer journey innovation in the organization. Each of these factors includes a dynamic development cycle that increases understanding of the problems and the impact of solutions. Therefore, the first core lever that supports successful customer journey innovation, approached from the company side, is to *treat customer journey innovation as a continuous development process*.

A second management lever concerns the focus on the moments of interactions for directing customer journey and experience improvements. When innovating customer-company interactions throughout the customer journey, companies need to assume different perspectives. The most important ones are a touchpoint-, sequence-, and journey perspective, each of which can be perceived from the company's or customer's point of view. Ideally, these different-level perspectives should complement each other in a company's efforts to innovate interactions, as they allow accounting for complex and diverging demands in innovations. Bridging different perspectives can generate valuable insights for innovation. There are two main occasions for combining different perspectives: framing customer-company interactions and distinguishing customer and company assessment. First, framing customer-company interactions as occurring at touchpoints, sequences, or journeys creates different insights. While a touchpoint perspective addresses the details and design of interactions but tends to omit relationships between touchpoints, a journey perspective captures the bigger picture of interactions over time. A sequence perspective, which considers sections of the customer journey, is useful in combining the strengths of a detailed touchpoint perspective and an overall journey perspective. It thus yields a systematic structured and dynamic approach. Second, combining perspectives is also beneficial when taking both the company's and the customer's perspective. Doing so provides a more comprehensive assessment of the feasibility and desirability of innovations in the customer journey than either of the perspectives alone. To overcome the regular mismatch between customer preferences and company implementation, customer journey innovation needs to consider both sides upfront. Such a dual perspective accounts for the organizational strengths and capabilities in innovation, and for customer preferences for innovating the customer journey, which may require serving heterogeneous customer segments. Taken together, combining perspectives on interactions, which are to be innovated in the customer journey, yields a more complete picture of the suitability and effects of innovations. Therefore, the core lever with regard to the customer interactions is to *treat customer journey innovation as the flexible switching of perspectives*.

Finally, on the customer side, companies face diverging interests with regard to interactions in the customer journey, which need to be considered in innovations. Specifically, these diverging interests concern the mode of interaction and the approach to retaining customer trust. Companies need to equally consider digital and personal elements in their customer interaction strategy. While digital interactions are more efficient and less resource-intensive than personal interactions, personal interactions are still more effective in building customer trust.

Moreover, both forms of interactions need to be integrated coherently to allow customers to smoothly switch the type of interaction when passing through the customer journey. Also, for building trust, diverging interests need to be balanced. Most important for building trust is the customer relationship, which can be more effectively implemented in personal interactions. At the same time, transparency and accessibility in interactions are prerequisites for customers to engage with a company. Companies need to ensure that they invest enough and do not fall behind competitors in this regard. Thus, the tensions between the type of interactions and the focus in these interactions require companies to balance such diverging demands. Therefore, the core lever regarding customer impact in managing service innovations in the customer journey is to *treat customer journey innovation as a balancing act between diverging interests*.

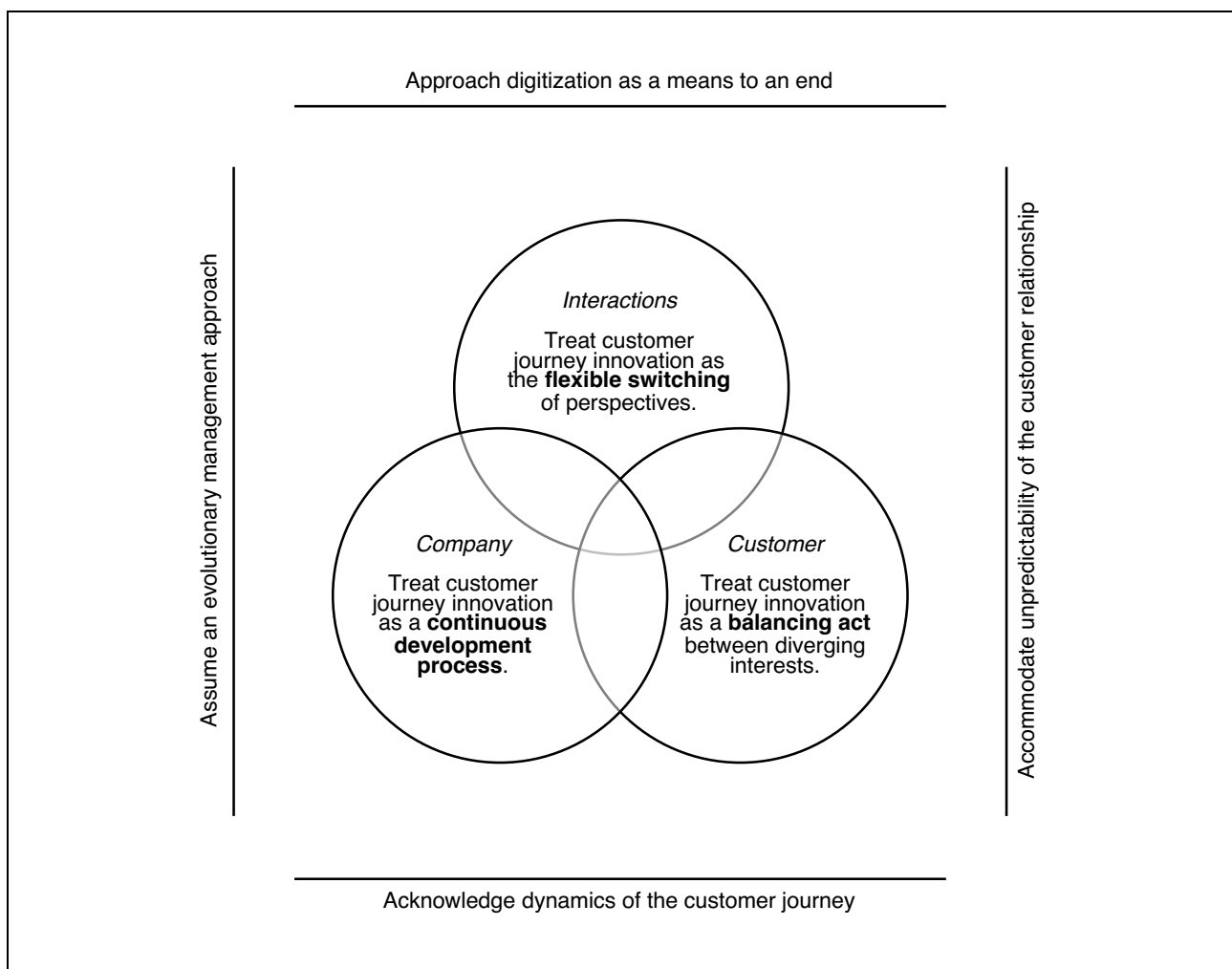


Figure 5-3 Pillars and levers for innovating the customer journey

5.3.3 Guiding Management Plan

To successfully innovate the customer journey as part of managing customer experience, the company perspective (particularly customer experience management in the organization), innovations in customer-company interactions, and the customer perspective (particularly the impact of changed interactions on customer trust) are key considerations. Assuming these three perspectives allows accounting for the relevant considerations in customer journey innovation and constitutes a comprehensive approach. According to the overall objective and focus of the innovation initiative, either perspective may be emphasized.

Four steps that guide managers in the innovation of the customer journey are derived from the results of this dissertation. Figure 5-4 summarizes the steps in form of a management plan for approaching innovation in the customer journey.

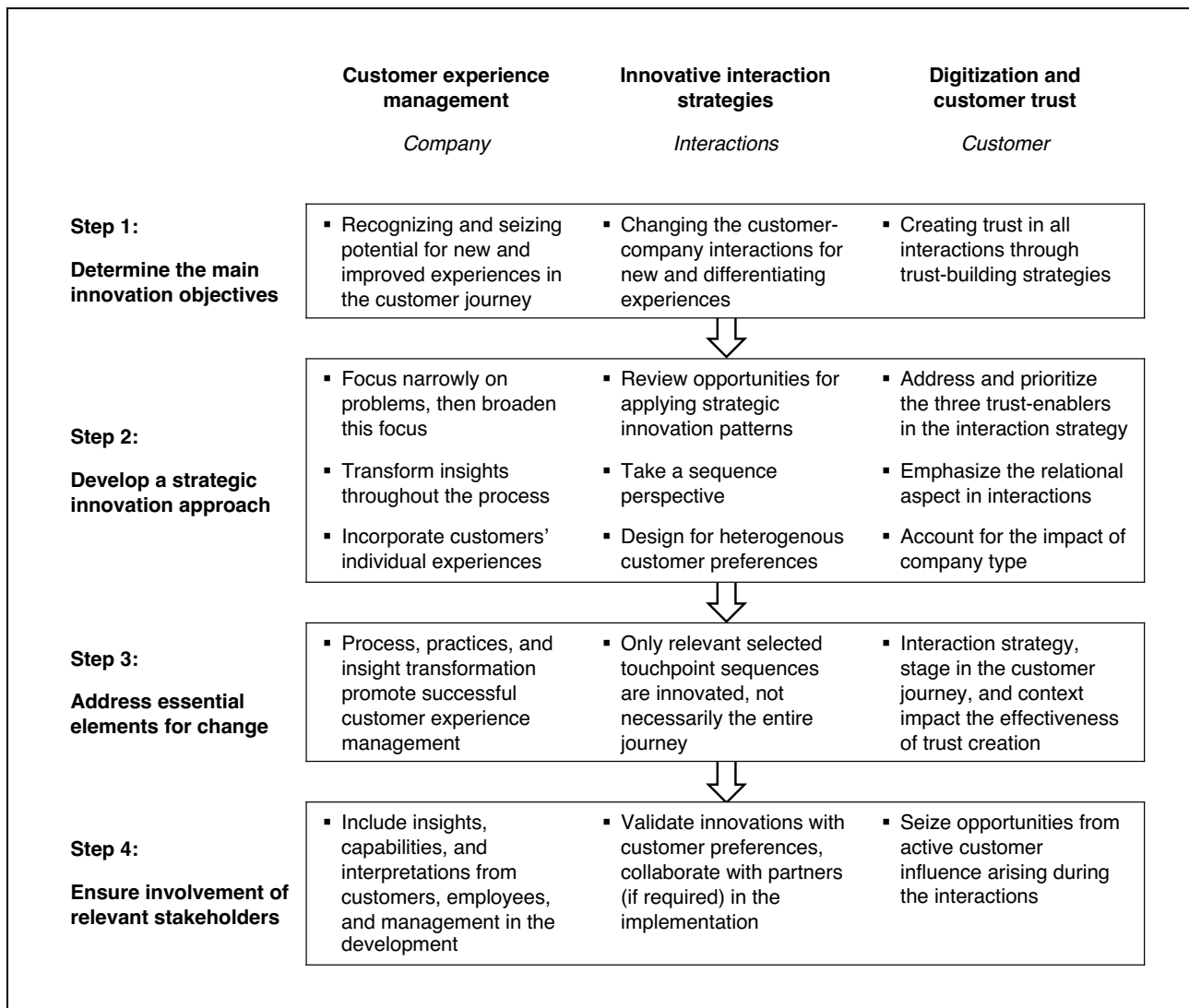


Figure 5-4 Guiding management plan for innovating the customer journey

Step 1: Determine the main innovation objectives

The first step in innovating the customer journey is to determine the main objective of a company's innovation efforts.

The company perspective formulates the objective to recognize potential customer experience improvements in the customer journey and to fully capitalize on any such opportunities. Rather than focusing on innovation per se, this objective emphasizes the aim to translate changes in the customer journey into significant improvements of customer experience.

From the interaction perspective, innovating the customer journey aims to implement changes in customer-company interactions and stresses the improvement of customers' transition throughout the journey. Together, this creates the basis for differentiation through the resulting new and improved customer experiences.

The customer perspective aims to steer the impact of changes in interactions on customers, and particularly on customer trust. As trust is inevitably affected by such changes, this perspective prepares in advance for the corresponding effects by using strategies that attenuate negative and reinforce positive impacts on trust.

Step 2: Develop a strategic innovation approach

In the second step, the innovating company devises a strategic innovation approach according to the main objectives that have been formulated.

Emphasizing the company perspective, the customer experience management process starts with a narrow focus on apparent problems with customer experience and then broadens the focus to extend the solutions. Deliberately transforming the insights throughout this innovation process in terms of their form is critical, as this increases the scope, impact, relevance, and applicability of solutions and constitutes the root of innovation. The approach takes particular care to incorporate individual customer experiences (e.g., through observation of and direct exchange with customers) and to translate these into design implications for the customer journey.

Focusing on customer interactions, the search for innovation opportunities in the journey can be guided by the recurring patterns informing the distinct innovation strategies. These strategies help to discover potential for experience improvements along the journey. The application of these innovation strategies concerns sequences of related touchpoints that together fulfill a customer purpose. Therefore, a sequence perspective is beneficial for innovating the customer journey. The chosen innovation approach should emphasize designing changes in the customer journey with respect to different customer segments, as customers are heterogeneous in their preferences for customer journey innovation.

An innovation approach focusing on customer response addresses and prioritizes the identified trust-enablers in formulating an innovation strategy. Three trust-enablers in particular are useful for setting strategic innovation priorities. In this respect, the relational aspect is especially important and is finding increasing application, not only in personal but also in digital interactions. When developing trust-building strategies, an approach highlighting the impact

of the interaction strategy on the customer should also remember the effect of company type, as this significantly impacts how the interaction strategy affects the customer.

Step 3: Address essential elements for change

To take effective action based on the selected innovation approach, the third step considers the particular elements that are changed as part of the innovation approach.

Regarding the company, a triple focus is advocated to promote successful customer experience management in the organization and to effectively implement an innovation approach in the company. Such a focus transforms process attributes, management practices, and insight transformation practices in order to anchor innovation throughout the company and to impact innovation development in an organization.

Implementing innovations of interaction strategies follows a sequence perspective. This selects particularly relevant related touchpoints as the object of innovation. These modifications in the customer journey are combined with other touchpoint sequences, which remain unchanged. The combination of changed and unchanged touchpoint sequences forms an innovated customer journey, and thereby improves customer experience.

The effect of different innovation approaches on the customer results in particular from the interaction strategy in terms of the level of digitization in interactions. Moreover, strategically designing an interaction strategy should occur with regard to the stage in the customer journey and the context in which an interaction takes place. Together, these considerations are essential for implementing an innovation approach that effectively accounts for the impact on customer trust.

Step 4: Ensure involvement of relevant stakeholders

As an interaction always involves the company and the customer and, in many instances, also other parties, the last step ensures the involvement of relevant stakeholders.

When emphasizing the company perspective, the deliberate inclusion of stakeholders is highly important for successful customer experience innovation. Each group of stakeholders contributes insights, capabilities, and interpretation, and thus is involved in particular instances throughout the innovation process. At the same time, this perspective stresses the need to deliberately exclude stakeholders occasionally throughout the process as part of stakeholder management, in order to advance in the development of innovative solutions in the customer journey.

Focusing on customer-company interactions reveals the need to include stakeholders in various forms. Most immediately, as customers vary in their preferences for innovations in the customer journey, they should be involved in validating the innovative solutions developed. Moreover, several innovation strategies may require collaboration with external partners in order to seamlessly combine touchpoints owned by each of these parties and forming part of

a single customer journey. Some improvements have a significantly advanced impact when they account for the larger network within which interactions take place. This can be achieved either by collaborating with relevant parties or by acknowledging this network in designing the customer journey.

Finally, focusing on the customer and actively making use of customer influence on interactions, particularly in digital interactions, presents an innovation opportunity. During interactions, customers provide direct input for designing customer-company interactions. Consequently, an increasing amount of data relevant to customer journey innovation becomes available. Thus, the active influence of customers on interactions can be considered as an opportunity for innovation and should be deliberately sought in order to identify further innovation potential.

5.4 Opportunities for Further Research

Taken together, the results indicate various opportunities for further research. A combined focus on the company, the customer, and their interaction has been shown to be a suitable perspective for studying customer experience innovation. Further, focusing on touchpoint sequences, which are delimited by customer purpose, rather than on individual touchpoints or the entire customer journey, has been shown to be a promising approach and is recommended to be further pursued in future research.

This research has taken an innovation perspective on customer experience management. This has allowed generating new insights for research on customer experience and service innovation as well as for managers aiming to manage and improve the customer experience. Since this dissertation focused on general customer experience, which results from innovation rather than on the subjective and individual level of customer experience, future research could further investigate the impact of innovation on the latter. This would allow making accurate inferences about customer journey design, and thus would advance the ability to create customer journeys that match the individual customer's needs and expectations. Considering the relationship between the level of subjective customer experience and the implications for general journey design is also required to improve and personalize digital interactions in the customer journey and to advance interactions that make use of artificial intelligence.

Throughout this dissertation, various methods have been combined. These included expert interviews, a single case study, a multiple case study, a conjoint experiment, and an experimental study. In order to further study the relationship between company activities, interaction, and customer impact, longitudinal research accounting for the temporal dimension of customer experience innovation would create further insights. In this sense, a longitudinal study could identify causal relationships between the three parts investigated individually in this dissertation: management practices, the changes implementable in the customer journey,

and their effect on customer experience and trust. Such a study would provide important insights for management practice that would serve to better coordinate activities and to foresee the impact on the customer.

This research has several limitations. It has focused on the financial services industry as a critical industry for studying customer experience innovation. Further research should consider the transferability of the results to other industries. In doing so, it should aim to complement the results of this study and to test their generalizability across industries. Particularly, the retail and travel industry appear instructive, due to the high relevance of managing customer experience in the services of these industries. Additional industries that lend themselves to further investigating the results under the perspective of increasing digitization include the media and music industries, which are strongly affected by digitization in interactions and industry disruption. With regard to customers, this research focused on B2C customers, while Chapter 3 indicated the potential of studying customer experience innovation also among B2B customers. Future research could explore this matter. The results would shed light on differences and commonalities of customer experience innovation in these contexts. This would deepen understanding of the customer experience concept and provide useful insights for companies operating in either of the two contexts. Finally, as the results of this research indicate, the relevance of the type of organization for customer experience innovation efforts should be acknowledged in future research. Further, the diversity of the organizational set-up (including the centralization or decentralization of responsibility for customer experience management in the organization) should consciously be included in empirical studies.

Finally, this dissertation has focused on the dyadic relationship between the company and the customer, as these parties have been the main focus of the analysis. Considerations have been limited to company-owned touchpoints. Further research should expand and broaden this focus and consider the results for customer experience innovation in the context of the multiple actors involved in shaping customer experiences. Such a broadened focus would advance existing results by uncovering important interdependencies for innovating customer experience that result from the context of customer-company interactions and need to be considered in (re-)designing the customer journey. Such considerations would likely uncover additional paths for innovating the customer experience, ones that do not arise from immediate customer-company interaction but from the networked interactions of multiple stakeholders. Thereby, accounting for multiple actors in shaping customer experiences would further improve the ability to deliberately manage the impact of service innovation on customer experience.

5.5 Conclusion and Outlook

The starting point of this dissertation was the challenges faced by companies in innovating customer experience that are relevant both in theory and in practice. Especially the increasing digitization of customer-company interactions shifts requirements for providing positive customer experiences. So far, companies have struggled to strategically implement customer experience management in their organization and in customer-company interactions. This study investigated three main concerns, in order to identify success factors for customer journey innovation and to provide recommendations for implementation. First, with regard to the company, this dissertation has identified successful approaches to innovating the customer experience (considering practices and processes) and how they can be anchored in the organization. Second, with regard to interaction, this dissertation has shown how innovations can be used for differentiation and can be applied to purposefully impact the customer journey while respecting different customer groups. The results have introduced a sequence perspective on touchpoints in the customer journey that promotes a structured yet flexible approach towards customer journey innovation. Third, regarding the customer, trust was identified as a key consideration for companies when changing interactions in the customer journey and the impact of such changes on customer trust was investigated. Together, analyzing these three concerns has addressed the challenges faced by researchers and by practitioners. Analysis has allowed deriving success factors for managing customer experience innovation in the organization.

The analyses support the relevance of assuming each of the three perspectives – the company, the interaction, and the customer perspective – for successful customer experience innovation. The insights from these three perspectives should be integrated. Taken together, they form a comprehensive approach towards customer experience management capable of innovating customer-company interactions in a way that positively impacts the customer and the company. It is specific to the three perspectives that they focus on customer-company interaction and thus are in their core both customer and company focused at the same time. Acknowledging the interrelation of these perspectives appears to be a promising approach and should be embraced by further research on customer experience management and customer journey innovation.

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Appendices

Appendix A Supplement to Study 1

A.1 List of Exploratory Expert Interviews

Table A-1 List of expert interviews in the exploratory research study

Company	Industry	Function
Airline company	Airline industry	Head of Customer Experience
Automotive company	Automotive manufacturing	Vice President Brand Experience
Bank	Financial services	Head of Customer Experience
Consultancy	Professional services	CEO
Consultancy	Professional services	Partner
Consultancy	Professional services	Senior Manager
Food company	Food processing	Digital Engagement Manager
Marketing solutions provider	Professional services	Business Development Manager
Online service provider	Internet-related services	Industry Leader
Retailer, wholesaler	Retail and wholesale	Head of Marketing and Services
Telecommunications provider	Telecommunications	Business Development Manager
Travel agency	Tourism	Marketing Director

Note: Two interviews were conducted in English and ten interviews were conducted in German. The interviews were recorded and transcribed for further analysis.

A.2 Interview Guideline for the Exploratory Expert Interviews

Question Set 1: Meaning of customer experience

What does customer experience mean to you? What are your goals when managing the customer experience? Which role does managing the customer experience play in your company? How do you integrate the customer experience management in your organization? Why do you take care of customer experience management? What are trends in managing customer experience?

Question Set 2: Managing customer experience at touchpoints

At which touchpoints is it most critical to actively manage customer experience? What are customers' expectations for these touchpoints? What is the ideal company response? When in the customer journey do customers value experience innovation the most?

Question Set 3: Innovating customer experience

What constitutes an innovative customer experience (or an innovative touchpoint)? What types of innovative experiences are most appreciated? How important is innovating the customer experience? What is the impact of innovation?

Question Set 4: Developing innovative customer experiences

What are positive or negative examples of customer experience innovations? How were these innovations developed? What were important steps in the process? In how far were customers involved in the development process? What are challenges for developing innovative customer experiences?

Question Set 5: Assessing innovative customer experiences

How is the performance of customer experience innovations assessed? How are failures of customer experience innovations dealt with?

Question Set 6: Outlook for customer experience

Which additional aspects or challenges do you consider important in the context of customer experience innovation? In order to improve the ability to innovate customer experiences, what further specific insights are needed?

Appendix B Supplement to Study 3.2

B.1 Overview of the Attributes in the Conjoint Experiment

Table B-1 Attributes and attribute levels in the conjoint experiment

Strategy	Example	Strong	Weak	Absent
Integrating	Providing an insurance check that reviews customers' insurance contracts and suggests cheaper alternatives (Anivo)	All accounts are summarized in an overview. Payments can be made directly via the finance manager.	All accounts are summarized in an overview. Payments cannot be made directly via the finance manager.	Accounts are not summarized in an overview. Payments cannot be made directly via the finance manager.
Brokering	Fast application for business loans by automating the processing of various sources of performance information (Kabbage)	All expenses are analyzed for you. You receive suggestions to optimize your expenses.	All expenses are analyzed for you. You do not receive suggestions to optimize your expenses.	Your expenses are not analyzed for you. You do not receive suggestions to optimize your expenses.
Connecting	Asking customers for anticipated events and analyzing their accounts to detect expense patterns; both are accounted for in the investment plan (Wealthfront)	Bank accounts of family members can be connected. Financial products can be purchased together via the finance manager.	Bank accounts of family members can be connected. Financial products cannot be purchased together via the finance manager.	Bank accounts of family members cannot be connected. Financial products cannot be purchased together via the finance manager.
Complementing	Allowing lenders to shift due payments forwards and backwards without additional charge (LendUp)	You will be notified if alternative products offer better conditions. These can be purchased via the finance manager.	You will be notified if alternative products offer better conditions. These cannot be purchased via the finance manager.	You will not be notified if alternative products offer better conditions. These cannot be purchased via the finance manager.
Consolidating	Focusing on education on the website and through real life meetings (e.g., in the form of webinars, mentors, eBooks) (OurCrowd)	Taking out a loan can be done online. You will receive the loan within a few hours.	Taking out a loan can be done online. You will not receive the loan within a few hours.	Taking out a loan cannot be done online. You will not receive the loan within a few hours.
Positioning	Allowing users to set own categories of expenses which are then used to analyze financial patterns (Tink)	Upcoming installments can be moved to an earlier date. They can also be delayed for up to 14 days.	Upcoming installments can be moved to an earlier date. They cannot be delayed.	Upcoming installments cannot be moved to an earlier date. They cannot be delayed.
Anticipating	Combining many functionalities (e.g., paying and splitting bills, managing investments, ordering services) within one payment platform (Alipay)	You will be notified if you deviate from your saving goals. Particular expenses can be considered during planning.	You will be notified if you deviate from your saving goals. Particular expenses cannot be considered during planning.	You will not be notified if you deviate from your saving goals. Particular expenses cannot be considered during planning.
Empowering	Analyzing financial habits by combining information from all linked financial accounts (Wealthfront)	Financial information is displayed graphically. You receive financial tips in video tutorials.	Financial information is displayed graphically. You do not receive financial tips in video tutorials.	Financial information is not displayed graphically. You do not receive financial tips in video tutorials.
Co-creating	Offering a prepaid card and mobile app for children that can be accessed and managed by parents (Spriggy)	You can choose categories for displaying your expenses. You can also define personalized categories.	You can choose categories for displaying your expenses. You cannot define personalized categories.	You cannot choose categories for displaying your expenses. You cannot define personalized categories.

B.2 Overview of Construct Measures in the Conjoint Experiment

Table B-2 Construct measures and Cronbach's alpha in the conjoint experiment

Construct and items	α
Convenience orientation (Huynh & Olsen, 2016, p. 216) <i>1 = strongly disagree, 7 = strongly agree</i> I want to spend as little time as possible on financial products. The less effort I need for financial products, the better. It is a waste of time to spend a long time with financial products.	.77
Innovativeness (R. Grewal, Mehta, & Kardes, 2000, p. 20) <i>1 = strongly disagree, 7 = strongly agree</i> In general, I am the first in my circle of friends to use digital services when they appear in the market. Compared to my friends I use a lot of digital services. In general, I am the first in my circle of friends to know the about the latest digital services.	.92
Risk aversion (Donthu & Gilliland, 1996, p. 74) <i>1 = strongly disagree, 7 = strongly agree</i> I would rather be safe than sorry. I want to be sure before I purchase anything. I avoid risky things.	.87
Online search (Bart et al., 2005, p. 150) <i>1 = strongly disagree, 7 = strongly agree</i> I use the Internet as an information tool.	
Age In years	
Gender Female (0) vs. male (1)	
Education level School diploma (0) vs. occupational training (1)	

Note. Adapted from the original German questionnaire.

B.3 Results of the Latent Class Analysis in the Conjoint Experiment

Table B-3 Latent class analysis in the conjoint experiment: Model selection

Segments	Log-likelihood	AIC	CAIC	BIC	ABIC	Entropy
1	-2267.70	4571.40	4694.33	4676.33	4619.14	—
2	-2192.96	4459.93	4712.62	4675.62	4558.06	0.52
3	-2163.97	4439.95	4822.41	4766.41	4588.48	0.59
4	-2136.71	4423.42	4935.64	4860.64	4622.34	0.68
5	-2108.46	4404.92	5046.91	4952.91	4654.25	0.64
6	-2077.33	4380.66	5152.40	5039.40	4680.37	0.69
7	-2058.50	4380.99	5282.50	5150.50	4731.11	0.71

Appendix C Supplement to Studies 4.1 and 4.2

C.1 List of Expert Interviews

Table C-1 List of expert interviews in the qualitative research study

Expert Group	Company	Industry	Function
Group A: Financial service providers	Bank (direct bank)	Financial services industry	Chief Marketing Officer
	Insurance (incumbent)	Financial services industry	Chief Marketing Officer
	Insurance (incumbent)	Financial services industry	Innovation Manager
	Insurance (incumbent)	Financial services industry	Marketing Managing Director
	Insurance (start-up)	Financial services industry	CEO, founder
Group B: Best practice companies	Airline company	Airline industry	Senior Director Online
	Online service provider	Internet-related services	Industry Head
	Technology service provider	Artificial intelligence-related services	Executive Strategist
Group C: Academia and applied research	Research organization	Applied research	Researcher
	Research organization	Applied research	Researcher
	University	Scientific research	Professor
	University	Scientific research	Professor

Note: Two interviews were conducted in English and ten interviews were conducted in German. The interviews were recorded and protocolled for further analysis.

C.2 Interview Guidelines for the Expert Interviews

C.2.1 Interview Guideline Version A

The following interview guideline was used for experts of group A (financial service providers) and group B (best practice companies).

Question Set 1: Digital media in the customer process

During which stages of the customer process does the use of digital media have potential? Which characteristics of digital media contribute to their adoption? How can digital media facilitate or enhance the process for the customer? Which challenges do companies face when digitizing the customer process?

Question Set 2: Utility dimensions and customer expectations concerning digital media

How do customers benefit from digital media in the purchasing process? What expectations do customers have towards a digital purchasing process? Which of these expectations are currently met and which ones are not? Which effect does (not) fulfilling the expectations towards digital media have on the customer relationship and on the customer experience? Why do customers decide not to use digital media?

Question Set 3: Technology, disruption and adaptation

In future, which (types of) companies will assume a leading role in the market? In how far will disruptive offers be of relevance? How can companies prepare for such new offers? How will specialized "single stage" offers and holistic integrated solutions be positioned in the market and when will they be most beneficial?

Question Set 4: Utility dimensions of digital media for companies

How do you use digital media for leading customers to the purchase decision? What are your goals when using digital media in the customer process? In how far do you take customer expectations into account when designing the digital customer process? What prompts customers to switch channels? Why do customers decide to discontinue the purchasing process or not to purchase?

Question Set 5: Effects of digital media on the customer relationship

What aspects of the customer relationship are critical for the purchasing decision? In how far does digital media influence the customer relationship? What are the decisive factors for gaining customers' trust? How can trust be created digitally?

Question Set 6: Levers and options for the digital customer process

In how far does your company personalize digital customer processes? Which customer needs and expectations are taken into consideration when designing the digital customer process? How should digital media be integrated in future? What are best practices for the integration of digital media?

Question Set 7: Personal contact in the customer process

Which role does the personal contact with the customer advisor play in the customer process? Which differences between personal contact and digital interaction are critical for the purchase decision? How will the role of personal contact change in future? How will this impact the customer relationship?

C.2.2 Interview Guideline Version B

The following interview guideline was used for experts of group C (academia and applied research).

Question Set 1: Trust in the customer process

What does “trust” in the customer process mean for you? In which phases of the customer process is trust particularly relevant? How can trust be built in the customer process? What are the effects of successful trust building on the customer behavior?

Question Set 2: Effects of digital media on the customer

In how far does the effect of digital media and personal contact differ in their effect on customer trust? How is trust built through personal and through digital interactions and where are the differences? How do digital media affect customer trust (irrespective of content etc.)? In how far can digital interactions help or hinder trust building?

Question Set 3: Digital trust building measures

Which specific measures (digital and digital/ offline combined) can companies use for promoting customer trust? How do they affect the customer? Which synergies exist between digital and offline measures? Can personal trust building be replaced by digital trust building? In how far do the same or different triggers affect trust building through personal contact vs. digital media? What are the prohibiting factors?

Question Set 4: Drivers of digital customer trust

Which role do digital interaction tools, the content itself, and the professionalism of the implementation play for trust building? Which role do transparency, simplicity, and personalization of the digital interaction play for trust building? Which factors should companies necessarily consider for building trust through digital interactions? In how far do these factors differ from offline interactions?

Question Set 5: External influences on trust building

Which role do individual customer characteristics and company characteristics play for the effect of trust building measures? In how far does the perceived trustworthiness differ between start-up companies that interact only digitally with customers, and established companies that interact both on- and offline with their customers?

Question Set 6: Outlook

Which developments do you observe with regard to digital media that promote trust building? Which developments do you see among companies' application of digital media that specifically serve trust building?

C.3 Overview of Construct Measures in the Experiment: Trust Enablers

Table C-2 Trust enablers: Construct measures and Cronbach's alpha in the experiment

Construct and items	α
Competency (Cho, 2006, p. 35) <i>1 = strongly disagree, 7 = strongly agree</i> Alpa is an expert in the financial services business. Alpa knows what it is doing. Alpa is competent. Alpa is proficient.	.94
Transparency (Communication openness: Auh et al., 2007, p. 363) <i>1 = strongly disagree, 7 = strongly agree</i> Alpa keeps me very well informed about what is going on with my finances. Alpa explains financial services in a meaningful way. Alpa always offers me as much information as I need. Alpa always explains to me the pros and cons of the offers it recommends to me.	.95
Ease (Service quality (ease): Homburg et al., 2009, p. 51) <i>1 = strongly disagree, 7 = strongly agree</i> I am very comfortable with Alpa. I can get helpful guidance from the employees. I only need to exert the smallest possible effort. I keep the stress that is connected to financial decisions as low as possible. I receive service and guidance from experts at Alpa.	.93
Accessibility (Access convenience: Seiders et al., 2007, p. 148) <i>1 = strongly disagree, 7 = strongly agree</i> I am able to reach Alpa quickly and easily. Alpa's contact options are convenient for me. Alpa can be accessed conveniently at any time.	.95
Relevance (Advice: Bart et al., 2005, p. 149) <i>1 = strongly disagree, 7 = strongly agree</i> Alpa provides me with sufficient information to make a purchase decision on all products being offered. The investment option by Alpa can be personalized to my needs. Alpa can recommend products based on previous purchase. Alpa allows me to create products or services to exactly fit my needs. The site is helpful to me in reaching my buying decisions.	.94
Relationship (Social presence: Gefen & Straub, 2003, p. 24) <i>1 = strongly disagree, 7 = strongly agree</i> There is a sense of human contact at Alpa. There is a sense of personalness at Alpa. There is a sense of sociability at Alpa. There is a sense of human warmth at Alpa. There is a sense of human sensitivity at Alpa.	.96

Note. Adapted from the original German questionnaire.

C.4 Overview of Construct Measures in the Experiment: Experimental Study

Table C-3 Experimental study: Additional construct measures and Cronbach's alpha

Construct and items	α
Trust (Gefen, 2000, p. 735; McKnight et al., 2002, p. 355) <i>1 = strongly disagree, 7 = strongly agree</i> Even if not monitored, I'd trust Alpa to do the job right. I trust Alpa. I believe that Alpa is trustworthy. I believe that Alpa would act in my best interest. If I required help, Alpa would do its best to help me.	.95
Daily Internet usage in hours (Teo & Liu, 2007, p. 29) < 1 1 to < 3 3 to < 5 5 to < 7 7 to < 9 >= 9	
Familiarity with financial services (Gefen, 2000, p. 735) <i>1 = strongly disagree, 7 = strongly agree</i> I am familiar with searching for financial services on the Internet. I am familiar with buying financial services on the Internet.	.86
General trust <i>1 = strongly disagree, 7 = strongly agree</i> I place high trust in financial services. I place high trust in online services. I place high trust in personal advice. I place high trust in start-up companies. I place high trust in incumbent companies.	.92
Privacy concern (Malhotra et al., 2004, p. 351; Okazaki et al., 2009, p. 76) <i>1 = strongly disagree, 7 = strongly agree</i> I believe that online privacy is invaded when control is lost or unwillingly reduced as a result of a transaction.	
Age In years	
Gender Female (0) vs. male (1)	
Nationality German (0) vs. Swiss (1)	
Education level School diploma (0) vs. occupational training (1)	
Employment status Unemployed (0) vs. employed (1)	
Financial status (Bansal et al., 2016, p. 8) Very poor (1) to very wealthy (7)	

Note. Adapted from the original German questionnaire.

Curriculum Vitae

Maleen Knaak

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Education

2013 – 2018	University of St.Gallen , St.Gallen, Switzerland Doctoral Studies in Business Administration
2011 – 2013	Maastricht University , Maastricht, The Netherlands Master of Science in International Business
2011 – 2013	Queen's University , Kingston, Ontario, Canada Master of Arts in International Business (MIB)
2008 – 2011	Maastricht University , Maastricht, The Netherlands Bachelor of Science in International Business
2011	Queen's University , Kingston, Ontario, Canada Exchange Semester

Work Experience

2018 – 2019	Institute of Marketing , University of St.Gallen, St.Gallen, Switzerland Project Leader
2013 – 2017	Institute of Marketing , University of St.Gallen, St.Gallen, Switzerland Research Associate
2012	Lancel Sogedi , Paris, France Junior Sales Manager