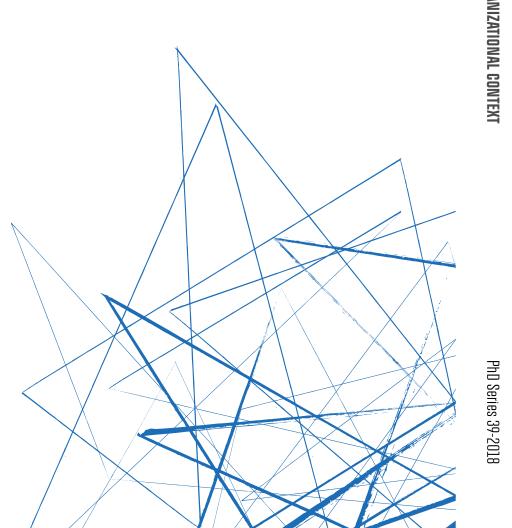
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SERVICE DESIGN AS A TRANSFORMATIVE FORCE: INTRODUCTION AND ADOPTION IN AN ORGANIZATIONAL CONTEXT

Marzia Aricò **SERVICE DESIGN AS A**

Doctoral School of Organisation and Management Studies

CBS K COPENHAGEN BUSINESS SCHOOL

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Service Design as a Transformative Force: Introduction and Adoption in an Organizational Context

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Foreword

This thesis is the culmination of a research project started in 2013. After working as a design practitioner for more than five years, I decided it was about time to reflect on my own practice and contribute to its development. I started this journey thanks to an opportunity offered by DESMA, an Initial Training Network within the area of Design Management funded by the European Commission's Marie Curie Actions (FP7). The program has provided a challenging yet inspiring platform to create and develop new knowledge. I'd like to thank every single one of the other twelve researchers who have shared the DESMA journey with me, offering opportunities to debate, travel, learn, and grow. I'd also like to thank Anna Rylander, Claudio Dell'Era, and Tony-Matti Karjalainen for setting up such an interesting program and for guiding each one of us with passion and dedication.

Although DESMA provided the opportunity to start this research project, this study would have never happened without the unconditional support of Livework studio. The crowd at Livework offered me a home to learn and experiment, and a bunch of extremely bright human beings to think, imagine, and create with. In particular, I'd like to thank Lavrans Løvlie for hosting me in Oslo during my first year of research and introducing me to Telenor; Ben Reason for putting me in contact with most of the organizations analyzed in this study; and Melvin Brand Flu for giving me a home in Rotterdam, for having pushed my boundaries, for challenging me, for giving me headaches, for the stories told at the right time, for the countless beers when they were most needed. Thanks for the trust and unconditional support.

I wish to profusely thank my supervisor Stefan Meisiek for accepting the challenge to work with a designer wanting to do a PhD in a business school. It doesn't happen often, and many scholars before him did not understand why I was so eager to try. I want to thank him for his patience, for his dedication, for having read every single word of this thesis and of the many versions before this one. For having provided always constructive and meaningful feedback. For caring about the work. For sharing my same passion and belief in the potential of a meaningful combination between design and business. For having let me wander in the woods of knowledge, and for rescuing me when I was clearly lost. For twice inviting me to spend time at the University of Sydney, to where he moved halfway through this research project. In Sydney, I not only found an amazing bunch of smart passionate people, but I also discovered surfing, which truly changed my life. I was a designer before starting this journey, now I am a designer-researcher-surfer! I want to thank all the people at the University of Sydney Business School who welcomed me, gave me an office, space to think, and listened to my rambles on my PhD. I'd particularly like to thank Karen Ho and Stephanie Wilson for their warmth and openness. I'd also like to thank my second supervisor, Giulia Calabretta, for her constant daily support. A PhD can be a lonely journey—and this was particularly the case, as I was based in Rotterdam during most of my PhD, hence with little access to the Copenhagen Business School. Giulia opened the doors of TU Delft, making me feel at home, always providing meaningful and precise feedback on my work that helped me improve and grow as a researcher.

The work has also incredibly benefitted from the feedback and advice provided by the four fantastic discussants who attended my two work-in-progress seminars. Shannon Hessel and Silviya Svejenova Velikova from CBS, for having coped with an early, rudimentary version of this study. Nonetheless, they have been fantastic at giving me constructive feedback that has enabled me to move forward a long way. In particular, I'd like to thank Shannon for having involved me in the CBS Studio work over these past three years. I've loved every minute of it. Ingo Karpen from RMIT, not only for his detailed feedback but also for sharing my same passion for the topic. His perspective made me see my work from a new exciting angle. And Susanne Boch Waldorff for the precise and meaningful advice given during my second seminar, and for having introduced me to the institutional logics perspective. Her PhD course on Perspectives in Organizational Analysis has been an eye opener.

I'd like to thank the many professionals that have accepted to be interviewed for the data collection of this study. All the anonymous respondents of Study1 as well as the crowd at Telenor, for their time and honesty in sharing their experience. I wish to particularly thank Annita Fjuk for giving me access to Telenor, for introducing me to the many great employees I interviewed, and for the passion she shared with me for the topic.

Finally, I'd like to thank the four most important people of my life. Salvatore Aricò, Rosaria Lo Sicco, and Vittoria Aricò, who have always supported all the decisions I took in my life—even those that sounded completely insane (such as this PhD!).

They have supported me during the worst and best moments, sharing laughs, worries, and countless trips to the beach. Making me feel special. And then Jonas Piet, who decided to propose during this research project on a boat off Syracuse. Despite my mood swings and PhD crises. Whose imagination, creativity, positivity, and love have supported me beyond explanation during this journey.

Marzia Aricò, Rotterdam, April 2018

Abstract

In the last decade, service design has seen a rapid diffusion, with several service design agencies established globally and commercial organizations willing to adopt it. This guick expansion is mainly due to an increasing focus of organizations on services and customer experience, building also on the need for businesses to digitalize their commercial offers and core operations. Despite the uptake of service design in practice, research has yet to deliver systematic empirical studies, rigorous analysis, and careful theorizing of service design and its fit within the strategies, practices, and processes of organizations (Ostrom, et al., 2015; Andreassen, et al., 2016). Service design's theoretical foundations can be found in a wide range of academic fields that span from design to management (Kimbell, 2011; Karpen, et al., 2017), making it difficult to locate and develop a cohesive argument on the topic. The purpose of this study is to contribute to laying the foundations to systematically start investigating service design in an organizational context. I will use an institutional logics perspective, one of the key themes in institutional theory. Through this perspective, the study aims at clarifying the elements characterizing the organizational environment within which service design is introduced and the mechanisms for its adoption in such an organizational context.

The study confronts two research questions:

- 1. What are the elements characterizing the organizational context within which service design is introduced that influence its introduction and existence?
- 2. How do the mechanisms that favor service design adoption in an organizational context operate?

To seek answers to these questions, I have employed a qualitative and interpretative research design. Nine large, western organizations operating across eight different sectors are analyzed, who have all opted to introduce service design to tackle a diverse range of pressing business challenges. The nine organizations are first analyzed in an exploratory fashion, aiming to understand how service design played out in these different organizational contexts (Study1). I have then selected one of the nine, Telenor Group, identified as a revelatory setting, and have developed an in-depth case on service design in an organizational context (Study2). This study has utilized primary data emerging from in-depth interviews with key informants.

Observation has also been carried out, and the study has employed secondary data sources emerging from company website and social media channels.

The study suggests that service design can be conceptualized as simultaneously virtual and material, characterized by a defined set of principles and practices. The principles characterizing service design are: human-centered, co-creative, holistic, *experimental, and transformative.* The practices characterizing service design are: conducting design research, ideating, visualizing, prototyping, and sequencing. Findings suggest that service design enters the organization through the emerging customer logic, conceptualized as an organizational logic of competitiveness that reflects a system guiding specific competitive choices. Service design enters the organization using the channel offered by the emerging customer logic, representing a way for the logic to materialize itself in practice and to suggest a clear alternative model to new service development and innovation. Findings suggest that the customer logic is immersed in a constellation of three logics, respectively Telco, *Digital*, and *Customer*; such a constellation is subject to five constellational forces. The constellation of logics and its constellational forces determine the environment within which service design is introduced. The five constellational forces emerge as follows: (1) exogenous forces, (2) constellational relationships among the three logics, (3) the nature of the recombinant strategies used to introduce each of the logics, (4) individual actions, and (5) organizational goal. Findings also suggest that the mechanisms that favor the growth of service design adoption are enacted by organizational members carriers of the customer logic, and are exercised across four stages (sensitizing to service design principles, embedding service design practices, securing human resources, growing enabling structures) via eleven distinct activities (expose, simplify, customize, familiarize, engage, locate, specialize, track, incentivize, measure, evaluate).

This study offers two major contributions to the existing body of knowledge:

- 1. It contributes to the stream of research on *design legacies*. By analyzing the intra-organizational context within which service design is introduced, the study offers an understanding of the organizational environment within which service design is introduced as shaped by the constellation of logics and constellational forces.
- 2. It contributes to the stream of research on *design capabilities*. The study offers a transformative model to explain how service design capabilities grow

in an organizational context and the role of organizational actors in their evolution.

Dansk Resumé

I løbet af det sidste årti har servicedesign gennemgået en hastig udbredelse, i hvilken servicedesignbureauer globalt etableret kommercielle adskillige er og organisationer er villige til at implementere det. Denne hurtige udvidelse skyldes hovedsageligt organisationernes stigende fokus på service og kundeoplevelse, og bygger også på virksomheders behov at digitalisere deres kommercielle tilbud og kerneoperationer. På trods af implementeringen af serviceteknologi, har forskningen i praksis endnu til gode at levere systematiske, empiriske undersøgelser, grundig analyse og omhyggelig teoretisering af serviceteknologi og dens positionering inden for organisationernes strategier, praksis og processer (Ostrom, et al., 2015; Andreassen, et al., 2016). Servicedesigns teoretiske fundament forefindes i en bred vifte af fagområder, der spænder fra design til ledelse (Kimbell, 2011; Karpen, et al., 2017), hvilket gør det vanskeligt at lokalisere og udvikle et sammenhængende argument for emnet. Formålet med denne undersøgelse er at bidrage til at danne fundamentet for systematisk at påbegynde undersøgelser af servicedesign i en organisatorisk sammenhæng. Jeg vil anvende et institutionelt logikperspektiv, ét af de centrale temaer inden for institutionel teori. Gennem dette perspektiv har undersøgelsen til formål at afklare de elementer, der kendetegner det organisatoriske miljø, inden for hvilket servicedesign er indført, samt mekanismer for dets implementering i en sådan organisatorisk sammenhæng.

Undersøgelsen konfronterer to forskningsspørgsmål:

- 1. Hvilke elementer kendetegner den organisatoriske kontekst, inden for hvilken servicedesign er indført, der påvirker dens indførelse og implementering?
- 2. Hvordan opererer mekanismerne, der taler for implementering af servicedesign i en organisatorisk sammenhæng?

For at søge svar på disse spørgsmål har jeg anvendt et kvalitativt og fortolkende forskningsdesign. Jeg har analyseret ni store, vestlige organisationer, der opererer på tværs af otte forskellige sektorer, og som alle har valgt at indføre servicedesign for at håndtere en bred vifte af presserende forretningsudfordringer. De ni organisationer analyseres først og fremmest på en forklarende måde, med det formål at forstå, hvordan servicedesign udspillede sig i disse forskellige organisatoriske sammenhænge (Undersøgelse1). Jeg har derefter valgt en af de ni, Telenor Group, der identificeres som et særligt tilfælde, og udviklet en dybtgående case om servicedesign i en organisatorisk sammenhæng (Undersøgelse2). Denne undersøgelse har anvendt primærdata, som stammer fra dybdegående interviews med nøgleinformanter. Observation er tillige blevet udført, og undersøgelsen har anvendt sekundære datakilder, stammende fra virksomhedernes hjemmesider samt deres sociale medieplatforme.

Undersøgelsen antyder, at servicedesign kan konceptualiseres som samtidigt værende virtuelt og materielt, karakteriseret af et defineret sæt principper og praksisser. Servicedesign er kendetegnet ved fem forskellige principper: brugercentreret, medskabende, holistisk, eksperimentelt og transformativt. Resultaterne af servicedesign karakteriseres også af fem forskellige fremgangsmåder: udførelse af designforskning, idéudvikling, visualisering, prototyping og sekvensering. Resultaterne tyder på, at servicedesign entrerer organisationen gennem den voksende kundelogik, konceptualiseret som en organisatorisk logik af konkurrenceevne, som afspejler der et system, styrer specifikke, konkurrencedygtige valg. Servicedesign entrerer organisationen ved at benytte den kanal, som den nye kundelogik tilbyder, hvilket repræsenterer en måde, hvorpå logikken kan realisere sig selv i praksis og kan tilbyde en klar, alternativ model til ny serviceudvikling og innovation. Resultaterne tyder på, at kundelogikken er indlejret i en konstellation af tre logikker, henholdsvis Telekommunikation, Digital og Kunde. En sådan konstellation er underlagt fem konstellationskræfter. Konstellationen af logik og konstellationskræfter er bestemmende for det miljø, inden for hvilket servicedesign indføres. Fem konstellationskræfter fremkommer: (1) eksogene kræfter, (2) konstellationsforhold mellem de tre logikker, (3) typen af de rekombinante strategier, der anvendes til at introducere hver af logikkerne, (4) individuelle handlinger og (5) organisatoriske mål. Resultaterne tyder også på, at nøglemekanismerne for etablering af serviceteknologi i en organisatorisk sammenhæng er repræsenteret af den rolle, som organisatoriske aktører spiller i væksten af servicedesigns kapaciteter.

Denne undersøgelse yder to store bidrag til den eksisterende sum af viden:

1. Den bidrager til strømmen af forskning i *arven fra design*. Ved at analysere den intraorganisatoriske kontekst, inden for hvilken servicedesign indføres, giver undersøgelsen en forståelse af organisationslogik, defineret af

specifikke egenskaber og konstellationskræfter, som påvirker det organisatoriske miljø, inden for hvilket servicedesign indføres.

2. Den bidrager til strømmen af forskning i *designkapacitet*. Undersøgelsen foreslår en transformativ model til at forklare, hvorledes serviceteknologiernes egenskaber vokser i en organisatorisk sammenhæng samt de organisatoriske aktørers rolle i denne udvikling.

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Chapter 1: Introduction

The fundamental goal of design is no longer the production of yet another chair. It's a form of inquiry, and of agency.

Jan Boelen, Head of Social Design, Design Academy Eindhoven.

I started my journey into design as a young child, watching my father at work. My father is an architect, and I loved working with him on the technical drawings, instructing the construction team, choosing the right materials. I loved the fact that we could see something beautiful where others could only see a pile of bricks and a dusty construction site. I spent endless torrid Sicilian summers imagining houses, villas, apartments, gardens, seeing them eventually taking shape out of our imaginations.

When it was time to choose my university studies, however, I decided to opt for Industrial Design rather than Architecture. I realized I wanted to work on a smaller scale, with objects that were closer to people's hands. I began designing chairs, tables, toys, shelves, packaging, book covers. I also learned some crucial critical thinking skills. I learned to question my environment and the people living in it, investigating their behaviors and choices. I learned to learn from a Calvin & Hobbs comic strip, a David Bowie's music video, skaters' routines, and craftsmen's hands. But I soon realized that industrial design was not my real vocation.

Certainly, Professor Victor Papanek, with his book *Design for the Real World*, had a strong influence on this realization, arguing that "there are professions more harmful than industrial design, but only a very few of them" (Papanek, 1972, p. 14). Papanek was a sharp intellectual and writer calling designers to reflect on their social and moral responsibility, maintaining that "in an age of mass production, when everything must be planned and designed, design has become the most powerful tool with which man shapes his tools and environments (and, by extension, society and himself)" (p. 14). A second book, fundamental in my journey out of industrial design, was *In the Bubble: Designing in a Complex World* by John Thackara. The author not only made me face my social and moral responsibilities as a designer but also showed me that there was a way to put my design skills to use in a more meaningful manner. What seemed chaos around me suddenly became an interesting design challenge: "Things may seem out of control—but they are not out of our hands. Many of the troubling situations in our world are the result of design decisions. Too many of them were bad design decisions" (Thackara, 2005, p. 1). I therefore decided to limit my personal bad design decisions. I decided that the last thing the world needed now was yet another chair.

Thus, I graduated from Industrial Design with a thesis on the design of death. I wanted to give people the chance to design their own funeral experiences. After all, death and birth are two of the most important events in our lives, and yet we have very little influence in designing them. As enabling people to design their own birth sounded too complex, I decided to opt to design the experience of dying. The committee present at the defense of my thesis kept asking about the product; they argued that they could not judge my work without seeing the product. I kept responding that I purposely did not design any product, I designed an experience instead. Without knowing it, I had just developed my first service design project. That moment represented the beginning of my personal journey into service design.

It was the mid-2000s when the first service design studios started to pop up in London (UK), with Livework and Engine leading the way. These small studios were talking about design in a way that reflected my brand-new realization. They were presenting design as a form of inquiry, agency, and meaningful transformation. I moved to London, dedicated a few years to study this new form of design, and started working to help large organizations use and embed design into their innovation processes. I was working with organizations across several industries, and with an array of professionals ranging from engineers to marketers. Each one of them had their own pair of glasses through which they saw the world. I was often the only designer around the table. My role was to show them the world through my own colorful pair of glasses, guiding them through creative exploration and synthesis—and they all loved it. Design can be playful and fun. Professionals whose days were marked by boring meetings and ugly PowerPoint presentations were suddenly thrown into a space with colorful Post-its where they were asked to imagine, sketch, prototype, fail. In that space, failure suddenly became their success measure. Great concepts were produced during those sessions that made all the participants extremely proud.

Unfortunately, this colorful story does not end well. Virtually none of the concepts produced during those sessions were ever implemented. They tended to disappear into the complex organizational machine, languishing in drawers, or radically changed by the many hands in the implementation process. For me, that condition was even worse than designing chairs. This was worse than bad design, it was useless design. When I was designing chairs—although in my eyes a meaningless activity—I at least had the pleasure of seeing the final output produced and sold to customers. But now, most of the service design projects ended up as nothing. I felt a clown, a corporate entertainer, who was there to entertain an innovation department with some extra budget to spend.

I soon realized that my distress was shared by most of the strategic designers, design thinkers, and service designers I met in conferences across the globe. That realization became the very beginning of the research project presented in this PhD thesis. I always profoundly believed in the potential of design, thus I wanted to understand how to make service design increasingly more effective in an organizational context. I decided to explore the topic through scientific means, to ensure depth and credibility. I paired up with the best service design studio I knew, Livework, and joined their team, creating a good setup to access clients and designers. I have found the collaboration between Copenhagen Business School and Livework to be excellent in keeping my mind immersed in both academic as well as practitioners' discourses. This thesis will describe my journey since then, its findings and reflections. So, let's just allow this new story to begin.

1.1. Service Design Emergence

After service design's commercial breakthrough in the early 2000s, the practice has seen a rapid diffusion, with several service design agencies established and commercial organizations willing to adopt it. This quick expansion was mainly due to an increasing focus of organizations on services and customer experience. In the last few decades, the world has indeed witnessed a fundamental shift from an industrial to a service and experience economy (Pine & Gilmore, 1998). To avoid ending up in a commoditized business, organizations worldwide have shifted from the production of goods to the delivery of services and experiences. Within this context, services as well as products become components of a much more holistic offering, where services can be conceptualized as the *stage* and goods as *props* to engage customers with *memorable events* (Pine & Gilmore, 1998, p. 98). Such a

shift requires organizations to rethink the values they create for their customers, together with the processes and practices to support such new value creations. Already in 1988, scholars Vandemerwe and Rada described the clear shift of corporations throughout the world towards services, terming this movement *servitization of business*, which they defined as "the increased offering of fuller market packages or 'bundles' of customer-focused combinations of goods, services, support, self-service, and knowledge to add value to core product offerings" (p. 314). The authors recognized the trend as being virtually relevant to any industry, being customer-driven and perceived as a competitive advantage. Since then, research has explored the topic extensively, mainly focusing on its relevance (although primarily for manufacturing), but also starting to explore how to implement a servitization transition effectively (Calabretta, et al., 2016a).

While an increased focus on services and customer experience has certainly contributed to the quick spread of service design among organizations, digitalization is undoubtedly a second key element. Digitalization is indeed considered one of the key drivers for disruption among several sectors, with media and telecoms at the top of the list of those industries affected the most (Grossman, 2016). Digital technologies have pervaded consumers' lives, profoundly changing their behavior. From a customer's perspective, digital is expected and taken for granted (Banfi, et al., 2014). Digitalization has therefore become a business mantra. However, organizations globally, especially those that are non-digital natives, are struggling to keep up with digital change while dealing with their legacy systems (ibid.). The need to perform a digital transformation while keeping up with customers' expectations is challenging traditional businesses (ibid.). As Reason et al. point out: "Digital collapses traditional boundaries—between departments, intermediaries, or organizations—and challenges established safe processes and practices. A shift to digital is not simply a channel shift, it is a different way of doing business" (2016, p. 96).

The emergence of service design could therefore not have been timelier. Service design appeared, with the promise to provide an effective way to design omnichannel services that people need and want. Service design leverages on the need to shift from products to services, on the focus on customer centricity, and on the desire to become increasingly more digital—while still being creative, human centered, and fun. This façade of creative problem solving and exploration hides, however, some dark consequences. Service providers struggle to adopt service design, ending up investing extensively in customer research, idea generation, and prototyping, translating these efforts into outputs that rarely see the market (Sangiorgi, et al., 2015). On the one side, organizations struggle to internalize service design, to put it to use effectively, to achieve the desired outcomes. On the other side, service design practitioners struggle to support their clients (e.g., service providers) through the transformation needed to internalize service design effectively. The difficulty in adopting service design is experienced by organizations virtually across any sector; for example, telecom, banking, insurance, retail, manufacturing, and transport, to name a few. While the industry varies, challenges in the adoption of service design are consistent. To corroborate this practitioners' struggle, the report Design for Service Innovation & Development (resulting from a six-month scoping study commissioned by the UK Arts and Humanities Research Council) reveals that 51% of service design projects do not get implemented (Sangiorgi, et al., 2015). Although staggering—one out of every two project outcomes do not get implemented—in general terms, from the eyes of a service design practitioner, this rate looks quite conservative.

Despite the uptake of service design in practice, design research has yet to deliver systematic empirical studies, rigorous analysis, and careful theorizing of service design and its fit within the strategies, practices, and processes of organizations (Ostrom, et al., 2015; Andreassen, et al., 2016). Research has so far mainly focused on service design tools, methods, and processes—such as personas, customer journey maps, service blueprints, and stakeholder maps (Karpen, et al., 2017). Some scholars, however, recognize leveraging service design as one of the key service research priorities, having "the potential to advance the service field and benefit customers, organizations, and society" (Ostrom, et al., 2015, p. 127). Thus, how organizational adoption of service design happens—that is, the necessary changes in organizational mindsets, structures, and processes (Ostrom, et al., 2015)—is still somewhat of a mystery. To lay the foundations for systematically investigating service design, research is needed on the effects of the emergence of service design in an organizational context as well as those mechanisms required for its adoption (Karpen, et al., 2017).

This study aims to contribute to laying the foundations for systematically investigating service design in an organizational context. I decided to tackle this

challenge using an institutional logics perspective. This study represents one of the first attempts to investigate service design through such a specific perspective of organizational analysis. Institutional logics represent a central theme within institutional theory that is considered one of the dominant perspectives in organization and management theory. It provides a useful lens to explain and understand organizations as a "social mechanism to achieve collective ends" (Greenwood, et al., 2014, p. 1209). I found the perspective particularly useful in the context of this study as it offers to (1) account for organizational heterogeneity, (2)explain stability and change, and (3) operate at multiple levels of analysis-macromeso-micro (Greenwood, et al., 2011; Greenwood, et al., 2014; Thornton, et al., 2012). The perspective is particularly pertinent, since organizations experiencing difficulties in adopting service design are heterogeneous, and the introduction of service design produces dynamism and change, while upsetting stability. Moreover, changes affect and challenge the organization at multiple levels (e.g., changes in work practices, business models, and employees' roles). The perspective has enabled me to position service design in a wider societal and organizational context, and thus to shift from an analysis of service design in a vacuum to one where service design is understood as part of a wider constellation of logics. The derived conceptualization of service design and its transformative power on the organization emerges from an analysis of the interrelationships between logics, organizational strategies, and individual actions.

1.2. Research Questions and Structure of the Thesis

This thesis represents an account of a study conducted from 2013 to 2017. The study is composed of two parts. The first, Study1, is characterized by exploratory, qualitative, in-depth interviews engaging nine large, western organizations that opted to embrace service design. Its objective was to orient the research direction towards an understanding of how service design played out in the different organizational contexts. The second, Study2, is instead a qualitative, in-depth case study on service design in an organizational context that has as its research setting one of the world's largest telecom companies, Telenor Group. Study2 aims at portraying a deeper analysis and understanding of the organizational environment within which service design is introduced and the mechanisms that favor its adoption.

The research questions are therefore the following:

- 1. What are the elements characterizing the organizational context within which service design is introduced that influence its introduction and existence?
- 2. How do the mechanisms that favor service design adoption in an organizational context operate?

Including this introduction (Chapter 1), the thesis comprises six sections. In Chapter 2, I present the literature and theories relevant for the study. The first half of the chapter presents an overview of the literature on service design. It offers a conceptualization of service design principles and practices, to then display an analysis of the key theories developed in the fields of research of *design* and *service* and how they have influenced the development of the research on service design. This part concludes with an overview of the key streams of research on service design relevant for this study. The second part of Chapter 2 portrays a selection of key concepts of the institutional logics perspective. This is not intended as an overview, but as a selection of relevant concepts to support the unfolding of the findings and the development of a theoretical framework.

Chapter 3 is an empirical chapter, presenting the research settings for both studies. It briefly describes the contexts of those cases selected for Study1, and then offers a more detailed description of Telenor Group. The section on Telenor offers information on the organization and on those project examples that are used as references to unfold the findings.

In Chapter 4, I present the research design and methodology used for this study. The chapter provides a reflection on the ontological and epistemological standpoints, describing my *worldview* as in the set of beliefs that have been guiding my research (Creswell, 2014). Then follows the unfolding of the data collection and data analysis, and two brief sections on validity and a reflection on my role as researcher.

In Chapter 5, I unfold the findings. I first describe the degrees of service design adoption characterizing the nine organizations under analysis in Study1. These are clustered into three groups defining their level of service design adoption: low, medium, high. Following this, I present the findings emerging from Study2, an indepth case study on service design in an organizational context that sees Telenor Group as its research setting. A framework to explain the elements characterizing the organizational environment where service design is introduced is built throughout the chapter, where each subsection clarifies a portion of the framework emerging from the findings. Through the understanding offered by the framework, I present the emerging elements that characterize the organizational environment within which service design is introduced, and the mechanisms for its adoption.

In Chapter 6, I first provide an answer to the two research questions this study aims to explore by analyzing the findings emerged in Chapter 5. I continue by providing an argument on the transferability of findings to other contexts. I then reflect on the findings vis-à-vis the theory presented in Chapter 2. By doing so, I draw two key contributions of this study to the existing body of knowledge: (1) this study advances the stream of research on *design legacies*, offering an understanding of the organizational context within which service design operates, exemplified by the logics and constellational forces as elements characterizing the context within which service design is introduced; and (2) it advances the stream of research on *design capabilities*, expanding on the elements constituting an organizational actors contribute to service design adoption. Following this, I then describe the limitations of the study, and opportunities for future research and practice. Finally, I provide a conclusion to the thesis.

Chapter 2: Theoretical Positioning

The theory section comprises two parts. *The first part* aims at analyzing the state of the art of the literature on service design, with a particular focus on the discussion on service design in an organizational context. The review on service design is structured as follows. First, I will share some background information on service design, providing an introduction, a definition, and a brief overview of the objects of design and service design process. Second, I will analyze the literature purposively looking for a list of distinct principles and practices characterizing service design. Third, I'll provide an overview of the evolution of the perspectives on service and *design*. Finally, I will briefly reflect on the content shared, creating a link to introduce the institutional logics perspective.

The second part aims at presenting a selection of elements characterizing the theory of institutional logics. I will focus on four major topics: (1) orders and logics, (2) institutional complexity, (3) agency and structure, (4) institutional stability and change. The literature review on institutional logics does not intend to be a full overview but rather a selection useful to set up the trajectory I'll follow throughout the thesis. The aim is to make the literature review narrower and more relevant to the findings and discussion. In both parts I will indeed deliberately attempt to create opportunities to explain the findings presented in Chapter 5 and to stimulate the discussion presented in Chapter 6.

2.1. Service Design

Engineers put technology first. Accountants put the bottom line first. Managers put organizational needs first. Marketers put selling first. Politicians put the party first. We are amongst those few agents of change who put people first. Much of what we do is working with others to design the experience of living and working, and as such ours is a political and moral practice. We design work. We design play.

Mike Press, Emeritus Professor of Design Policy, University of Dundee¹

Service design has its theoretical roots in the 1980s, when a small group of service marketing scholars started referring to the idea of designing services (i.e., Shostack, 1984; Baum, 1989; Hollins & Hollins, 1991). Shostack, for example, in her article Designing Services that Deliver (1984), signals the widespread danger of poor services, calling for managers to begin adopting a more rigorous approach to new service development. In the 1990s, a small group of scholars in the United Kingdom, United States, Italy, and Germany (e.g., Hollins & Hollins, 1991; Buchanan, 1992; Manzini, 1993; Erlhoff, et al., 1997) started describing service design as a new design agenda (Sangiorgi & Prendiville, 2014). It was only in the early 2000s that a niche group of scholars started to systematically look at service design. Since then, academic interest in the topic has rapidly and steadily increased. Figure 1 shows the growth of academic interest in service design from 1973 to 2017, portraying a consistent increase in academic publications since 2004. Such a phenomenon has been boosted by the establishment of dedicated academic service design conferences such as ServDes; by the rise of special issues on service design sponsored by several academic journals (among which are the International Journal of Design, the Design Journal, and the Journal of Service Research); and by the establishment of European Training Networks dedicated to explore the topic such as SDIN (Service Design for Innovation) and DESMA (Design Management).

¹ Source: Twitter Post. Available at: https://twitter.com/MikePress/status/793574741575667712. [Accessed May 2017].

Documents by year

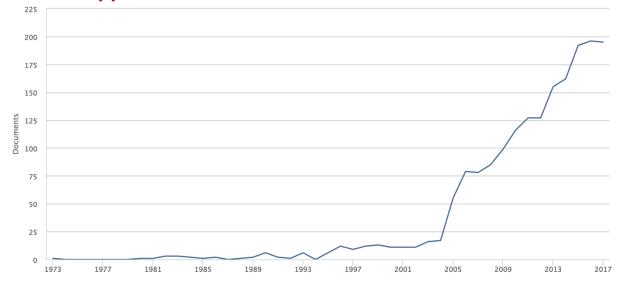


Figure 1. Articles referring to service design in either title, keywords, or abstract in the following subject areas: business, management, social sciences, arts, and humanities. Source: Scopus [Accessed February 2018].

Articles on the topic can be traced in a wide variety of literatures covering business and management, social sciences, economy, and arts and humanities. This insight suggests that service design's theoretical foundations can be found in a wide range of academic fields that span from design to management (Kimbell, 2011; Karpen, et al., 2017), making it extremely difficult to locate and develop a cohesive theoretical grounding to the field. Despite this fragmentation, certainly the evolution of the perspectives of the concepts of *service* and *design* have been influencing the way service design has been conceived over time (Kimbell, 2011a; Sangiorgi & Prendiville, 2014; Sangiorgi & Prendiville, 2017b).

This chapter aims at evaluating the state of the art of the thinking around service design, creating a platform to position the present study. Since this study is primarily interested in the introduction and adoption of service design in an organizational context, this literature review will focus on an understanding of such perspectives on the topic. Section 2.1.1. will cover the basics of service design, offering a definition and an analysis of its objects of design and process. Section 2.1.2. will deep dive into the understanding of the specific principles (values, assumptions, and beliefs) and practices (activities and routines) characterizing service design. Section 2.1.3. will offer an overview of the key perspectives on service design as developed

in the last two decades, and as influenced from the parallel evolution in the understanding and definition of what *service* and *design* are. Finally, section 2.1.4. will offer a reflection on the positioning of the present study in respect to the knowns and unknowns uncovered in this literature review.

2.1.1. Characterizing service design

This section aims at unfolding the basics subtending the concept of service design. It will begin by exploring some of the most common definitions of service design, highlighting the ones used as references in this study. This section will continue by offering an understanding of the objects of design in service design and its process.

Towards a Service Design's Definition

Literature does not agree on any one definition for service design. Across the different disciplines that have analyzed service design as a theoretical object, we find a wide range of conceptualizations of service design spanning from a phase in new service development (NSD) processes (Edvardsson, et al., 2000) to a multidisciplinary practice contributing to service innovation (Patrício, et al., 2011; Wetter-Edman, et al., 2014; Ostrom, et al., 2015; Sangiorgi & Prendiville, 2017b). For example, design scholars Sangiorgi and Prendiville, in their introduction to the book *Designing for Service*, refer to service design as "a human-centered, creative, and iterative approach to service innovation" (Sangiorgi & Prendiville, 2017b, p. 2). In the recent book *This is Service Design Doing* (Stickdorn, et al., 2018, pp. 19-20), the authors attempt to research some of the most commonly used definitions of service design. The first they share is by Stefan Moritz, Director of the Service Design studio Veryday:

Service design helps to innovate (create new) or improve (existing) services to make them more useful, usable, desirable for clients and efficient as well as effective for organizations. It is a new holistic, multidisciplinary, integrative field.

Similarly, although in a more academic fashion, Foglieni, Villari, and Maffei (2018, p. 18) describe service design as follows:

Service design involves the capability of connecting the needs of customers with those of the organization, improving the quality of experiences, and supporting the

They both mention the centrality of the human experience, be it client or customer, and the paramount importance of the service delivery organization. Both needs are equally important and are actively addressed through a service design approach. Service design enables organizations to create value and differentiate from the competition, thus it addresses business needs. Such an approach mirrors Brown's (2009) argument, presented later on in the section *Perspectives on Design*, that design thinking is characterized by striking for a perfect balance between desirability (what customers need and want), viability (what meets business objectives), and feasibility (what is organizationally feasible). Service design is indeed profoundly rooted into design thinking (Kimbell, 2011a). Such a connection becomes even more apparent in the detailed and articulated definition of service design offered by Stickdorn and colleagues (2018, p. 20), generated through a crowdsourcing activity that engaged more than 150 service design specialists:

Service design helps organizations see their services from a customer perspective. It is an approach to designing services that balances the needs of the customer with the needs of the business, aiming to create seamless and quality service experiences. Service design is rooted in design thinking, and brings a creative, human-centered process to service improvement and designing new services. Through collaborative methods that engage both customers and service delivery teams, service design helps organizations gain true, end-to-end understanding of their services, enabling holistic and meaningful improvements.

All these definitions together seem to touch on all relevant aspects of service design. In the context of this study, I opted to choose the definition of service design formulated by management scholars Fayard, Stigliani, and Bechky (2016, p. 6), who argue:

> Service design is an emerging occupation in which practitioners aim to understand customers, organizations, and markets; develop new or improved services and customer experiences; translate them into feasible solutions; and then help organizations implement them.

I have selected this definition among the many offered in literature, as Fayard and colleagues stress the organizational aspect of service design as well as the role of service design practitioners. In particular, they refer to the aim of understanding

customers, *organizations*, and *markets*; also highlighting the importance for service design practitioners to enable organizations to implement the new or improved services and customer experiences. Such sensitivity towards the understanding of organizations and implementations enables me to connect to multiple organizational theoretical domains—especially, as we'll see later, to that of institutional logic.

The Objects and Process of Service Design

The previous section has provided a selection of definitions of service design. This section aims to shed some light on the object of design of service design and the process that characterizes it. Kimbell and Blomberg (2017), in a book chapter entitled *The Object of Service Design*, try to answer the simple, yet challenging question: What do service designers design? The authors identify three approaches to understanding the object of service design: the *service encounter*, the *value co-creating system*, and the *socio-material configuration*. These three approaches draw on different research traditions, being informed by design and technology, social sciences with a focus on anthropology, and business and management—once again demonstrating the heterogeneous nature of service design.

The service encounter focuses on the experience customers have as they engage in interactions with the various touchpoints constituting the service. Service designers control the customer experience delivered over time by designing various touchpoints: "The tangible elements that make up the experience of using a certain service" (Fayard, et al., 2016, p. 6). To name a few, touchpoints can be physical spaces such as a retail shop; digital platforms such as an app; or interactions with a call center such as a phone call. It is through encounters with all these different touchpoints that the service is enacted and the experience delivered. The service encounter emphasizes what happens in the interactions between customers and providers, thus the focus is on multiple actors being (for example) users and customers, or staff and volunteers. The second object of service design, according to Kimbell and Blomberg (2017), is the value co-creating system. This focuses on the dynamic exchanges of resources and competences through which actors achieve certain outcomes for organizations and individuals. Under this perspective, there is less focus on users and customers and their experiences, rather a focus on the resource exchanges between entities within the system. Finally, the authors argue that the third object of service design is the socio-material configuration. This

focuses on the dynamic configuration of actors through practice, and emphasizes the social context within the service.

While the service encounter approach favors a focus on human actors as having agency, the socio-material configuration approach argues that actors exercise agency through their interrelationships. In other words, actors *co-articulate* the service in practice.

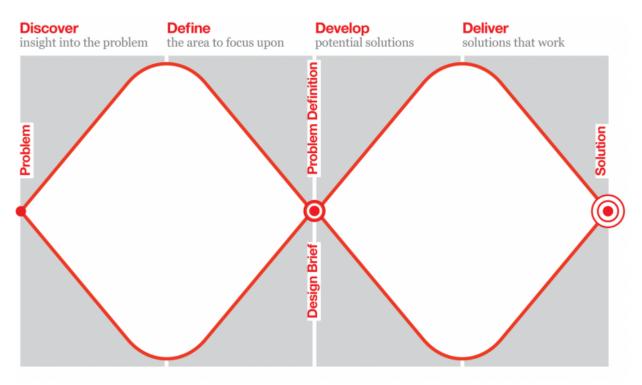


Figure 2. Double Diamond. Source: designcouncil.org.uk.

Having clarified *what* service designers design, I will now briefly explore *how* service designers design. Service design relies on a process that alternates between divergent and convergent phases, which is by its very nature iterative (Brown, 2009; Stigliani & Fayard, 2010). Such a process resembles what the UK Design Council has labeled *Double Diamond* (Design Council, 2015), characterizing designers' work across different disciplines. The Double Diamond (see Figure 2) is a simple visual map of the design process that illustrates two moments of divergent and convergent thinking encompassing four distinct phases named *discover*, *define*, *develop*, and *deliver*. The first moment (encompassing discover and define) aims at the exploration and definition of the problem at hand. The second (encompassing develop and deliver) aims at the development and validation of the solution.

Independently from the different stages service design practitioners go through, they utilize several common methods and tools. In this respect, the work of Morelli (2009) becomes useful to illustrate what methods service designers use and to what aims. By building on the model developed by Pugh & Morley (1988), Morelli defines "a framework for a methodological approach to operate in the new industrial paradigm" (p. 572) encompassing *analysis and interpretation of the context*, *development of the system*, and *representation and communication*.

- *Analysis and interpretation of the context*: Represents the earliest phase of the design process, when service designers utilize methods (such as interviews and observation) to discover and empathize with the actors' deepest needs and wants. Context mapping and actors' profiling are common methodological tools used at this stage.
- *Development of the system*: Encompasses the planning of the service activities in terms of sequence, timing, and interaction. This cluster includes scenarios (sketches of the service sequence) and service blueprints (a process analysis methodology).
- *Representation and communication techniques*: Encompasses the representation of the core features of the service. Prototypes, at different levels of fidelity, are used extensively to learn about the new service, and to validate and improve solutions.

Morelli shares an analysis of some of the methodological tools used by service designers during the service design process, providing a fair overview. The list could easily become quite extensive if more precision was required by covering the full variety of tools and methods used by service designers. The book *This is Service Design Thinking* describes 25 service design tools (Stickdorn & Schneider, 2010) while *Service Design for Business* describes 9 (Reason, et al., 2016). Appendix 1 provides a full account of such tools and methods as a glossary for the reader.

Take Away Concepts

Literature does not agree on a single definition of service design. The one adopted in this study is offered by Fayard et al. (2016) due to their focus on the understanding of the organizational context within which service design practitioners operate, and the emphasis on the implementation of the new or improved service or customer experience by the service delivery organization. Service design's objects of design are the *service encounters*, *value co-creating systems*, and/or *socio-material configurations* (Kimbell & Blomberg, 2017). Service designers' process resembles the *Double Diamond* (Design Council, 2015), encompassing exploration and definition of the problem, and development and validation of the solution.

2.1.2. Service design principles and practices

In the same article where Fayard and colleagues (2016) share the definition of service design adopted in this study, the authors uncover how service design gains legitimacy not only through its practices but also through its values. According to the authors, shared values and beliefs represent the cultural underpinning for service design's legitimacy. Practitioners enact service design values in their daily work through a set of material practices, defined as "a set of routines that emerge in context" (Kimbell, 2011b, p. 300). Values and practices, Fayard and colleagues (2016) argue, are deeply entangled: while values define how service designers work, it's only through practice that those values are enacted. The authors are not the only ones referring to the centrality of values and practices in service design in particular, or in design in more general terms. As we'll see in the section dedicated to the perspectives on *design* in more detail, a recent conceptualization of design is indeed one of a set of material and discursive practices (Kimbell, 2011b; Kimbell, 2012). Such a conceptualization, as interdependent symbolic and material constructions, connects extremely well with the institutional logics perspective used in this research.

Several other scholars have acknowledged that service design is characterized by distinct values and practices distinguishing it from other design or management disciplines (Mager, 2009; Stickdorn, 2010; Kimbell, 2011b; Kimbell, 2012; Karpen, et al., 2017). However, to my knowledge, Fayard and colleagues (2016) are the first scholars to create such a clear connection between service design values and practices that is foundational to its very existence and legitimacy. Thus, in this literature review, I have opted to explore in more depth the defining principles underpinning service design—including values, assumptions, and beliefs—and the material manifestation of the principles in practices—as in routinized activities. As we'll see later, such understanding will become extremely useful in the analysis of the data from both Study1 and Study2.

Service Design Principles

Fayard, Stigliani, and Bechky (2016) identify three values characterizing service design: *taking a holistic approach*, *being empathetic*, and *co-creating*. *Taking a holistic approach* refers to the tendency of service designers to take a system view, understanding the different actors and factors involved in time and space. *Being empathetic* refers to the value of showing empathy to all the actors involved (e.g., users, customers, service providers). *Co-creating* refers to the value of approaching projects with a collaborative mindset where users, customers, and organizational actors are all actively involved throughout the design process.

In a chapter of the book *This is Service Design Thinking* (2010), considered by many service design practitioners as the *bible* of service design, Marc Stickdorn shares five principles defining service design thinking: user-centered, co-creative, sequencing, evidencing, and holistic. Three of the five principles—user-centered, co-creative, and holistic—mirror the three values shared by Fayard et al. (2016). User-centered refers to service designers' attitudes towards putting "the customer at the center of the service design process" (Stickdorn, 2010, p. 36). This requires the capacity to empathize with customers, understanding their genuine needs and expectations. Thus, the user-centered principle suggested by Stickdorn (2010) mirrors the value of being empathetic suggested by Fayard et al. (2016). By cocreative, Stickdorn refers to the service designers' belief that all relevant stakeholders need to be involved in the service design process. Thus, this portrays a similar meaning to the value of co-creating shared by Fayard and colleagues. By holistic, Stickdorn refers to the service designers' belief that the "entire environment of a service should be considered" (2010, p. 34). Thus, this mirrors the value of taking a holistic approach shared by Fayard and colleagues (2016).

Stickdorn adds two additional principles characterizing service design: *sequencing* and *evidencing*. *Sequencing* refers to the very nature of services as sequences of interrelated actions and events; the design of a service requires the orchestration of such sequences. *Evidencing* refers to service designers' tendency in practice to evidence intangible elements of the service through visualization and prototyping. Stickdorn does not distinguish in his book chapter between values and practices, but rather assembles a list of generic principles characterizing service design. In the context of this literature review, which aims at distilling the elements that characterize service design's principles and practices, this distinction becomes

paramount. Thus, I will attempt to analyze the descriptions provided by Stickdorn for these two additional elements so as to trace whether in his definition the two can be associated to virtual principles or material practices.

Sequencing subtends the act to "deconstruct service processes into single touchpoints and interactions" (2010, p. 40). It is a physical, material activity that service designers undertake through tools such as journey maps. Similarly, evidencing subtends the material and tangible activity of visualizing and prototyping. These are two elements that Fayard and colleagues (2016) recognize as practices. Thus, sequencing and evidencing do not emerge as principles (values, assumptions, or beliefs) but rather as material practices (routines in context that service designers enact). Therefore, I have decided to exclude sequencing and evidencing from the list of principles characterizing service design, but instead—as we'll see in the next section—to include them in the list of practices.

A third piece of work that helps tracing the potential principles and practices characterizing service design is presented by Karpen et al. (2017). The authors are management scholars; thus, their analysis develops in a more scientific fashion than that provided by Stickdorn (2010). The authors provide a list of principles characterizing service design as emerging from an in-depth literature review that includes design, innovation, marketing, and service research streams. However, similar to Stickdorn (2010), the authors do not specify whether the principles they identify engage with virtual or material aspects of service design. It is not part of their analysis since it is not useful to their argument. Hence, I'll analyze each of the six principles the authors have identified, trying to trace whether the elements represent principles or practices.

The first three principles shared by Karpen et al. (2017)—*human- and meaning-centered, co-creative and inclusive, holistic and contextual*—mirror the first three elements found in Fayard and colleagues' (2016) and Stickdorn's (2010) work. Karpen et al. (2017), however, include three additional elements: *emergent and experimental* (a fundamental principle behind design work is continuous experimentation and iteration of potential solutions); *explicative and experimentially implicit* (a key design principle is a focus on communicating ideas in a tangible manner); and *transformative and betterment-oriented* (design aims at transforming present conditions for the better). Among these last three elements, *explicative and*

experientially explicit mirrors the point made by Stickdorn on *evidencing* (2010), and the one made by Fayard et al. (2016) on *visualization*. Karpen and colleagues exemplify the meaning of the principle *explicative and experientially explicit* as follows: "Design helps to make the intangible become tangible, experienceable and understandable (and thus explicative). Through visualizations, prototypes, and storytelling, for example, designers help stakeholders feel, hear, see, touch, taste, and think through problem and solution spaces, to enable more concrete impressions" (2017, p. 397). This quote illustrates the focus of the principle on visualization and prototyping, two elements traced by Fayard and colleagues (2016) as practices. Moreover, the authors stress the aspect of turning the intangible into the tangible, which resides at the very core of Stickdorn's (2010) definition of *evidencing*. The principle *explicative and experientially explicit* can thus be regarded as a practice, and it will be discussed in more detail in the next section.

This consideration leaves us with *emergent and experimental* and *transformative* and betterment-oriented. To exemplify the meaning of emergent and experimental, among an array of quotes from several sources, the authors choose one from the work of Orthel who argues that "the designer must presume an unknown set of information is true to determine if a proposed idea could solve a problem" (2015, p. 3). More directly, Karpen and colleagues explain that the principle builds on the belief that "solutions benefit from iteration and experimentation" (2017, p. 395). The first quote the authors refer to, and the direct argument they make, points towards a conceptualization of emergent and experimental as a set of beliefs and thus as a virtual principle. As per transformative and betterment-oriented, Karpen and colleagues (2017), among the array of quotes selected to exemplify the principle, choose one from the work of Swan and Luchs, who argue that "every [design] solution needs to be robust, responsible, and designed with regard to its long-term impact on the environment and society" (Swan & Luchs, 2011, p. 325). Karpen and colleagues argue that transformative and betterment-oriented "highlights the inherent progressive and socially responsible nature of design" (2017, p. 394). Again, the quotes selected, and their direct arguments, point towards a conceptualization of the principle as a set of beliefs; hence, a positioning of transformative and betterment-oriented as a virtual principle and not as a material practice.

I have decided to add these two principles, opting to include a total of five elements: *human-centered, co-creative, holistic, experimental,* and *transformative.* Table 1 presents the three values identified by Fayard et al. (2016), the six principles formulated by Karpen et al. (2017), and the five principles shared by Stickdorn (2010). I have highlighted those that have been selected as symbolic with a white background. I will now analyze each of the five emerging elements in more detail.

Table 1. A comparison of service design principles as described by the three different sources. Cells in gray represent elements that have been identified as practices, and therefore excluded from this analysis.

Fayard, et al., 2016	Karpen, et al., 2017	Stickdorn, 2010
Values	Principles	Principles
Being empathetic	Human- and meaning-centered	User-centered
Co-creating	Co-creative and inclusive	Co-creative
Taking a holistic approach	Holistic and contextual	Holistic
	Explicative and experientially explicit	Evidencing
	Emergent and experimental	Sequencing
	Transformative and betterment-oriented	

Human-centered. Human-centered is certainly the principle characterizing service design that is more widely recognized. Virtually any publication on service design refers to its human centeredness, whether the authors are academics (e.g., Blomkvist & Segelström, 2014; Karpen, et al., 2017; Foglieni et al., 2018) or practitioners (e.g., Stickdorn, 2010; Polaine, et al., 2013). For instance, Ostrom and colleagues argue that "service design represents a human-centered, creative, iterative approach to the creation of new services" (2015, p. 136). Foglieni and colleagues postulate that "people-centeredness clearly emerges as an essential characteristic of service design, since services are co-produced between people and providers, and they result from complex interactions inside and outside the service design is *human-oriented*, and that "a fundamental starting point in design is empathic with customers, users, and stakeholders, service designers ensure that the new service proposition is

human centered—in other words, it reflects customers' needs and wants and service providers' capabilities. Further, Fayard and colleagues share that one of the key values characterizing the service designers who participated in their study was *being empathetic*, as they were "showing empathy for all the people they designed for, both users and service providers" (2016, p. 13). Again, in a study on the role of empathy in customer-employee interactions, marketing scholars Wieseke, Geigenmüller, and Kraus define empathy as "the ability to sense and share another's thoughts, feelings, and experiences and to react to the observed experiences of another person" (Wieseke, et al., 2012, p. 324). Practitioners often refer to this concept as the capacity of service designers *to step into the customer's shoes* (Fayard, et al., 2016, p. 20).

Co-creative. Almost because of its human-centeredness, service design stands for co-creation. Fayard and colleagues (2016) argue that co-creation represents a major source of difference from both other designers (e.g., graphic and product designers) and non-designers (e.g., management consultants). Karpen and colleagues posit that the paramount importance of co-creation with internal and external stakeholders is due to the complexity of service design projects, encompassing "the identification of technological and human interrelations; the design of technology/human interfaces; and the mapping of the customer journey" (2017, p. 398). Hence, cocreation is paramount to maximize stakeholders' resources, to ensure coherence in designing the new service proposition, and to uncover critical factors that could hinder the implementation of the new service. Stickdorn reasons that the value of co-creation stands for the belief that "putting the customer at the center of a service design process involves facing the reality that potentially there is more than just one customer group, and each group possesses different needs and expectations" (2010, p. 38). The author uses the same argument in relation to key stakeholders: "A single service provision can involve a number of actors and different customer groups as well as different employees and interfaces" (2010, p. 38).

Holistic. Fayard and colleagues identify holism as a central value of service design, interpreted as "going beyond the design of single touchpoints for customers to encompass the entire system of touchpoints and actors involved in the creation and delivery of services" (2016, p. 15). This is in line with other academic studies (e.g., Patrício, et al., 2011; Karpen, et al., 2017), and with practitioners' points of view (e.g., Stickdorn, 2010; Reason, et al., 2016). Practitioners Reason et al., for instance,

argue that service designers aim to "create a holistic experience where the customer gets what they need through whichever channel they start with" (2016, p. 76). Stickdorn corroborates this view, suggesting that holism requires designers to profoundly understand "the wider context in which a service process takes place" (2010, p. 44). What is often referred to as the capacity of *seeing the bigger picture* requires valuing the understanding of individual touchpoints, service sequences, service providers, and customer behaviors alike.

Experimental. Karpen and colleagues argue that one of the key principles characterizing service design is experimentation: "This experimental nature is important to stimulate and retain a creative environment in which ideas can thrive, where deep learning occurs and there is no fear of failure" (2017, p. 396). Service designers value trial and error, purposely seeking early failures to test and improve solutions. The experimental nature of service design certainly emerges from its deep link to design thinking, which "relies on abduction and experimentation involving multiple alternative solutions that actively mediate a variety of tensions between possibilities and constraints, and is best suited to decision contexts in which uncertainty and ambiguity are high" (Liedtka, 2015). Thus, service design values experimentation because it engages with ambiguous situations where neither the problem nor the solution is often straightforward.

Transformative. Finally, service design is transformative, as it aims to change existing conditions (e.g., resources, relations, systems) towards a better end state (Sangiorgi, 2011; Karpen, et al., 2017). Karpen and colleagues argue for "design's inherent sustainability nature, such that solutions should be developed with regard to its long-term and multi-layered impact on the environment and society" (2017, p. 394). Service design practitioners Reason, Løvlie, and Brand Flu explain service design's transformative nature as follows: "A transformative concept is more about helping a company get out of a rut and responding to competition or taking a lead with a new idea" (2016, p. 90). Thus, service design has at its core the objective to transform customer experiences, services, and organizations aiming for long-term and meaningful impact.

Service Design Practices

So far, I have argued that service design is characterized by five principles: *human-centered, co-creative, holistic, experimental, and transformative.* These five

elements represent the values, beliefs, and assumptions characterizing service design. This section will focus on service design practices, representing the enactment of principles in service design's work, and drawing the attention "to what people do in their embodied, often mundane, situated interactions with other people and with things" (Kimbell, 2012, p. 132). Following a similar style used for the previous section, I will select a few publications from both academics and practitioners that focus on service design practices, processes, tools, and methods. I will analyze these publications, expressly hunting for a list of material practices that characterize service design. For each material practice identified, I will provide a reflection on what principle it enacts and how.

Morelli's (2009) work on reframing the service design process indicates that a first practice of service design relates to in-depth research and analysis through methods such as interviews and observation; a second deals with a visual development of the system through sketches, scenarios, and blueprints; and a third engages with representation and communication through prototypes. Morelli's analysis finds a clear counterpart to Fayard, Stigliani, and Bechky's (2016) argument. In terms of practices, their findings suggest that service design is characterized by design research, visualizing, and prototyping. The authors explain how service designers conduct design research through interviews and observation, empathizing with customers and stakeholders, "collecting evidence by using diaries, pictures, sketches, and personas" (p. 13). Service designers also visualize throughout the process by (for example) "using sketches, journeys, maps, blueprints, Legos, and Playmobils" (p. 13). Finally, the authors point out the importance of prototyping by (for example) "using paper, cardboard, role playing, and bodystorming" (p. 13). The elements shared by the two studies are extremely similar. The authors refer to the same three practices but label them differently.

The authors of the book *This is Service Design Thinking* (Stickdorn & Schneider, 2010) contributed eight years later to a sequel of the book, entitled *This is Service Design Doing* (Stickdorn, et al., 2018) where they discuss three core activities characterizing service design: *research*, *ideation*, and *prototyping*. In their argument, *research* is the process of understanding humans and their behavior in relation to the service, and it aligns with Morelli's (2009) and Fayard et al.'s (2016) first item in the list. *Ideation* refers to the process of coming up with multiple ideas as starting points of an evolutionary process. It implies generating, diversifying,

developing, sorting, and selecting ideas. This is an element that has not directly been mentioned by the other two authors; therefore, I'm opting to add *ideation* as an additional practice characterizing service design. *Prototyping* mirrors the third element shared by Morelli (2009) and by Fayard et al. (2016), and it refers to the physical realization of important aspects of the new service concept to explore alternative solutions and evaluate which ones might actually work. Table 2 summarizes the elements shared in the three distinct publications.

Morelli, 2009	Fayard, et al., 2016	Stickdorn, et al., 2018
Methodological Approach	Practices	Activities
Analysis and interpretation of the context	Conducting design research	Research
Development of the system	Visualizing	Ideation
Representation and communication	Prototyping	Prototyping

Table 2. A comparison of service design practices as described by three different sources.

The four material practices emerging are *conducting design research, ideating*, visualizing, and prototyping. In the previous section, I have shown how two of the principles shared by Stickdorn (2010)-evidencing and sequencing-are in fact material practices. As a reminder, evidencing refers to visualization and prototyping that have already been included in the list of material practices under analysis. Sequencing refers to service designers' practice of orchestrating the service sequence of interrelated actions and events. This is something Morelli (2009) also points out when sharing that service designers orchestrate a service system through the planning of the service activities in terms of sequence, timing, and interaction. It is also something Reason et al. (2016) indicate when referring to the concept of movement, described as encompassing four stages: before, beginning, during, and after. The concept of sequencing is corroborated by several authors—academics and practitioners alike—and thus is worthy to be included in the list of practices. To summarize, following the review and analysis provided above, it can be argued that service design is characterized by the following five practices: conducting design research, ideating, visualizing, prototyping, and sequencing. I will now explore each practice in detail.

Conducting Design Research. Design research differs from more traditional marketing research since it prefers a qualitative versus a quantitative approach. It has the objective to deep-dive into people's lives, habits, social contexts, and motivations (Stickdorn, 2010; Polaine, et al., 2013). Practitioners Polaine, Løvlie, and Reason (2013) corroborate the importance of design research within the service design process, describing it by comparison with the more traditional market research. The authors argue that market research tends to favor a quantitative approach based on large numbers of respondents. Such approach "yields some 'truths' that are statistically significant and correct" (p. 39), but that often fail to provide insights into the real motivations for people behaving or not behaving in a certain manner; the societal context that contributes to such behavior; and how humans make sense of products and services in the much broader context of their life and experience. Hence, the authors argue that "statistics are not very actionable for designers—we need to know the underlying reasons" (p. 39). The authors support a qualitative, design-led type of research that enables designers to deep-dive into humans' lives to understand the "chaos and emotions that make us human and behave in seemingly illogical ways" (p. 40).

Sleeswijk Visser and colleagues (2005) offer a detailed explanation of how service designers develop design-led research in practice. The authors argue that to design products or services that are relevant for people, designers need to understand the context of people's interactions with such products or services. Such a process enables designers to gain empathy with the users, to avoid preset assumptions, and to foster creativity and innovation. An experience, the authors argue, always occurs in the context of time (past, present, and future) and is a subjective event. Designers use an array of techniques, depending on the type of knowledge they seek, to gather data in relation to the context and experience. Traditional techniques, such as interviews and observations, uncover only explicit and observable knowledge. Through these techniques designers learn about current and past experiences but gain little insights into possible future experiences. To learn about potential future experiences, designers need to access people's fears, dreams, ideas, and aspirations—in other words, designers need to access people's *tacit knowledge* and latent needs. Generative techniques are used for this aim. Participants are guided through a *designerly* process, creating artifacts such as drawings, collages, and Lego constructions. It is through such processes that people start becoming aware of their experiences and begin to reflect on them. Participants are also asked to tell a story about the artifact they created. The artifacts and related stories become rich information for designers to use during the creative process.

Conducting design research is therefore a fundamental material practice characterizing service design to the extent that "the ability to really innovate a certain service experience lies in the breadth of the initial research phase" (Stigliani & Fayard, 2010, p. 12). In other words, the deeper and wider the scope of the research, the higher the possibility to truly grasp the problem at hand, and to provide solutions that are relevant to the audience of the new service design. Fayard and colleagues (2016) suggest that conducting design research is an enactment of holism, empathy, and co-creation. Design research, being qualitative in its very nature, requires designers to empathize with customers and stakeholders, to understand their needs and expectations. Through design research, designers map the interactions between providers and customers, both front-end and back-end. This enables designers to work holistically, ensuring a complete picture of the overall customer experience and service delivery. Finally, design research provides the insights to engage stakeholders in co-creating the service. Often, key stakeholders are also involved in developing the research (e.g., running customer interviews).

A close look at the definitions and arguments around the remaining two symbols identified, *experimental* and *transformative*, shows that the two can also be thought as enacted through design research. Karpen et al. (2017), while describing experimentation, argue that "design solutions improve through ongoing feedback and reflection, and designers thereby move from exploration (diverging) to exploitation (converging), progressively narrowing down potential problems and solutions" (p. 396). In practice, design research enacts experimentation, as it enables designers to explore the problem space through a deep understanding of customers' needs and wants. The definition of the problem space includes also an understanding of the service delivery organization's limitations and opportunities. In respect to *transformative*, Karpen et al. (2017, p. 394) maintain that conducting design research enables design research can also be thought that can stimulate the design process towards transformative outcomes. Thus, conducting design research can also be thought of as an enactment of the transformative principle.

Ideating. Stickdorn et al. (2018) argue that service designers tend to generate a high quantity of ideas at various stages of the service design process. Although ideation is usually marked as a discrete phase in the service design process—roughly corresponding to the *develop* phase in the *Double Diamond*—the authors argue that idea generation happens, in fact, throughout the entire service design process. Ideation starts during the research phase prompted by new insights into the humans and context under analysis, reaches its peak during the ideation and definition of the new or improved service, and sparks during prototyping when designers learn what works and what doesn't. Ideas are generated, recombined, developed, and distilled throughout the different phases. Divergent phases of the service design process are often characterized by the creation of many ideas. Techniques used therefore aim for quantity not quality-at least at first. Aiming for quantity enables designers and stakeholders to move from the initial, obvious solutions to more sophisticated and radical ideas. Tanghe (2018) argues that in this process designers use *abductive* thinking, described as "the logic of what might be" (p. 161). Abductive thinking is about synthetizing the data available and making sense of it in a way that hasn't been done before, suggesting new plausible explanations and directions. In practice, Tanghe contends, this is often done in a low-tech environment, with sticky notes on a wall. Such a large working environment is necessary as abductive thinking demands pattern recognition. It is often a process where intuition and experience play a major role, where "it's not about what's 'right,' it's about what's 'probable' and 'possible'" (2018, p. 161).

Ideating can be interpreted as the enactment of all five principles characterizing service design. Ideation throughout the different phases of the service design process addresses customer's and stakeholders' needs and wants, hence enacting the principle of human-centeredness. Ideation regards the entire service-system and considers the effects of each suggested change on the entire network, hence enacting holism. Service designers often ideate in collaboration with key stakeholders and users during dedicated co-creative sessions, consequently enacting the co-creative principle. Experimentation is best expressed in a creative environment that stimulates ideas, where service designers—through actively seeking new solutions and ideas—experiment with *what might be*, hence enacting the principle of experimental. Finally, it is through the ideas generated and recombined throughout the ideation effort that service design meets its objective of transforming customer experiences and the service system at large. New ideas and solutions are

fundamental for transformation towards a new desirable state. This concerns the final principle, transformative.

Visualizing. Visualization is often highlighted as one of the key strengths of service designers (Kimbell, 2009b; Segelström, 2013). Service scholars Ojasalo, Koskelo, and Nousiainen point out that visualization "is often seen as one of the most essential features of service design due to the intangible nature of service interactions and value" (2015, p. 200). Blomkvist and Segelström define visualization of services as "depictions of current and/or future states of the service," arguing that as service depictions, "visualizations are primarily used as summarizations of research on a current service or as the deliverable of a project, showing how the new service is suggested to be structured" (2014, p. 335). Thus, Segelström (2009) argues that there are three main reasons service designers visualize: (1) to articulate insights (visualizing research material enables spotting patterns that otherwise would be difficult to notice); (2) to communicate insights (visualizing provides a way to share insights and ideas with those who have not been part of the process); and (3) to maintain empathy (creating visual summaries of human emotions, needs, and drives helps to maintain empathy with the people for whom the design is being made throughout the process).

Service designers use visualization to turn intangible ideas, concepts, and interactions into tangible outcomes (Ojasalo, et al., 2015). Through visualization, service designers simplify complex concepts and systems, providing something that different stakeholders can understand and interact with. Examples of tools used for the visualization of a service are sketches, customer journey maps, blueprints, visual scenarios, and personas (Stickdorn, 2010; Ostrom, et al., 2015; Fayard, et al., 2016). Practitioners Reason, Løvlie, and Brand Flu (2016) advocate that visualization is fundamental to move from an insight stage to an implementation one, arguing that "it's particularly useful to better understand systems, processes, and customer experiences. Simple sketches and drawings can help clarify ideas, aid communications, and support convincing superiors, peers, and implementation teams" (2016, pp. 9-10). Calabretta and colleagues (2016b) corroborate this view by asserting that visualization helps designers to "translate opportunities into tangible and observable manifestations," and that by doing so, designers "reduce uncertainty, and encourage the organization to open up to more innovative

possibilities" (2016b, p. 46). Thus, visualization is used to turn the intangible into the tangible, to simplify the complex, and to aid communication and alignment.

Although the ability to visualize is not unique to service design, but common to any other design discipline, Fayard and colleagues' findings (2016) suggest that visualizing is what most differentiates service designers from non-designers (i.e., marketers and management consultants), making service design's approach distinct from other ways of conceptualizing and planning for services. Visualizing enacts all five principles characterizing service design. The visualization of the insights gathered through design research, especially through the creation of customer journeys and service blueprints, is key in nurturing a holistic approach. The visualization of the customer experience as well as backend operations enables designers to generate a holistic view of the service system. The visualization of user profiles or personas triggers empathy towards customers' and users' needs and wants, enabling a human-centered design. Moreover, the sketches and illustrations produced are used to create a shared understanding of the problem space or solutions and enable a co-creative approach. Visualization enables designers to experiment with ideas and potential solutions, to receive feedback, and to iterate. Finally, through visualization, service designers enact the principle of transformative. They do so through sketches, illustrations, and maps (such as customer journeys and service blueprints), seeking to illustrate how the current service can be improved in the long run.

Prototyping. Prototypes "aim at improving the quality of the ideas and solutions suggested by service design projects through the testing of whole or parts of service ideas" (Blomkvist & Segelström, 2014, p. 335). According to Blomkvist and Segelström (2014), prototyping is an iterative process where problems, ideas, and opportunities are tested, discovered, or refined over time. The testing focuses on the customer experience as well as the service delivery process. A prototype can therefore be thought as a simulation of an aspect of a service, to learn what works and what doesn't in short iterative cycles (Buchenau & Suri, 2000). Prototypes are the means to learn about the potential service under development, where the key subtending belief is that "experience is, by its nature, subjective, and that the best way to understand the experience of a service is to experience it subjectively" (Buchenau & Suri, 2000, p. 425). Prototypes are developed to reduce the risk associated with costly development processes (Polaine, et al., 2013). Before

allocating many resources (e.g., technology or employees' time) into new service development, crucial aspects of the service are prototyped to minimize the risk of failure (ibid.).

In a recent article, Blomkvist (2016) argues that four levels of prototyping can be identified: Artefact (the prototype of any tangible object developed for a specific purpose—the focus of the prototype is the implementation rather than the design); Use (concerns how an artifact is used—the focus is the interaction between user and artefact); Context (this level includes social, relational, and contextual factors-the focus is on channels, objects, and processes [e.g., activities in which people engage]); and Service (consists of many consecutive touchpoints where artefacts are used in various contexts-touchpoints can be social, from person to person, some are mediated by artefacts, but none is contextually independent). According to Blomkvist (2016), service designers use a wide range of different techniques depending on the prototype level. At the *use* level, they use techniques such as cognitive walkthrough (Mahatody, et al., 2010), where the designer sets an experiment and users are invited to test the prototype. At the context level, an example of prototyping techniques is experience prototyping (Buchenau & Suri, 2000), where the experience is prototyped within the context. At the *service* level, one or multiple touchpoints can be prototyped at the same time. In all cases, prototypes can be low fidelity (e.g., paper prototypes, roleplays) or high fidelity (e.g., functioning web platforms) to the extent of reaching a pilot, where multiple aspects of a service are tested at once (Buchenau & Suri, 2000; Polaine, et al., 2013).

Prototyping enacts all the five principles characterizing service design. According to Fayard and colleagues (2016), prototypes developed in an iterative fashion ensure that the newly built design is truly human-centered, responding to customers' needs and wants. Prototypes also support and facilitate co-creation as they make the intangible aspects of a service tangible, enabling different stakeholders to contribute to the refinement of the service idea. Moreover, prototypes enable the enactment of a holistic view of the service system by simultaneously checking multiple aspects of a newly designed service offering. While Fayard and colleagues (2016) recognize the ability of prototyping to enact human-centeredness, co-creation, and holism, it can also be argued that prototyping enacts the experimental and transformative principles characterizing service design. Experimentation resides at the very core of prototypes. Designers build prototypes to experiment with possible future service

scenarios, and to experiment with different solutions (Calabretta, et al., 2016b). They also test and ensure that the newly designed service is better than what already exists (Karpen, et al., 2017). Hence, it can be argued that prototyping also enacts the transformative principle.

Sequencing. Stickdorn (2010) compares services to movies, arguing that "services are dynamic processes that take place over a certain period of time. This service timeline is crucial to consider when designing services, since the rhythm of a service influences the mood of customers" (p. 40). The metaphor of a movie, theatre, or tale is often used by practitioners to describe how a service unfolds. Reason et al. (2016) use the metaphor of a tale to describe the orchestration of the before-beginningduring-after characterizing the work of service designers. Thus, in practice, service designers decompose the service experience into phases underlying what happens before (e.g., comparing different offers by different service providers); beginning (e.g., signing up for the service and first use); *during* (e.g., regular use or change of situation); and *end* (e.g., discontinuing the use of a service). Each phase is explored in terms of desired customer experience, relevant touchpoints, and backend service delivery. By doing so, service designers orchestrate the "cues that occur at different points in time and space" (Zomerdijk & Voss, 2010, p. 68). To achieve this, designers utilize customer journey (a visual representation of the desired customer experience throughout the different phases) and blueprint (a tool that enables connecting the desired customer experience with touchpoints and backend processes and systems). Service blueprints are particularly important in the unfolding of the sequencing practice. A service blueprint "provides a diagrammatic tool for designing the service provision" (Patrício, et al., 2011, p. 182). It enables mapping all the key activities required during service delivery, underlining how these activities are linked and their impact on customer experience (ibid.).

Sequencing, similar to the previous four material practices, can be interpreted as enacting all five principles characterizing service design. First, by specifying the desired stages of interaction, service designers ensure that the service is truly human-centered, responding timely to customers' needs and wants (Stickdorn, 2010). Second, by making the service sequence tangible through customer journeys and blueprints, sequencing enacts the co-creative principle as it is used to engage stakeholders in the co-creation of the ideal service sequence (ibid.). Third, sequencing enacts the principle of holism. The creation of a service sequence aims at portraying a complete picture of front-end interactions and back-end operations (Patrício, et al., 2011). Fourth, sequencing enacts experimentation. The service sequence goes through several iterations to ensure the right one is found (Reason, et al., 2016). Finally, sequencing enacts the principle of transformative as it aims at improving the current service sequence in the long run (Karpen, et al., 2017).

Take Away Concepts

Service design is characterized by both principles (values, assumptions, beliefs) and practices (routinized activities). Five principles characterize service design: *humancentered*, *co-creative*, *holistic*, *experimental*, and *transformative*. Five practices characterize service design: *conducting design research*, *ideating*, *visualizing*, *prototyping*, and *sequencing*. Principles and practices are deeply entangled: while principles define the values, assumptions, and beliefs driving service designers' work, it's only through practices that those principles are enacted. Thus, each practice is the enactment of all the five principles defining service design.

2.1.3. Perspectives shaping the service design discourse

The previous two sections have offered an overview of the basics to understand service design through an analysis of its definition, objects of design, and process, and then to offer a detailed analysis of its distinct principles and practices. This section will now begin to direct attention towards the core interest of this research: the introduction and adoption of service design in an organizational context. As shared at the beginning of this chapter, the evolution of the concept of service design has been influenced by the parallel evolution in the understanding and definition of the concepts of *service* and *design* (Kimbell, 2011a; Sangiorgi & Prendiville, 2014; Sangiorgi & Prendiville, 2017b). Thus, to understand the evolution and development of the concept of service design in an organizational context, a high-level understanding of the evolution of the perspectives on service and design is beneficial. I will briefly present the evolutions of these two perspectives before deep diving into the details of the evolution of the perspectives on service design.

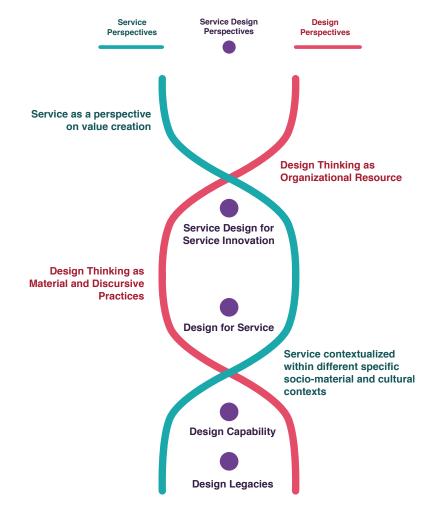


Figure 3. Summary representation of key perspectives of service design in organizations and key influences from *design* and *service* research fields.

Figure 3 offers a brief summary of the key service design perspectives relevant to this study (purple), and those service (green) and design (red) perspectives influencing the evolution of our understanding of service design in an organizational context. Each stream in Figure 3 (green, red, and purple) will be analyzed in the following three sections. The next section will uncover key perspectives on services starting from the mid-1980s, with a particular focus on those perspectives emerging from the early 2000s (in Figure 3: service as a perspective on value creation, and service contextualized within different specific socio-material and cultural contexts) that have greatly influenced the discourse on service design in an organizational context. The following section will explore key perspectives on design, starting from the late 1960s, with a particular focus on those perspectives emerging from the late 2000s (in Figure 3: design thinking as an organizational resource, and design

thinking as material and discursive practices) that have greatly influenced the discourse on service design in an organizational context. The final section of this subchapter will instead provide a detailed overview of the evolution of the conceptualization of service design from the 1990s as influenced by both service and design perspectives. The section will emphasize the analysis of those discussions that have emerged since the early 2010s, focusing on the understanding of service design as a force for organizational transformation (in Figure 3: service design for service innovation, design for service, design capability, design legacies).

Perspectives on Service

This section will share some of the key perspectives on the concept of *service* that have influenced the conceptualization of service design over time. Figure 4 provides a summary timeline of the different service perspectives described.

The way services have been viewed, described, and analyzed in literature has changed over time. An initial school of thought started to describe services as opposed to products. The so called IHIP paradigm, articulated by Zeithaml et al. (1985), conceptualizes services as characterized by four properties that distinguish them from products:

- Intangibility: services are conceptualized as activities or performances rather that physical objects;
- Heterogeneity: every service performance is unique, depending on the behavior of service provider and customer, as well as other contextual aspects influencing the performance;
- Inseparability of consumption and production: services exist in the moment they are performed and consumed;
- Perishability: services cannot be stored.

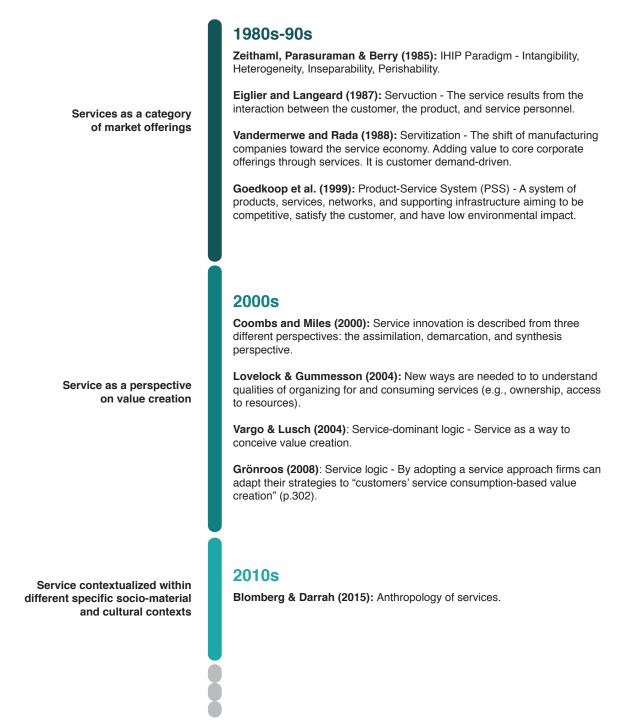


Figure 4. Summary timeline of the evolution of the different perspectives on service. Own elaboration based on Foglieni, et al. (2018).

The IHIP paradigm has later been challenged by several marketing scholars who argue that these four characteristics are not generalizable to all services (Lovelock & Gummesson, 2004). For example, the automation of a large portion of service-related human activities has reduced the heterogeneity of outputs in many sectors.

The IHIP paradigm reflects a goods-centered view of services where services are considered as intangible add-ons to goods, or immaterial products (Foglieni, et al., 2018). Such a perspective has later been termed a Goods-Dominant Logic as opposed to a Service-Dominant Logic (Vargo & Lusch, 2004, 2008; Lusch & Vargo, 2014)—a new paradigm introduced by service marketing scholars Vargo and Lusch that inverts the role of services in business and economy. Under this new paradigm, services are conceptualized as the basis of economic exchange where goods are a mere medium for service provision, and hence services are envisioned as the application of resources for the benefit of another actor (Vargo & Lusch, 2004c), and service value is always co-produced between the service provider and the beneficiary. Such conceptualization transforms the role of the user from passive consumer to an active co-creator of value (Vargo & Lusch, 2008). Moreover, the new paradigm has enabled an exploration of the concept of value creation in use and context (Vargo & Lusch, 2008), enabling a conceptualization of services as a perspective on value creation rather than a category of market offerings as a replacement of products (Foglieni, et al., 2018).

Under Vargo and Lusch's argument, everything is service (2004a; 2008). This suggests that the conventional distinction between products and services, which had been dominating the discourse till then, does not matter. It is also important to note that the authors distinguish service (singular) as an activity of economic exchange from services (plural) as an economic category opposed to products (Vargo & Lusch, 2004b). Understanding the service-dominant logic paradigm is important because, as we'll see later in the section dedicated to the perspectives on service design, it presents multiple points of contact with service design, influencing a specific stream of research defined as *Design for Service* (Kimbell & Seidel, 2008; Kimbell, 2011; Meroni & Sangiorgi, 2011; Wetter-Edman, et al., 2014; Sangiorgi & Prendiville, 2017).

In her precise overview of design and management literatures on services and design, Lucy Kimbell argues that "despite this lack of agreement on how to define services, researchers have advanced knowledge about how organizations manage them" (2011a, p. 44). The author also adds that despite an increasing understanding of how organizations manage services, literature on how organizations *design* services rarely draws on theories of design. Consequently, service design has long been seen as a phase of new service development or as a redesign of existing

services (Kimbell, 2011a; Foglieni, et al., 2018). One of the first scholars who acknowledged that services could be intentionally designed is Shostack (1984), who suggested that key to the design of a successful service offering is documenting and monitoring the service delivery process. Thus, the author proposed a visual representation of a service design, the *blueprint*, to specify what a service ought to be like. Since then, management scholars have been investing in the development of research that could advance our understanding of how organizations design and innovate services.

Innovation in services not only touches on the way services are designed and developed, but also on how they are delivered and managed (Miles, 2010). Service scholars Patricio, Gustafsson, and Fisk define service innovation as "a new process or service offering that is put into practice by an organization, and is adopted by, and creates value for one or more actors in a service network" (Patrício, et al., 2018, p. 3). The authors argue that with the growing presence of services in the manufacturing sector, and the increasing competitive forces generated by technological advances and globalization, service innovation is key to economic and social development. Innovation in services encompasses multiple aspects concerning the development or improvement of service concepts, delivery systems, and the adoption of new technological, human, or organizational capabilities.

According to Patricio and colleagues, a service innovation can have multiple forms: "A service innovation may be an innovation of business models, service bundles, social offerings, experiential aspects, process changes, behavioral changes, and perceptions of the brand" (Patrício, et al., 2018, p. 7). Sangiorgi et al. (2015) argue that to qualify service innovation as implemented change, three dimensions can be identified: (1) service innovation outcomes, (2) service innovation levels, and (3) service innovation measures. The first relates to where the changes are visible, ranging from the periphery of the organization to within the organization's structure and culture. The second dimension refers to the extent to which changes are implemented, ranging between radical to ad hoc innovations. The third dimension refers to the way changes are measured, encompassing technical, commercial, civic, and relational performance. As we'll see later, the perspective on service innovation has heavily influenced the evolution of the concept of service design, giving rise to a stream of research on service design as an approach to service innovation (Sangiorgi, et al., 2015; Patrício, et al., 2018). Finally, a third perspective on the concept of *service* that has certainly influenced the evolution of service design, offers an anthropological and practice-based description of service that reconnects services to daily social life (Sangiorgi & Prendiville, 2017b). Blomberg and Darrah (2015) suggest an anthropology of services, arguing that services have virtually always existed in human activities and that they are always embedded in local contexts. In the authors' argument, an anthropology of services explicates the social contexts "to develop more varied and grounded approaches to service encounters, notions of co-production and cocreation, value propositions and service systems" (2015, p. 171). The authors develop an approach to show how services are experienced and co-production is attained through the situated participation of actors (Kimbell & Blomberg, 2017). This perspective suggests that actors exercise agency through their *inter-relating*, proposing that "constituents co-articulate a service as it unfolds in practice, connecting material and digital touchpoints and people's experiences to participation in social practices, organizational routines, and narratives about value and valuing" (Kimbell & Blomberg, 2017, p. 87).

Perspectives on Design

To trace those perspectives on *design* that have more than others influenced our understanding of service design, I will primarily focus on the evolution of the concept of *design thinking*, which represents the very root of service design (Kimbell, 2011a; Stickdorn, et al., 2018). Figure 5 provides a summary timeline of the perspectives on design described in this section.

In a precise, two-part review of the origins and evolution of design thinking, Lucy Kimbell suggests that historically design thinking has been described through three distinct perspectives: design thinking as a cognitive style, design thinking as a general theory of design, and design thinking as an organizational resource (2011b; 2012). The first perspective focuses on *designers' thinking and doing*, with a body of literature that found its peak from the late 60s to the late 80s. Already, in 1969, Simon refers to design as the knowledge subtending all the fields concerning *what ought to be*, such as engineering or management, as opposed to the sciences that are concerned with *what is*. Simon argues that design can be applied to cases where the problem is well defined, as well as those that portray an ill-defined problem. Solving the problem consists of decomposing systems, searching and choosing between

alternatives. During the same period, Alexander (1971) argues that design is about giving form and organization to physical things. This perspective on design deals with the concept of materiality. Both Simon and Alexander were concerned with what design and designers' work is. On the one hand, Simon argued that designers' work is abstract, concerning a desired future state. On the other, Alexander argued that designers' work concerns materiality, giving form to things. None of the two authors in their analysis refer to a specific design thinking.

The first analysis of design thinking appears in 1987 with the work of Peter Rowe. The author's work represents one of the very first discussions about the design process and key principles. Rowe argues that designers base their work not only on facts but also on their intuition, commenting that it is through the problem-solving process itself that solutions are shaped. The concept of design thinking since then has received substantial attention across several fields of study such as engineering and architecture, focusing on how designers think, trying to codify designers' problem-solving attitude. Nigel Cross is one of those scholars that substantially contributed to the discussion since those early days till today. Cross addresses design as a coherent discipline of study, describing it in contrast with the sciences and humanities (1982; 2001). The author refers to a *designerly way of knowing*, arguing that "there are things to know, ways of knowing them, and ways of finding out about them that are specific to the design area" (1982, p. 224). Cross suggests that designers tend to approach all problems as ill-defined, applying a problemsolving approach that is solution focused (1982; 2001). This first perspective design thinking as a cognitive style—represents an early effort to understand what designers do in their work. However, it does not explain why designers have such a particular cognitive style, nor does it offer a full account of design thinking or a more general theory of design (Kimbell, 2011b).

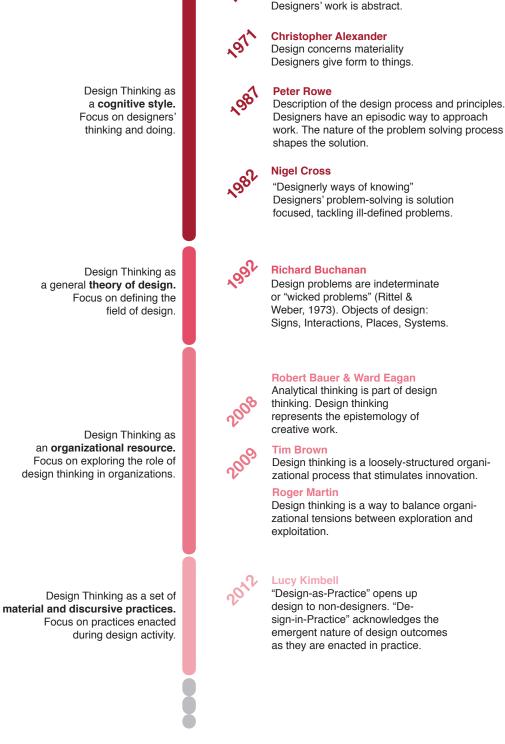
The second perspective, *design thinking as a general theory of design*, aims at resolving these limitations while defining the field of design. In 1992, Richard Buchanan published a paper entitled *Wicked Problems in Design Thinking*, which meritoriously shifts the discourse around design from its legacy in industrial production linked to a physical materiality towards a generalized *design thinking*. The author argues that the concept can be applied to virtually anything, be they signs, interactions, places, or systems (1992). Buchanan borrows the concept of *wicked problems* (Rittel & Webber, 1973) to define the nature of design problems.

In Buchanan's view, design problems are indeed indeterminate. Buchanan is not necessarily concerned with designers and how they design, but with designers' role in society.

The third and final perspective, identified by Lucy Kimbell (2011b), is *design thinking as an organizational resource* (2011b). Two major exponents of this perspective are Tim Brown, the CEO of IDEO—one of the most influential design consultancies in the world—and Roger Martin, Dean of the Rotman School of Management at the University of Toronto till 2013. Brown and Martin each published a book in 2009, respectively *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*, and *The Design of Business: Why Design Thinking Is the Next Competitive Advantage*. Both books explore the role of design thinking in organizations.

The two authors describe design thinking rather differently. Brown (2009) argues that design thinking is a loosely structured organizational process to stimulate innovation, while Martin (2009) argues that design thinking is a way to balance organizational tensions between exploration and exploitation. Both authors do not base their arguments on academic research, but they nonetheless contribute to the widespread legitimation of the notion of design thinking among the general public, whether designers or non-designers. The underlying message is that design thinking is a viable option to turn organizational problems into opportunities for innovation (Kimbell, 2011b). Brown (2009) purports that the continuum of innovation is best thought of as a system of overlapping spaces, rather than sequential phases, that he terms as *inspiration, ideation*, and *implementation*. Design thinking, the author claims, is fundamentally an exploratory process that enables navigating these spaces iteratively and in a non-linear manner.

A second way the author suggests thinking about these spaces of innovation is in terms of boundaries: "Without constraints design cannot happen" (Brown, 2009, p. 17). Brown summarizes three constraints or criteria for successful ideas: feasibility (what is technologically possible), viability (what is sustainable in terms of business), and desirability (what makes sense for people). A design thinker will bring these three into a harmonious balance.



Herbert Simon

Design concerns "what ought to be"

Figure 5. Summary timeline of the evolution of the different perspectives on design. Own elaboration based on Kimbell (2011b; 2012).

On the other side, Martin (2009) presents a different way of thinking about design thinking, by viewing it as a source of competitive advantage for organizations. If Brown focuses on designers and their approach to work, Martin focuses on nondesigners and managers in organizations. Design thinking, in the author's argument, supports managers to shift from having to choose between alternatives to imagining completely new concepts and solutions. At the core of what design thinking brings to organizations is abductive reasoning, where understanding does not entail progressing towards an absolute truth but rather an evolving interaction with the context. In a more academic fashion, Bauer and Eagen (2008) contribute to this third perspective, arguing that analytical thinking is not the opposite of design thinking, but rather the first is part of the latter. The authors believe that design thinking represents the epistemology of creative work. This third perspective on design thinking is of particular relevance to this study because, as we'll see in the findings section, in the context of Telenor service design is found to offer an alternative model for the organization to compete in the industry, hence positioning itself as a possible new system to drive competitive advantage.

In conclusion to the analysis of these three major perspectives on design, Kimbell (2011b) argues that they portray significant limitations. Researchers that focus on designers' cognitive style rarely focus on the world within which designers work. These studies tend to present design thinking as a form of information processing with inputs and outputs. Authors that emphasize design thinking as a general theory of design, although offering an understanding of designers and the world within which they work, tend to generalize what designers think, implying that it is different from what non-designers think and do. The growing interest in design within management, and within an organizational context, is starting to undermine this belief. Lastly, authors that focus on design thinking as an organizational resource tend to portray design thinking as a process that can be applied to organizations. These studies rarely clarify what happens when the process needs to be translated from one context to another. Under this light, Kimbell (2011b, p. 300) suggests that:

By focusing on situated, embodied material practices, rather than a generalized "design thinking," we may shift the conversation away from questions of individual cognition or organizational innovation. Instead, design becomes a set of routines that emerge in context.

In other words, the author suggests that in order to overcome the limitations characterizing the three major perspectives on design, the research focus should shift towards the exploration and clarification of design's material practices in context. By so doing the author proposes a new analytical device to discuss design through theories of practice (Kimbell, 2012). In Figure 5, I have highlighted this new approach as a fourth perspective on design; namely, *design thinking as a set of* material and discursive practices. This fourth perspective has the merit to shift "the level of analysis in research away from individuals to practices, conceived of as a nexus of minds, bodies, things, and the institutional arrangements within which designs and their users are constituted" (Kimbell, 2012, p. 131). To achieve this, Kimbell introduces the concepts of design-as-practice and designs-in-practice. Design-as-practice focuses on what designers do in their embodied and situated routines including those artifacts they use or produce throughout their design work. Under this perspective the artifacts constitute the very essence of what design is. Designs-in-practice acknowledges the emergence of design outcomes as they are enacted in practice. Kimbell chooses to utilize the plural form *designs* to highlight the impossibility of there being a singular design. Outputs created during the design process are always many, which are then assembled into products or services. The concepts of designs-in-practice also acknowledges design's incomplete nature of processes and outcomes. The activity of designing continues through the engagement with a product or service throughout time and space. Kimbell argues that the pairing of design-as-practice and designs-in-practice represents an alternative to design thinking that "moves the unit of analysis away from the individual designer or user, or the organization or group and its norms, to a way of thinking about design that is relational, embodied, structured, and structuring" (2012, p. 140). The approach of this fourth perspective, with its focus on material and discursive practices, resonates with the approach of this study that conceptualizes service design as simultaneously virtual and material.

Perspectives on Service Design

This section will now explore some key perspectives on service design, as emerged and influenced by those key perspectives on service and design shared above. By so doing, this section will provide an overview of the development of service design research and its focus. The aim is to showcase in what way service design research has been *scaling-up* and *deepening-in* (Sangiorgi, 2009) over the last two decades, with an emphasis on the evolution of the understanding of service design in an organizational context. Figure 6 offers a visual summary of the key perspectives that will be presented in this section.

Sangiorgi (2009) argues that there are three major areas of investigation on service design that can be traced: (1) Interactions: how service interactions can be designed and evaluated; (2) Complexity: modes of intervention of service design on complex systems; (3) Transformation: how service design has a transformative impact on organizations and communities. The first stream of research found its peak between the 1990s and early 2000s as a way to legitimize design as a viable approach to services. In this period, the discourse on service design revolved primarily around the concepts of service interfaces and interactions between customers and service providers, focusing on concepts such as service encounters, touchpoints, and moments of truth. Contributions from this period suggested "a shift from considering services as complex organizations to considering services as complex interfaces" (Sangiorgi & Prendiville, 2017b, p. 2). This focus has been described by Sangiorgi (2009) as an *Interaction Paradigm*, allowing designers to focus on understanding human experiences and translate them into improved customer journeys. According to Sangiorgi (2009), it is around this key competence that service design built-and still builds-its legitimacy and key differentiation from any other design discipline. As part of the same stream, and in the same period, service design research has also concentrated on collaborative design approaches. Drawing on the field of participatory design, here the focus was on specific approaches to engage people in the design process (Sangiorgi & Prendiville, 2017b).

Such attention on service interfaces and on collaborative design approaches for better experiences has evolved since the mid-2000s into an understanding of what is behind the implementation of better service experiences, shifting the focus of the service design field onto the organizational system behind the delivery of such experiences. This is where the second stream, the one of *complexity*, starts to develop and evolve. Organizations begin to be perceived "as complex social systems than just as processes" (Sangiorgi & Prendiville, 2017b, p. 3) that include people's norms, values and beliefs, procedures, hierarchies and tasks, organizational resources, and strategies (Junginger & Sangiorgi, 2009). Such a shift of focus triggered the migration of designers' work from the periphery of the organization (where customer interactions happen) to its very core (where values and practices are defined). Between the late 2000s and the 2010s, such a focus fueled the

realization that service design might have a transformative power over organizations, generating lasting changes in their ability to change and innovate.

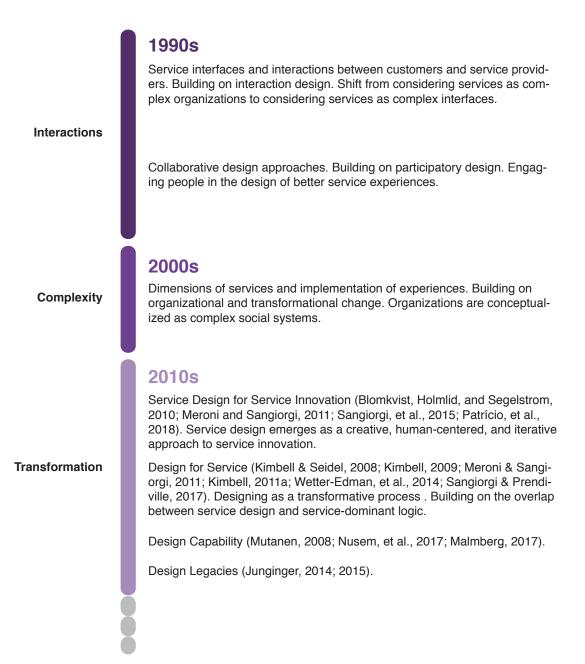


Figure 6. Summary timeline of the evolution of the different perspectives on service design. Own elaboration based on Sangiorgi (2009).

Each research stream has witnessed service designers deepening their understanding and impact on the organization from their design of service interfaces and interactions (thus, peripheral to the organization); then through to the implementation of new experiences (thus, touching the very core of organizational values, norms, processes, and procedures); till reaching a transformative power over the way organizations change and innovate. Within this context, Junginger and Sangiorgi (2009) summarize four elements concerning the links between service design and organizational change: service design often begins at the organizational periphery; building trust relationships for change; develop transformative insights; and pilot projects as seeds for change. The authors also describe how service design can gain different levels of depth into the organization, with associated different kinds of outcomes and impacts. Following the reasoning shared above on the evolution of service design's impact on organizations, the authors summarize three levels of depth:

- *Service interaction design*: Designers focus on the design of service interactions. If the suggested improvements remain relegated to the periphery of the organizations (i.e., without affecting values and norms), the impact will remain contingent.
- Service design intervention: When the design of the new service interactions requires questioning current organizational norms and values, service designers become involved in the redefinition of key organizational elements. The organizational change is not necessarily radical if the new service concept does not address key organizational assumptions.
- Organizational transformation: When the service concept requires deeper organizational transformations, touching key organizational assumptions, service designers need to engage in long-term collaborations with the organization to win possible resistances.

The perspective on organizational transformation provides the most relevant contributions to this thesis, offering several sub-streams of research that contribute to our growing understanding of the transformative impact of service design's introduction on organizations. Therefore, I will explore the streams of research developed within this perspective in greater detail. The concept of *transformation* design has been articulated as follows:

Because organizations now operate in an environment of constant change, the challenge is not how to design a response to a current issue, but how to design a means of continually responding, adapting, and innovating. Transformation design seeks to leave behind not only the shape of a new solution, but the tools, skills, and organizational capacity for ongoing change (Burns et al., 2006, cited in Sangiorgi, 2011, p. 29).

Yu and Sangiorgi (2017) describe different levels of service design's transformative impact associated with three different designer-client relationships. The first designer-client relationship is appointed as *delivering*. Here, the design work is developed entirely by designers with little or no intervention by the client, who is a mere recipient of designers' work. Under this designer-client relationship, service design informs service planning and development, thereby affecting physical resources and technologies. The second designer-client relationship is appointed as *partnering*. This is characterized by clients' engagement in design activities through which they offer their organizational perspectives. Under this second relationship type, service design has the power to align actors to the users' experience where objects of change also become human actors. Finally, the third type of designerclient relationship is appointed as *facilitating*. This is where the designers' role becomes one of coaches supporting clients in learning the design approach and applying it to their context. Under this final typology, service design has the transformative power of developing new capabilities. Objects of change become not only physical resources, technologies, and human actors, but they extend to processes and routines. As we'll see later in the findings chapter, Yu and Sangiorgi's (2017) understanding of the different levels of service design's transformative impact associated with different designer-client relationships will become very handy in understanding the impact generated by the introduction of service design in the different companies analyzed as part of Study1.

Since it entered the organizational realm, service design has been explored by different research streams in relation to different theoretical concepts. The ones that have been more broadly discussed are *service design as an approach to service innovation* (Sangiorgi, et al., 2015; Patrício, et al., 2018), *design for service* (Kimbell and Seidel, 2008; Kimbell, 2011; Meroni and Sangiorgi, 2011; Wetter-Edman, et al., 2014; Sangiorgi and Prendiville, 2017), *design capability* (Mutanen, 2008; Nusem, et al., 2017; Malmberg, 2017), and *design legacy* (Junginger, 2014; 2015).

Service Design for Service Innovation

In the last decade, scholars from both design and management traditions have been investigating service design as an approach to service innovation (Blomkvist, et al., 2010; Meroni & Sangiorgi, 2011; Sangiorgi, et al., 2015; Patrício, et al., 2018) that includes "working with user-centeredness, multidisciplinary teams, aesthetic and visual competence, and creative processes" (Wetter-Edman, et al., 2013, p. 10).

Under a design approach, innovation has been approached with a pragmatic experimental attitude with the objective of proposing possible alternative futures, and by so doing offering an outside-in perspective to service innovation (Wetter-Edman, et al., 2013). In a recent article on the topic, service scholars Patrício, Gustafsson, and Fisk argue that service design plays a paramount role in service innovation as "it brings innovative ideas to life through a design thinking process by understanding customers and their context, envisioning future service solutions, and prototyping them" (2018, p. 3).

Design for Service

Over the past few years, a small but active group of scholars has started investigating a specific outside-in design approach to service innovation labeled *Design for Service* (Kimbell & Seidel, 2008; Kimbell, 2009; Meroni & Sangiorgi, 2011; Kimbell, 2011a; Wetter-Edman, et al., 2014; Sangiorgi & Prendiville, 2017a). *Design for Service* is a context-related approach to service innovation based on the service-dominant logic analytical framework (Wetter-Edman, et al., 2013). The use of the preposition *for* implies the idea of designing as a transformative process. In the case of service design, "designing *for* something" rather than "designing something" means that "what is in effect being designed is not the end result (the interaction between people), but an *action platform*. This means a system that makes a multiplicity of interactions possible" (Meroni & Sangiorgi, 2011, p. 3).

The concept of *Design for Service* aligns with the service-dominant logic perspective that considers service as a perspective on value creation where the distinction between products and services is no longer relevant. The shift towards an understanding of services as a perspective on value creation, and its conceptualization of users as value co-creators, has created a good ground for the discourse on service design to develop (Foglieni, et al., 2018). The relationship between service dominant logic and service design has been explored by several scholars (e.g., Kimbell, 2011; Wetter-Edman, et al., 2014). Key concepts of service design and service dominant logic have been found complementary, such as *value-in-use* and *value-in-context*, experience as individually determined, and networks relevant in the value co-creation processes (Foglieni, et al., 2018).

Design for Service considers the *user as a resource* (Meroni & Sangiorgi, 2011). Under this conceptualization, the *user* can be seen as a resource during the design process or in its application, and it can be an individual as well as a community. The designer is conceptualized as a *facilitator* and *provoker*. The designer is an actor in the design process whose role is to facilitate different actors' contributions and to propose alternative views, provoking discussion and ideas. Supporting this view of the designer as facilitator and provoker is Kimbell (2011a), who argues that referring to designing for services "makes clear that the purpose of the designers' enquiry is to create and develop proposals for new kinds of value relation within a socio-material world" (Kimbell, 2011a, p. 49). Wetter-Edman and colleagues (2014), in an article exploring the synergies between *Design for Service* and service-dominant logic, suggest three propositions to frame *Design for Service*:

- 1. *Design for Service explores service systems* through the understanding of the different actors and value co-creation activities in which they are involved in order to imagine and design new service systems.
- 2. Design for Service provides approaches for understanding context and *individual actor's experiences*, recognizing how experiences are formed within context as a result of how resources are integrated.
- 3. *Design for Service extends the meaning of resource integration and value cocreation* through the adoption of co-design for the collaborative generation of new resource constellations approaches to enable the generation of new service systems.

Thus, *Design for Service* emphasizes the complex and relational side of services, considering them as evolving entities that are impossible to predetermine (Meroni & Sangiorgi, 2011; Sangiorgi & Prendiville, 2017a). In one of the most recent publications on the topic, Sangiorgi and Prendiville (2017a) opt to substitute "design" with "designing" by establishing the expression *Designing for Service*, arguing that:

Being "designing," an ongoing activity to which designers can engage with and affect during their interventions, the focus necessarily shifts to the context of where these changes can and are happening, which is no longer exclusively just the user's space, but also the organizations and their value networks (2017a, p. 252)

The authors also underline that such context sensitivity enables a shift from "designers" to "designing" that migrates the attention from individual design practitioners to the collective of people engaged with changing and adapting their performances. They also address the intentional choice to keep the word "service"—rather than "services"—to be in line with the service-dominant logic analytical framework that assumes services as a way to conceive value co-creation.

Design Capability

Another area that has received some attention in relation to service design in an organizational context is the one of *design capability* (Mutanen, 2008; Nusem, et al., 2017; Malmberg, 2017). One of the first and most established frameworks to assess an organizational design capability is the Design Ladder, developed by the Danish Design Centre in 2001 as a way to categorize the different levels of integration that design can have within an organization (Doherty, et al., 2014). The Design Ladder encompasses four stages: (1) *No design*—design plays an insignificant role in the organization; (2) *Design as styling*—the organization uses design as a medium to develop the form or affect the usability of a product; (3) *Design as strategy*—design plays a key role in the management and strategic development of the organization. The Design Ladder is a useful framework to assess the high-level design maturity of organizations; however, it is quite generic, and it does not support the understanding of how to progress from one level to the other.

In her recent PhD dissertation, Lisa Malmberg (2017) offers a thorough analysis of the concept of *design capability*. The author defines design capability as "an organization's ability to utilize design" (2017, p. 87). Malmberg argues that a close analysis of the literature reveals three patterns in the conceptualization of design capability: *design capability as design resources*; *as awareness of design*; and *as structures that enable the use of design*. In her argument, an organization's design capability is a synthesis of all three aspects.

Design capability as design resources refers to design competences, skills, or activities introduced by professional designers or for the use of design processes, methods, and practices. This perspective assumes that design capability can be developed by hiring in-house designers, or by training existing personnel in design activities and developing their knowledge of design methods and tools. This perspective assumes that design capability can be increased by acquiring or increasing design resources. *Design capability as awareness of design* suggests that an organization's design capability increases together with its understanding of the design approach, methods, and tools. A classic example of a maturity model in this case is the Design Ladder presented above. Finally, *design capability as structures that enable the use of design* refers to the organizational ability to make use of design practices. This perspective assumes that design capability cannot be

improved by simply adding resources but rather it requires the development of structures, routines, and processes that enable the utilization of design competences and the assimilation of design practices. The understanding of these three patterns is paramount, as they will be used to understand and interpret the efforts in developing design capabilities in the organization analyzed in Study2.

Malmberg (2017) underlines that, depending on the perspective chosen on design capability, the explanation of how it is developed or increased in organizations differs. It can be interpreted as being developed by ensuring access to external or increasing internal design resources; as developing according to an increased awareness of design; or as dependent on structures within the organization that enable design practice. However, although Malmberg (2017) does an excellent job in clarifying the *what* a design capability is composed of, the author dedicates less attention to the *how* organizational actors can contribute to grow design capability in an organization. Moreover, all these perspectives share the assumption that design capabilities need in some way to be instilled and developed in organizations that are often lacking this capability. The work of Junginger on *design legacies* (2014; 2015) sheds some new light on this assumption, while providing a rare and insightful account of the synergies between service design and organizational change.

Design Legacy

Junginger (2014; 2015) highlights that while managers and designers alike have been busy finding ways to introduce and embed design practices into organizations, they have failed to acknowledge that virtually any organization already works with specific design principles, methods, and practices. In other words, the author argues that design principles, methods, and practices are already embedded in organizations that therefore are full of design legacies. The implication to the way managers and designers have been approaching the introduction of service design in organizations is the realization that they can introduce *new* design practices that, however, need to acknowledge and deal with those existing design legacies. The author identifies three elements of organizational design legacies: *organizational purpose, organizational design approaches*, and *organizational design practices*. Organizational purpose refers to the very reason why an organization exists—its aim and vision. Organizational design practices refer to the values that govern the organization. Organizational design practices refer to how design actually takes place and becomes apparent within the organization. In this respect, the author describes three key organizational design practices: *designing for organizations*—organizations opt to leave the design to external design experts; *designing with organizations*—organizations opt to design with external design experts; and *designing by organizations*—organizations opt to develop all the design tasks by themselves. Thus, the author argues that "the elements of an organizational design legacy concern what, how, and why designing matters to an organization" (Junginger, 2015, p. 214). This analysis and proposition becomes extremely timely as it acknowledges design to be increasingly recognized as a core organizational activity, thus implying that design is not something that can be injected or owned by designers or expelled by selected members of the organization.

The author has more recently further built on the concept of design legacies to start describing the one of *organizational design narratives* (Junginger & Bailey, 2017). Junginger and Bailey (2017, p. 33) indeed argue that:

Since every organization has its own design history, has developed its own practices for how to go about developing services over time, any new design efforts take place under a historic pre-text

The authors describe the organizational pre-text as the combination of previous design efforts, decision-making, and approaches that have informed and still inform the organizational design practices within a specific organization. The authors juxtapose organizational *pre-text* to organizational *context*, representing a second element of an organizational design narrative that describes the current design environment of an organization-including purpose, vision, and the actors involved and affected by design decisions. Within this context, the authors argue that the purpose of an organizational design narrative is to trace design issues, practices, and principles that govern the organizational life. A good organizational design narrative includes both the customer and stakeholder perspectives. A strong organizational design narrative is fundamental to ensure there is a shared understanding of the direction the organization is taking resulting in a sustainable development of projects that do not get affected by changes in resources or personnel. As the authors clearly point out: "When a clear design narrative exists, everyone involved has a stake in the design intent of a project and feels part ownership of the design culture permeating the organization" (2017, p. 37). In this

case, employees become guardians of the organizational design narrative, taking responsibility that the organizational culture matches the narrative.

Although the work of Junginger on design legacies and organizational narratives significantly advances our understanding of the context within which service design is introduced, it is still extremely design-centric. The author focuses on those design legacies and narratives that define the context, devoting less attention (an exception is the acknowledgement of the *organizational purpose*) to those non-design related elements that yet influence the introduction and diffusion of service design in an organizational context.

The concepts of *design capabilities* and *design legacies* will become extremely relevant in the context of this study. As we'll see in the discussion section, these two research areas represent the ground for the development of the contribution of this study to the existing body of knowledge.

Take Away Concepts

This chapter has presented several concepts that are fundamental to grasp and retain as they will be used in the understanding and interpretation of data in both studies, and as the basis of the argument that will be shared in the discussion section. In this summary I'd like to stress six key concepts. First, one of the most influential concepts subtending the understanding of the role and impact of service design comes from the recent new conceptualization of services as a perspective on value creation. Second, another of the most influential concepts subtending the understanding of the role and impact of service design comes from the conceptualization of design as a set of material and discursive practices. Third, service design has a transformative power over organizations. Fourth, service design can gain different levels of depth into the organization, with associated various outcomes and impacts. Fifth, design capability can be conceptualized as design resources, as awareness of design, or as structures that enable the use of design. Sixth, organizations are full of design legacies; the introduction of new design practices need to acknowledge and deal with those existing design principles, methods, and practices.

2.1.4. Expanding our understanding of service design in organizations

Although the research streams presented above have significantly contributed to growing our understanding of service design in an organizational context, research is still extremely sparse and fragmented. Despite scholars agreeing on the transformative power of service design (Junginger & Sangiorgi, 2009; Sangiorgi, 2011), existing literature is rather silent on the influence of the organizational environment on the introduction of service design and on the mechanisms for service design adoption. Studies that report attempts by organizations to introduce and embed service design are predominantly descriptive or prescriptive and do not offer an in-depth understanding of the organizational consequences in the form of transformations (Karpen, et al., 2017; Kurtmollaiev, et al., 2018).

To help address this limitation, I will apply an institutional perspective to explain organizational transformation and mechanisms for adoption through the concept of organizational logics. When organizational actors introduce and embed service design in organizations, they do not simply adopt additional tools and methods to enhance their existing innovation or development processes. In fact, the introduction of service design practices, such as qualitative design research or prototyping, often conflicts with the established traditional organizational processes and practices. Moreover, by actively involving a wider group of stakeholders in co-creative processes, thus generating new experiences and levels of awareness, service design may affect organizations beyond innovation routines, enabling larger scale transformations (Junginger & Sangiorgi, 2009; Kurtmollaiev, et al., 2018).

The institutional logics perspective offers theoretical lenses to systematically look at such organizational context and transformations. It is a metatheory of institutions that is apt to analyze the interrelationships between institutions, organizations, and individuals within a social system (Thornton, et al., 2012). It enables analyzing actors within their social context and, by assuming that organizations are exposed to institutional pluralism, it enables understanding the role of actors in institutional change. A key feature of institutional logics is thus a simultaneous focus on multiple levels of analysis—macro, meso, and micro—where no one level privileges over another. The three levels are conceptualized as nested; individuals and organizations simultaneously draw on logics and are shaped by them. It allows change to occur, as it assumes institutional logics as not static structures, but as malleable to actors' elaboration (Thornton, et al., 2012). In other words, this perspective assumes change

as inevitable and empowers an understanding of transformation through the way institutions, organizations, and individuals affect each other. The perspective enables me to position service design in a wider societal and organizational context, and to account for the agentic role of organizational actors. Hence, it provides the conceptual tools to systematically analyze service design in an organizational context.

2.2. Institutional Logics

A core premise of the institutional logics perspective is that the interests, identities, values, and assumptions of individuals and organizations are embedded within prevailing institutional logics.

Thornton, Ocasio & Lounsbury, 2012, p. 6

The origin of institutional theory lies in the early 1950s in the work of Philip Selznick (1949; 1957), which is now referred to as "old" institutionalism, distinguishing between "institution" and "organization," and locating organizations in wider institutional environments and value sets (Greenwood, et al., 2014; Johansen & Waldorff, 2015). This first wave of old institutionalism was followed in the 1970s by what is now referred to as "new" institutionalism. In this period, a group of scholars (e.g., DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Zucker, 1977) began exploring why organizations tend to look alike. Their work was characterized by an early focus on legitimacy, schemas, fields, and templates (Greenwood, et al., 2014). While the old institutionalism revolved around the concepts of power and influence, competing values, and informal structures, this early neo-institutionalism focused on the socializing effects of institutions, presenting an action-oriented approach to the ability of organizations to adapt to their institutional environment (Johansen & Waldorff, 2015). This approach focused greatly on similarities among organizations rather than on differences. Moreover, these studies often lacked empirically observable issues; thus, the perspective became functionalistic and detached from empirical issues. Organizations and institutions do change in practice, organizations do present differences, therefore a new way to understand the actions that caused such change was needed (DiMaggio, 1988; Powell & DiMaggio, 1991; Seo & Creed, 2002).

A third wave of institutionalism has arisen since the 1990s, bridging the old and new institutionalisms (Johansen & Waldorff, 2015). This new wave argues that organizations are embedded in an institutional context that prescribes legitimate behaviors. The agenda is to understand how organizations handle institutional pluralism and the role of actors in institutional change (Dacin, et al., 2002; Battilana, 2006). Thus, this third wave started focusing on institutional work, institutional entrepreneurship, and institutional logics (Greenwood, et al., 2014; Johansen & Waldorff, 2015). Institutional work is concerned with the role of actors and their agency in the development of institutions, it "highlights the awareness, skill and reflexivity of individual and collective actors" (Lawrence & Suddaby, 2006, p. 219) as they create, maintain, or change institutions (Scott, 2014). Institutional entrepreneurship, on the other side, focuses on the activities of actors to mobilize resources to create new institutions or disrupt existing ones (Maguire, et al., 2004; Garud, et al., 2007). These first two perspectives are characterized by an agentic approach to institutions. Within this context, institutions are defined as "those social patterns that, when chronically reproduced, owe their survival to relatively self-activating social processes" (Jepperson, 1991). In Lawrence, Hardy, and Phillips' work on collaboration as a form of institutional entrepreneurship (2002), the authors define institutions as follows:

We define institutions as relatively widely diffused practices, technologies, or rules that have become entrenched in the sense that it is costly to choose other practices, technologies, or rules. Practices, technologies, and rules can therefore be more or less institutionalized, depending on the extent of their diffusion and the strength of these self-activating mechanisms (p. 282).

It is useful to note that in the same paper the authors introduce the concept of *protoinstitutions*, defining it as "practices, technologies, and rules that are narrowly diffused and only weakly entrenched, but that have the potential to become widely institutionalized" (p. 283). They conceptualize proto-institutions as "institutions in the making" (p. 283), having the potential to become full institutions if social processes contribute to entrench them and diffuse them throughout the institutional field.

While institutional work and entrepreneurship are characterized by an agentic approach to institutions, the third—institutional logics—takes a different direction. Institutional logics are defined as "the socially constructed, historical patterns of cultural symbols and material practices, including assumptions, values, and beliefs, by which individuals and organizations provide meaning to their daily activity, organize time and space, and reproduce their lives and experiences" (Thornton, et al., 2012, p. 2). Institutional logics have their roots in the work developed by Friedland and Alford (1991), in which they critique neo-institutional theory for not situating actors in their social context. By doing so, they position a metatheory of institutions that incorporates individuals and organizations.

Thus, the institutional logic perspective is apt to analyze the interrelationships between institutions, organizations, and individuals within a social system (Thornton, et al., 2012). Friedland and Alford conceptualize institutions as "simultaneously material and ideal, systems of signs and symbols, rational and transrational" (1991, p. 243). Thus, institutions are characterized by both material and symbolic elements (Thornton, et al., 2012). Material elements are structures and practices. Symbolic elements are ideas and meanings. The symbolic and material elements are intertwined and constitute one another.

This chapter aims at uncovering some of the key theoretical elements related to the institutional logics perspective. This doesn't aim to be a full overview but a strategic selection of those elements useful to explain the effects of the introduction of service design and the mechanisms for its adoption in the organization. Section 2.2.1 will uncover the constructs of orders and logics presenting the concepts of institutional and organizational logics. Section 2.2.2 will clarify the concept of institutional complexity, section 2.2.3 the ones of agency and structure, finally section 2.2.4 will uncover the fundamental concepts of institutional stability and change. The chapter will end with a reflection on the institutional logic perspective vis-à-vis service design.

2.2.1. Institutional orders and logics

Friedland and Alford argue that institutions are "supraorganizational patterns of human activity" (1991, p. 243) through which individuals and organizations organize time and space and order reality. The authors propose that in the western world the core societal institutions (defined as "institutional orders") are Capitalism, Family, the Bureaucratic State, Democracy, and Christianity. This list has subsequently been extended by a group of scholars—among which are Thornton, Ocasio, and Lounsbury (2012)—to encompass Family, Community, Religion, State, Market, Profession, and Corporation. Each institutional order is ruled by a central logic (Friedland & Alford, 1991; Thornton, et al., 2012; Johansen & Waldorff, 2015).

Friedland and Alford theorized institutional logics as "a set of material practices and symbolic constructions" (1991, p. 248). Symbols are intangible meanings—"ways

of ordering reality"—while practices are tangible ways to "organize time and space" (Friedland & Alford, 1991, p. 243). Thus, Friedland and Alford conceptualize institutions as simultaneously "material and ideal." While the institutional order sets unique organizing principles that influence actor's behavior, institutional logics sets a frame of reference that influences actor's choices, their sensemaking, and their sense of identity (Thornton, et al., 2012). Logics can therefore be interpreted as the orders' content; for example, participation is the institutional logic of the institutional order sate. Institutional logics are positioned to be more powerful than institutional orders as they guide institutions and social meaning (Friedland & Alford, 1991). Institutions and their ruling logics co-exist in society often creating contradictory social arrangements (Friedland & Alford, 1991); such contradictory social arrangements (Friedland & Alford, 1991). Thus, institutional logics provide institutional theory with a way to account for and explain institutional stability and change (Friedland & Alford, 1991; Thornton, et al., 2012; Johansen & Waldorff, 2015).

As this study primarily deals with the market institutional order, I will here analyze it in greater detail than the remaining orders to provide the necessary information to support the findings that will be presented in Chapter 5. Friedland and Alford argue that a market "is not simply an allocative mechanism but also an institutionally specific cultural system for generating and measuring value" (1991, p. 234). The market institutional order is certainly the one that over the years has attracted consistent attention by institutional scholars (Greenwood, et al., 2014). Because of the tendency to conflate the notions of orders and logics, and depending on the research context, the market institutional order has been analyzed over time by different scholars as business (Reay & Hinings, 2009), market (Glynn & Lounsbury, 2005), or for-profit logic (Battilana & Dorado, 2010; Tracey, et al., 2011). In a study of critics' reviews of the Atlanta Symphony Orchestra performances, Glynn and Lounsbury (2005) analyze how a traditional dominant aesthetic logic yielded to a new market logic. In the study, the authors use the notion of the market logic to refer to "broader notions of self-interest and profit-motive that animate commercially driven action in Western capitalistic economies and are predicated on formal rationality" (p. 1037). Another example of how the market order has been treated in institutional studies can be found in the work of Thornton (2002) in the case of higher education publishing transitioning from an editorial to a market logic. Within this context, the market logic is presented as characterized by the role of the CEO

as the dominant source of authority, who gains legitimacy through the firm's market position and public shareholders. The mission underlying the logic is to build competitive positioning of the firm and increase profit margins. The logic has a major focus on resource competition using strategies such as building market channels and growth by acquisition. The dominant logic of investment is to commit capital to the highest market return.

Interinstitutional System

Friedland and Alford conceive society as a "potentially contradictory interinstitutional system" (1991, p. 240). The interinstitutional system operates at three levels of analysis: "individuals competing and negotiating, organizations in conflict and coordination, and institutions in contradiction and interdependency" (1991, p. 241). In Figure 7, the individual level is defined as "micro"; the organizational level is defined as "meso"; and the societal level is defined as "macro." This definition is in line with most studies on institutional logics (Thornton, et al., 2012). Individual actions are observable at the micro level; organizational logics are observable at the macro level of analysis. Friedland and Alford (1991) consider these levels nested, progressively specifying constraints and opportunities for individual action. Thus, the interinstitutional system enables researchers to understand the levels that define institutions (Thornton, et al., 2012).

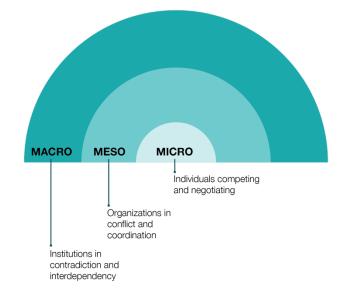


Figure 7. Levels of analysis as described by Friedland and Alford (1991). The levels are conceptualized as nested, progressively specifying constraints and opportunities for individual action.

An institutional logics perspective assumes institutions to be heterogeneous contrary to what was argued by the previous wave of new institutionalism. Institutions differ because of their overarching logic, but it is at the field level that the logic gets specified in its symbolic and material expressions (Greenwood, et al., 2014). DiMaggio and Powell, in an often-cited article titled The Iron Cage Revisited (1983), define organizational field as "those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products" (p. 148). The power of such unit of analysis is that it does not only look at competitors or firms in the organization's network, but it also includes the totality of all possible relevant actors (DiMaggio & Powell, 1983). The concept of organizational field has great importance for contingency variables that influence organizational structures; examples are organizational size, function, or range of services delivered (Greenwood, et al., 2014). Thus, when two organizations are faced with similar institutional pressures, organizational heterogeneity is extremely likely due to contingency factors (Greenwood, et al., 2014). Organizational fields are viewed as carrying their own logics, nested within institutional orders (Goodrick & Reay, 2011).

Organizational Logics

Spicer and Sewell (2010) elaborate on the concept of organizational logic, as a meso-level construct that is situated between the institutional theory's field-level logic and the sense making activities of individual actors. Like institutional logics, the authors argue, also organizational logics can be conceptualized as an interaction between "a symbolic system that informs cognition about an organization and the material manifestation of that cognition in the form of the specific practices that are enacted in that organization" (2010, p. 916). Under this light, organizational logics can be interpreted as a mode of cognition connected to the legitimation of action. To summarize, the authors articulate their proposition as follows (Spicer & Sewell, 2010, p. 918):

We propose that an organizational logic is a composite expression of a range of institutional logics localized in time and space and, considered as such, it serves as a meso-level construct that bridges the methodological holism of field level analyses of institutions and the methodological individualism of psychological approaches to human agency and cognition. Organizational logics can be interpreted as the assumptions of what is considered to be legitimate and effective for an organization within a given context (Spicer & Sewell, 2010). Going back to Friedland and Alford's explanation of orders and logics, each of the most important institutional orders of our contemporary society has a central logic that "constitutes its organizing principles and which is available to organizations and individuals to elaborate" (1991, p. 248). Spicer and Sewell (2010), with the concept of organizational logic try to understand how organizations elaborate on the current institutional logics to create their distinct organizational logics. By so doing the authors argue that organizational logics are related but at the same time conceptually and empirically distinct from institutional logics. Moreover, the authors argue that if we accept that institutional logics are subject to change, we can also assume that organizational logics will also change.

A particular organizational logic, Spicer and Sewell (2010) argue, is empirically operational when a specific configuration of *discourses* is observable at the organizational level. A discourse visible at the organizational level, the authors argue, "reflects the ideational content of broader institutional logics as they are taken up and elaborated by individual actors" (2010, p. 918). By analyzing changes in discourses at the organizational level, we can understand how actors, both individually and collectively, use discursive resources to influence the symbolic and practical climate of an organization. Under this light an organizational logic can be interpreted as "a spatially and temporally localized configuration of diverse discourses, we can expect contradictions are immersed in a multiplicity of discourses, we can expect contradictions and tensions between the discourses making up the organizational logics to arise, offering the opportunity for actors to exercise projective agency. This projective agency creates the opportunity for organizational logics to change.

Spicer and Sewell also argue that discourses are modified through three main forms of *discursive agency*: (1) undertaking acts of ironic accommodation between competing discourses; (2) building chains of equivalence between the potentially contradictory discourses; and (3) reconciling new and old discourses through pragmatic acts of *bricolage*. By investigating transformations in the organizational logic of Australia's largest public broadcaster, the authors found out that by using these forms of discursive agency, actors were able to transform the dominant organizational logic from the one of nationalism to the one of globalization.

Take Away Concepts

Institutional orders set unique organizing principles that influence actor's behavior. Scholars recognize seven major institutional orders characterizing contemporary Western society: Family, Community, Religion, State, Market, Profession, and Corporation. Each institutional order is ruled by a central logic, a set of material practices and symbolic constructions, that sets a frame of reference that influences actor's choices, their sensemaking, and their sense of identity. The institutional logic perspective is apt to analyze the interrelationships between institutional logic and the sense making activities of individual actors, we find the meso-level construct of organizational logic, that is the set of assumptions of what is considered to be legitimate and effective for an organization within a given context. A particular organizational logic, is empirically operational when a specific configuration of *discourses* is observable at the level of the organization. As we'll see in the findings section, the concept of organizational logic will be used in Study2, to observe the transformations in the organizational logics of Telenor Group.

2.2.2. Institutional complexity

The previous section has shown how multiple institutional orders and their guiding logics co-exist in society. Multiple institutional logics—since they provide actors with distinct frames of reference to inform and shape their choices, their sensemaking, and their sense of identity-often expose actors to conflicting institutional demands (Meyer & Rowan, 1977; Friedland & Alford, 1991; Kraatz & Block, 2008; Greenwood, et al., 2011; Pache & Santos, 2013). Literature refers to this phenomenon as "institutional complexity." Greenwood and colleagues argue that "organizations face institutional complexity whenever they confront incompatible prescriptions from multiple institutional logics" (2011, p. 318). Conflicting institutional demands are defined as the "various pressures for conformity exerted by institutional referents on organizations in a given field" (Pache & Santos, 2010, p. 457). Pache and Santos refer to the notion of conflicting institutional demands as the "antagonisms in the organizational arrangements required by institutional referents" (2010, p. 457). Thus, organizations facing conflicting institutional demands operate within different institutional orders subject to multiple and contradictory guiding principles, normative orders, and cultural logics. The more differentiated and complex the organization, the greater the likelihood that the organization will be subject to institutional complexity (Greenwood, et al., 2011). The response to such conflicting prescriptions is challenging, producing internal frictions and uncertainty on how to move forward. As Battilana and Dorado put it: "Dealing with multiple institutional logics is challenging for organizations because it is likely to trigger internal tensions that may generate conflicts among organization members, who are ultimately the ones who enact institutional logics" (2010, p. 1420).

Based on an in-depth analysis of the literature on institutional complexity, Greenwood at al. (2011) reveal two fundamental pitfalls regarding how institutional complexity has been approached so far by institutional scholars: (1) most studies consider only two logics, only a few studies analyze the effect of more than two logics at play at once, (2) most studies assume logics as inherently incompatible—there is a lack of studies that examine the extent to which logics are incompatible (or not). A consequence of the first pitfall is that the complexity experienced by organizations is underestimated and the organizational responses not being properly understood. A consequence of the second pitfall is that implicit in most studies is the belief that the rise of a new logic requires the disappearance of the old dominant logic, due to their fundamental incompatibility.

In contrast to the first dominant pitfall, and in pursuit of a way to theorize how multiple logics can be reflected in professional work. Goodrick and Reay coin the term constellation of logics (2011). The authors define a constellation as a "combination of institutional logics guiding behavior at any one point of time" (Goodrick & Reay, 2011, p. 399). What is important in the context of a constellation of logics is the way logics are arranged and their mutual relationships. Goodrick and Reay (2011) argue that relationships among different logics within a constellation can be competitive as well as cooperative. Competitive relationships imply that strengthening one logic will necessarily weaken another one. In the conflict, one of the logics must win for the tension to be resolved. Cooperative relationships imply that alternative logics can together influence practice; thus, strengthening one logic might strengthen an alternative logic. Goodrick and Reay (2011) suggest that there are two ways logics can be cooperative. First, relationships can be facilitative: changes in work practices with one logic can facilitate changes in work practices in another logic. Second, relationships can be additive: a specific work task reflects the influence of multiple logics. Table 3 provides an overview of the possible nature

of logics' relationships. Understanding those relationships is fundamental to understand how change occurs and stability maintained (Waldorff, et al., 2013).

Table 3. Overview of possible logics	' mutual relationships.
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Competitive Relationships	Cooperative Relationships			
	Facilitative	Additive		
Strengthening one logic will necessarily weaken another one	Changes in work practices with one logic can facilitate changes in work practices with another logic	A specific work task reflects the influence of multiple logics		

Recently, in relation to the second dominant pitfall, a group of scholars have explored how organizations combine and reconfigure logics, coining the notion of *hybrid organizations* (Battilana & Dorado, 2010; Jay, 2013; Pache & Santos, 2013; Greenwood & Hinings, 1996). Within this context, under certain circumstances, institutional logics might be compatible (Greenwood, et al., 2011). Such understanding requires us to explore the nature of such incompatibility or compatibility.

Conflicting institutional demands may vary in relation to the nature of their prescriptions (DiMaggio & Powell, 1983; Oliver, 1991; Pache & Santos, 2010). Those prescriptions can either engage organizations at an ideological level, prescribing the goals that are legitimate to pursue, or at a functional level, prescribing the means the organization should adopt (DiMaggio & Powell, 1983; Oliver, 1991; Scott & Meyer, 1991; Townley, 2002; Pache & Santos, 2010). In their analysis, Pache and Santos (2010) argue that incompatibility at a goal level is substantially more challenging to resolve than one at a mean level, as it requires organizational members to question what their organization is about. Goals are simply not easily negotiable. Conflicts on means only are easier to tackle since "they focus on technical issues; these demands are relatively peripheral for organizations. Such conflict may not necessarily be worth the cost of an institutional battle" (Pache & Santos, 2010, p. 464). The negotiable nature of means enables the resolution of conflicts. While Pache and Santos describe incompatibility in terms of differences concerning goals and means, Goodrick and Salancik (1996) focus on organizational discretion. In their argument, discretion originates from the uncertainty inherent in the goals and practices prescribed; therefore, "actors may use their own particularistic interests to guide their further definition of appropriate action" (1996,

p. 2). The higher the ambiguity of prescriptions, the higher the level of discretion. In this context, the incompatibility between logics is mitigated, while the discretion of actors to reconcile logics is enhanced (Greenwood, et al., 2011). What both these approaches suggest is that if logics' prescriptions are ambiguous, actors are provided with more discretion to resolve the tension produced by the complexity. When logics are instead specific, organizations tend to experience a higher level of complexity.

Organizational Strategies to Respond to Institutional Complexity

In early research, scholars have addressed institutional complexity as something imposed on the organization (Kraatz & Block, 2008; Greenwood, et al., 2011), analyzing how the organization responds to the conflicting prescriptions of different logics (D'Aunno, et al., 1991; Oliver, 1991; Pache & Santos, 2010). A development from this point of view has certainly been the work on hybrid organizations, defined as "organizations that combine institutional logics in unprecedented ways" (Battilana & Dorado, 2010, p. 1419). Such organizations, through a process of selective coupling, combine different elements from multiple competing logics in a systematic way to manage the incompatibility between logics, and to reduce the costs and risks associated with decoupling or compromising (Pache & Santos, 2013).

It is useful now to briefly describe the concepts of decoupling, compromising, and selective coupling. As Pache and Santos (2013) point out, the concept of decoupling has a long tradition in institutional theory (Meyer & Rowan, 1977; Westphal & Zajac, 2001; Fiss & Zajac, 2006; Boxenbaum & Jonsson, 2008; Bromley & Powell, 2012; Crilly, et al., 2012). These studies suggest that when facing conflicting demands from competing institutional logics, organizations symbolically agree to one logic's prescription while implementing the one of the competing logic, usually the one closer to the organizational goals. Thus, decoupling refers to "the process through which organizations separate their normative or prescriptive structures from their operational structures" (Pache & Santos, 2013, p. 974). One of the major assumptions of decoupling studies is that all organizational members adhere to the logic and are willing to defend it (Pache & Santos, 2013). Compromising refers to the attempt of organizations to accept and internalize institutional prescriptions, but in an altered form that balances conflicting expectations (Oliver, 1991). Compromising can happen through internalizing the minimum indispensable elements to ensure conforming to institutional demands, or through negotiations

with institutional referents to modify their expectations (Pache & Santos, 2013). Pache and Santos (2013), with their comparative study of four work integration social enterprises, and in opposition to what previous literature suggests (that under conditions of conflicting institutional demands organizations tend to decouple or to compromise), found an alternative strategy that involved *selective coupling* of demands from different logics. The organizations under their analysis did indeed adhere to both logics at play—social welfare and commercial—selecting intact demands and showcasing a stable configuration over time.

As part of the stream of research on hybrid organizations, a group of scholars have explored how organizations engineer ad hoc conflicting logics to pursue new strategies and create new market opportunities (Tracey, et al., 2011; Kent & Dacin, 2013; Dalpiaz, et al., 2016). Under this light, institutional complexity becomes a potential source of opportunity for change (Dalpiaz, et al., 2016). Dalpiaz et al. (2016) introduce the concept of recombinant strategies to explain how organizations purposefully combine different logics to pursue new market opportunities. The authors develop a theoretical model linking recombinant strategies for dynamic restructuring of organizational agency to the capacity of creating and pursuing new market opportunities. They argue that recombinant strategies reflect "explicit decisions about the desired relationship between elements of the two logics and their application to organizational activities" (p. 354). The authors recognize three possible recombinant strategies: compartmentalization, enrichment, and synthesis. Dalpiaz et al., in line with the mainstream approach, choose to analyze only two logics and their recombinant strategies. Their findings suggest that under a compartmentalization strategy the organization opts to adopt two separate sets of guiding principles as prescribed by the two logics. The new and the old coexist, while there is a preference to adopt practices suggested to be legitimate by the new logic. Under an enrichment strategy, the organization opts to enrich the first logic with selected elements of the new logic. The old logic maintains priority. Under a synthesis strategy, the two logics are synthesized into a third new one through a process of reinterpretation of the composing elements.

Take Away Concepts

Organizations are subject to institutional complexity whenever they face incompatible prescriptions from multiple institutional logics. A constellation of

logics is a combination of logics guiding behavior at one time. Relationships among different logics within a constellation can be competitive as well as cooperative. Conflicting institutional demands may engage organizations at an ideological level, prescribing the goals that are legitimate to pursue, or at a functional level, prescribing the means the organization should adopt. Incompatibility at a goal level is substantially more challenging to resolve than one at a mean level. Early research has conceptualized institutional complexity as something imposed on organizations. Later research has analyzed how organizations engineer ad hoc conflicting logics to pursue new market opportunities. Under this stream, research shows three strategies organizations adopt to deal with institutional complexity: (1) compartmentalization, (2) enrichment, and (3) synthesis. These are all crucial concepts to highlight and remember, as they will all be extensively used in the findings section of Study2. As we'll see Telenor Group is facing a high degree of complexity as resulting from the co-existence of multiple organizational logics. We will also see how both compartmentalization and enrichment strategies have been adopted in the context of the organization under analysis.

2.2.3. Agency and structure

The previous two sections have explored the nature of institutional logics, and the concept of institutional complexity. This section will now unfold the topics of action, structure, and embedded agency. These themes are key within the institutional logics perspective as a source of exploration and debate among several organizational and institutional scholars (Sewell, 1992; Emirbayer & Mische, 1998; Seo & Creed, 2002; Battilana, 2006; Thornton, et al., 2012). An institutional logics perspective enables us to theorize structure and action simultaneously through the interdependence and partial autonomy of the interinstitutional orders within the interinstitutional system (Thornton, et al., 2012).

Scott defines agency as "an actor's ability to have some effect on the social world altering the rules, relational ties, or distribution of resources" (2014, p. 94). It is through agency that actors exercise choice and directly impact and transform the context within which they operate (Emirbayer & Mische, 1998). Thus, agency provides a way to think about action in institutional processes (Scott, 2014). As already argued, a key feature of institutional logics is a simultaneous focus on multiple levels of analysis—macro, meso, and micro—where no one level privileges over another. The three levels are conceptualized as nested; individuals and organizations simultaneously draw on logics and are shaped by them. The notion of institutional logics shaping action, and vice versa, is referred to as "embedded agency," which represents one of the core metatheoretical principles of the institutional logics perspective. Embedded agency allows change to occur, as it assumes institutional logics as not static structures, but as malleable to actors' elaboration (Thornton, et al., 2012). Thus, in their argument, Thornton, et al. describe individuals as social actors "situated, embedded, and boundedly intentional" (2012, p. 102). Weber, considered one of the fathers behind some of the key concepts of institutional theory, regards action as social because the actor anchors specific meanings to behavior (Scott, 2014).

The plurality of institutional prescriptions produces a diversity of actors' behavior (Martin, et al., 2017). This diversity should not automatically be interpreted as actor autonomy. In this regard, research has indeed shown how different groups of actors become variously affected by logics' prescriptions (Goodrick & Reay, 2011; Pache & Santos, 2010; Reay & Hinings, 2009; Martin, et al., 2017). Studies of sustained institutional complexity show that actors might remain bound to their original logic and referent audience, and can either continue acting in accordance with those expectations, or might simultaneously have to satisfy expectations of more than one audience for legitimacy (Martin, et al., 2017). In the latter case, different aspects of actors' practice get governed by different logics.

The concept of constellation of logics adopted in this piece of research offers an important new way to understand agency (Waldorff, et al., 2013; Martin, et al., 2017). Waldorff and colleagues (2013), for example, argue that it is through the understanding of the arrangement and relationships between logics within a constellation that action can be explained. The authors argue that actions are at the same time constrained and enabled by the constellation of logics. However, it is important to note that studies in this field tend to constrain the analysis at the field level, where the constellation of logics is a result of field level dynamics determining the options provided to different actors (Martin, et al., 2017). Research has given less attention to the concept that constellations may be constructed—as opposed to given—and which dimensions of agency drive their formation (Smets & Jarzabkowski, 2013; Martin, et al., 2017).

Neo-institutional theory has historically not been well equipped to explain the partial autonomy of agency and structure (Thornton, et al., 2012); thus, a long structure-agency debate has been developing over the years (Garud, et al., 2007). Early institutional theory focused on a concept of agency where actors are viewed as constrained by institutional norms (Thornton, et al., 2012). The assumption that structures constrain agency can easily explain stability and continuity, but it does not provide a way to explain change (Garud, et al., 2007). On the other side, however, theories that privilege the role of agency with a focus on intentionality often end up promoting "heroic models of actors and have been criticized for being ahistorical, decontextualized, and universalistic" (Garud, et al., 2007, p. 961). In institutional theory, the structure-agency debate is referred to as "the paradox of embedded agency" (DiMaggio, 1988; Friedland & Alford, 1991; Sewell, 1992; Holm, 1995; Seo & Creed, 2002; Garud, et al., 2007).

The paradox unfolds as follows: "How can actors change institutions if their actions, intentions, and rationality are all conditioned by the very institution they wish to change?" (Holm, 1995, p. 398). Researchers have addressed this issue by providing a theorization of agency and structure as mutually constitutive, in a dual relationship. Giddens' notion of "structuration" (1984), Bourdieu's notion of "habitus" (1977), and Sewell's notion of "dual" structures (1992) are probably the most well-known attempts. For these researchers, structure and agency are not in opposition but they constitute each other. According to this view, actors are knowledgeable agents empowered by the reflective capacity to respond in different ways as prescribed by social norms (Garud, et al., 2007). Conceptualized in this manner, structure does not only constrain agency but also provides the very fabric for agency to take place (Garud, et al., 2007).

Particularly interesting in the context of this study is Sewell's theory of structure. Sewell theorizes structures as dual, constituted by schemas (virtual) and resources (actual) that mutually affect each other (1992). Sewell argues that structures are virtual; they are not material, they do not exist in time and space, but "are put into practice in the production and reproduction of social life" (1992, p. 6). Structures consist of schemas, conceptualized as procedures that guide the enactment of the production and reproduction of social life. Schemas are characterized by *generalizability* (they are general procedures) and *transposability* (they can be applied in a variety of contexts). Structures also consist of resources. Sewell ties the

concept of resources to one of power, arguing that "resources are anything that can serve as a source of power in social interactions" (1992, p. 9). The author posits that resources can be human (e.g., strength, knowledge) as well as nonhuman (e.g., objects). Therefore, conceiving human beings as agents implies conceptualizing them as empowered by access to resources. Sewell (1992) argues that structure and human agency presuppose each other. Structures are indeed enacted by "knowledgeable human agents" (1992, p. 4); therefore, structures enable human agency. The concepts of knowledgeable and enabling imply that agents put their structurally formed capacities in place in new, creative, and innovative ways contingent to the context. Social actors are here conceptualized as able to apply several different schemas while having access to a wide range of resources. Under this light, Sewell defines agency as "entailing the capacity to transpose and extend schemas to new contexts" (1992, p. 18). In other words, in Sewell's argument, actors are empowered by structures to enact schemas and mobilize resources. Thus, agency is a fundamental constituent aspect of structure.

Finally, also relevant for the purpose of this study is Emirbayer and Mische's (1998) theory of agency. The authors conceptualize human agency as "a temporally embedded process of social engagement, informed by the past (in its habitual aspect), but also oriented toward the future (as a capacity to imagine alternative possibilities) and toward the present (as a capacity to contextualize past habits and future projects within the contingencies of the moment)" (Emirbayer & Mische, 1998, p. 963). By so doing, Emirbayer and Mische argue that the agentic action of social dimension can only be captured within the flow of time. Since actors are constantly embedded in multiple temporalities at any given time, social actors can be thought as oriented toward the past, present, and future at once. The work of Emirbayer and Mische is extremely relevant in the context of this research as it accounts for change, as the authors put it "by differentiating between the different dimensions of agency, we can help to account for variability and change in actors' capacities for imaginative and critical intervention in the diverse contexts within which they act" (1998, p. 970). Emirbayer and Mische (1998) therefore conceptualize agency as encompassing three elements:

- *Iterational* element. It is the selective reactivation of past patterns as replication of routines. It anchors actors in the past.
- *Projective* element. It is the imaginative generation of possible future trajectories. It projects actors in the future.

• *Pragmatic-evaluative* element. It is the capacity to make practical judgments among alternative trajectories. It enables actors to respond to evolving situations and emerging demands.

As mentioned in the above section dedicated to *organizational logics*, Spicer and Sewell (2010) argue that the emergence of contradictions and tensions between the discourses making up the organizational logics, offers the opportunity for actors to exercise projective agency that promotes, transforms, and hybridizes discourses. Projective agency is deployed in response to these contradictions and tensions, creating the opportunity for organizational logics to change. In the deployment of projective actions, the authors argue, individuals or groups articulate a project to influence future activities, by identifying a collective problem and possible solutions to that problem. Actors seek to justify the project through the mobilization of a coherent discourse. The articulation of efficacious discourses is vital to develop and defend legitimacy.

Take Away Concepts

An institutional logic perspective assumes institutional logics to shape action, and vice versa. This notion is referred to as embedded agency, which represents one of the core metatheoretical principles of the institutional logics perspective. Embedded agency allows change to occur, as it assumes institutional logics as not static structures, but as malleable to actors' elaboration. Within the specific context of organizational logics' transformation, the concept of projective agency is key. Projective agency is the capacity of actors to imagine and generate future possible trajectories. This is important to note as the findings of Study2 will show how in response to organizational logics' contradictions and tensions, organizational actors exercise projective agency to create the opportunity for the customer logic to be increasingly diffused and entrenched in the intra-organizational environment, and service design increasingly adopted.

2.2.4. Institutional stability and change

The previous three sections explored the nature of institutional logics, institutional complexity, and the notions of agency and structure. By doing so, I have introduced two core metatheoretical principles of the institutional logics perspectives: agency is embedded, and institutions operate at multiple levels of analysis (macro-meso-

micro). This section will present a third core principle, historic contingency, that underlies the understanding of interinstitutional systems' stability and change (Thornton, et al., 2012). Interinstitutional systems are not static, they are adaptable social systems where institutional orders evolve, giving rise to new institutions. Institutional orders and their attributes are interdependent, showing a capacity to develop and transform with important consequences for the stability and adaptation of the interinstitutional system.

Particularly interesting in the context of this study is the role of actors in maintaining stability and initiating change. In this respect, Smets, Morris, and Greenwood (2012) argue that literature has been mainly approaching institutional change from three major (macro/meso) perspectives. First, institutional change can be conceptualized as resulting from exogenous shocks (e.g., financial crisis or technological disruptions). The shock produced in the environment forces actors to rethink the order generated by the institutional logics at play, triggering a reflective capacity to come up with possible alternative solutions often considered unthinkable in the old set up. Second, institutional change can emerge because of contradictions at the field level. In this respect, Seo and Creed (2002) posit that the more the field matures, the more it will have to face contradictions arising from conflicting institutional logics. Actors pressurized by these contradictions start to consider different responses to initiate change. Third, institutional change can arise from intra-organizational dynamics (Smets, et al., 2012). Intra-organizational interests and values contribute to change. This approach, among others, has been adopted by Pache and Santos (2010), who have explored the role played by intra-organizational processes in organizational decision making. An important contribution in this last case is the acknowledgement that organizational responses to institutional pressures can be reflected onto the field level (Smets, et al., 2012).

A critique to the current approaches to institutional change is their primary focus on the macro level of analysis (Smets, et al., 2012). There is a clear lack of studies that explore the micro dynamics that produce institutional change. For almost two decades, scholars have been calling for an increased attention to the microfoundations of institutionalization (Powell & Colyvas, 2008). Powell and Colyvas argue that because institutions are enacted by individuals in social situations, then we need a better understanding of organizational actors' roles in maintaining and transforming institutions. The authors believe that "the development of micro-level explanations will give more depth to accounts of macro-level events and relationships" (2008, p. 276).

Bertels and Lawrence (2016) offer one of the accounts of micro-dynamics for institutionalization through a study on the role of individuals in shaping organizational responses to institutional complexity relating to Aboriginal education in Canada. Their work is particularly interesting in the context of this study. Not only because they deal with the micro-mechanisms that influence organizational responses to institutional complexity, but also because they do so in a context where a well-established logic, *multiculturalism*, is challenged by a new emerging logic, *Aboriginal distinctiveness*. The authors define a new emerging logic as an institutional logic "that is associated with sets of values and beliefs, but lacks clearly defined practices and routines that represent legitimate instantiations of those values and beliefs" (Bertels & Lawrence, 2016, p. 340). Thus, new emerging logics portray clearly defined symbolic constructions but weakly established material practices. They lack legitimacy of practices and organizational structures. The authors argue that, when dealing with a new emerging logic, understanding the role of individuals is paramount since in such a context "the translation of values and beliefs into organizational practices and structures depends on the will and skill of organizational members to construct new routines and organizational structures" (p. 341). Their findings suggest that individuals' sensemaking and institutional biographies influence the form and scope of action in which organizations engage. By doing so, the authors portray an image of organizational responses to institutional complexity "as an internally complex process in which individuals make sense of and give life to institutional logics inside organizations" (p. 358).

Take Away Concepts

An institutional logics perspective provides a way to understand institutional change. Research suggests that institutional change can be produced by exogenous shocks, by contradictions at the field level, or by intra-organizational dynamics. In the single case study of Telenor, we will see how organizational change is produced by exogenous shocks, intra-organizational dynamics, as well as micro-dynamics.

2.3. Service Design Through an Institutional Logics Perspective

This research is not the first attempt to apply an institutional logics perspective to service design. Contextual to the conclusion of this Ph.D thesis, Kurtmollaiev et al. (2018) have published an article entitled *Organizational Transformation Through Service Design: The Institutional Logics Perspective* in the Journal of Service Research. In the article, the authors provide insights into why and how organizations adopt service design, and how this influences organizational mindset and practices. The authors base their empirical data on a longitudinal study on Telenor Group, the same company under analysis in Study2 of this research. It is pure coincidence that the authors of the article have worked on the same company, applying the same perspective on the case. Nonetheless, their work is extremely relevant to this study, offering the opportunity for a deeper and better-informed reflection.

Kurtmollaiev et al. (2018) apply an institutional perspective to explain organizational change and innovation through the concepts of institutional logic and institutional work. By analyzing the adoption of service design in an organization, the authors "investigate the role of service design in the creation, maintenance, and disruption of organizational logic" (2018, p. 60). By building on Spicer and Sewell's (2010) work, Kurtmollaiev et al. (2018) argue that at the organizational level institutional logics are reflected in organizational logics. When a company introduces a new practice (such as service design) that differs from the established frame of reference (such as the logics of market and corporation), organizational actors can either maintain or disrupt the existing organizational logic. Thus, by analyzing the adoption of service design in the organization, the authors opt to investigate the role of service design in the creation, maintenance, and disruption of the organizational logic.

The authors' findings suggest that first, in contrast to the typical view of service design within traditional innovation research, service design is more than an approach to innovate services or a stage in new service development processes. Service design indeed emerges as the new service development process itself, representing a powerful transformative force within the organization. Second, their study explains employees' resistance to designers' activities as linked to the discrepancy between organizational institutions and service design practices. Third, their findings suggest the emergence of a service design capability from a combination of "change routines (e.g., the formal stage-gate innovation process),

routine changes (e.g., launch of a new strategy), and changes in routines (e.g., involvement of customers in the innovation process)" (2018, p. 70). Finally, the authors describe a model of organizational logic change (see Figure 8). In the model, S1, S2, S3, and S4 represent the states of the organizational logic, as in the four modifications of the organizational logic ignited by the introduction of the new symbolic and material elements.

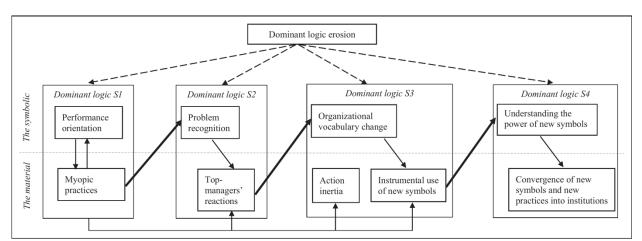


Figure 8. Theoretical model of organizational logic change developed by Kurtmollaiev et al. (2018, p. 69).

The authors argue that the transformation of the symbolic elements followed a topdown mechanism, as sanctioned by top management. The transformation of the material dimension of the organizational logic followed a bottom-up mechanism, requiring the recognition of the value of the new practices. Kurtmollaiev and colleagues continue arguing that at each new state "changes in the symbolic emerged from the material of the previous state, prompting corresponding changes in the material of the current state" (2018, p. 69).

Kurtmollaiev et al. (2018) provide good foundations to analyze the introduction and adoption of service design in an organizational context from an institutional logics perspective. However, their work represents only a first attempt to apply an institutional logics perspective to service design, posing questions that are still unanswered, opening several new paths for future research. For example, the authors showcase four stages of organizational transformation without explaining the cross-level mechanisms that enable such a transformation. Moreover, the authors do not offer a complete view of those elements that characterize the organizational context of Telenor, the organizational logics operating in the intraorganizational environment and how they impact service design. Finally, there is insufficient clarity on the role of individuals in the processes of adoption of service design and their impact on organizational logics (and vice versa). This research will contribute to address these limitations and to increase our understanding of the phenomenon.

Chapter 3: Research Context

The Telenor Service Design Lab is a space where people can come and work on their conditions, not through the traditional Telenor way of doing things. Interviewee, Telenor Group

This study has seen the involvement of nine companies. These organizations are large, western organizations that opted to embrace service design to tackle a business challenge to maintain or improve their market position. Table 4 presents an overview of the nine organizations selected for the study. The names of the companies have been anonymized for privacy issues. The table shows the industry each organization operates in, number of employees, type of organization, country of headquarter, start year and scope of the service design project under analysis, and state of implementation of the project. Most organizations, the exception being IT, operate globally.

Company Reference	Industry	Number of Employees	Туре	HQ	Project Start and Scope	Implementation
Financial services	Banking, financial services	250,000+	Public	USA	2013 - Improving the ability to resolve critical incidents	Partially implemented
Professional services	Procurement and supply chain management	250+	Public	UK	2015 - Service specification for IT platform	In progress of implementation
IT	IT professional services for education	600+	Not-for- profit	UK	2014 - Customer- reporting framework	Partially implemented
Manufacturing	Component manufacturer for industrial applications	25,000+	Private	Denmark	2012 - Service strategy	Not implemented
Automotive	Automotive	600,000+	Public	Germany	2010 - Scoping of a new service for car sharing	Pilot phase
Pharma	Pharmaceutical	120,000+	Public	USA	2011 - Service strategy for new drug	Not implemented
Insurance	Insurance	3,000+	Public	Norway	2013 - Customer orientation of	Fully implemented

Table 4. Overview of the organizations included in the study.

					the commercial area	
Engineering	Engineering and service company	50,000+	Public	Finland	2015 - Service strategy and offering	Fully implemented
Telecom	Telecom	30,000+	Public	Norway	2016 - Service offer for families	In progress of implementation

I will now provide a brief overview of the first eight organizations, and a detailed analysis of the setting characterizing the ninth organization. The Telecom company has indeed been used as a research setting for the in-depth case study, thus offering more empirical material and requiring a more precise analysis. It is useful to note that when mentioning the word *sponsor*, I refer to the person commissioning and leading the service design project in each organization. Usually, the sponsor is a head or director of function—often within marketing, innovation, or customer experience.

3.1. Financial Services

The selected organization is a multinational banking and financial services holding company, headquartered in the US. It is one of the largest in its sector. The decision to start a service design project followed an incident with a key account that caused the loss of the client. Thus, the project aimed at improving the ability to resolve critical incidents. The sponsor was based in London (UK) and was the UX Design Manager and Community Leader. His personal objective with the project was to create an opportunity to generate a case on how customer experience can drive prioritization and decision making, and how service design thinking could be used as a business tool. He left the organization just at the end of the project to move on with his career in another large corporation in a different sector. The project was a one-off and was only partially implemented.

3.2. Professional Services

The selected organization is a UK-based register for pre-qualified contractors and consultants. At the time of the study, the company had recently been acquired by a large UK-based professional services multinational with more than 75,000 employees. Due to the new acquisition, the decision to go for service design had to go through intricate layers of stakeholders and decision makers. The process took a few years. Faced by the task of rebuilding one of their key IT platforms, the sponsor

opted for service design, aiming at tackling the challenge through an outside-in, human-centered approach. The personal objective of the sponsor was to generate a case to prove the validity of the service design approach and create internal traction.

3.3. IT

The selected organization provides specialized IT services to universities and colleges across the UK. At the time of this study, the company was shifting from a model where it was fully funded by the government to a model where it is directly funded by the different universities and colleges. This shift generated pressure to start understanding real customers' needs and wants, and to ensure the offer was appealing to the existing client base. The project sponsor was the Director Group Sector Intelligence, who had the task to create a customer-reporting framework. The scope of the project changed on the run to focus increasingly more on the understanding of customers. The sponsor's personal objective was to try and establish service design as a core business process in the organization.

3.4. Manufacturing

The selected company is a global producer of business-to-business products and services. Its offerings range from air conditioning to compressors. The sponsor was new in the organization when the project started and had the task to develop a brandnew service strategy. The firm was going through a period of turmoil with a sudden change of leadership and strong political issues. The project did not get implemented. The sponsor left the company shortly after the end of the project.

3.5. Automotive

The selected organization is one of the largest automotive firms in Europe. The objective of the project was to create a brand-new offering for car sharing. The firm had, and still has, an internal service design team. At the time of this study the project was still at pilot stage.

3.6. Pharma

The selected company is a US-headquartered multinational specializing in manufacturing medical devices, and pharmaceutical and consumer packaged goods. The project's focus was to create a service offering around a new drug. The drug

eventually ended up failing medical trials; the project therefore never got implemented. The sponsor left the company shortly after.

3.7. Insurance

The selected organization is one of the largest Scandinavian general insurers. The Director of the Commercial Business area strongly believed in the need to customerorient the area and assigned to the Head of Branding and Customer Experience the task to investigate how best to do that. The project sponsor opted to make use of service design to customer-orient the commercial business area. The project was fully implemented and perceived as extremely successful.

3.8. Engineering

The selected organization is a specialized engineering firm headquartered in Finland. The company has an internal service design team. The company is historically very product focused. The project aimed at creating a brand-new service strategy and offering. The project was fully implemented, and included employees training on service design approaches, methods, and tools. The sponsor left the organization shortly after the end of the project.

3.9. Telecom

While the first eight companies requested to be anonymized, the ninth accepted to be openly named. The company is Telenor Group, a large, for-profit telecom organization headquartered in Norway. Telenor provided the research setting for the in-depth case study (Study2). Thus, as we'll see in the next chapter, the data collected for this case are broader and deeper, encompassing multiple interviews, observations, and secondary sources (such as website and social media channels) offering thicker empirical material.

Telenor Group is one of the world's major mobile operators. It was founded in 1855, and handles 211 million mobile subscriptions, operating directly in 13 markets, and in another 14 through their ownership of VimpelCom (Telenor, 2016). The company employs 36,000 people worldwide, with a turnover of US\$15.6B and a market value of US\$24.6B in 2016 (Forbes, 2016). Telenor HQ is in Oslo, Norway (see Figure 9).



Figure 9. Telenor HQ in Fornebu, Oslo (Norway). Own picture.

Telenor, as with all the major telecoms, has recently found itself pressured by the market to servitize. As with any traditional telco, Telenor's legacy is represented by products, although intangible, under the form of price plans. Its core products are identified as subscriptions to data, voice minutes, and SMSs. Interviewees refer to a shift "from owning to accessing," driven by customers' expectations towards flexible relationships and customized services. Such a shift is identified as fundamentally challenging the very core of Telenor's business model and its way of organizing to deliver value. The need to move from a product logic to a service one, does not only derive from customers' demands but also becomes apparent from pressing competition that no longer resides solely within the telco industry. Indeed, competition has arisen from several different parties in adjacent sectors, such as Skype and Facebook. Such players are referred to by several interviewees as "other types of beasts," meaning organizations that are digital native, that act differently, characterized by an intrinsic agility to adjust to market demands. Telenor is not a digital native; it is large, and certainly not agile. Thus, digitalization represents another pressure driver for change.

As stated in the introduction to this thesis, digitalization is regarded as one of the key drivers for disruption in the telecom industry (Grossman, 2016). Consumers expect well-functioning, beautifully made, customized digital apps and platforms as the integral part of the services they use. However, digitalization, as well as servitization, pose several challenges on how to perform the organizational transformation needed to keep up with customer expectations and current technological developments. The need to digitize is understood as a priority for Telenor to keep up with competition. In Telenor, digitalization implies both digitalizing customer-facing services and the core of its operations.

In 2013, driven by this clear need to change, Telenor announced its new strategy: Digital Service Provider Vision 2020. This has recently been reworded to Customers' Favorite Partner in Digital Life (Telenor, 2016), and revolves around four key pillars: (1) loved by customers, (2) engaging digital products, (3) winning team, and (4) most efficient operator (Telenor, 2016) (see Appendix 2 for details on the current strategy). The shift seems to be one from products to superior customer experience driven by digital technology. As part of this push towards digital services and experiences, Telenor defines a list of key capabilities needed going forward. Most of these capabilities are certainly technical and related to digital, such as IT architecture and big data analytics. In addition to the technical capabilities, there is also service design, which is positioned as a key capability for Telenor to develop in the future, in view of delivering on their current strategy. Because of the positioning of service design as one of Telenor's key capabilities to master, service design has started to spread across the organization. A Telenor Service Design Process has been developed, and a "Service Design Academy" rolled out with the objective to train leaders and managers in this new way of working. In late 2015, Telenor Norway established its first Service Design Lab.

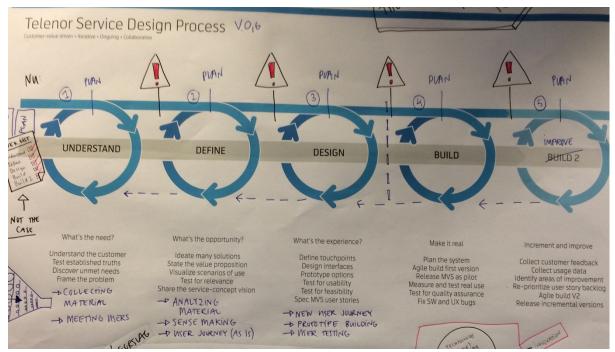


Figure 10. The Telenor Service Design Process. Picture taken during the observation of the Service Design Lab at Telenor HQ, Oslo. Own picture.

Figure 10 shares the service design process adopted by Telenor, which the company developed in collaboration with the design studio Designit. The model builds on the *Double Diamond* and encompasses five phases: *understand* customers' needs and wants, *define* the opportunity area to develop solutions, *design* the experience, *build* prototypes and pilots, and *improve* continuously and iteratively.

The Telenor Service Design Lab hires eight designers whose focus can be described around three major pillars:

- 1. Validate Design. Validate the service design process through a pilot project (the Family Project started at the beginning of 2016 to prove the value of service design).
- 2. **Do Design**. Establish supporting teams in other departments to ensure that customers' needs and wants, as well as elements of user experience, are part of the new product or service development processes.
- 3. **Build Design**. Develop service design capabilities across Telenor Norway through training.

The Service Design Team has been positioned under the Technology Department, five layers down from the CEO. Such positioning implies that any decision concerning the lab requires five layers of decision makers' approval. Figure 11 shows a picture taken during the observation of the Service Design Lab, displaying the organizational structure of Telenor Norway. The black circle in the figure highlights the positioning of the lab within the organizational structure. Interviewees have often referred to this picture during the interviews to clarify their positioning and the distress associated with it. Being positioned five layers under the CEO means that decisions take time to be agreed, requiring multiple negotiations among several stakeholders. Moreover, the Technology Department is by its very nature technology motivated, favoring a technology-driven approach to innovation and new service development, rather than the human-centered approach of service design.



Figure 11. Telenor Norway's organizational structure. The black circle underlines the positioning of the service design team. Own picture, taken during the observation of the Service Design Lab at Telenor HQ in Oslo.

Another interesting observation that emerged during the visit undertaken at the Telenor HQ is the physical positioning of the lab within the main building. The lab is hidden behind a thick and secured door (left-hand photo in Figure 12). Only those employees (mainly designers) working in the lab have access, and it is not possible to see what's happening in the space from the outside. In order to enter, guests need to be escorted by one of the designers working in the lab. It is possible to request a guest pass, but it takes time to obtain it, and it requires a convincing reason as to why it is needed. During my one-week visit, I was always escorted by my Telenor contact when entering or leaving the lab. Figure 12 (right-hand photo) shows the reception of the lab, indicating this is an office within the office, a secluded space that needs its own additional reception. The space inside is extremely "designerly," displaying design furniture, Mac computers, open spaces with glass walls and whiteboards, and inspirational quotes on the walls by some design gurus (see Figures 13 and 14). The space—that would appear to be designed for informal use and to be accessed during project work—is actually quite empty. As already mentioned, only eight designers work in the lab, making it not very buzzy with people and energy.



Figure 12. Entrance to the Service Design Lab. On the left is the secured door to access the lab, on the right the lab reception. Own photo.

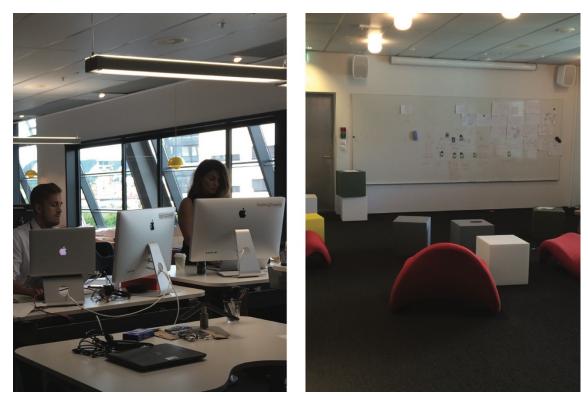


Figure 13. Interior of the Service Design Lab. On the left a few employees working at their desks. On the right a workshop area. Own photos.



Figure 14. Interior of the Service Design Lab. On the left, one of the designers working with a team on a project. On the right, one of the inspirational quotes on the walls. Own photos.

The lab has a public Instagram account (see Figure 15) managed by the designers themselves. The account is set up to share the work developed in the lab to external audiences, mainly service design talent as potential new recruits. Telenor is a big corporation, not considered an ideal employer by service designers, thus the profile is set up to showcase that Telenor has a service design team developing interesting work. The content shared in the profile mainly concerns the process, the team, and the work environment; communicating a fun, informal, and designerly place to work, far from the common perception of a corporate environment. In terms of the lab's outcomes, the only project that emerged from the lab itself—and that is fully guided by service design—is the Family Project. In addition to that, service designers are involved in several other projects across the organization, acting as "design consultants" for different business units. Their role is mainly to facilitate creative processes and cross-departmental work, and to orchestrate the content development. As service design commonly operates within a project environment, it is important to explain the nature of these projects and the way they have been established and rolled out. It is useful to present this information, as I will often refer to these projects in the findings of Study2 to exemplify some of the insights shared in Chapter 5. The next four sections will analyze four distinct projects.



telenorservicedesignlab 242 posts 565 followers 276 following Telenor Service Design Lab Creating better solutions for our customers www.linkedin.com/jobs/view/service-designer-at-telenor-561648703







Telenor · For













































Figure 15. Instagram profile of the Telenor Service Design Lab. Accessed March 2018.

3.9.1. Family Project

This is the first pilot in Telenor Norway to fully follow the Telenor Service Design Process. The project belongs to the Mobile division, and its objective is to create a new tailored offering for Norwegian families. The project was staffed from the very beginning with two senior service designers, who dedicated 100% of their time to the project. The two designers were joined by several representatives from different pockets of the organization: IT, Marketing, Product, and Customer Service. These representatives were part of the core team but dedicated 40–60% of their time to the project.

At the beginning of the project, the Lead Service Designer was acting as project manager. The team had to report back to the Mobile division that granted freedom and flexibility to the service design team to run the project as they thought best. The project began with the first phase of the Telenor Service Design Process, Understand —a three-month period dedicated to conducting design research to gain insights into families' needs and wants. The insights emerging from this phase resulted in a brand-new way to segment families based on the age of children, which indeed emerged as a key indicator for families' behaviors, needs, and challenges. The following phase, *Define*, had the objective of generating ideas to respond to the needs emerging from phase-one. A total of 100 ideas were generated by key representatives from the Mobile, Business, Fixed and TV, Group, and Technology divisions. These 100 ideas were funneled into 12 concepts that were storyboarded and tested with customers and employees. Through this validation session, the concepts were reduced to 8, out of which 4 were selected to be developed further. Phases one and two (Understand and Define) took six months in total. The end of the six months represented a critical moment for the project since, as part of the new Digital Service Strategy, the Mobile division created an innovation plan and selected a new Head of Innovation #2. The Head of Innovation immediately took a substantial interest in the project, joined the steering committee, and started to heavily influence it. More specifically, the Head of Innovation assigned a new project manager to the project, who was unfamiliar with the service design process but mostly familiar with lean thinking due to her tech startups background.

The following phase of the project was *Design*, where the concepts were developed further, and several prototypes constructed to be tested with customers. This was followed by *Build*, encompassing implementation and the go-to-market. If, during

the *Design* phase, the team had mainly focused on the product itself (the app), then the *Build* phase required to rethink the service around it. Thus, strong conflicts arose between the two service designers on the one side, and the new project manager on the other. These conflicts were driven mainly by their profound different views (design vs. tech) and objectives (validating service design in Telenor vs. delivering a product as soon as possible to the market). The tension between the designers and the new project manager escalated to the point that the project stalled. The issue has been escalated to the next level of leadership to be resolved. The project was still ongoing at the time of data collection.

3.9.2. Internet for all

This is an example of a project where the service design team acts as consultants for a project developed and owned by another division. The division developing the project is Mobile. The objective was to engage elderly people to use smartphones and tablets. The team produced online guidelines for elderly people to be able to learn how to use a phone or tablet in eight steps. The program was presented during a large event at Telenor Arena, where 3,000 seniors were invited to participate to test the guidelines and material created (see Figure 16). The project is fully implemented. Internet for All is a successful project in terms of its implementation, but less successful in terms of process. The designer and the team of the Mobile Division failed to work together as one team. From a customer experience perspective, there was no clarity on who was supposed to lead the project. Such uncertainty became a source of tension between team members.



Figure 16. One of the seniors testing the eight steps to learn how to use a smart phone. Source: www.telenor.com.

3.9.3. Connect idea

This is another example of a project where service designers acted as consultants. The division was Group Technology, which asked the Service Design Lab to work on the implementation of a login system in Norway that was already used in other countries. The team objective was to find out how to make the transition easier from a customer perspective. While the team started analyzing the potential effect on customers going from the old login solution to the new one, the service design team realized that the implementation could not be run as in other countries, due to specific Norwegian legal restrictions and data privacy regulations. However, the decision of what to do and how to do it had already been taken prior to the designers' involvement, leaving very little room for decision making and changing plan. The uncertainty on how to operate from all parties involved produced stasis, relegating the project to a lengthy, still ongoing, analysis phase.

3.9.4. Customer lifecycle management

This is a third example of a project where the service design team acted as project consultants. The objective was to create personalized offers by learning about users' behaviors. The focus was on making use of already existing data analytics to learn about users' behavior, and to use these insights to create automated, personalized offers. The project was initially considered, by the owning department, as a data-driven project, a technical piece of work with virtually no impact on customers. The service design team, aware of the impact that such automated offers could potentially have on customers, forced themselves into the project. Risks were mainly perceived around communication and privacy. As a result, the project lead reacted positively, and invested into the creation of a new privacy strategy and dashboard.

3.9.5. Projects summary

Table 5 presents a summary of the four projects as a reference for the reader.

 Table 5. Summary of service design project examples in Telenor.

SERVICE DESIGN DRIVEN PROJECT

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Family Project

Objective	New offering for Norwegian families
Division	Mobile
Informants	Senior UX Specialist (Telenor Norway); Head of Innovation #1 (Telenor Group); Senior UX Designer (Telenor Norway); Head of Innovation #2 (Telenor Norway); Business Developer and Project Manager (Telenor Norway); Senior Service Designer (Telenor Norway)
Current Phase	Ongoing

Title	Internet for All
Objective	Engaging elderly people to use smartphones and tablets
Division	Mobile
Informants	Head of eHealth (Telenor Norway); Senior Service Designer (Telenor Norway)
Current Phase	Implemented
Title	Connect Idea
Objective	Provide customers with single login details to be used across different platforms
Division	Group Technology
Informants	Senior Service Designer (Telenor Norway)
Current Phase	Ongoing
Title	Customer Lifecycle Management
Objective	Creating personalized offers by learning about users' behaviors
Division	N/a
Informants	Senior Service Designer (Telenor Norway)
Current Phase	Ongoing

EXAMPLES OF CONSULTING PROJECTS FOR DIFFERENT DEPARTMENTS

Chapter 4: Research Design & Methodology

The core requisites for qualitative analysis seem to be a little creativity, systematic doggedness, some good conceptual sensibilities, and cognitive flexibility—the capacity to rapidly undo your way of construing or transforming the data and to try another, more promising tack.

Miles & Huberman, 1994, p. 309

This chapter presents my research design and methodological approach. First, I'll share a reflection on the research approach, then I will present the data collection and analysis, to conclude with a reflection on validity and on the researcher's role.

4.1. Research Approach

This study makes use of a qualitative research approach; that is, a form of inquiry "for exploring and understanding the meaning individuals or groups ascribe to a social or human problem" (Creswell, 2014, p. 4). The understanding of researchers' approach to research involves the identification of three fundamental components: philosophical assumptions, research design, and specific methods (Creswell, 2014). The three components are interconnected. In planning a study, researchers need to reflect on the philosophical *worldview* assumptions that they inevitably bring to the study, the relevant research design related to the worldview, and the specific research methods that can translate the worldview and research design into practice. In this section, I'll unfold each of the three components characterizing the qualitative approach of this study, specifying the philosophical assumptions, research design, and methods.

4.1.1. Philosophical worldviews

Creswell (2014) makes use of the term *worldviews* to refer to the philosophical assumptions that researchers bring to the study. A worldview represents the "basic set of beliefs that guide action" (Guba, 1990). Other authors have referred to the concept of philosophical assumptions as *paradigms* (Lincoln, et al., 2011; Mertens, 2015), or *epistemologies* and *ontologies* (Crotty, 1998). For researchers, being

explicit about their worldview implies the identification of the underlying assumptions that will guide the research. Literature discerns four main worldviews: postpositivism, social constructivism, transformative, and pragmatism (Creswell, 2014). The present thesis builds on a social constructivist worldview. The foundations of social constructivism can be found in the work of Berger and Luckmann (1967) and Lincoln and Guba (1985). More recently, the position has been summarized by authors such as Crotty (1998), Lincoln, Lynham, and Guba (2011), and Mertens (2015). Creswell argues that "social constructivists believe that individuals seek understanding of the world in which they live in and work" (2014, p. 8). The fundamental assumption is that individuals attach certain meanings to their experiences that are multiple and diverse.

Thus, the researcher is led to look for the complexity of views rather than narrowing these views into a few categories. Questions asked to participants are usually broad and generic to enable individuals to focus on what they care the most, expressing their views. Social constructivists not only focus on the meanings that participants attach to their experiences, but also on the interactions among individuals and the specific context within which they operate—that is, historical and cultural settings. Researchers position themselves into the context, acknowledging that their background and knowledge affects the interpretation of what is shared by participants. Social constructivists do not start from theory to seek an understanding of the phenomenon under analysis, rather they interpret the meanings individuals have about the world and inductively develop theory. Crotty (1998) summarizes the assumptions characterizing social constructivism as follows:

- Individuals construct meanings as they interpret their experiences. Thus, researchers tend to ask open-ended questions to let different views emerge.
- Individuals' historical and social contexts affect the interpretation they make of the world. Thus, researchers tend to understand the context and setting within which individuals operate.
- Meaning generation is always social, arising from interaction with other human beings. Thus, the process is inductive, the researcher generates meaning from the data collected in the field.

Therefore, the ontological position (the philosophy of reality) of social constructivism is local (Lincoln, et al., 2011). Realities are constructed through the interpretation of individuals. The epistemological position (the philosophy of

knowledge) is subjectivist and generated through findings (Lincoln, et al., 2011). I married the social constructivist worldview early in this research journey. Such a standpoint has enabled me to embrace complexity, tracing meanings in each participant's experience. Moreover, I tried whenever possible to understand and experience participants' settings. Finally, I let the data guide my interpretation, landing on the institutional logics perspective towards the end of my journey, when data was already collected for both studies, and a preliminary round of coding was already completed. I have indeed explored several organizational theories in my journey (e.g., bureaucracy, sense making, organizational identity, and culture), selecting institutional theory as useful to interpret and to reflect on my findings as they emerged.

4.1.2. Research design and methods

The second component characterizing the inquirer's research approach is the research design. This study makes use of a qualitative and interpretive research design. Such research design is characterized by emerging research questions, data often collected in participants' settings, and data analysis building inductively from particulars to general themes, where the researcher interprets the meaning of the data collected (Creswell, 2014). Researchers who opt to embrace this form of inquiry embrace an inductive style, focusing on individual meaning, internalizing the complexity of the situation at hand. As noted, the social constructivist view focuses on members' negotiation of shared meaning, placing the attention on the shared interpretive schemes that actors collectively construct to offer meaning to the organizational experience (Gioia, et al., 2000; Gioia, et al., 2010). Thus, the qualitative and interpretive research design fits well with the social constructivist worldview characterizing this piece of research.

Researchers do not only select whether the study is to be qualitative, quantitative, or mixed methods, but also decide on a specific type of study within these three choices (Creswell, 2014). Within a qualitative research approach, there are multiple research designs available to inquirers. The most common five found in literature are: narrative research, phenomenological research, grounded theory, ethnography, and case studies (Creswell, 2014). This research employs a case study research design. The three most prominent scholars who have contributed to the definition of a specific process for case study research are Robert Yin, Sharan Merriam, and

Robert Stake (Yazan, 2015; Harrison, et al., 2017). It is worth noting that each of these three authors have their own specific epistemological orientations that impact their perspectives. Harrison and colleagues (2017), in a precise analysis of the foundations and methodological orientations of case study research, summarize the three epistemic commitments as follows:

- Yin: Realist-postpositivist. The focus is on maintaining objectivity.
- *Merriam: Pragmatic constructivist.* Reality is assumed to be constructed subjectively through meanings developed socially and experientially.
- *Stake: Constructivist/interpretivist.* The interpretive role of the researcher is paramount in the research process.

Given the nature of this research, building on a social constructivist worldview, I will primarily utilize Stake (1995), and Merriam and Tisdell's (2016) perspectives to inform the research design. Stake (1995) defines case study research as "the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances" (p. xi). Merriam and Tisdell (2016), in their definition of case study, include the object of study and products of research. They define a case study as "an in-depth description and analysis of a bounded system" (p. 37). The authors emphasize that the case study is the object of study, and that the product of inquiry should be descriptive and heuristic.

The third major component in the definition of a research approach are the research methods, including forms of data collection, analysis, and interpretation that the researcher proposes for the study (Creswell, 2014). In a precise overview of the qualitative case study methodology, Baxter and Jack (2008) argue that researchers need to identify the following key elements when designing and implementing qualitative case study research projects:

- Determining the unit of analysis. According to Merriam and Tisdel (2016): "The unit of analysis, *not* the topic of investigation, characterizes a case study" (Merriam & Tisdell, 2016, p. 38). Thus, the unit of analysis—the bounded system—defines the case. Examples of units of analysis are the individual, a program, or a procedure. In my case, the unit of analysis is the *constellation of logics*.
- **Binding the case.** It is important for researchers to specify what the case is *not* about. Both Yin (2009) and Stake (1995) suggest that placing boundaries

on a case can prevent the scope becoming too broad. In the case of this research, the case is not about the service design practice per se.

• Determining the type of case study. Yin (2009) categorizes case studies as *critical* cases to test a specific theory; *extreme* cases where something out of the ordinary seems to be occurring; or *revelatory* cases that offer the possibility to gain further insights into an understudied phenomenon. Stake (1995) identifies case studies as *intrinsic*, when the researcher has a genuine interest in the case; *instrumental*, providing insight into an issue or helping to refine a theory; or *collective*, multi-case studies that enable researchers to explore differences within and between cases. This research project makes use of a revelatory case study, Telenor Group, offering the possibility to gain further insights into an understudied phenomenon.

4.2. Data Collection

As anticipated in the empirical chapter, this study has seen the involvement of nine companies. I first collected data in the nine organizations in an exploratory fashion, to understand how service design played out in each organization and the level of service design adoption characterizing each firm. I refer to this first study as Study1. This study is characterized by exploratory, in-depth interviews with a limited number of respondents. Following, I have selected one of the nine organizations to be studied in more depth, providing the setting for the in-depth case study. The selection has been guided by the availability of the organizations under analysis and by the characteristics of the specific organization. The in-depth case aims at understanding the organizational environment within which service design is introduced and the way the mechanisms that contribute to establish service design operate in the organization under analysis. I refer to this second study as Study2. Figure 17 provides an overview of the nine companies involved and the level of depth of the analysis.

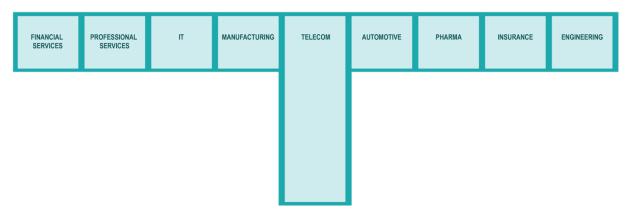


Figure 17. Study1 (horizontal), Study2 (vertical).

The nine organizations were selected from Livework's existing clients, being easily accessible due to my proximity to the design studio. I had to rely on Livework's partners to establish a contact with the companies to be included in the study. The organizations were theoretically sampled with the aim of simultaneously investigating different theoretical categories and "extreme cases"— ideal settings, in which the phenomenon of interest is "transparently observable" (Eisenhardt, 1989; Pettigrew, 1990). To cover the different categories, companies were included that pursued projects of various types and strategic scopes in terms of the challenge to be addressed with service design. The criteria used for the sampling can be summarized as follows:

- I tried to ensure a broad selection of industries to avoid the research results (especially in the case of Study1) being tight to a specific sector.
- I've selected polar cases, extreme representations of different possible project outcomes (e.g., success examples, failure examples, projects that have been changing scope underway).
- I have excluded startups, SMEs, and governmental agencies, focusing mainly on large privately or publicly held organizations. I have selected organizations with more than 250 employees, thus considered large organizations.
- I have selected only organizations headquartered in the western world (Europe or USA) to avoid contingency factors such as culture.
- Finally, the sampling has been affected by the availability of each organization's employees to be interviewed.

For both studies, data were collected from at least two main sources: (1) interviews with key referents, and (2) secondary sources such as project documentation (e.g.,

reports, presentations, supporting visual material), websites, and/or social media channels. In the case of Study2, one week of informal observation was also performed.

Study1 is exploratory, which is particularly appropriate when there is limited theoretical knowledge on the phenomenon under study (Eisenhardt, 1989; Yin, 2009). Primary data resulted from in-depth interviews with key informants (Eisenhardt, 1989). A dyadic approach was used. For each case, interviews were held with both the sponsor of the project from the client organization and the service design professional from the Livework team involved in the work (see Table 6 for interviewees' details). As explained earlier, the sponsor is the person commissioning and/or leading the service design project. Sponsors are key informants as they have an overview of the entire project and its follow up in the organization. The service design professional is also key to integrate and back up the sponsor's insights, and to obtain an overview of the service design activities and tools used in the project.

A total of 16 interviews were conducted, each lasting 60–90 minutes. The interviews were retrospective, semi-structured, and focused on the following topics: (1) project content (objectives, stakeholders, process); (2) extent of project implementation; (3) critical moments and challenges; and (4) perceived enabling factors for both the successful development of the specific project, and the emergence and diffusion of service design in the specific organization. Appendix 3 shares the interview schedule used as the guideline to run the interviews. Although most questions were generic in respect to the introduction and adoption of service design in each organization, I asked each interviewe to select a representative project to talk about and to use it to exemplify statements. I did this to ensure statements were grounded in specific examples and less abstract. Some of the organizations have indeed run several projects; for example, in the case of the Insurance company, the organization ran 38 projects in the last seven years using a service design approach. Thus, choosing one representative project has helped the interviewee to be specific in describing outcomes, challenges, and enabling factors.

#	Role	Organization	Project Discussed
1.	UX Design Manager and Community Leader	Financial services	Resolution of critical incidents
2.	Project Manager	Professional services	Service specification for IT platform
3.	Director Group Sector Intelligence	ІТ	Customer-reporting framework
4.	Deputy Chief Innovation Officer	т	Stakeholders' engagement
5.	Head of Marketing and Strategy	Manufacturing	Service strategy
6.	Business Innovation Manager	Automotive	Car sharing
7.	Senior Manager, Design Research	Pharma	Service strategy for new drug
8.	Head of Branding and Customer Experience	Insurance	Customer orientation of the commercial area
9.	Senior Design Specialist	Engineering	Service strategy and offering
10.	Senior UX Designer, Telenor Norway	Telecom	Service offer for families
11.	Partner #1	Livework	IT Manufacturing Pharma Engineering
12.	Partner #2	Livework	Automotive Insurance Telecom
13.	Partner #3	Livework	Professional services Financial services
14.	Director	Livework	Professional services
15.	Head of Design	Livework	IT Engineering
16.	Senior Service Designer	Livework	Engineering

Table 6. Details on interviewees for Study1.

Study2 saw the development of an in-depth case study on service design in an organizational context, using Telenor Group as the research setting. My access point to the organization has been a Head of Innovation #1 focused on design-driven innovation, who has been one of the main promoters of service design in Telenor. She is also Research Director of Service Design & Innovation at the Center for

Service Innovation (CSI), coordinated by the Norwegian School of Economics (NHH). Having struggled with the introduction and adoption of service design in Telenor, the Head of Innovation supported my research by giving me access to Telenor for one-week observation and interviewees. She identified and suggested key informants to be interviewed across the organization, who have been exposed or actively involved with service design in Telenor. To extend the sample of relevant interviewees suggested, I also used a snowballing technique (Yin, 1984)—each interviewee was asked to suggest somebody else in Telenor to be interviewed. I favored suggestions for extra interviewees that could complement each interviewee's perspective; for example, when interviewing designers, I often asked to be put in contact with a non-designer they had worked with in the past on a service design related project. This approach enabled me to interview actors both at the center and at the periphery of the service design discourse in Telenor, showcasing different and sometimes competing interpretations.

In total, 20 interviews were conducted (see Table 7 for details on informants). Interviews were semi-structured, allowing open-ended probes, and ranged from 30 minutes to 3 hours depending on the interviewee availability. The interview guide comprised four sections: (1) the informant's background and his/her role in the organization; (2) service design in Telenor (including emergence, diffusion, established routines); (3) perceived benefits and challenges related to service design; and (4) overall organizational strategy and the potential role of service design in its achievement. Appendix 4 shows a high-level interview schedule used to guide most of the interviews.

#	Job Role	Business Unit & Country	Profile
1.	Senior Vice President #1	Telenor Group, Norway	Heading a unit in group HR. Dealing with HR development areas from culture, values, brand, employee engagement, change management, and transformation. Operating at global level. Also responsible for digital and collaboration tools.
2.	Senior UX Specialist	Telenor Norway	Working for Telenor for the past 6 years, always in the role of interaction designer. Part of the Service Design Lab but mainly working to advise other divisions on customer experience sensitive projects.

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3.	Head of Innovation #1	Telenor Group, Norway	Focusing on design-driven innovation, selecting and embedding new approaches to innovation for Telenor going forward.
4.	Senior Vice President #2	Telenor Group, Norway	Heading the research unit. Not actively involved in projects but having a strategic management and leadership position to influence decision making and future trajectories for Telenor going forward.
5.	Change Manager	Telenor Denmark	Working for Telenor for the last 8 years as internal consultant / project manager. In May 2016, became change manager for the digital transformation.
6.	Senior UX Designer	Telenor Norway	Service design lead, managing the service design lab. She has personnel responsibility for all the service designers in addition to prioritizing the types of project designers should work on and approach. She also sits in a few project committees.
7.	Head of Academy	Telenor Group, Norway	Working within the learning and development department. Heading up the academy, focusing on leadership and experts' training. The training focuses on critical capability areas.
8.	Vice President	Telenor Group, Norway	Responsible for change management in Telenor's global transformation program. His focus is to develop, utilize, and get momentum behind the different tools that Telenor is trying to use to spark change in the organization. The change agenda is based on their 2020 strategy plan.
9.	Head of Innovation #2	Telenor Norway	In this position since February 2016. Before, he was CEO for Cable and TV. He is leader of the steering group for the Family Project (the project that is piloting service design at Telenor). The project manager of the Family Project reports to him.
10.	Products and Systems Experience Design Manager	Telenor Serbia	The oldest Telenor Serbia's employee. He has been in the company for 10 years. He is responsible for 3 teams: user experience and process design, product and systems development, and frontline systems. He reports to the Service Design and Channel Management Director, who reports to the Chief Marketing Officer.
11.	Media Specialist	Telenor Serbia	Communication team.
12.	Head of eHealth	Telenor Norway	eHealth is a business-to-business group performing business development for the eHealth sector. Previously he was head of market communications in the mobile division.
13.	Product Manager	Telenor Norway	Concept developer working for the Head of eHealth.
14.	Service Designer	Telenor Norway	Joined Telenor in January 2016. Part of the Service Design Lab.
15.	Project Manager	Telenor Norway	Joined Telenor in May 2016. Her background is in tech startups.
16.	Senior Service Designer #1	Telenor Norway	Joined Telenor one month earlier than the setup of the Service Design Lab. One of the most senior designers in the Lab.

17.	Senior Service Designer #2	Telenor Norway	Joined Telenor in 2013. Her role is Senior Service Designer, but she also works with communicating service design within the organization. She curates the Instagram profile for the Service design Lab.
18.	Digital Experience Manager	Telenor Serbia	Leading the team responsible for user experience of online channels. His team is therefore responsible for creating, developing, and maintaining their mobile app, website, and self- care portal for the consumer and business segments. His team is also responsible for the website of Telenor Bank in Serbia. Covering both markets of Serbia and Montenegro.
19.	Project Director Service Design	Telenor Group	One of the key figures supporting the introduction and diffusion of service design in Telenor. He reports to the CMO under the consumer division.
20.	Service Design Lead	Telenor Hungary	Part of digital service department, reporting to the strategy director. His team focuses on digital service strategy and service design. He is also senior advisor, advising on digital strategy and methodologies like Agile. Prior to joining Telenor, he worked in Microsoft for 15 years.

Following Gioia and Thomas's approach (1996), in both studies I encouraged interviewees to use their own terminology, and to steer the discussion towards topics that were of great importance to them. All interviews were audio recorded and transcribed verbatim as soon as possible. After each interview, I compiled a case summary that included field notes, emerging patterns, and alternative explanations (Miles & Huberman, 1994). Since the data collection relied heavily on retrospective interviews, I followed the suggestions of prior researchers (Miles & Huberman, 1994; Miller, et al., 1997; Eisenhardt & Graebner, 2007) and took precautionary and corrective actions. First, the study objectives and data collection process were clearly explained to the interviewes to ensure the confidentiality of the interviews and results. Second, free reporting was encouraged, allowing respondents not to answer a question if they did not remember clearly. Third, I triangulated interview data by posing the same questions to multiple participants (this happened specifically for Study2).

Primary data for both Study1 and Study2 have been complemented by secondary sources. In the case of Study1, the secondary data set has been mainly constituted by project documentation (including project briefs and proposals, reports, presentations, and supporting visual material). Such projects documentation was provided both from company referents and from the Livework service design professional who curated the project and client relationship. I used projects documentation to clarify interviewees' references to specific project outcomes. In

the case of Study2, I had no access to project documentation due to the confidentiality of the projects that were still ongoing. However, I made extensive use of Telenor's official website and the Service Design Lab's Instagram account. I analyzed the website to gather general information about Telenor and details on its current strategy (both described in Chapter 3). Many informants have indeed directed me to the website to source official information on Telenor's current strategy. It's important to note that the content of the strategy page on the website has slightly changed during the time of this study. Data shared here refer to the Our Strategy page as accessed on January 2017 (see Appendix 2 for details on the webpage's content during data collection.) I have also made use of the Lab's Instagram profile, to better grasp the narrative the service design team chooses to describe their mission and identity. While the Telenor's official website is managed by the marketing department, the Lab's Instagram profile is directly managed by the service designers themselves. Thus, the language and content shared in the two channels are quite different. The second is certainly more informal, enabling the designers' view of their workplace to emerge.

Data from Study2 were also complemented by a one-week observation period at the Service Design Lab in Telenor, Norway. The observation focused on understanding the space of the Service Design Lab and the interactions among service designers. The observation was extremely beneficial in adding an extra level of analysis to what referents shared during the interviews. The observation was also beneficial to stimulate informal encounters. During the week I spent at Telenor HQ, a 2-day Telenor Academy training was rolling out in the same hotel where I was staying. The training was on design thinking and involved 30 change managers from across regions. The training was led by two representatives of the Stanford D-School. I was invited to join and observe the session. I observed the team dynamics for a few hours and interviewed a few of the change managers attending the training. Figure 18 shows a picture of the group working together. As we were all staying at the same hotel, I also had the chance to engage participants in informal conversations on their experience with design thinking and service design on multiple occasions.



Figure 18. Design Thinking training delivered by the Stanford D. School for 30 Telenor change managers from across regions. Own photo.

4.3. Data Analysis

This research is qualitative and fundamentally interpretative in its approach. Study1 is exploratory, while Study2 is an in-depth case developed on a single setting selected as revelatory—offering the possibility to gain further insights into the understudied phenomenon of service design in an organizational context. Gioia and colleagues have mastered the use of an interpretative approach in the context of revelatory studies through a series of papers developed in the 1990s revolving on sensemaking and sensegiving (e.g., Gioia & Chittipeddi, 1991; Gioia & Thomas, 1996), and a later set of studies on organizational identity change (e.g., Corley & Gioia, 2004; Gioia, et al., 2010). Through a set of studies spanning more than three decades, Gioia and colleagues developed an approach to interpretative research still used by many qualitative researchers today. Following their process, I started by reading the transcriptions thoroughly to immerse myself into the research context and to identify relevant statements. I therefore began developing in vivo codes

through open coding of data, which through constant comparison have been grouped into first-order concepts. According to van Maanen (1979), a renowned American organizational theorist, first-order concepts are the facts of an investigation. Van Maanen argues that "at one level, certain descriptive properties of the studied scene serve as facts." On another level, however, some of these facts "do not speak for themselves and the fieldworker must therefore deal with another level of first-order fact, namely: the situationally, historically, and biographically mediated interpretations used by members of the organization to account for a given descriptive property" (1979, p. 2). According to the scholar, both the descriptive properties and the member interpretation of what is behind these properties are firstorder concepts. Translating this at an empirical level, what van Maanen suggests is that both the behavior and the subject interpretation of that behavior should be treated as facts. Thus, during these phases, the wording used for the labelling reflected the interviewees' own words.

Next, I looked for possible relationships between first-order concepts that, through axial coding, were then grouped into increasingly more abstract second-order themes (Strauss & Corbin, 1998). According to van Maanen, second-order concepts are "those notions used by the fieldworker to explain the patterning of the first-order data" (1979, p. 3). Thus, second-order concepts describe the relationships between the different properties observed. Finally, through further comparison, second-order themes have been grouped into aggregate dimensions, serving to summarize the key elements of the theoretical model. The intention is to move from a descriptive to an interpretive, more explanatory mode.

Data collected from the interviews were quite rich in terms of inputs and examples, hence the choice of what to code and focus on has not been easy. I had several iterations of coding, each time focusing on something slightly different. Thus, the process of data analysis has been developed iteratively, moving back and forth between data and codes, going through several iterations. Such iterations included discussions with supervisors and conversations with external informants for feedback (including academic experts, practitioners, and service design professionals interviewed during the data collection) (Miles & Huberman, 1994; Gioia, et al., 2013).

Data have been coded using the qualitative data analysis software NVivo. I allowed concepts and themes to keep emerging till I had a clear understanding of the relationships among different elements. Especially in the specific case of Study2, I made statements of findings only if they were corroborated by multiple informants, so as to mitigate the risks associated with retrospective accounts. In the rare cases where I have chosen findings supported only by a few informants (e.g., to inform possible speculations on future trajectories), I have explicitly underlined the exact individuals referring to the concept. Representative quotes shared throughout the paper therefore represent corroborated findings.

Table 8 shows the progression of data analysis for Study1, including some representative quotes to explain how first-order concepts have been distilled. Second-order themes are more abstract in respect to first-order ones and reflect the patterning that emerged from first-order data. Finally, aggregate analytical dimensions are the elements used for the framework that will be shared in the findings chapter.

Representative Quotes	First-Order (Informants) Concepts		Second-Order Themes		Aggregate Analytical Dimension
"I think the people who need to provide us with those requirements are our customers and I think we aren't best placed to elicit those requirements. And a fresh pair of eyes" Professional services	Customer perspective				
"I'm all about the strategy. It's the strategy that is important. It has to have a deep understanding of customers. It has to have good customer insights" Manufacturing	Customer insights	÷	Human-centered	<i>→</i>	
"It certainly changed the way people thought around servicing customers versus servicing equipment" Manufacturing	Shift towards a customer-focused mindset				Awareness of service design principles
"There's one good design principle that we've got, which is open it up to everybody. Just let people see the value, and that is a polar opposite principle to what we've been like for the last 15 years" Professional services	Engage and let people see the value	<i>→</i>	Co-creative	÷	
"The engagement of people was a determining factor, that we were able to get	Engage and excite				

Table 8. Progression of data analysis for Study1.

people involved and get people excited" Engineering					
"And I think there were, like, five or six short presentations from different departments at the beginning of the workshop We then also invited all kinds of users and we created different sub-groups and built different scenarios and then tested them with users again. And also looked into pricing models, so we had also other consultants involved. Also, other experts, maybe more from the business management or business strategy consultancy background" Automotive	Engagement of diverse actors, both internal and external				
"So, this woman approached us and was looking for a new way to think about this. And she knew that the team she had in place was focused on other things, which were all very important as well. And so, in order to build a more holistic type of patient experience, she brought us to work with her" Pharma	Designing holistic experiences				
"First of all, I wanted the business to see how you could map out the target customer experience across the end-to-end, the whole end-to-end experience for different actors and different touchpoints" Financial services	End-to-end customer experiences across different actors and touchpoints	→	Holistic	<i>→</i>	
"The cross functionality. To be able to bring the right people from the different functions; it's really important. It cannot be one-sided. It has to be multi-sided" Engineering	Cross-functionality				
"What actually worked really well was to have this pop-up exhibition. We had a few hours when in a room we would put a concept as it was at that moment, on the walls, and we invited all the different streams. We explained the different parts and people were just discussing and so on and we had free food, that always helps And then we were really asking them all the time: 'We have this idea what do you think?' And working with them and try to bring those ideas reflected in the concept" Engineering	Open feedback sessions to improve concepts	÷	Experimental	>	
"Having the customer involved in the process, not a few what we often have been doing in the past assuming this is what the customer wants, but really be able to review the ideas and improve them during the process" Engineering	Always reviewing and improving ideas				
"I think they were engaged with it because it was a new and exciting way of working. And they just quite liked that. Although it made them feel quite nervous" Director, Livework (referring to Professional Services)	New way of working	<i>→</i>	Transformative	>	

"When they really got it and got engaged was when they started to see the result, when they heard the voice of the customer, when they saw also that they were key players to make this happen" Engineering	New awareness of being key player in the delivery of superior customer experience				
"You really bring the imagination of the business alive and they can see how things could be better. And that's not just around the user interface; that's definitely around sometimes new tools, sometimes removing tools, sometimes changing business processes, sometimes changing the way that information flows between teams and even where they sit in relation to one another" Financial services	Seeing how things could be better				
"We have made videos of the voice of the customers. So, not us telling them what the customers say, but showing them what the customer is saying" Engineering	Being able to show what customers say				
"I got a lot out of that project because it helped us go back to basics to understand our customers and our audiences" IT	Understanding customers as well as stakeholders	÷	Conducting design research	÷	
"The fact that we spent all the time trying to analyze customers and understand what the customer needs were. I think everybody understood that" Manufacturing	Analyzing customer needs				
"I think the second thing I wanted to see is that we could use that as a tool to prioritize what we were going to focus on, and then take those prioritized moments for different actors into a rapid concept design phase" Financial services	Concept design				Enactment of service design practices
"So what we wanted to do was to get someone in to help us run a process where we could work with our stakeholders to analyze that problem in a bit more depth and come up with solutions which really would work, instead of the initial first idea solution that people were touting around, because we were convinced that wouldn't work" IT	Coming up with solutions that would work	÷	Ideating	÷	
"How are you going to come up with ideas to meet or solve these challenges? So, we had a concept development phase where we had an idea workshop with 30 employees in the organizationThe goal was to come up with 100 ideas in three hours and we did it. Of course, a lot of the ideas were similar, and then we basically took all of these ideas and narrowed it down to 12 main concepts" Telecom	From ideas to concepts				

	1					
"Well, we had a demo that would help visualize this type of service, to visualize the service history and forecast of the product" Engineering	Visualizing the service, its history and forecast					
"We then storyboarded the concepts and then did another concept test where we invited customers and employees to a sort of speed date of concepts. Just to see which they liked and which they didn't like" Telecom	Storyboards to share concepts easily	→	Visualizing	→		
"We conducted some experience prototyping with the patients and caregivers and the physicians We did do a few iterations in between although it wasn't really massive or anything. There was always a need to work on them and improve upon them as we learned more about the audience" Pharma	Iterative experience prototyping with multiple actors					
"Rapid design concept which brings prototypes to show how the future could be better" Financial services	Prototyping to show how the future can be better	<i>></i>	→	Prototyping	<i>→</i>	
"We, and this is the approach that we always take, we don't learn theoretically we learn by doing. So, the project was the means to learn" Engineering	Learning by doing					
"We made our customer journey for commercial, or actually a life cycle of commercial, and we used the customer satisfaction data into that customer life cycle to identify hotspots" Insurance	Customer journey + customer satisfaction data at different stages to identify hotspots					
"They helped us to build a service blueprint to help map the services across the journey" Pharma	Mapping the service across the journey	÷	Sequencing	÷		
"They [Livework] mapped out the journey flow and maybe in three or four steps just showed how a different solution might work" Financial services	Journey flow for current and to be service					
"It would have been nicer to have had more people to hand it off to. There were just a couple of people who I had the ability to work withThere was really no one for me to work with except a couple of people who were peripheral in the business, one of whom was reporting to me. But there really was nobody within the company to do a lot of the implementation" Manufacturing	Lack of dedicated resources; one sponsor with a very small team peripheral to the business	÷	Sponsor with a small team, not fully dedicated to the project; no or few stakeholders	<i>→</i>	Dedicated human resources	
"I had other responsibilities. This was only one small responsibility that I had. I was responsible for product management. I was responsible for marketing and	Sponsor dedicated only partially to the project		reached			

communication. I was responsible for product launches. And as the line manager in this division, I couldn't dedicate fulltime to it" Manufacturing "Sometimes there were three, maybe sometimes there was one. You know, involved is a very difficult concept since we were involved in a lot of projects. So, I think that I was the most heavily involved with that project and I spent a lot of time with them, but there were different levels of involvement at all times" Pharma	Small team with different degrees of involvement throughout the project; sponsor closely involved				
"Probably around between six and ten, it varies between the levels of involvement. Around six really closely involved and staying around, ten loosely, and another four more who were really loosely involved. Most of them work in the research and development department, some of them work in our intelligence gathering, our sector intelligence department. Some of them work in our marketing and communications department" IT	Medium team, cross-functional, with different degrees of involvement	÷	Dedicated sponsor with a partly dedicated team; medium number of stakeholders reached	>	
"It was maybe 25, 30 people. I knew who was either working in similar fields or would be relevant in the near future, and we invited different departments" Automotive	Medium number of stakeholders involved				
"Loads30 I'd say at least. And if you count all the people that got involved at the front- line, at a country level, another 30 maybe. If you see the project as having one line and then adding work streams, so there was almost a customer insight and concept line, and then when that concept was bought there was price and payments, marketing, CRM and IT work streams, and they took on the product definition side of things, you know, the package definition, and we carried on with the service stuff. There were 5–6 work streams. There was quite a large core team of designers" Partner, Livework [referring to Engineering]	Large core of designers with multiple work streams across functions	→	Dedicated cross functional team	<i>→</i>	
"How many people were involved in the project? From previous organization, I would reckon somewhere around ten people. Across departments. We did some interviews and discussions with key accounts that are operational people in the customer center, and the direct channel with the key accounts. And we involved the managers of the different channels: telephone channel, call center, and the physical channel" Insurance	Medium core team involving employees from multiple departments; active engagement of key stakeholders				
"CoDesign would start with two things: one, to change that perception, and two, to make	New process and routine to contribute	÷	Processes	÷	Enabling structures

sure there were formal and clear routes for our senior stakeholders to input into our research and development and steer it" IT "They are implementing things, and it has already led to reworking of a number of their	to research and development Reworking					
systems and processes to align more on the customer" Partner, Livework (referring to Engineering)	processes to align to customers' needs					
"A couple of the recommendations were to work with outside IT related vendors. And we had proposed to work with a few outside firms, so we were looking to set up some trials of the electronic program, and that didn't work out" Manufacturing	Working with external IT solutions providers	→	IT systems	<i>→</i>		
"You have to change the way of doing things and quite often, the systems how they are, it requires quite a big effort of changing" Engineering	Need to change IT systems					
"Our Creative Director was very progressive and really believed that design can change healthcare and still believes in it, I should say. She very much promoted us working with different kinds of groups and to think differently" Pharma	Leadership that promotes a design culture					
"I think one of the biggest challenges is that alongside the strategic work of customer experience is to be doing organizational and cultural design work. And that will be my biggest piece of advice. I think if the organization is willing to spend money on design resource, on someone like Livework, I would be putting in from the beginning a work effort that was around, just purely focused on organization and culture" Financial services	Importance of investing into organizational culture alongside service design work	→	Culture	>		
"We were also very lucky that we have a very open-minded business owner who just wanted to do something new and something that concerned the customer needs and wants" Engineering	Leadership that promotes a customer culture					

I approached Study1 in an exploratory fashion, letting the data guide the interpretation, with little influence from theory. Study1 served to inform the direction to take with the research. Study2, in a more systematic fashion, aimed at providing a detailed understanding of the environment within which service design is introduced and the mechanisms for its adoption. Study2, similar to Study1, also saw multiple iterations of coding. Again, I allowed the data to guide my interpretation. After a few iterations of coding, I started experimenting with the

institutional logics perspective, letting the theory help me frame certain concepts. Thus, the resulting final coding of Study2 is a result of a systematic engagement with theory. Several iterations were performed involving the two supervisors for feedback on interpretation and also "member checking" (bouncing early interpretations to insiders for feedback) (Langley & Abdallah, 2011).

I coded the data collected during Study2 twice over six months. I began by looking for patterns and extremes; thus, the first data coding was not influenced by any specific theory. My objective was to familiarize myself with the data and to trace common patterns among interviewees' recounting, while also deliberately looking for outliers. At a second stage, I contrasted the initial analysis with institutional theory, developing a second iteration of coding. Such processing helped me to clarify the language. Table 9 shows the structure of the final data coding from the specific (first-order concepts) to the general (aggregate analytical dimensions).

Representative Quotes	First Order (Informants) Concepts		Second-Order Themes		Aggregate Analytical Dimension
"We're saying that we need to digitize the core because we're going to deliver something different to the customers" Vice President	Digitizing the core to deliver new digital solutions to customers				
"We have a huge shift globally away from owning to accessing. We have a shift from print and software being something that you buy, a license for, to something that drives a service that you subscribe to or you use for free because somebody else is paying for it. That's a huge shift and, for us specifically, we need to understand and leverage that" Senior Vice President #2	Customers demand digital solutions that enable them to shift from owning to accessing	→	Market demands for digital solutions	>	
"And this has very often led to call storms to the customer center because the products are not well understood, they're difficult, they don't necessarily work as advertised. We've had that all the time. And then we've understood there's this big shift toward customer-centricity, that it is possible to be more customer-friendly. It is possible to design journeys and products that are stickier because customers like them and not because there's no other option" Senior Vice President #2	Customers complain because products are difficult, and they do not work as advertised	>	Market demands for customer centric services		Exogenous forces
"Before having service design in place and the customer journey as a tool, we were unaware of problems. We were becoming aware when customers started complaining" Products and Systems Experience Design Manager	The team was unaware of potential problems with products and services, leading to customers' complaints				

Table 9. Progression	of	categorical	analysis	for	Study2.

"There is some structural stuff to make this infrastructure work and somebody needs to operate and manage access to this infrastructure and these natural resources. There's value there. That's our access business. We'll continue to do that" Senior Vice President #2	Operating and managing the infrastructure				
"A lot of the price plans have been developed over the years by us, and others have been kind of like this. They have been defined to drive sales. New customers coming in acquire customers and increase the usage of minutes and SMSs and data" Senior Vice President #2	Objective is to drive sales				
"A strong focus on operation efficiency, traditional risk management in terms of existing assets we have. Which is what we are good at, it's 90% of our business" Senior Vice President #1.	Focus on operation efficiency				
"Currently they [refers to the traditional organization] are very used to think that you create a product and it's done. You ship it and you sell it" Business Developer and Project Manager	Strong product legacy	÷	Telco logic		
"Telenor has a very heavy legacy technology orientation. Basically, we are in an organization that has responded to technological development and taken what we have seen has worked somewhere else and just implemented it in our markets. It's super-easy, right? It's foolproof. And the only innovation you have to do in Norway is figure out how does the landscape and the winters affect the technology because that's the only unplowed fields of knowledge" Senior service designer #1	Technology orientation for new product development			÷	Constellation of logics
"Everybody is, you know, living inside a large organization and they are acting in roles. And they all look at the world from the inside" Service Design Lead.	Inside-out perspective				
"What I saw from where I sit is that we have a dominant culture in Telenor which is based on the waterfall model of projects, the waterfall model of thinking" Senior Vice President #2	Dominant waterfall model				
"The goal is to be a digital service provider, taking a position in people's digital life" Product Manager	Becoming a digital service provider				
"We're going to use the shift to digital to get the market share and new markets" Project Director Service Design	Objective is to get more market share and new markets				
"We also need to digitize our core. The digitization of the core is, of course, of the utmost importance, and it is something that we need to focus on, but it still is kind of an enabler in order to get to the point that we would like to be as a company" Vice President	Focus on digitalization	÷	Digital logic		
"In a technological company like Telenor, a service is very much associated with some technological thing, it's a digital service" Head of Innovation #1	Delivering digital services				

"We're easily spending the IT resources because we're a technology company, we have already learned that those are expensive resources and we have come to expect it and accept it. We have become numb to it" Senior Service Designer #1 "The people with technical skills taking the idea from marketing, not testing it with the customers, but just taking the idea and starting developing it with technology. Testing only, usually only after launch, for the smaller things, just to see what is wrong, but nobody was doing testing in the meantime" Products and Systems Experience Design Manager	Technology investments for new product/service development No testing with customers but only tech development inside-out				
"So, we had to change the project manager and then they put in another project manager that only understands the lean process" Senior Service Designer.	Lean process for new product/service development				
"Let's start by trying to solve problems for the people that we're here for and then decide how we need to organize and how we need to shape the organization in order to be able to do that" Vice President	An organization that tries to solve problems for customers				
"And then we've understood, and there's this big shift toward customer-centricity that it is possible to be more customer-friendly. It is possible to design journeys and products that are stickier because customers like them and not because there's no other option" Senior Vice President #2	Shift towards customer- centricity				
"Making sure that the owner or the project model also understands that the project needs to focus also on the customer experience, not just how to implement it in the fastest possible way" Senior UX Specialist	Focus on customer experience				
"Work across channels, including physical channels, not only digital. When I came to Telenor, the challenge was how to make the experience digital but also human centered, through service design" Service Design Lead Hungary	Delivering cross- channel, human-centric services	→	Customer logic		
"Trying to push service design thinking in innovation processes, especially in the very first steps before you actually have a kind of solution to develop" Head of Innovation #1	Service design thinking as driver of innovation processes				
"To let people understand that there are humans outside and they think, feel, and they have some needs, and they know something and don't know something" Service Design Lead Hungary	Outside-in perspective				
"Our team prefers that you use service design because we think that is the best way to work" Senior UX Specialist	Service design as preferred way of working for new service development				
"That shift is big. You come up with something that is a bit New-Age-ish. It's not serious, if you know what I mean. It's not run by engineers and people with a Master in Finance. So that's the shift, and that shift is a cultural shift and a mental shift" Senior Vice President #2	Service designers are not perceived as serious enough to contribute to business decisions	<i>→</i>	Relationships between customer and telco logics	→	Constellational relationships

"Because one of the problems we have				
when we do the traditional waterfall logic				
and approach to change management is that				
I need to understand your feelings, I need to	The second beautiful and the second			
put your feelings into my plan. Because we	The empathic nature of			
teach our people that resistance will come.	service design doesn't fit			
My point is to understand so that I can put it	with a waterfall			
into a traditional project plan. And in that	development approach			
sense service design is such a powerful tool				
to really deep dive into those emotions"				
Senior Vice President #1				
"Because then you look at the MVP				
[minimum viable product] and you try to	Clash between			
decide which one you should invest into	traditional resource			
But then you can't do an MVP at the early	allocation and service			
period of the service design. But you want to	design process			
keep Capex" Head of Innovation #2				
"Here are these technologists who know all				
this stuff and suddenly designers are				
supposed to do our work because it used to				
be only two sides. It's like the business side				
and technology. So, technology made what				
the business side innovated. And now	The traditional business-			
designers are coming, and the business side	driven approach is			
is also told that we need to include the users	challenged by the			
in this and listen to the users which, I think,	introduction of a			
	customer focus			
makes the biggest impact on the business				
side because it reduces their role, their				
mandate, their position. From being the				
powerful side to just being a side" Senior				
Service Designer #1				
"Making sure that the project owner also				
understands that the project needs to focus				
also on the customer experience, not just	Clash between fast time			
how to implement it in the fastest possible	to market and a focus			
way. This environment here has often				
another way of thinking than other people.	on customer experience			
So that's always challenging" Senior UX				
Specialist				
"It was a product. It was an app and, of				
course at this point, we always knew that it's				
not just a product. We had a lot of insight				
around communication and the need to				
communicate around this topic. But the	Digital products as a			
focus became a bit on the product at the	smaller unit within end-		Relationships	
same time as we started developing a	to-end services		between	
		\rightarrow		
service blueprint for that product. So, to not			customer and	
forget that this thing has to go into the bigger			digital logics	
picture at some point" Senior UX Designer				
"Well we don't really agree because I, half of				
the team and I think we are in what I would				
say is kind of Design Build where we have a				
basic app, but we know we have to change				
it, and add features, and kind of work it away	Differences between a			
from a basic product to something people	lean and a service			
really like, but I think the Service Designers	design approach to new			
would say that we are kind of jumping ahead	service development			
a bit and that we should go back to the	•			
•				
Deline and Design bhase more. So, we don't				
Define and Design phase more. So, we don't really agree on where the project is at"				
Define and Design phase more. So, we don't really agree on where the project is at" Business Developer and Project Manager				

"We don't know how the market will respond. So, we're easily spending the IT resources					
because we're a technology company, we have already learned that those are expensive resources and we have come to expect it and accept it. We have become numb to it, which is very dangerous; I think that is really bad culture. But it's very easy to use a lot of money on the implementation and little money on analysis due to tradition. So, what we want in service design is to use more time on analysis and make sure that what we use our expensive resources for are really worth it" Senior Service Designer #1	Allocation of resources to IT development vs. to customer analysis				
"The thing is that the lean model fits so much better within our culture. Because, what's the main drive in the freaking lean model? Time. It's time. And this resonates very well with our existing focus on time management. Time, time, time, deliver faster, fast time to marketingJust develop something, show the customers, and there you go. And this is so much more compatible with our established way of doing things" Project Director Service Design "Telenor is not a strategic company, it's a	Compatibility between lean and the existing focus on efficiency and time management		Relationships between telco and digital logics		
morphing company, we're just morphing out opportunistically" Project Director Service Design	Morphing from a telco into a digital service provider				
"We will retain the focus on growth and value creation. The growth will come from both our telco business, current digital verticals (IoT/M2M, Online Classifieds and Financial Services), and in new digital verticals" Telenor Website, 2016	Retaining the focus on the traditional telco business expanding into new digital verticals				
"It's an organizational entity, and it's there to create breathing space for the designers at the beginning until the environment has become less hostile in a way" Project Director Service Design	The Service Design Lab is an organizational entity offering a safe environment for designers to validate service design				
"On the other end, we are still like soldiers out there being sort of consultants, doing other sort of tasks, mostly just facilitating and kind of orchestrating development work" Service designer	Designers also operate as consultants to the rest of the organization.	÷	Compartmentali zation		
"I think they expect us to come up with something very new and innovative" Service designer	Expectations are for the Service Design Lab to deliver innovative concepts			→	Recombinant strategies
"But I try to involve myself in order to at least set some guidance on how do we make sure that projects that work in this way do the right thing. If they follow the service design method We know that the whole idea of that is you always test with customers, you always involve the customer in the process. That's baked into the process itself.	A selected group of designers contribute to the definition of the digital service provider governance.	→	Enrichment		

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"What I'm doing, I'm keeping a list of all the requests for service design I say no to. So that at some point I can say this is the demand, it's increasing, this is what we said no to that is in the queue" Project Director Service Design	Tracking demand for service design to make a case to hire more resources				
"All these kind of big, giant, gigantic telecom back office systems which basically, some of them are needed for sure. But probably not all of them. But due to legacy we're kind of trying to handle them the same way we've always been doing, just with a different perspective" Vice President	IT legacies to be tackled in order to be able to innovate	÷	Growing enabling structures	→	
"People want to do that, but they don't have the system impulses to do that. So, the next step would then be to change systems and processes to be able to support this" Head of Innovation #2	Need to change systems and processes in order to deliver on new customer-centric services		Structures		

The table is not intended as a causal or dynamic model but as a representation of the core concepts and their relationships, which served as the basis for the formation of the theoretical framework. The process has not been without obstacles; a simple description of the process that guided the data analysis probably does not do justice to the uncertainties encountered during the process. As Langley and Abdallah have noted in describing Gioia and colleagues' template: "Finding the twist that will pull all the ideas together is of course necessarily a creative act" (2011, p. 215). The difficulty was mainly due to the amount of data produced that was consistent. Moreover, the use of jargon and the need for interviewees to describe highly abstract concepts made the process of making sense of their statements particularly difficult. The procedure has been particularly complex for tracing the logics at play; therefore, I'll use the following as an example to exemplify the stages I followed.

During the first round of coding, I labelled all the statements that referred to organizational objectives. Under this node, I labelled all statements to official as well as perceived objectives. For example, under this node I had a quote from the Senior Vice President #2 sharing the following: "A lot of the price plans have been developed over the years by us, and others have been kind of like this. They have been defined to drive sales." As well as a quote from the Project Director Service Design sharing the following: "We're going to use the shift to digital to get the market share and new markets." They are both organizational objectives, but they seem to refer to different priorities and frames of references. It was at this stage that I started to contrast the statements under the node *organizational objectives* with neo-institutional theory. I began comparing informants' statements, soon realizing that the two quotes used as examples here were two representations of the perceived

organizational *goal* (Pache & Santos, 2010; Battilana & Dorado, 2010; Dalpiaz, et al., 2016) under two distinct logics. Thus, the two quotes have been labeled at a second round of coding as *telco logic* and *digital logic*. Such a process has enabled me to reach the progression of categorical analysis portrayed in Table 9.

4.4. Validity

Ensuring validity standards in qualitative research is challenging because of the simultaneous necessity to allow both rigor and creativity into the scientific process (Whittemore, et al., 2001). This is particularly true for those studies that opt for an interpretivist approach, such as this one. According to Whittemore, et al. (2001, p. 526), "creativity must be preserved within qualitative research, but not at the expense of the quality of the science." The authors continue arguing that techniques employed to reduce validity threats, specifically within the context of interpretivist inquiry, are options to be determined by the researchers within the context of the specific investigation. In other words, there is no one-size-fits-all validity criterion, but rather researchers will determine the most appropriate validity criteria for each specific investigation. In the authors' own words: "Because qualitative research is often defined by uncertainty, fluidity, and emergent ideas, so too must be the validity criteria that give credence to these efforts" (2001, p. 528). Creswell (2014) recommends using multiple techniques to ensure accuracy of the findings and to enable the reader to assess the results. The validity techniques I have opted to use in this investigation are the following: triangulation, member and expert checking, and thick description.

Triangulation. This study has used different data sources of information. Study1 employed interviews as primary data sources and project documentation as secondary data sources. Study2 employed interviews and observation as primary data sources, and website and social media channels as secondary data sources. When relevant, the different sources have contributed to build a coherent justification for themes.

Member and Expert Checking. To determine the accuracy of the qualitative findings, specific descriptions and emerging themes have been shared with some of the participants and experts to determine whether they felt the interpretation was accurate. Experts involved are academics (both in the fields of service design and

institutional theory) and service design practitioners. Participants and experts' feedback have been taken into consideration in the following iterations of the work.

Thick Description. I tried to offer rich descriptions to convey the findings. I have included an empirical chapter in the thesis to provide background information, stories, and pictures that could contribute to transport the reader to the setting of Telenor. I have supported the description of the progression of data analysis with rich direct quotes. Representative quotes have also been used extensively throughout the finding section.

4.5. Reflection on the Researcher's Role

Particularly in qualitative research, the role of the researcher as a primary data collection point requires the identification of possible biases in respect to the study (Creswell, 2014). My perception of service design in an organizational context has certainly been shaped by my experience as a service design professional. I have been working in the field of service design for the last ten years, being employed at Livework for the last five, a position that has granted me special access to interviewees in a wide range of organizations. All the companies analyzed in this study, both as parts of Study1 and 2, have been Livework's clients. Hence, I had direct contact to those that have been at the forefront of the introduction of service design within their specific contexts. Also, access to project documentation has been easier than usual as all project deliverables are available to all Livework's employees as part of the company's archive of past projects. My practical experience has likewise influenced the way I have been running interviews. When interviewees were referring for example to barriers and enablers of service design in an organizational context, my experience as a service design professional in projects and as a service design coach in training programs offered some insider knowledge that enabled me to ask specific follow-up questions to deep dive into known pitfalls or uncover uncommon behavior. Also, in the case of data interpretation, my experience in the field enabled me to quickly distill common practices and unusual practices, approaches, or solutions. However, my previous experience, although beneficial under a certain perspective, also represents an important bias for the study. Although I have strived to ensure objectivityespecially during data analysis—my role as a service design practitioner has certainly influenced the way I viewed, understood, and coded the data. Particular

attention has been dedicated to the choice of the validity techniques described above to limit such bias.

Chapter 5: Findings

The research questions presented in the introduction asked: (1) What are the elements characterizing the organizational context within which service design is introduced that influence its introduction and existence? (2) How do the mechanisms that favor service design adoption in an organizational context operate? This chapter presents the findings from Study1 and Study2 that will help answering the research questions this study aims to explore.

5.1. Study1: Degrees of Service Design Adoption

Study1's findings suggest that the nine cases analyzed portray different levels of service design adoption. Two cases showcase a high level of adoption of service design, four portray a medium level, and the remaining three a low level. Findings suggest four parameters that influence such clustering: (1) Awareness of service design principles, (2) Ability to enact service design practices, (3) Access to dedicated human resources, and (4) Presence of enabling structures. Awareness of service design principles refers to the knowledge and understanding of the key principles characterizing service design. Ability to enact service design practices refers to the extent to which practices are enacted effectively. Dedicated human resources refers to the commitment of organizational actors to contribute to the design work. Enabling structures refers to the processes, systems, and culture apt to enable the effective development of the service design work. Each of these parameters is found across the cases with different degrees of development. The development of each element is evaluated as what the team has managed to achieve by the end of each project under analysis. Table 10 describes the four factors in relation to the degrees of development (low-medium-high) that they tend to appear across the different cases.

Table 10. Dimensions influencing the degree of service design adoption.	

	Awareness of SD Principles	Enactment of SD Practices	Dedicated Human Resources	Enabling Structures
Low	The sponsor and core team display a limited knowledge of service design. The project serves as a way to	The sponsor and core team display limited and superficial ability to enact	The sponsor is the main driver of the project, sometimes supported by a very small team of people. The team usually	Lack of some of the fundamental structures such as processes to deal with the exploratory and iterative nature of

	expose them to service design principles.	service design practices effectively in projects.	manages to engage few (or no) stakeholders during the development of the work. Sponsor, team, and stakeholders dedicate a small percentage of their time to the project. Support from external parties, such as consultants, is the norm.	service design, dedicated IT systems to support implementation, and service culture.
Medium	The sponsor and core team are aware of service design principles. Key stakeholders display a limited understanding. The project serves as a medium to expose key stakeholders to service design principles.	The sponsor and core team display a sufficient ability to enact service design practices. At this stage, they invest into familiarizing key stakeholders with service design practices, actively and consistently involving them in co-creative sessions.	Small but cohesive and dedicated team driving the work. The team invests in the engagement of a limited number of key stakeholders across the organization. Possible support from external parties with whom they work closely.	Some of the key organizational structures to enable service design start to be in place, usually early stage processes and routines.
High	The sponsor, core team, and key stakeholders are fully aware of service design principles.	The sponsor and core team display high confidence in enacting service design practices effectively. Key stakeholders are familiar with some of the practices relevant to their role and position.	Cross-functional dedicated team. The team invests in the engagement of a wide number of key stakeholders across the organization. Possible support from external parties with whom they work closely as one team.	Some of the key organizational structures to enable service design are fully established and embedded, such as processes, IT systems, and service culture. Organizational actors are able to recognize the missing structures and actively work for their definition.

Table 11 showcases the nine cases under analysis and the respective degrees of mastery of the four elements as perceived by the interviewees. The first thing to note is that the development of the four elements happens in a precise sequence, where teams first invest into familiarizing with principles, to then develop the ability to enact practices, to then assign dedicated resources to scale, and to finally invest into the development of enabling structures. This is not surprising as each element is instrumental to the one coming after. The second thing to note is that on the base of the degree of mastery achieved, the nine cases can be clustered into three groups portraying low (blue), medium (yellow), or high (green) service design adoption.

Table 11. The nine organizations under analysis vis-à-vis the four parameters characterizing service design adoption. The table also shows three clusters of service design adoption: low (blue), medium (yellow), and high (green).

	Awareness of SD Principles	Enactment of SD Practices	Dedicated Human Resources	Enabling Structures
Manufacturing	Low	Low	Low	Low
Professional services	Low	Low	Low	Low
Financial services	Medium	Medium	Low	Low
Automotive	Medium	Medium	Medium	Low
IT	Medium	Medium	Medium	Low
Pharmaceutical	Medium	Medium	Low	Medium
Telecom	Medium	Medium	Medium	Low
Engineering	High	High	High	Medium
Insurance	High	High	High	Medium

It is important to be reminded that due to the nature of this preliminary study and the consequent limited data collected, this finding is not to be interpreted as referring to the service design adoption of each entire organization, but as referring to the specific reality of the project shared by each informant and the limited actors involved. Thus, within the context of Study1, service design adoption is interpreted as the extent to which each team managed to embed service design in terms of principles and practices, and to influence the establishment of dedicated human resources and enabling organizational structures with the objective to establish service design as their way of working in the long term. Findings suggest that each project run by the sponsors interviewed in the different organizations is perceived as a stepping stone within a larger journey towards embedding service design as a way of working. Thus, the level of adoption reached in each case is not by any means static, rather it is a fluid state subject to change over time. The interviewee from the financial services organization puts it quite clearly by arguing the following:

You have to accept you're on a journey. You can't change the way the business works overnight. You have to begin to introduce new ways of doing things. In a way I think we achieved our goals because we knew we wouldn't change everything. We knew that the solution we were mapping out was only ever going to be partially implemented, but the culture and the decision making, the value of design, people did believe in that far more than they did at the beginning, and for that reason, I think it was fantastic. It was a success. Yes, it's just hard, not seeing it all realized.

I will start by analyzing each degree of adoption individually, to then meld them into a preliminary model of service design adoption maturity.

5.1.1. Low adoption

The cases displayed as representing the low adoption cluster are characterized by low or medium awareness of service design principles, low or medium ability to enact practices, no or few dedicated resources, and no enabling structures in place. Table 12 describes each of the four parameters as perceived in the three cases part of this cluster.

	Awareness of SD Principles	Enactment of SD Practices	Dedicated Human Resources	Enabling Structures
Manufacturing	Low. Limited knowledge of SD principles by the sponsor and core team. Knowledge concerns mainly the principle of human centeredness.	Low. Limited knowledge of how to enact SD practices. The project exposed organizational actors to some of the practices such as design research. The team relies on the external consultants to do the work.	Low. One sponsor supported by a small team of people, both with limited time to dedicate to the project. The support team was peripheral to the organization, not sitting within core functions. No resources available for implementation. Support of service design consultants up to pre- implementation.	Low. Lack of IT systems to enable the implementation of the service strategy. Lack of strong leadership to champion a service- centric approach versus a product-centric approach. Lack of an organizational culture that enables experimentation.
Professional services	Low. Limited knowledge of SD principles, mainly related to human centricity and holism.	Low. Limited knowledge of SD practices; in particular, conducting design research and visualization.	Low. One sponsor with a very small team of people. The sponsor was fully dedicated to it while the remaining three people were involved inconsistently throughout the project. Involvement of service design consultants up to pre-implementation.	Low. Lack of design or service culture. Lack of process to deal with exploratory approaches.
Financial services	Medium. Good knowledge of SD principles by the sponsor. Limited	Medium. Fair ability to enact SD practices by the sponsor. Limited knowledge by the	Low. One sponsor, with a very small team. Both of them not dedicated full time to the project.	Low. Lack of all the fundamental enabling structures in terms of design and service

Table 12. Analysis of the three low adoption cases vis-à-vis the four parameters characterizing service design
adoption.

understanding from the supporting team or key stakeholders, with a focus on the transformative principle.	supporting team and key stakeholders, with a focus on conducting design research and sequencing.	Involvement of 15 key stakeholders only in specific moments of the project. Involvement of service design consultants up to pre- implementation.	culture, processes to support collaboration and experimentation, and dedicated IT systems that could support the implementation of some of the new concepts.
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The three cases analyzed differ in terms of the organizational environment characterizing them, the industry, and the challenges they tried to tackle (see the research design & methodology section for details). However, they do showcase similar characteristics across the four defining elements. The three projects described by the three interviewees in the three organizations represent the first attempt to introduce service design into the respective work environments. Thus, although the projects briefs varied, the underlying intention of the three sponsors was to test the service design approach and to familiarize themselves and their teams with its principles and practices. As the sponsor of the professional services project shares, the objective is to expose as many people as possible to it: "Open it up to everybody. Just let people see the value. And that is a polar opposite principle to what we've been like for the last 15 years." The sponsor of the financial services project corroborates this approach, sharing his three main objectives with the project. First, he wanted to familiarize key stakeholders with the practice of sequencing, to showcase "how you could map out the target customer experience across the end-to-end, the whole end-to-end experience for different actors and different touchpoints," highlighting the importance of good *customer research* for a correct sequencing. Second, he aimed at familiarizing stakeholders specifically with the *transformative* key principle characterizing service design:

You really bring the imagination of the business alive and they can see how things could be better. And that's not just around the user interface, that's definitely around new tools or removing tools, sometimes about changing business processes, or changing the way that information flows between teams.

Third, the sponsor wanted to showcase the transformative potential impact of service design on the business: "I think the third thing for me really was just to show a very engineering-led business, how [service] design thinking could be used as a business tool." Following the same approach, the sponsor of the manufacturing project shares that the development of in-depth customer research was perceived as

extremely beneficial to shift some of the organizational actors' perspective from a focus on products to one on services and customer. In the sponsor's own words: "It certainly changed the way people thought around servicing customers versus servicing equipment." A brief look at the final deliverable of the manufacturing project indeed showcases that the core of the final outcome is a new understanding of how to unlock value. The report in one of its first pages shares:

Unlocking value: Enabling our customers to unlock the value in our products by providing the same value in our service offerings.

The entire report displays a strong focus on service design principles and on the outputs of service design practices in action. The document shares an in-depth actor map, portraying an extensive number of customers interviewed with their direct quotes and key insights. This element mirrors the *human-centeredness* principle as well as the *conducting design research* practice. The report directly refers to an outside-in approach to the definition of service strategy, defined following a deep understanding of customers and stakeholders. It also directly refers to an *integrated* offer encompassing sales and marketing, field delivered services, electronic delivered services and products, thus displaying a holistic approach to the development of the strategy, and hence mirroring the service design principles of holisms. The report shares a visual representation of the sequencing of the new service strategy, mirroring the *visualization* and *sequencing* practices. It concludes with recommendations for the next steps by suggesting the need for prototyping the concepts, and directly referring to and introducing the *prototyping* service design practice. The document exemplifies that the objective of the project was to familiarize the sponsor, team, and key stakeholders with some of the principles and practices of service design, uncovering its transformative power by tackling the specific challenge of defining a new service offering.

It can be argued that the three projects represent an initial attempt to bring service design within the three different organizational environments. The three projects represent the first stepping stone towards a higher degree of service design adoption. Within this context, it is beneficial to analyze the perceived barriers to adoption by the three interviewees of the three cases. Referents share that the first key barrier when approaching service design for the first time is the uncertainty related to the expected final outcome of the service design process. Its experimental nature hinders a full understanding of the possible final output at the beginning of the process. In particular, the referent of the professional service project was very keen to address this barrier since the difficulty in articulating the final outcome represented a challenge to sell the project internally and secure a budget for it:

It's really difficult to know what you're going to get. So, convincing the organization to spend six figures on something that they didn't really understand was always going to be challenging.

A second key barrier that was recognized is the need for collaboration across departments, and the lack of knowledge on how to facilitate and achieve it in practice. The development and implementation of new service offerings requires the collaboration of multiple people from multiple parts of the business, who are not necessarily used to collaborate in their daily work. The financial services sponsor shares how out of the ten service concepts developed during his project, only one managed to be implemented. In his opinion, this was due to this lack of collaboration among different teams and departments:

When you're doing service design work, you're very rarely saying to one person, one team, "Can you make this?" Nearly all the time you find that what you're saying is: "We need to bring product managers from a few different groups in the business together because we need to create this new missing piece," or "You changing this piece requires bits of all the different IT systems to come together in a new way and to experience a new interface." And it's very difficult to get people collaborating like that from different bits of the business because they don't have to work like that. They've got their silos and they work within those. So, getting those people together is tough, to get them to release resource is quite tough because it's through an initiative that's not solely owned by that part of the business.

Finally, service design is argued to be unable to respond to the speed of development expected in such organizational environments. Service design comes into an environment characterized by speed where results are expected to come fast. Service design, due to its exploratory nature, struggles to respond to the pace stakeholders are expecting.

5.1.2. Medium adoption

The second cluster includes four cases that have reached a medium adoption of service design. These four teams are characterized by a fair understanding of service design principles and ability to enact service design practices. However, they often

lack strong dedicated resources especially in terms of access to key stakeholders, and all the key enabling organizational structures necessary to sustain service design work. Table 13 describes each of the four parameters as perceived in the four cases part of this cluster.

	Awareness of SD Principles	Enactment of SD Practices	Dedicated Human Resources	Enabling Structures
Automotive	Medium. Fair understanding of SD principles by the sponsor and core team.	Medium. Fair ability of enacting SD practices by the sponsor and core team. The team conducted design research, ideated and visualized different scenarios for the service, prototyped the initial service ideas with potential users. They also explored potential business models.	Medium. Dedicated service design team. Ad-hoc involvement of a cross-functional team of 25–30 actors across departments. Several external resources were involved at different stages of the project, mainly service design and strategy consultants.	Low. Dedicated processes were lacking. Lack of a service culture. However, the project benefitted by a top- down mandate to investigate services.
π	Medium. Fair understanding of service design principles by the sponsor and core team, achieved through the involvement in the service design project.	Medium. Fair ability to service design practices thanks to the support of the external service design consultants.	Medium. One sponsor with a core team of 3. Involvement of 20–30 stakeholders across different functions. Support of service design consultants up to pre-implementation.	Low. Lack of all the basic enabling structures. In particular, lack of a service culture and leadership open to experimentation and innovation.
Pharmaceutical	Medium. The sponsor and her core team were aware of all key service design principles. Limited understanding from key stakeholders.	Medium. Limited ability to enact service design practices, in particular ideating and sequencing.	Low. One sponsor with a small team (2– 3) only partly dedicated to the project. Support of service design consultants throughout the project up to pre- implementation.	Medium. Presence of limited design processes and routines. Strong leadership support.
Telecom	Medium. Strong understanding of service design principles by the sponsor and the internal service design team. Limited understanding from key stakeholders.	Medium. Strong ability to enact service design practices by the service design team. No ability by key stakeholders.	Medium. Dedicated service design team. Struggling to involve key stakeholders. Support of external consultants.	Low. Lack of most of the key enabling organizational structures such as dedicated IT platforms to support implementation and service culture. Most of all, lack of clear processes and routines

Table 13. Analysis of the four medium adoption cases vis-à-vis the four parameters characterizing service design adoption.

		to work with service
		design.

The cases in this cluster are characterized by the presence of a core service design team internal to the organization. This is true for automotive, pharmaceutical, and telecom. In the case of IT, the sponsor did not have an internal service design team; however, she had access to a team of dedicated resources eager to understand and work with service design. These projects, unlike those analyzed in the low adoption cluster, did not have the objective to expose the team and stakeholders to basic service design principles, but to test service design and prove its transformative power within the specific context of each organization. The sponsor of the automotive case shares, for example, how the project did not serve to learn anything new about service design but to learn about the organization and how best to use service design within that context:

I learnt a lot about the organization, about where the organization's very good at, and where the organization is not competent or capable of certain operations.

Consequently, the deliverables emerging from this cluster's projects are slightly different from those analyzed in the low adoption cluster. The final report summarizing the work developed during the IT project has a great focus on the expected behavior of frontline staff. It defines *principles* on how staff should behave, and *roles* on how staff should engage customers. The document states: "We have an adaptive and responsive approach to reporting; as our relationship with our customers evolves, our roles change." The document also includes a roadmap on how to achieve the new behavior and perform the new roles. The report concludes by sharing points of consideration for successful implementation, with a great focus on collaboration and integration between the department where the project has been developed and other workstreams. This report exemplifies the more sophisticated nature of the project, in respect to those sharing in the low adoption cluster, aiming at proving service design's transformative power in the specific context as well as defining new customer-centric practices, behaviors, and routines.

Finally, it's important to note that all the sponsors operating within this cluster share how the project was facilitated by a favorable timing to start service design work due to a moment of transition for the respective organizations. In the case of IT, for example, the project happened when the company was about to shift from a fully public-funded model to a partly private-funded model. In the case of automotive, the organization was ready to invest into services when car sharing was proven to be a viable model for the future. In the case of Telecom, the project happened amid a shift in strategy towards customer-centricity. Thus, it could be argued that all four projects have happened during a moment of organizational transition characterized by the need to define a new model of competitiveness. Within this environment, service design has found the right ground to be introduced and tested.

A close look at the four cases shows some interesting patterns in the barriers to adoption traced by the four different sponsors. A first barrier emerging is establishing a clear ownership for a project's outcome and its implementation. The sponsor of the automotive organization refers to a complex process of diluted ownership of the project and involvement of many different departments at different stages that eventually profoundly affected the original service concept, compromising its design and original intention:

What happened in the big organization is that we basically created a certain kind of mold, like a certain kind of shape, and throughout the organization with all its requirements and people from technical, from operational, from IT, from whoever they all shaped that mold. That means it went through so many hands. And in Germany we have the saying, too many cooks spoil the soup.

Thus, the sponsor expresses his concern for the lack of ownership of the vision and development of the new service. A second barrier perceived is the ability to understand what the stakeholders involved in the project are ready to handle and internalize at a specific time. The development of the service design work and its outcomes should be sensitive to the readiness of the environment. Interestingly, the sponsor of the IT organization shares how one of the major barriers for the adoption of service design she encountered was being too excited and evangelic about service design, sharing too much too soon. One of the key learnings was to be able to dilute the excitement and engagement over time, to enable organizational actors to absorb what shared and move forward as planned:

Sometimes it's a brilliant mix, but sometimes it's a toxic mix, when you've got enthusiasts and evangelists together, that was my experience. And there's only so far that an organization can go. I suffered from trying, I made that mistake. I tried to push too far too quickly. Thus, service design, being substantially different from more established ways of working, requires the sensitivity to understand the extent to which those organizational actors involved are ready to accept it and absorb it. The two barriers to the adoption of service design that have emerged from this cluster portray a higher maturity and awareness of service design. While the sponsors belonging to the previous cluster directed their frustration towards the difficulty in articulating a possible final outcome to secure a budget for the project, or towards the difficulty in fostering collaboration, these four sponsors are more concerned about ownership to secure implementation and the optimum engagement across the project to ensure long term commitment. Their concerns and perceived barriers showcase they have managed to reach a more advanced stage with their respective projects.

5.1.3. High adoption

Finally, the third cluster includes two cases displaying a high adoption of service design. Here, the sponsor, team, and key stakeholders are reported as showcasing a high awareness of service design principles and ability to enact service design practices. The two cases are characterized by a dedicated strong core team to develop the work with the support of external service design consultants, and the engagement of several key stakeholders across departments. Both cases report some initial organizational structures in place to sustain service design work and an awareness of any that are missing. Table 14 describes each of the four parameters as perceived in the two distinct cases for this cluster.

	Awareness of SD Principles	Enactment of SD Practices	Dedicated Human Resources	Enabling Structures
Engineering	High. Full awareness of principles by the sponsor and core team. Throughout the project, key stakeholders have also been familiarized with the principles.	High. Full ability to enact practices by the sponsor and core team. Throughout the project, key stakeholders have been exposed and involved in the enactment of the practices.	High. Team of approx. 10 people fully dedicated to the project. The team managed to involve a high number of stakeholders across functions.	Medium. Culture supporting experimentation. Initial processes and routines to work with service design. Lack of IT systems enabling the smooth implementation of outcomes.
Insurance	High. Full awareness of principles by the sponsor	High. Full ability to enact practices by the	High. Team of approx. 10 people fully	Medium. Established service culture. Initial

 Table 14. Analysis of the two high adoption cases vis-à-vis the four parameters characterizing service design adoption.

and core team. sponsor a Throughout the project, key stakeholders have project, k been familiarized with stakehold the principles. been exp involved i enactmer practices.	ughout theproject. The team managed to involve aLack of IT systems to support the smooth development of the work.andstakeholders across functions.work.
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The Insurance project had the objective to customer orient the entire commercial area. The Engineering project had the objective to develop a brand-new service strategy and offering. Both projects were wide and extremely sensitive in their respective organizations, as they touched the very core of business operations and challenged current business models. The two projects successfully reached implementation and, in both cases, the start of the project was preceded by an extensive period of preparation. Also, in both cases, the project did not represent the first attempt to use service design by both sponsors and teams but rather a stage of a journey started years before. The sponsor of the engineering project, for example, shares how she felt that her role prior to the beginning of the project was one of a "lobbyist" trying to convince stakeholders and ensure their buy-in. That process lasted for a year and half. Another element that emerged as paramount in both cases was the ability to produce tangible outputs from the very beginning of the process. The team in the engineering organization, for instance, set up a pop-up exhibition to ensure different actors across the organization could be exposed to the work and contribute to it:

What actually worked really well was to have this pop-up exhibition. So, we had a few hours when we put a concept in a room, as it was at that moment, and invited all the different streams...There were a lot of people coming, and I think that was probably one of the most effective tactics to get them engaged. And then we were really asking them for their ideas and feedback, working with them, and trying to reflect those ideas in the next iteration of the concept. So, they felt that that work was useful, that it was not one more meeting or one more workshop after which nothing happens.

Such an approach benefitted from engagement, excitement, and ownership. A third element emerging as key for the success of both projects was core team size. Both sponsors had a core team of less than ten people dedicated to the work. This is perceived as an important factor to maintain a strong ownership and keep up the

pace of the work. The sponsor of the Insurance case corroborates this point as follows:

It makes everything easier because you have fewer people and fewer opinions. And you can be more effective on your time, use of time, and man hours. It gets much less political; people tend to have meetings that are work based and not meetings that are more conversations and discussions. We work together in meetings; we don't have project meetings, you see.

Finally, the type of relationship established with the external service design consultants also became extremely important. In both cases, the two teams (internal and external) were set up to work together as one team. This approach facilitated ownership from the organizational actors involved. The nature of the deliverables also changed. In both projects, teams have been investing a considerable amount of time in prototyping and piloting, hence the reports highlight not only the usual customer and stakeholder insights, service concepts, and service sequences, but also learning from prototypes, detailed descriptions of staff behavior, new processes and practices, required capabilities and dependencies, and other projects happening in the organization related to or influencing the service. In the case of Engineering, deliverables included a toolkit and specific guidelines to scale the service and train staff across markets.

Some common barriers to adoption also emerge from the two interviews. A first barrier perceived for the smooth development of the service design work is the lack of IT systems that can effectively support project outcomes. In the case of the Insurance project, for example, this emerged as a lack of a sound CRM system that could support the work. Finally, both projects aimed towards an important organizational transformation in their respective environments; consequently, the ability of the organization to adapt and sustain the new service over time is addressed as a key barrier to the effective development of service design work and the implementation of its outcomes. The sponsor of the Insurance case expresses this point as follows:

And last but not least, the organization's ability to not just implement, but to adapt it. Because we see sometimes that the amount of initiatives going on makes it impossible for even the most important ones to be adopted because of the sheer amount of things that are happening. What the interviewer stresses in this sentence is the nature of the environment where service design operates, characterized by several initiatives in different departments showing different priorities. Ensuring the new service is adopted at scale and sustained over time is a challenge that both sponsors stressed as key to be addressed. The two perceived barriers shared by the sponsors are both related to enabling structures. Issues with uncertainty and resources seem to be overcome.

5.1.4. A service design adoption maturity model

The previous three sections have presented the nine cases under analysis, which were clustered depending on the degree of service design adoption reached. This section aims at bringing these insights together into a preliminary model highlighting the different stages of service design adoption vis-à-vis their determining factors.

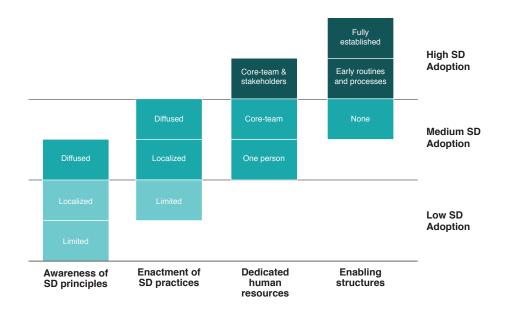


Figure 19. Service design adoption maturity model.

Figure 19 displays the model resulting from a re-elaboration of Table 10. On the bottom side of the model are highlighted the four factors emerging as influencing the service design adoption. Each factor is represented by three blocks, as the elements themselves can be found in the cases at different degrees of development: low-medium-high.

Findings suggest that those cases characterized by a low service design adoption showcase a limited or extremely localized (to only one person, the sponsor of the project) awareness of service design principles, and by a limited ability to enact service design practices. What this means in practice is that, for example, the sponsor and team are familiar with the human-centeredness and co-creative nature of service design but lack an understanding of its holism and the ability to prototype effectively in practice. In these cases, projects are initiated to tackle a specific pressing challenge and through that to expose some organizational actors to the principles and practices of service design. When commenting on the professional services project, the Livework Director who worked on the project shared how the internal team hadn't mastered service design practices, especially prototyping, rather reverting quickly to what they knew best:

I think what they have done is going for an awful lot of processes, all the specifications for the website, and they will go for a big waterfall delivery. And they will get to the end, and it will still contain quite a lot of risk because they haven't fully tested it with customers. And that's a risk for them but they don't know how to do it the other way.

This quote clearly exemplifies that the project has planted a seed, but the team has a long way to go to learn how to use and routinize service design in their daily practices.

Above low SD adoption, Figure 19 displays medium SD adoption as characterized by an increasingly more diffuse awareness of service design principles. Here, the sponsor and the core team have reached a significant awareness, exposing key stakeholders to it. On the other side, their ability to enact service design practices varies from localized to sponsor and team, to diffused to key stakeholders. The sponsor, and often the core-team in these cases, are usually granted a significant portion of their time to the project, ensuring a dedicated group of people to the development and delivery of the work. However, no organizational structures are yet put in place to enable service design in the short as well as long term. Consequently, concepts struggle to be implemented and service design to be adopted.

Finally, those cases that portray a high adoption of service design are characterized by a diffused awareness of principles and ability to enact practices among the core team and some of the key stakeholders involved in the work. They also showcase dedicated full-time resources—certainly in terms of core team but often in terms of stakeholders to support the work. To conclude, they also can rely on specific organizational structures in terms of processes, routines, service culture, or IT systems. Such a setup creates the right conditions for projects' outcomes to be more likely implemented and for service design to be adopted. Livework's senior service designer, who was assigned to the Engineering project, comments on the importance of the dedicated team and its positioning within the organizational structure:

Another success of this project is that today the service design team still exists. The company sees the value. And it is the only design function that sits in the corporate building. It's the only one. And they are still there. They could have disappeared. There were times where they were discussing to move them where the design department sits, away from where the decisions are made. But that didn't happen. The service design team sits in the business. Literally. And everybody understands what service design is. They are still working together with the different functions. They are part of the rollout.

The designer underlines an important aspect of the establishment of dedicated human resources, which not only relates to the number of people and their experience but also to their positioning in the business. It is important to remember that, due to the nature of Study1, these findings are only preliminary and restricted to the specific projects under analysis. The data collected during Study1 do not allow a generalization of the findings to the entire organization. The objective of this preliminary study was indeed to provide a broad view on the perceptions of service design adoption among several different actors. The next section will now take one of these nine cases, the telecom corporation Telenor, and deep dive into the organization to understand the organizational and actors' dynamics in terms of service design adoption.

5.2. Study2: Telenor Design (R)evolution

Study2 is an in-depth case study on service design introduction and adoption in the organizational context of Telenor Group. Telenor is one of nine organizations analyzed in Study1, the telecom company belonging to the cluster of medium adoption. Findings suggest that at the moment of data collection, three distinct organizational logics co-exist in Telenor, imposing different and often conflicting demands. The three logics—telco, digital, and customer—represent three distinct models of competitiveness. The three logics form a constellation subject to five constellational forces: (1) exogenous forces, (2) constellational relationships among the three logics, (3) the nature of the recombinant strategies used to introduce each of the logics, (4) individual actions, and (5) organizational goal. Figure 20 shows the generic framework emerging from the findings, portraying a constellation of three logics and the forces affecting the constellation.

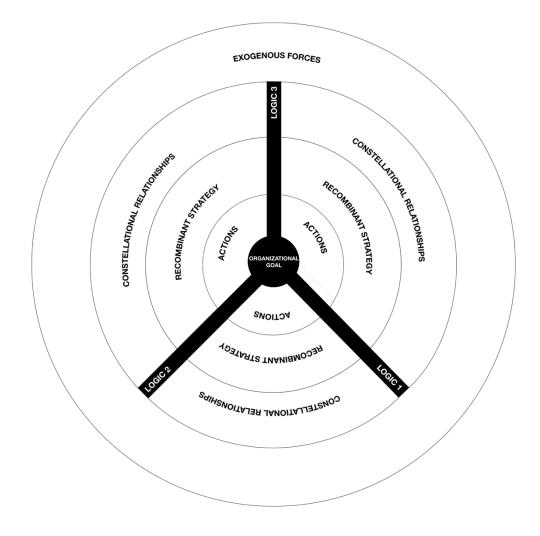


Figure 20. General framework showcasing a constellation of the three logics and the constellational forces operating on the constellation. Own elaboration.

The constellation of logics and its constellational forces characterize the organizational environment of Telenor, affecting service design introduction and existence in the organizational context. Some of these constellational forces emerge as sources of stability for the constellation, others emerge as forces of dynamism and change. Depending on their nature, as sources of stability or change, the influence of the constellation and its forces on service design will vary. Moreover, findings also suggest that key to the adoption of service design in an organizational context is the role of organizational actors to grow service design capability in Telenor. I will discuss the findings through the following sections:

- **Constellation of logics and its attributes**: There are three distinct organizational logics of competitiveness at play at Telenor. Each logic is characterized by a different set of attributes.
- **Constellational relationships**: The constellation shows cooperative as well as competitive relationships among logics. The customer logic results in competition with the remaining two, while the telco and digital logics emerge as cooperative.
- **Recombinant strategies**: Given its competitive nature in respect to the two more established logics, the customer logic is introduced into Telenor through a compartmentalization strategy. Attempts of enrichment strategies between the telco and customer logics, and between the digital and customer logics, also start to emerge.
- Logics in action: Organizational actors exercise agency favoring the growth of service design capabilities in Telenor, contributing to service design adoption.

5.2.1. A constellation of logics and its attributes

This section aims at exploring what are the distinct and present organizational logics at play in Telenor. A first round of coding showed one clear dominant logic and signals of two other incumbent logics. The analysis focused on tracing specific symbols (denoting meaning) and practices (materializing the ideas denoted by symbols) as representative, and constituting the distinct organizational logics (Thornton, et al., 2012). In other words, the analysis focused on the discovery of specific sets of ideas and ways to enact them. The logic of telco is the one that emerged immediately, sharply defined by the majority of interviewees. This is Telenor's legacy and long-term tradition. Interviewees have interestingly often referred to it as "logic," and (depending on the context) as the "traditional way of doing things," "telco legacy," and the "waterfall approach." As I'll present later in more detail, the telco logic is characterized by a focus on economic profitability, operation efficiency, and maximization of existing assets. The object of delivery to customers is products, developed through technological innovation, a waterfall model of development, and an inside-out approach.

Next to the established telco logic, the data signaled the presence of a second one, characterized by a focus on "service" and "innovation." What at first seemed a distinct "service" logic was later split into the digital and customer logics. A second round of coding has indeed shown a discrepancy in meanings attached to the use of common terms and concepts, underlying profound differences in assumptions, values, and beliefs among referents. Words such as "service," "innovation," "digital," "journey," and "customer" emerged to encompass profound different meanings depending on the expertise of the respondents. The difference was particularly evident between those that were working closely, or as part of the Service Design Lab and the rest of the interviewees. For example, interviewees with service design expertise loaded the word "service" with customer centricity. Interactions are conceptualized as happening over time, characterized by multichannel delivery. For the rest of the interviewees (e.g., project or product managers) working across different divisions (e.g., mobile, TV, ehealth), a "service" is a digital platform—an app or a website. A digital platform, in the understanding of the service designers interviewed, represents a single touchpoint in a list of possible ways to interact with customers. Under their perspective, it's the combination of the web platform, physical store, and call center interaction (to name a few) that creates what can be defined a service.

Another example can be found in the word "customer." In their work, the interviewed service designers explore a whole variety of roles that human beings can perform—for example, *users* when they are interacting with the web platform; *customers* when they try to change their subscription plan; or *consumers* when they browse options among different providers and compare Telenor with other competitors. The rest of the interviewees tend to refer to a customer as the person paying for the actual subscription, the contract holder.

These two examples demonstrate how the exact same words are fundamentally loaded with different meanings depending on the carriers, underlying profoundly different assumptions and beliefs—thus, the emergence of the digital and customer as distinct logics. The carriers of the customer logic are all the service designers interviewed as well as those referents who have been closely working with them and have promoted the Service Design Lab since its inception (e.g., Head of Innovation #1, and Project Director Service Design), who interestingly do not have a design background. The carriers of the digital logic are those who show a strong digital focus (e.g., Head of Innovation #2, and Head of eHealth).

Table 15 presents the key categories used to define the three logics. The choice of what categories to include has been partly informed by the work developed by Thornton et al. (2012) since the interinstitutional system they provide is certainly the most established among neo-institutional scholars. I've selected those categories that found a counterpart in the data available; namely, *identity* and *strategy*. I have also made use of conceptualizations and labels offered by other neo-institutional scholars; namely, *goal* (Pache & Santos, 2010; Battilana & Dorado, 2010; Dalpiaz, et al., 2016), *product/service conceptualization*, and *driver of innovation* (Dalpiaz, et al., 2016). Finally, the data directed towards an extra two categories that did not appear in any other study; namely, *perspective* and *development practice*. Table 15 displays the categories selected with a brief description on the meaning assigned to each of them in this study.

Categories	Descriptions
Organizational Identity	Refers to what organizational actors, carriers of the specific logic, identify the organization with.
(Thornton, et al., 2012)	Its shape and distinctiveness under the lens of the specific logic.
Organizational Goal	
(Pache & Santos, 2010;	Refers to the overall perceived objective of the organization and its very reason for existence.
Battilana & Dorado, 2010;	Its aim and vision under the lens of the specific logic.
Dalpiaz, et al., 2016)	
Organizational Strategy	Refers to the perceived strategy to achieve the organizational goal. Its values and trajectory
(Thornton, et al., 2012)	under the lens of the specific logic.
Product/Service	Refers to the conceptualization of the product or service the organization delivers to the
Conceptualization	market. Its outputs under the lens of the specific logic.
(Dalpiaz, et al., 2016)	
Driver of Innovation	Refers to the perceived major source of innovation worth to invest into. Its drivers to new
(Dalpiaz, et al., 2016)	product/service development and innovation under the lens of the specific logic.
Poropostivo	Refers to the perceived approach to innovation and new product/service development. It can
Perspective	be inside-out or outside-in.
Development Practice	Refers to the development approach perceived to best serve the logic in practice.

Table 15. Categories selected to define the logics and descriptions.

Table 16 describes each logic's attributes as per the categories selected. The content of the table summarizes the organizing principles guiding actors' behavior under the three different logics. Each of these attributes will be described in the second part of this section by unfolding the content of Table 16.

Categories	Telco Logic's Attributes	Digital Logic's Attributes	Customer Logic's Attributes
Organizational Identity	Telco solutions provider	Digital service provider	Customer-centric service provider
Organizational Goal	Profitability	Market acquisition	Customer centricity
Organizational Strategy	Efficiency; maximizing existing assets	Digitalization; faster time to market	Service experience; improving customer experience through services
Product/Service	Products (e.g., subscription	Digital services (e.g., apps	Human-centric services (e.g.,
Conceptualization	plans)	and web platforms)	tailored multichannel offers)
Driver of Innovation	Technology	Technology	Design
Perspective	Inside-out	Inside-out	Outside-in
Development Practice	Waterfall	Lean	Service design

Table 16. Ideal-typical logics at Telenor.

Telco Logic

This section aims at describing the telco logic and its key attributes. Table 17 shows the second column of Table 16 enriched with descriptions of the attributes and some of the most representative quotes. This table will guide the unfolding of the findings.

Table 17. Telco logic's attributes	s, descriptions, and representative quotes.
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Categories	Telco Logic Attributes	Descriptions	Quotes
Organizational Identity	Telco solutions provider	Refers to what organizational actors, carriers of the telco logic, identify the organization with. Under a telco logic, actors identify Telenor as a traditional telecommunication solutions provider that focuses on providing and managing the infrastructure for connectivity.	"There are some structural stuff to make this infrastructure work, and somebody needs to operate and manage access to this infrastructure and these natural resources. There's value there. That's our access business. We'll continue to do that" Senior Vice President #2. "It's only been about the frequencies and frequencies, and technical investments. This kind of a capability move, I mean, when they linked on fixed-to-mobile, these are technology shifts, they are totally natural. It's like no-brainers, it's just a matter of timing and how much" Project Director Service Design.
Organizational Goal	Profitability	Refers to the overall objective of the organization and its very reason for existence. Under a telco logic, actors recognize creation of profit as the overall organizational purpose.	"A lot of the price plans have been developed over the years by us, and others have been kind of like this. They have been defined to drive sales. New customers coming in acquire customers and increase the usage of minutes and

			SMSs and data" Senior Vice President
			#2.
			"Every manager needs to focus on the value and telco's focus on the price" Project Director Service Design.
Organizational Strategy	Efficiency	Refers to the strategy to achieve the goal of profitability. Under a telco logic, actors strive for operational efficiency and maximizing existing assets.	"A strong focus on operation efficiency, traditional risk management in terms of existing assets we have. Which is what we are good at, it's 90% of our business" Senior Vice President #1. "The traditional telco is more of a company that starts with: How can we utilize existing assets in order to bring products to the market? Which has worked well until now?" Vice President.
Product/Service Conceptualization	Products (e.g., subscription plans)	Refers to the conceptualization of the product or service the organization delivers to the market. Under a telco logic, actors interpret Telenor's major output to the market to be products, in the shape of subscription plans, for example.	"For sure our legacy is products, our price plans. We sell one thing. We sell access to the Internet and voice and SMS and that's what we do" Senior Vice President #2. "Currently, they [refers to the traditional organization] are very used to think that you create a product and it's done. You ship it and you sell it" Business Developer and Project Manager.
Driver of Innovation	Technology	Refers to the perceived major source of innovation worth to invest into. Under a telco logic, technology dominates the development scene, gaining heavy sums invested into it.	"Telenor has a very heavy legacy technology orientation. Basically, we are in an organization that has responded to technological development and taken what we have seen has worked somewhere else and just implemented it in our markets. It's super-easy, right? It's foolproof. And the only innovation you have to do in Norway is figure out how does the landscape and the winters affect the technology because that's the only unplowed field of knowledge" Senior service designer #1. "In Telenor, you are expected to develop more technological solutions, and to have
		Refers to the approach to innovation and new product/service development. Under a telco logic, innovation and development	a concept for like software developers" Head of Innovation #1. "Everybody is, you know, living inside a large organization, and they are acting in roles. And they all look at the world from the inside" Service Design Lead.
Perspective	Inside-out	are approached through an inside-out perspective. Directions are set following the project teams' belief of what should be done without involving external customers or validating concepts with users or partners.	"What type of insight did you really actually get when you're there, when you're talking with customers? Not creating your own view of what the customers need when you're out talking with them, that's very typical" Head of Innovation #1.
Development Practice	Waterfall	Refers to the development approach used for projects. Under a telco logic, the waterfall model is the established approach for product and service development or innovation projects.	"This is the classical waterfall model, with different phases. You have initiation and then you have analysis and then you have implementation. Between these phases you have some checkpoints,

milestones, important milestones for the projects. Decision one, decision two, decision three. And, wrong. But this is the IT model that all projects that are more than, I think, two million Krone in investment costs will follow" Senior UX Specialist.
"What I saw from where I sit is that we have a dominant culture in Telenor which is based on the waterfall model of projects, the waterfall model of thinking" Senior Vice President #2.

The traditional telco logic is a case-specific instantiation of a business (Reay & Hinings, 2009), market (Glynn & Lounsbury, 2005), or for-profit logic (Battilana & Dorado, 2010; Tracey, et al., 2011). Findings suggest that the telco logic's organizing principles rotate around economic profitability achieved through operation efficiency and a strong focus on products. Telenor under a telco logic is a transactional organization that sells telco subscription products to customers. They do that by ensuring operation efficiency, capitalizing on the infrastructure they have in place, aiming for maximum margins and minimum risk. The goal of Telenor under a telco logic—economic profitability—is intrinsic in the very nature of Telenor as a commercial for-profit organization. A focus on economic profitability has enabled Telenor to grow over the years and to reach its current market position. Although the new strategy set for 2020 dictates a focus on becoming a *digital service provider*—or (as has been reworded later) *customers' favorite partner in digital life*—the goal to remain profitable is still central and paramount.

The Vice President shares how although the new strategy requires an organizational transformation towards services and digital, Telenor needs to ensure combining this new ethos with remaining profitable. Data suggest that economic profitability under the telco logic is achieved through ensuring operation efficiency. The Senior Vice President #1 states, for example, how a strong focus on operation efficiency, and traditional risk management in terms of existing assets, drives 90% of the business at Telenor. This finding is corroborated by several other informants, among whom the Vice President argues that "the traditional telco is more of a company that starts with how we can utilize existing assets to bring products to the market." Thus, under the TT logic, the starting point of any new activity is an analysis of how the organization can maximize existing assets; for example, to deliver new products.

Findings also suggest that a telco logic has a strong focus on tangible products. The Senior Vice President #1 refers, for example, to network infrastructure, IT solutions, and subscription plans. He, similar to several other interviewees, refers to Telenor's core products as plans for call minutes, SMSs, and data for internet browsing. Such subscription plans are, in his own words, "defined to drive sales. New customers coming in acquire customers and increase the usage of minutes and SMSs and data." Findings also suggest that the traditional telco logic is rooted in an engineering tradition characterized by a strong technology orientation. Thus, data show that under a telco logic, technology is recognized as a major driver of innovation. Such a focus on technology identifies the very essence of Telenor, with multiple referents explicitly arguing that "we're a technology company."

Findings also suggest that the telco logic is enacted in practice through the employment of a waterfall model—a sequential, not iterative, approach to product (e.g., software) development, initiated by a clear business case, where progress flows downwards from one phase to the next, so that once a decision point has been made, the project team cannot possibly iterate but can only move forward. A clear business case is developed, resources allocated, ownership agreed, and well-defined stages of development set in a linear fashion. The focus on waterfall is expressed by most referents, being so engrained in the material practices that it has become synonymous with the telco logic itself. For example, the Senior Vice President #2 refers to the dominant culture in Telenor as a "waterfall model of thinking." Similarly, the Senior Vice President #1 talks about an "existing way of running projects, in a more classic, traditional, business case, waterfall logic. Which is what we know and what we are good at."

The preference of a waterfall development model and the profound belief in technology as a driver of innovation sets the right stage for an inside-out approach to flourish. Ideas for new product development are developed internally by teams who do not involve customers at any stage of their process—neither for research nor for validation. For example, the Head of Innovation #1 observes how the common traditional perspective in Telenor is for employees to create and work with their "own view of what customers need," which is often based on quantitative marketing surveys.

Referents share how the telco logic has worked extremely well for many years. However, challenges began to arise driven by customers' demands and expectations that did not match Telenor's current offer. Products developed inside-out were not meeting customers' expectations, instead igniting customer complaints. The extent of the problem is well portrayed by the Senior Vice President #2, who gives a clear and effective picture of the current situation:

That's been the thinking, we just developed the products and made them available and expected to sell them and the customers to understand them. And this has very often led to call storms to the customer center because the products are not well understood; they're difficult, they don't necessarily work as advertised.

This quote unveils how pressures from the market—customers complaining about Telenor's current offering—forced the organization to start considering alternative ways to run the business and to remain profitable. In other words, the organization started opening up to new logics of competitiveness. Data show that searching for alternatives has guided Telenor to explore new symbols, values, and meanings to drive organizing principles and new practices. The *digital* and *customer* logics emerging within this context are regarded as opportunities to respectively digitize operations and offerings, and to deliver services that customers love, thus enabling Telenor to gain a new competitive advantage.

Digital Logic

This section aims at describing the digital logic and its key attributes. Table 18 shows the third column of Table 16 enriched with descriptions and representative quotes. This table will guide the unfolding of the findings.

Categories	Digital Logic's Attributes	Descriptions	Quotes
Organizational Identity	Digital service provider	Refers to what organizational actors, carriers of the digital logic, identify the organization with. Under a digital logic, actors identify Telenor with a fairly contemporary telco organization that offers digital products and services to customers. Away from the focus on physical infrastructure, under this logic Telenor focuses on the digital revolution.	"The goal is to be a digital service provider, taking a position in people's digital life" Product Manager. "Initially they said: 'We want to be a DSP, a digital service provider for the customer.' Later, it has been a bit revised, so now it is: 'We want to be the customer's preferred partner in their digital lives'" Senior UX Designer.
Organizational Goal	Market acquisition	Refers to the overall objective of the organization and its very reason for existence. Under a digital logic, actors recognize increasing market share and	"We're going to use the shift to digital to get the market share and new markets" Project Director Service Design.

		expansion in new markets as their main objective.	"We always talk about results here, and we always talk about all that we have achieved in the market" Senior service designer #2.
Organizational Strategy	Digitalization	Refers to the strategy to achieve the goal of market acquisition. Under a digital logic, actors strive for digitalization of the core business and operations.	"We also need to digitize our core. The digitization of the core is, of course, of the utmost importance, and it is something that we need to focus on, but it still is kind of an enabler in order to get to the point that we would like to be as a company" Vice President. "During the last years since this DSP strategy was put on the agenda, and everybody said: 'What's digital really?', 'What's a service provider?', you know, 'What's digital talent?' And when you start to search, you see: OK, digital is a lot of things. And if you look at the other companies, everybody is being a digital service provider now, so in that sense we are not unique" Senior Vice President #1.
Product/Service Conceptualization	Digital services (e.g., apps and web platforms)	Refers to the conceptualization of the product or service the organization delivers to the market. Under a digital logic, actors interpret Telenor's major output to the market to be digital services in the shape of apps and web platforms, for example.	"In a technological company like Telenor, a service is very much associated with some technological thing, it's a digital service" Head of Innovation #1. "The energy now is very much around digital services. That's where the main focus in the business is" Senior Vice President #2.
Driver of Innovation	Technology	Refers to the perceived major source of innovation worth investing into. Under a digital logic, technology dominates the development scene, gaining heavy sums invested into it.	"We're easily spending the IT resources because we're a technology company. We have already learned that those are expensive resources and we have come to expect it and accept it. We have become numb to it" Senior Service Designer #1. "Should we go into this area, that area? This kind of a capability moves, these are technology shifts" Project Director
Perspective	Inside-out	Refers to the approach to innovation and new product/service development. Under a digital logic, innovation and development are approached through an inside-out perspective. Directions are set following the project teams' belief of what should be done without involving external customers or validating concepts with users or partners.	Service Design. "The people with technical skills taking the idea from marketing, not testing it with the customers, but just taking the idea and starting developing it with technology. Testing only, usually only after launch, for the smaller things, just to see what is wrong, but nobody was doing testing in the meantime" Products and Systems Experience Design Manager. "You will go into the same traps that everybody else goes into, basically falling in love with your own idea, subjectively taking the wrong decisions and not including the perspectives that might give it the idea" Senior Service Design #1.
Development Practice	Lean	Refers to the development approach used for projects. Under a digital logic, lean is the established approach for product and service development or innovation projects. Lean is an iterative process focused on speed and faster time to market.	"So, we had to change the project manager and then they put in another project manager that only understands the lean process" Senior Service Designer #2. "Time, time, time, deliver faster, fast time to marketing" Project Director Service Design.

The digital logic is another case-specific instantiation of a business (Reay & Hinings, 2009), market (Glynn & Lounsbury, 2005), or for-profit logic (Battilana & Dorado, 2010; Tracey, et al., 2011). The digital logic represents a new model of competitiveness striving for existing and new market acquisition via delivering digital services to the market. The development is characterized by a great focus on speed, to reach the market as soon as possible. Such focus demands a new development model that is recognized in the lean methodology.

Findings show that the digital logic emerged from the initial strategy set in 2013 for Telenor to become a digital service provider by 2020. To support this new direction, referents share how a brand-new budget has been established in Telenor, specifically for those projects with a digital service focus. Projects allocated to this new portfolio are subject to a less bureaucratic procedure and to a higher priority. Findings suggest that the choice of going digital is intertwined with the objective of expanding into new markets. The Vice President, for example, shares how the focus on digital is driven by the desire of developing "global products" and, more generally, to "scale global." Similarly, the Project Director of Service Design argues that Telenor is leveraging the digital shift to increase the current market share and access new markets. Moreover, data suggest that the shift to digital is not only in terms of digital offers to customers but also in terms of digitizing business operations.

Data also clearly suggest that, within the context of a digital logic, digital services are assumed to be the best way to achieve fast market acquisition. Findings show that digital services in this context are strictly associated with apps and web platforms. The Head of Innovation #1 corroborates this finding, stating that the meaning attached to a digital service is "very much about the device. It's a digital product." Finally, findings show that such a focus on digital services and digitalization of offerings and operations keeps at its core a strong belief in technology as a driver of innovation. While under a telco logic technology is mostly associated with technological infrastructure (e.g., frequencies), under a digital logic technology it is mostly associated with software (e.g., apps).

Data suggest that while principles and values of the digital logic are well defined, practices are still more ambiguous. This is not surprising as the digital logic is newly

emerging, impacting the organization within a short time span. Few interviewees refer to lean thinking as emerging material practice. Lean thinking is a model for product/service development characterized by a focus on eliminating waste, iteration, and speed (Womack & Jones, 2003). However, findings indicate that practices related to lean thinking are not yet well established. For example, the Senior UX Specialist shares how the process followed in digital projects is still unclear, as well as what kind of competences are required by project leaders to run projects under a digital logic. Findings also suggest that the digital logic is characterized by an inside-out approach. Technology is favored as a dominant lens for new product and service development, with very little interest in understanding customers and involving them in the development process. Teams develop ideas internally, perform a short validation session with users, and deliver the new product/service to the market. Ideas do not emerge from a deep understanding of customers or consumers, as would happen through an outside-in approach.

Finally, findings imply that the digital logic is not yet proving to be a key source of differentiation. Referents share how virtually every telecom has started the digital shift, turning digital services into the norm. The Senior Vice President #1 corroborates this finding arguing that "if you look at the other companies, everybody is being a digital service provider now, so in that sense we are not unique." Thus, with digital becoming the norm, the digital logic is failing to sufficiently differentiate Telenor in the market to achieve the market acquisition it was expected to ensure. What the above quote subtends is that although digital is a new logic for Telenor, it is well established in the organizational field. The digital logic is not sufficient to equip Telenor with the model of competitive advantage the organization is looking for. Consequently, Telenor's official organizational strategy got recently reframed into what is now presented as *customers' favorite partner in* digital life (Telenor, 2016). This shift reflects a desire to be increasingly more customer centric than solely digitally apt. Digital remains a core aspect of Telenor's run against competition, which is corroborated by the second current strategy pillar: engaging digital products. However, through the new strategy, such focus on digital is now contextualized in the wider customer's life, which is corroborated by the first pillar of the current strategy: loved by customers. It is within this context that the customer logic arises, representing a second organizational logic for competitiveness.

Customer Logic

This section aims at describing the customer logic and its key attributes. Table 19 shows the content of the fourth column of Table 16 enriched with descriptions and representative quotes. The table will guide the unfolding of the findings.

Categories	Customer Logic's Attributes	Descriptions	Quotes
Organizational Identity	Customer-centric service provider	Refers to what organizational actors, carriers of the customer logic, identify the organization with. Under a customer logic, actors identify Telenor with an organization that delivers solutions to customers' connectivity needs.	"As for everything new that we do, if we're going to deliver health services or financial services or classified services or communication services in the future, it's the job we do for the customer that's important. It's the end result for the customer that's important. It's not the technical solution or a regular price plan or stuff like that" Senior Vice President #2. "Let's start by trying to solve problems for the people that we're here for, and then decide how we need to organize and how we need to shape the organization in order to be able to do that" Vice President.
Organizational Goal	Customer centricity	Refers to the overall objective of the organization and its very reason for existence. Under a customer logic, actors recognize customer centricity as their main objective. Delivering services that customers love.	"And then we've understood, and there's this big shift toward customer-centricity that it is possible to be more customer-friendly. It is possible to design journeys and products that are stickier because customers like them and not because there's no other option" Senior Vice President #2. "I think, if you look at the things that we are doing in a design thinking/service design perspective, I think one of the ambitions is at least to be a customer centric company" Vice President.
Organizational Strategy	Service experience	Refers to the strategy to achieve the goal of customer centricity. Under a customer logic, actors strive for increasing service experience. Being able to deliver end-to- end services that customers love.	"We have a huge shift globally away from owning to accessing. We have a shift from print and software being something that you buy, a license for, to something that drives a service that you subscribe to or you use for free because somebody else is paying for it. That's a huge shift, and for us specifically, we need to understand and leverage that. So, our way of making money is going to change" Senior Vice President #2. "Making sure that the owner or the project model also understands that the project needs to focus also on the customer experience, not just how to implement it in the fastest possible way" Senior UX Specialist.
Product/Service Conceptualization	Human-centric services (e.g., tailored multichannel offers)	Refers to the conceptualization of the product or service the organization delivers to the market. Under a customer logic, actors interpret Telenor's major output to the	"Work across channels, including physical channels, not only digital. When I came to Telenor, the challenge was how to make the experience digital but also human centered, through service design" Service Design Lead Hungary.

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		market to be end-to-end services that address real customers' needs and wants.	"We think that, going forward, our success is going to be tied into our customers' success and our partners' success" Senior Vice President #2.
			"We need to introduce services and products that enhance the customer experience" Vice President.
Driver of Innovation	Design	Refers to the perceived major source of innovation worth investing into. Under a customer logic, design drives the development scene.	"But one of the epiphany moments for me, being a grown-up woman, not being digital native, when you look for examples at methodologies like service design, it's less on IT and more on markers and flipovers, right? So, it's a way of thinking, right? It's how you perceive the world. It's an attitude. It's a skill to analyze and design what's the job to be done. And that is powerful for everybody. That has nothing to do with age, or if you are in a digital business, or a traditional business; that can be useful for all people" Senior Vice President #1. "Trying to push service design thinking in
			innovation processes, especially in the very first steps before you actually have a kind of solution to develop" Head of Innovation #1.
Perspective	Outside-in	Refers to the approach to innovation and new product/service development. Under a customer logic, innovation and development are approached through an outside-in perspective. Directions are set starting by customers' needs and wants, always validating findings and service concepts with users	"I mean that we as designers, we are sort of driven by curiosity and always wanting to see things from different perspectives, and you just want to swim in people's thoughts, sort of, or behavior. It's the most exciting thing; kind of discover small details or even like big 'aha!' experiences when you talk to people, or you observe, or you think differently" Service Designer. "To let people understand that there are humans outside, and they think, feel, and they have some needs, and they know something
		and customers.	and don't know something" Service Design Lead Hungary.
Development practice	Service design	Refers to the development approach used for projects. Under a customer logic, service design is the established approach for product and service development or innovation projects.	"They introduced the Telenor Service Design Process as a new way of what they think is a more suitable way of developing new services especially, because that waterfall model that we have isn't quite suitable for developing new services. It doesn't support agility. It doesn't support prototyping. It doesn't support the design thinking way of working in a way. So, they introduced the Telenor Service Design Process" Senior UX Specialist. "Our team prefers that you use service design because we think that is the best way to work" Senior UX Specialist.
			"I think service design is one of a couple of very central methodologies that we can use to start thinking more from a customer's perspective" Vice President.

The customer logic provides a third case specific instantiation of a business (Reay & Hinings, 2009), market (Glynn & Lounsbury, 2005), or for-profit logic (Battilana & Dorado, 2010; Tracey, et al., 2011). It represents a third emerging model of competitiveness. Findings suggest that customer logic puts the customer at the center; the organization's very reason for existence is to serve customers best, providing solutions to their real connectivity needs.

The goal of the logic is customer centricity, identifying Telenor with a customercentric service provider. Both these categories underline the human-centered nature of the logic. This finding is supported, for example, by the Senior Vice President #2, who describes the shift happening in Telenor towards customer centricity, underlying the desire "to design journeys and products that are stickier because customers like them and not because there's no other option." Similarly, the Vice President shares that with the introduction of service design in Telenor, "one of the ambitions is at least to be a customer-centric company." The strategy to achieve such a goal is investing in improved service experiences. End-to-end services designed around customers' real needs. The object of delivery, therefore, is no longer a product but a human-centric service, where products result as important mechanisms of service provision. Under a customer logic, services are conceptualized as based on deep, qualitative customer insights, aiming at meeting customers' needs, wants, and expectations. They are also interpreted as end-to-end service interactions, happening over time, and through multiple touchpoints. This finding is corroborated, for example, by a Senior Service Designer working at the Service Design Lab, who asserts: "We need to look at the customer experience across all channels." Another example is provided by the Service Design Lead at Telenor Hungary, who shares how service designers "work across channels, including physical channels, not only digital."

Lastly, findings show that the customer logic values design as a driver of innovation, characterized by its human-centric and experimental nature. For example, a service designer operating at the Service Design Lab describes the human-centeredness of the design approach to innovation as immersing in people's thoughts, needs, and expectations. The same designer also describes the design approach as demanding designers to be "iterative and curious." Similarly, the Senior Vice President #2 describes the design approach to innovation as allowing "to learn and to experiment." Findings suggest that such a focus is enacted through the service

design process and an outside-in approach. Insights collected are based on real interactions with customers—usually through in-depth interviews and observations. Ideas are co-created with key stakeholders. Solutions are prototyped with customers before getting further developed or implemented. The process is dynamic and iterative. Findings also suggest that an outside-in approach enables designers to ensure that insights, ideas, and solutions are truly human-centered. For example, the Service Design Lead of Telenor Hungary explains how an outside-in approach enables taking into account that "there are humans outside and they think, feel, and they have some needs, and they know something and don't know something, and this is human-centered thinking and outside-in thinking."

Service design enters Telenor using the channel of the customer logic. Service design doesn't enter per se, but as a means to enact the customer logic in practice and achieve the new competitive model that the logic represents. Thus, service design is introduced in Telenor as a process for new service development (through the Telenor Service Design Process), as a unit (though the Service Design Lab), and also as one of the key capabilities Telenor needs to master going forward. At the core of process, lab, and capability, there is a fundamental focus on customers. Such strong focus on customers through service design is perceived as the "wild" card to play. It is fundamentally different from what Telenor knows, and it requires the organization to profoundly rethink the kind of value it delivers to customers and the way it does so. The Head of Innovation #1 sums it up as follows: "It's a huge transformation; it's a whole mindset."

Take Away Insights: A Constellation of Logics

Findings suggest that there are three distinct and present organizational logics of competitiveness in Telenor: telco, digital, and customer. The telco logic emerges as clearly defined and dominant. The digital logic is an emerging logic, showing clearly defined principles and values developing around digital transformation and increasing market share in existing and new markets. The digital logic has been fuzzy in determining the enactment of those principles in practice, relying on a lean methodology for innovation and development. The customer logic is the newest emerging, considered to be in full opposition to the traditional frameworks guding Telenor. The logic is fundamentally human-centered, aiming at delivering end-to-end services that customers love through a service design approach.

The two most recent logics, digital and customer, emerge as responses to pressures exercised by exogenous forces. Market demands for digital solutions and customer centric services have forced Telenor to consider new models of competitiveness, new ways to generate and deliver value to customers. The telco logic was, in fact, not fit to respond to such new demands. Exogenous forces therefore emerge as the first constellational forces operating on the constellation of logics. In particular, exogenous forces emerge as sources of dynamism and change, forcing new logics into the constellation and redefining their importance.

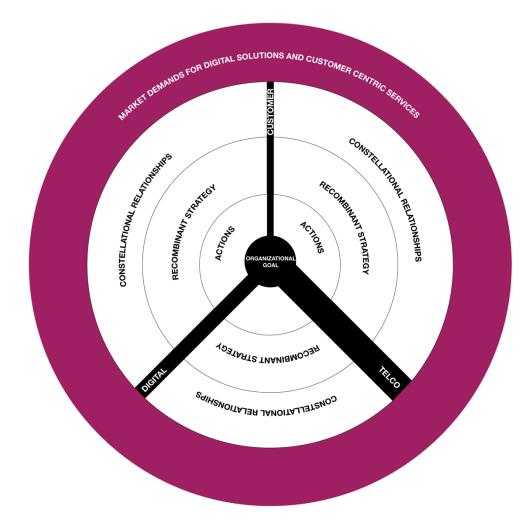


Figure 21. First specification of Figure 20. The three logics at play in Telenor are telco, digital, and customer. The three logics form a constellation. Exogenous forces, under the form of market demands for digital solutions and customer centric services, represent the first constellational forces operating on the constellation, sources of dynamism and change (purple).

This insight enables a start on specifying the first source of tension in the generic framework presented in Figure 20. Figure 21 shows the first buildup of what will become the final framework emerging from this study. The outer circle portrayed in Figure 20, which specifies exogenous forces, now becomes market demands for digital solutions and customer centric services. The circle becomes purple, signifying that these exogenous forces are a source of dynamism and change. Within the outer circle, the three black bars representing the constellation of three logics get increasingly specified. Telco becomes the thickest bar, as it represents the dominant logic at play in Telenor. Digital becomes thinner in respect to telco, as it is an emerging logic, less established. Customer becomes the thinnest bar, as it's the newest logic and still at an initial stage. The three logics do not exist in a vacuum; instead, they are positioned within a constellation. In the literature review, I explained that a constellation of logics is a "combination of institutional logics" guiding behavior at any one point of time" (Goodrick & Reay, 2011, p. 399), underlying that what's important in the context of a constellation of logics is the way logics are arranged and their mutual relationships. In the next section, I will therefore explore the mutual relationships between the three logics.

5.2.2. Constellational relationships

The previous section established that there are currently three distinct and present organizational logics at play at Telenor. The three logics have been described in terms of the key attributes that characterize them and make them distinct. I have also argued that the three logics represent a constellation. This section will now explore the way the logics are positioned within the constellation, and the nature of their relationships.

Figure 22 shows a visual representation of the mutual relationships among the logics emerging from the findings. The attributes used to analyze the relationships are the same as those illustrated in Table 16. However, at this stage, the objects of analysis are no longer the individual attributes (the contents of each cell in Table 16) characterizing the individual logics, but the relationships among them (represented by colored lines in Figure 22). As detailed in the theory section, relationships among logics can be competitive as well as cooperative (Goodrick & Reay, 2011). Cooperative relationships can be of a facilitative or additive nature. Figure 22 shows competitive relationships through purple lines, and cooperative relationships in

green. Crossed green lines represent cooperative relationships of an additive nature. Using each logic's key attributes as a unit of analysis as the choice to analyze the mutual relationships among logics is in line, among others, with the work developed by Goodrick and Reay (2011), who argue that logics' attributes have indeed been introduced to enable researchers to compare different institutional logics, thus allowing scientific enquiry (Goodrick & Reay, 2011; Thornton, et al., 2012).

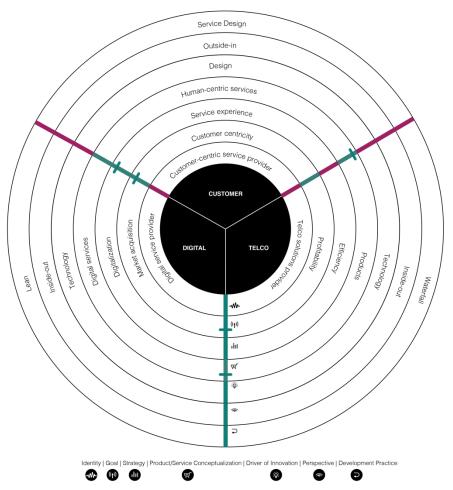


Figure 22. Competitive (purple) vs cooperative (green) relationships among the three logics' attributes.

In line with the work developed by Waldorff and colleagues (2013), I will utilize the understanding of the competitive and cooperative nature of relationships to inform whether the relationships between logics emerge as forces of stability or change. Indeed, Waldorff et al. (2013) argue that "the importance of cooperative as well as competitive relationships is critical to consider in attempting to understand how change occurs, or how stability is maintained" (p. 101). I will proceed by first describing the relationships between telco and digital, telco and customer, and digital and customer, and to then analyze their overall positioning in the constellation.

Relationships Between Telco and Digital Logics

Findings suggest that telco and digital are compatible logics. Their attributes show overall cooperative relationships of various natures—facilitative and additive. Thus, the line evidencing the relationships between telco and digital in Figure 22 is green. Findings suggest that telco and digital show cooperative relationships of an additive nature at the level of goal and product/service conceptualization. Data show that telco's goal is *profitability*, while digital's is *market acquisition*. These two different goals represent two distinct pillars of the overall strategy of becoming *customers' favorite partner in digital life*. They represent two fundamental aspects of the same strategy; namely, *most efficient operator* and *engaging digital products*. The description of the new strategy underlines the dependency between the two quite clearly; an extract (Telenor, 2016) of its definition states that:

We will retain the focus on growth and value creation. The growth will come from both our telco business, current digital verticals (IoT/M2M, Online Classifieds and Financial Services), and in new digital verticals

Therefore, following the organizational strategy, growth is expected through both maintaining the current telco business (telco logic) and by new digital verticals enabling access to new markets (digital logic). Thus, the two goals show a cooperative relationship of an additive nature since both logics are needed to reach the organizational strategy by 2020.

The second additive relationship is at the level of product/service conceptualization. Digital revolves around digital services in the form of, for example, apps and web platforms. On the other hand, telco has a strong focus on products (for example, in the form of subscription plans). A subscription plan is a transactional product; the customer chooses one, buys it, and utilizes it. The additive nature of this cooperative relationship emerges as products developed under a telco logic often require a digital service to be accessed and managed by customers. For example, a Senior UX Specialist explains how one of the projects at hand revolves around the development of a "portal or two portals for customers that want to buy API products." An API (application program interface) is a set of routines and protocols sold to business

clients to build software applications. It is a product developed under a telco logic targeting business customers who require a web platform to be accessed and managed. Similarly, the Project Director of Service Design refers to the My Telenor project, a platform (digital service) developed to enable individual customers to manage their subscription plans (product). These two examples demonstrate the cooperative relationship of an additive nature between telco and digital at the level of product/service conceptualization.

Findings suggest that the remaining relationships are cooperative of a facilitative nature—strengthening one will benefit the other. The facilitative relationships are identity, strategy, driver of innovation, perspective, and process. Telco identifies Telenor as a *telco solutions provider*, while digital as a *digital service provider*. The two identities, although different, subtend a very similar concept. Telenor provides telco solutions under both identities. The focus on digital, however, enables the organization to deliver increasingly more sophisticated digital solutions. It could be argued that one identity is the natural evolution of the other.

At the level of strategy, telco has a focus on *efficiency*, while digital is on *digitalization*. Digital thrives to digitize business offerings and core operations. Although the development of such digital technologies is highly resource demanding (in terms of cost and employee's time), the object of development is still a technological asset. Such digital platforms, although expensive, contribute to decrease the pressure on more manual channels-such as retail or call centerwhere employees are at the center of service delivery, directing traffic towards apps and web platforms where customers self-serve. The example of My Telenor described above provides a good case to support this interpretation. Customers are directed towards a web-platform where they can self-serve. Hence, findings suggest that digital services contribute to a more efficient business. Moreover-Telenor being fundamentally a technology company and given the great focus the telco logic has on technology-spending resources on technology development for digitizing the business is not questioned. For example, a Senior Service Designer corroborates this perspective, sharing how Telenor has over the years become numb to high-cost technology development:

We're easily spending the IT resources because we're a technology company, we have already learned that those are expensive resources and we have come to expect it and accept it. We have become numb to it.

Thus, efficiency and digitalization can be conceptualized as cooperative, of a facilitative nature. In terms of drivers of innovation and perspective, the two logics share the same attributes, they both have a strong focus on *technology* with an inside-out approach. When the attribute is the same, strengthening one will necessarily benefit the other. The final cooperative relationship of a facilitative nature is at the level of development practices that the organization should adopt for product/service development. At a first glance, this relationship emerges as competitive, fundamentally because the waterfall model adopted by the telco logic is linear, while the lean thinking model adopted by the digital logic is iterative. Under a waterfall model, decision points represent gates after which the development cascades down, with no opportunity to go back to the same decision point. Lean thinking is, conversely, iterative; improvements happen by trial and testing over time, informing decisions and development trajectories. Thus, the two processes might seem at first to be competitive by nature. However, the focus of lean thinking on operation efficiency and eliminating waste shares the fundamental value of operation efficiency of telco at the level of strategy (described before). Lean enacts, in practice, the value of efficiency that is so fundamental to the telco logic. To illustrate this, the Project Director of Service Design, while describing and comparing the different new processes introduced in Telenor in recent years for new product and service development, shares that "the lean model fits much better within our culture." He argues that the focus of lean thinking on efficiency and speed fits very well with the dominant culture (telco logic) of efficiency and time management.

Relationships Between Telco and Customer Logics

Findings suggest that telco and customer show competitive relationships at the level of most attributes, except for two: goal and product/service conceptualization. I will start unfolding the findings for the two cooperative relationships, and then move on to explore the competitive ones. In terms of goal, the telco logic focuses on *profitability*, while the customer logic is on *customer centricity*. The two goals, although different, leverage on two distinct aspects of the overall organizational strategy of becoming *customers' favorite partner in digital life*. Telenor's official strategy (Telenor, 2016) states that:

Subscriber growth is reaching saturation in most of Telenor's markets. To achieve above industry growth going forward, Telenor needs to create a superior experience for our customers and turn them into promoters of our services. This sentence suggests that to grow and remain profitable (telco logic's goal), Telenor needs to become more customer centric and deliver superior experiences to customers (customer logic's goal). Thus, the two logics' goals emerge as two aspects of the same organizational strategy. The focus on profitability and the one on customer centricity are two aspects of the overall mission to become *customers' favorite partner in digital life*. The relationship is therefore cooperative of an additive nature since reaching the final organizational strategy by 2020 requires both logics.

The second cooperative relationship can be found at the level of product/service conceptualization. The telco logic focuses on products (e.g., subscription plans), while the customer logic is on human-centric services. Findings show that in the context of Telenor, the end-to-end services designed to meet customers' needs include a product component. The product is conceptualized under the customer logic as one key touchpoint in the service delivery. Therefore, the development of new services often requires both logics to cooperate. To illustrate this point, the Products and Systems Experience Design Manager explains, for example, how the product price plan, developed under a telco logic, gets delivered to customers through an end-to-end service, developed under a customer logic. The two logics need to cooperate as, in his own words, "there is no product without the service around it."

Findings suggest that the remaining relationships are of a competitive nature. The telco logic revolves around transactional value exchange, while the customer logic centers on the humans addressed by the service. Thus, under a telco logic, actors identify Telenor as a *telco solutions provider*, while under a customer logic, Telenor becomes a *customer-centric provider*. The Project Director Service Design exemplifies the profound difference between the two arguing that Telenor needs to become "the orchestrator of services information for the customer. So, from the operator to the orchestrator." What the quote subtends is that a shift from transaction to human requires rethinking the identity and role of the organization, from an operator of telco solutions to an orchestrator of customer-centric services. The two attributes are therefore of a competitive nature, as strengthening one will inevitably weaken the other.

At the level of strategy, the telco logic focuses on *efficiency*, while the customer logic centers on service experiences. The shift of focus from products to experiences requested by this attribute requires rethinking the way Telenor creates and delivers value to customers. As previously underlined, the Head of Innovation #1 defines such a shift as a "huge transformation." Such questioning the value the organization creates, through the exploratory fashion of service design, conflicts with the focus on efficiency. Exploration takes time; it's uncertain, and difficult to plan and measure.

Findings suggest that the focus of the telco logic on *technology* driven innovation clashes with the customer logic's focus on *design*. Innovation driven by design relies on design professionals to guide the process between diverging and converging phases, empathizing with customers, and co-creating with stakeholders. On the other hand, a technology driven innovation relies on new technology development. The two drivers show a competitive relationship that is reflected at the level of development practice and perspective. The human-centered, iterative, and explorative nature of design as a driver of innovation is enacted through the service design process and an outside-in approach. Conversely, the focus on technology of the telco logic is enacted through a waterfall model and an inside-out approach. The competitive nature of the two processes—waterfall and service design—is corroborated by many interviewees. The Head of Innovation #1, for example, describes the differences between the two approaches as follows:

The existing waterfall project model is not useful for this [design-driven] way of thinking. [In a waterfall model] You need to have a clear business case even almost before you start the process, you need clear resources, clear ownership, all this very typical traditional business approaches to problem solving. But when you are using this way of working [service design], you're going to prototype with customers, prototype with other key stakeholders, and of course being out there, observing customers or users, thinking about people.

What this last quote exemplifies is that the two processes, following different stages and ethos, result in incompatibility. Similarly, the difference between outside-in and inside-out approaches is a source of competitive relationship. On the one hand, the telco logic favors ideas and solutions emerging from inside the organization, while the customer logic requires the involvement of customers and key stakeholders (including external partners) throughout the process. Managing the differences in prescriptions between an inside-out and an outside-in perspective is perceived as a

strong source of pressure. For example, the Service Design Lead of Telenor Hungary is among those interviewees who support this finding:

The challenge is, I believe, to change the mind set from inside out to outside in. To let people understand that there are humans outside and they think, feel, and they have some needs, and they know something and don't know something, and this humancentered thinking and outside in thinking was the biggest challenge because everybody is, you know, living inside a large organization and they are acting in roles. And all they look at is the world from the inside and, to me, that was the biggest challenge.

This quote exemplifies how the inside-out perspective favored by the telco logic, and the outside-in perspective privileged by the customer logic, generate a competitive relationship at the level of perspective.

Relationships Between Digital and Customer Logics

Findings suggest that the digital and customer logics present several competitive relationships, while only three are cooperative (at the level of goal, strategy, and product/service conceptualization). I will first describe the three sources of cooperative relationships before unfolding the findings related to the competitive ones.

Findings indicate that the digital logic's goal is *market acquisition* while the customer logic's goal is *customer centricity*. Similar to what has been argued in the previous two sections, the two goals, although different, represent two fundamental aspects of one organizational strategy. The strategy's focus on "new digital verticals" (Telenor, 2016) reflects the digital logic's goal to invest in market acquisition. Simultaneously, the focus on creating "a superior experience for our customers, and turn them into promoters of our services" (ibid.) reflects the customer logic's goal to become customer centric. The two logics' goals cater to two different aspects of the same strategy, defining the two attributes' relationship as cooperative.

In terms of strategy to achieve each logic's individual goal, digital favors the digitalization of customers' offers and core operations, while on the other side the customer logic focuses on improved service experiences. A strong component of the design and delivery of superior service experiences is represented by the

availability of digital channels. For example, one of the key outputs of the Family Project, aimed at providing a service offer to Norwegian families, is an app. The Senior UX Designer, leading the Family Project, shares that in the context of the project "the focus became a bit on the product [the app] at the same time as we started developing a service blueprint for that product. So, not to forget that this thing has to go into the bigger picture at some point." Thus, the ability to deliver superior service experiences depends on the level of digitalization, defining the relationship as cooperative of an additive nature. In terms of product/service conceptualization, both logics revolve around services. On one side, the digital logic focuses on digital services, while the customer logic focuses on human-centered services. Reinforcing the importance and increasing the focus on services benefits both logics. Thus, the relationship is cooperative of a facilitative nature. To corroborate this point, a Senior Service Designer shares how Telenor is "eager for services" that benefit both the digital and customer logics.

Findings suggest that the remaining attributes are characterized by competitive relationships. The digital logic strives for making Telenor a *digital service provider*, while the customer logic strives for turning the organization into a *customer-centric service provider*. The two identities prescribe distinct organizing principles that leave organizational actors puzzled on what choice to opt for. The Vice President explains how these two distinct identities have already become a source of distress for organizational actors as there is no clarity on what Telenor wants to become in the future. In the informant's own words: "We're not 100% clear on what we would like to be when we grow up," implying that no resolution has been found between the two distinct identities.

The remaining three competitive relationships are related to driver of innovation, perspective, and development practice. Under the digital logic, innovation is driven by technology, while under a customer logic it is driven by design. The relationship is identical to the one described between the telco and customer logics. Design-driven innovation requires design professionals to guide the organization through the key design phases, while technology driven innovation tends to heavily invest in new technology development. On the one hand, the focus is on people, on the other hand on technology. And again, the relationship at a perspective level shows the same competitive characteristics as between the telco and the customer logics. The digital logic tends to favor ideas emerging from inside the organization (inside-

out), while the customer logic favors insights and concepts rooted within a profound customer understanding (outside-in).

Finally, at the level of processes, the relationship is still competitive, although slightly more nuanced. On one side, the customer logic makes use of a design thinking process, while the digital logic favors lean thinking. I have been arguing how practices related to lean thinking are still ambiguous in Telenor. Findings suggest that the competitive relationship is primarily due to this ambiguity rather than to the prescriptions of the two practices per se. I will make use of three extracts from two different interviews to support this finding. On one side, the Project Director of Service Design refers to lean as the "step-brother" in respect to service design, and argues—as I've already shared—that lean fits much better than service design within the telco dominant culture. However, he refers to it as a "step-brother" because lean shares with service design an iterative approach. Moreover, as with service design, lean has been introduced quite recently in Telenor as a new way to approach product/service development in opposition to waterfall. One of the Senior Service Designers working at the Service Design Lab expresses how the two processes create conflicts among project team members; in her own words: "There's even a conflict internally, what method are we using? are we doing lean? are we doing service design?" These two quotes suggest a competitive relationship between the two attributes. However, the Senior Service Designer also shares that the issue is one of timing. Lean would be complementary to service design during the last two stages of the design process, when customer research has been developed and concepts formed. In her own words: "We're trying to tell people that when you come to Design and Build, like in the Service Design process module, then you can do lean, you can do as much lean as you want!" This quote suggests that the two processes could potentially be cooperative in Telenor. However, at the moment of data collection, they are referred to as in competition.

Take Away Insights: Constellational Relationships

The three logics, although prescribing different means-ends designations, cater to different elements of the current organizational strategy in place. The telco logic's focus on profitability and efficiency caters to pillar #4, *most efficient operator*. The digital logic's focus on market acquisition through digital solutions is backed up by pillar #2, *engaging digital products*. The customer logic's focus on customer centricity and service experiences is justified by pillar #1, *loved by customers*. It can

be argued that the three logics enact different aspects of the current organizational strategy. They represent three different trajectories towards the future of Telenor as a market leader and profitable organization. This insight is fundamental as conflicting prescriptions do not engage the organization at an ideological level (prescribing the goals that are legitimate to pursue); rather, they engage the organization at a functional level (prescribing the means the organization should adopt). In the theory section, I shared how Pache and Santos (2010) argue that incompatibility at a goal level is substantially more challenging to resolve than one at a mean level. Goals are not negotiable as they require organizational members to question what their organization is about. Conflicts on means only are easier to tackle, facilitating the resolution of conflicts. Thus, the current organizational strategy of *customers' favorite partner in digital life* emerges as a key source of organizational stability.



Figure 23. Second specification of Figure 20. The organizational goal, *customers' favorite partner in digital life*, represents the first source of organizational stability (green). The cooperative relationship between the

digital and telco logics is a source of stability. The competitive relationships between customer and telco, and customer and digital, are sources of dynamism and change (purple).

Figure 23 shows the second build-up of the framework. What has been presented in Figure 20 as organizational goal now becomes customers' favorite partner in *digital life.* The circle at the center of Figure 23 is green, representing a source of organizational stability. Moreover, the cooperative relationship between the telco and digital logics emerges as a second source of organizational stability. The two logics do not expose actors to any conflicting demands. Hence, Figure 23 shows a green section signifying *cooperative relationships* between telco and digital. Finally, while the previous section identified the first source of organizational change in the exogenous forces generated by market demands for digital solutions and customer centric services, this section traces a second source of organizational change: the competitive relationships between the customer and telco logics, and between the customer and digital logics. The customer logic and the remaining two logics portray conflicting attributes at the level of most categories. The customer logic is in competition with the other two, exposing organizational actors to contradicting organizational arrangements. Hence, Figure 23 shows two purple sections between the customer and the other two logics, signifying competitive relationships.

Considering how the customer logic differs from the other two, it is not plausible to argue that the only reason why the logic manages to remain within the constellation is solely the organizational goal of becoming *customers' favorite partner in digital life*. The next section will explore the nature of the strategy adopted to introduce the customer logic and service design in Telenor.

5.2.3. Recombinant strategies

The previous section explored the relationships between the three logics in the constellation. Up to this point, findings suggest that the three logics provide organizational actors with different means-ends designations as well as organizing principles (Friedland & Alford, 1991). It can be argued that the three logics expose organizational actors to conflicting demands. For example, in the case of the Family Project, the team is at the same time asked to follow a human-centered, exploratory approach to service development (deeply rooted in service design and the customer logic) while also being pressured to deliver results fast to market (expression of a

lean approach and a digital logic). These two demands are conflicting—as an exploration of customers' true needs requires time—leaving the team unsure on how to proceed and frustrated by the need to juggle different conflicting demands. To exemplify this point, a Senior Service Designer shares her frustration regarding the Family Project as follows: "As a designer, you really want to achieve greatness in the process, but you just become this octopus, you have to do everything, and I had to go out of that project because I was sick. I became sick." This quote exemplifies how the pressure of incompatible prescriptions from the three organizational logics exposes organizational actors to complexity. As described in the literature section, organizations face complexity whenever they are confronted with conflicting demands, which expose organizational actors to multiple and contradictory guiding principles and cultural logics.

This section will now try to shed some light on how Telenor is responding to such complexity, with a specific focus on conflicting demands concerning the customer logic. The choice to focus primarily on the customer logic is due to the objective of this study—which is to explore service design in an organizational context. Also, the competitive relationships that the customer logic showcases with the other two logics are the major source of conflicting demands and organizational complexity. I'll build extensively on the work developed by Dalpiaz, Rindova, and Ravasi (2016) by analyzing the recombinant strategies in place at Telenor. Two of the three recombinant strategies are being implemented at the same time; namely, *compartmentalization* and *enrichment*.

Compartmentalization

The empirical chapter has described the establishment of a Service Design Lab in Telenor Norway in the late 2015. The lab was set up following a decision from the board of directors that encompassed three objectives: (1) validate design, (2) do design, (3) and build design. Findings show that the establishment of the Service Design Lab is the result of a compartmentalization, recombinant strategy. After considering the incompatibility of the customer logic with both telco and digital, the Lab was created to provide a safe space to experiment with the service design process and approach without risking current traditional telco operations. This finding is supported by several referents, among whom is the Project Director Service Design, who shares the following:

It's an organizational entity, and it's there to protect the designers, to kind of create breathing space for the designers at the beginning until the environment has become less hostile in a way. The only thing that keeps these guys here is that they're able to sit together and breathe and talk to each other.

The lab represents a strategy to protect both the designers, who operate in a nondesign-friendly environment such as Telenor, and current operations and profitability. The positioning of the lab, specifically in respect to its primary goal validating the service design process through a pilot project—emerges as a compartmentalization strategy. Building on the work developed by Dalpiaz et al. (2016), we can summarize the mechanisms driving this first recombinant strategy at Telenor as follows:

Guiding Principles of Strategy: *Safety*. The organization can continue operating through the existing dominant telco logic while experimenting with some aspects of the customer logic and its key service design process in a small and safe pocket.

Search for Opportunities: *Entering new markets through customer-centric service innovation*. The main project emerging from the Lab, the Family Project, has indeed the objective to create a brand new custom offer for Norwegian Families. Telenor does not currently have any offer for this segment; therefore, the aim is to enter a new market through new service development driven by the customer logic.

Practice Change: *Radical and delimited.* Service design is a radically different mode of operating for Telenor, with a strong focus on innovation. To illustrate this finding, one of the Service Designers shares that "I think they [referring to leaders] expect us to come up with something very new and innovative." Thus, the service design process is expected to produce some radical innovations. However, the effort is delimited to the lab and to the designers that constitute it.

Execution Challenges: Lack of dedicated time from key stakeholders external to the lab. The design of an end-to-end multichannel service requires the involvement of key stakeholders across functions. One of the key aspects characterizing a design approach to innovation is co-creation. The team driving the Family Project, adjacent to two fulltime service designers, is constituted of several representatives from different functions; for example, IT, Marketing, Product, and Customer Service. These representatives are part of the core team but dedicated to it approximately

40% of their time. This lack of commitment had the consequence to slow down the project development significantly.

Findings show that within a compartmentalization strategy the customer logic dictates organizing principles to guide work development and decision making. In the example of the Family Project, designers share that although the project team was constituted of several actors who were not carriers of a customer logicreferents instead of a digital or telco logic-conflicts were resolved by letting the organizing principles of the customer logic guide the resolution. The compartmentalization strategy therefore contributes to maintain organizational stability. However, this source of stability has proved to be only temporary and delimited. Findings suggest that when prescriptions from another logic are actively imposed on the development of tasks within the compartmentalization strategy, resolution of conflicts becomes ambiguous. For example, six months after the start of the Family Project, the Head of the Innovation Program (carrier of the digital logic) took interest in the work and assigned a project manager from his team to run it until completion. The Project Manager was guided by the digital logic's organizing principles, thus by the lean practice, while the Lead Service Designer (who had run the project till that point) was guided by the customer logic's organizing principles, thus by the service design practice. The tension between the two escalated to the point that the project stalled. The Lead Service Designer articulates it as follows:

Her [Project Manager] KPI is to deliver a product as soon as possible. And our KPI is to pilot the service design process and, of course, come up with these new services. We've picked up a concept that reached the define stage, and then we needed to do the design phase. But what she's done is she's jumped there, and has just found one idea within that concept, and then she just wants to build it, and see how it goes and build on it. But we think that she has missed out on this whole phase. So, we don't really know how to move forward because she wants to just tell our service designer, today you're going to do this, today you're going to do that. The service designer, you know, thinks that she's meant to lead us through this phase and then that's a bit of a conflict. Which has now been going for about two weeks and we've not resolved it yet.

Findings suggest that as long as the customer logic is the only logic imposing prescriptions on the development of tasks within the compartmentalization strategy, then organizational actors can fully rely on the organizing principles dictated by the logic. When another logic, such as digital, influences the development of tasks (as

per the example portrayed by the quote above), actors are ill-equipped to decide which logic should drive decision making and the resolution of execution challenges. Thus, the compartmentalization recombinant strategy represents an element to contribute to organizational stability, but in a way that is only temporary and delimited. Moreover, the compartmentalization strategy hinders the possibility for the customer logic to spread more broadly across the organization. As noted in the empirical chapter, the objective of the lab is not only to *validate design*, but also to *do design* (support teams across functions to embed human-centered practices), and to *build design* (develop service design capabilities across Telenor Norway). The compartmentalization strategy is not apt to equip actors to navigate challenges that naturally arise during this effort. Although the compartmentalization strategy creates the right environment to validate design, it does not provide the right setup to do and build design more broadly across Telenor. To respond to the objective of doing and building service design, an enrichment strategy between the customer and the other two logics starts to emerge. The two strategies emerge almost simultaneously as they cater to different objectives.

Enrichment

Findings suggest three enrichment strategies enacted in Telenor. The first is between the telco and digital logics, the second between the telco and customer logics, and the third between the digital and customer logics. Since the focus of this study is to understand the adoption of service design, a major focus will now be given to the enrichment strategy between the customer logic and the remaining two.

Enrichment Between Telco and Digital Logics. The establishment of a new portfolio for digital, with a new budget and owner, subtends the choice to legitimize elements of the digital logics within the dominant telco logic. Referents also refer to the establishment of an Innovation Program within the Mobile Division, whose objective is to find new ways for Telenor to innovate, but also to find a development model that is "faster" than the current waterfall. Therefore, actors are using the digital logic's focus on digital innovation and faster time to market to enrich the telco logic. The enrichment strategy is in progress in its form (routines are in progress of being established), but it is certainly established in its need (legitimized in the eyes of organizational actors).

Enrichment Between Telco and Customer Logics. While validating service design through the compartmentalization strategy, Telenor is faced by the need to be increasingly more customer centric to meet the goal of becoming *customers' favorite partner in digital life* by 2020. The customer logic provides insights into how to achieve this goal. Thus, findings suggest that carriers of the telco logic try to enrich the logic in practice with selected elements of the customer logic. The elements selected are mainly in relation to service design practices; namely, customer research and prototyping. As a result, these elements begin to be embedded into the traditional waterfall model. The enrichment between the telco logic and the customer logic had no clear principles guiding it, instead it started emerging indiscriminately. Referents share how telco referents, pressured by the demand to produce products and services that are increasingly more customer centric, start to "steal" practices, tools, and methods from service design, embedding them into the waterfall model. For example, the Project Director of Service Design shares the following:

We had a lot of people, for example, in the business running around, like Norway as well, using design tools and methods in the Waterfall Development Process. Which is a huge pain. And then in some countries they think they're doing service design, and since they don't have any designers in house they don't even see that something is wrong.

This quote exemplifies how the enrichment between the telco and customer logic is emerging randomly, through individual actors' initiatives. Moreover, it is important to note that such enrichment is primarily happening at the level of practices and processes, not necessarily at the level of values and principles. While such enrichment attempts increase the diffusion of service design across the organization, they also bring serious consequences for quality standards. Thus, the enrichment between the telco and customer logics cannot quite be defined as a strategy characterized by specific objectives and plans—rather it can be argued to be an attempt or initiative.

Enrichment Between Digital and Customer Logics. A third attempt of enrichment emerges between the digital and customer logics. While the previous enrichment cannot be defined as a strategy—emerging by individuals' uncoordinated initiatives—the one between digital and customer shows clear signs of strategic intentions. Findings suggest that in response to the objective of *doing*

design (supporting teams across functions to embed service design practices), carriers of the customer logic are actively trying to influence the definition of the digital governance to ensure that key aspects of the customer logic are included. These are primarily related to service design practices. Data show that the choice to actively try to enrich the digital logic—and not the telco logic, for example—is because digital projects have a higher priority, significant resources allocated, and a flexible governance, as compared to more traditional telco projects. Moreover, as discussed before, the digital logic's process to approach new service development is still ambiguous since practices and governance are still in the process of being defined; thus, the digital logic's practices are more easily influenced than the more established practices of the telco logic. The contribution of these two elements establishes that an enrichment strategy between the two logics represents a good opportunity to ensure that key principles and practices of the customer logic can be instigated more broadly. The Senior UX Specialist, involved in the definition of the digital governance, corroborates this finding by sharing the following:

This trying to participate in making a finished DSP governance and try to make a process where we don't make a strict process like this [service design], but at least set some criteria that if you don't follow the service design method, at least then you have to test with customers all the time. You have to make sure that what you're doing actually addresses some needs, that you do something that the customers actually need.

The quote exemplifies how this enrichment strategy is more strategic than the previous one, aiming at establishing service design's core practices broadly in the organization. The mechanisms driving this enrichment strategy can be summarized as follows:

Guiding Principles: *Prioritizing the digital logic, enriching it with elements of the customer logic*. As the quote above illustrates, to ensure the customer logic moves increasingly out of the compartmentalization strategy and diffuses across the organization, the customer logic's carriers select key practices of service design to be embedded into digital practices.

Search for Opportunities: *Customer-centric products or services*. The service design practices selected to enrich the digital logic mainly aim at ensuring that project outcomes from digital projects are increasingly more human-centered.

Design research and prototyping are two of the most important elements introduced to enrich the digital logic.

Practice Change: *Incremental and delimited.* The enrichment of the digital logic through elements of the customer logic does not aim at disrupting digital's practices but to supplement them with some key service design practices.

Execution Challenges: *Lack of designers to support the enrichment strategy.* The Senior UX Specialist shares that, under the new DSP governance definition, service designers are required to be involved in an increasing number of projects. However, the service design team has not grown in number, it still comprises eight designers—few in comparison to project demands.

Synthesis

There is no trace of Telenor's attempt to synthetize the different logics, or a selected combination of the three, into a new logic. This does not come as a surprise. The telco logic is still dominant, and Telenor is still profitable. Moreover, the three logics are in a position of temporary stability within the constellation. Although findings suggest the lack of a synthesis strategy, data indicates that a few individual actors, at a leadership level, have engaged in a reflection on what elements are needed to enable a synthesis strategy in the future. All actors agree that the current organizational stability is only temporary; therefore, a reflection on future directions is needed.

The first element emerging from the data, considered fundamental for a synthesis strategy, is the need for organizational actors across Telenor to internalize that change is inevitable. The days when the telco logic could effectively drive business decisions, as well as directing ways of organizing, are quickly expiring. The Senior Vice President #2 describes this first insight as follows:

I think you need to internalize two things. I think you need to internalize the fact that the world is changing. We're living in a time of great uncertainty and a time where industry is transforming, or needs to transform, changing and being challenged left, right, and center. Then you need methods that allow you to learn and to experiment, and this [service design] is a structured way of doing that, which is proven. But you need to internalize that. You need to understand and accept that that's true, it's actually true. And then you need to be comfortable with the way you work before you start promoting it. Therefore, the first element is recognizing change as inevitable, and being open to learning and experimentation. The second element emerging is related to the recognition of the equal importance of the digital and customer logics. Most interviewees in leadership positions repeatedly refer to digital and customer centricity together in their statements. They maintain the need to include both new logics in Telenor's way of operating due to its new strategic goal.

Finally, the third element suggested from the findings is related to the need to establish key referents for the two new logics. There is a perceived need for leaders who can represent each logic at the board of directors to influence strategic choices, and who can also support the maneuvering process between different practices, which is what is proving so hard in the daily work. Not surprisingly, this step has already been taken for digital practices. A new leadership role has been created to ensure that digital is represented around the CEO's table. However, the process to have a representative for the customer logic who understands and can represent the customer and service design in the board of directors looks way more futuristic. Service design and the customer logic have not yet reached a level of institutionalization that justifies a dedicated leadership role. Nevertheless, a few interviewees referred to this option as a future requirement. The Project Director of Service Design is certainly one of the leaders who has long considered this option and managed to clearly articulate his thoughts on the topic. He states that the role of a Chief Design Officer (CDO) has indeed been discussed; however, there are three things that are conditional for that to happen: (1) being able to have a clear design department and team, (2) providing the new leader with a clear written mandate to bring design into Telenor, and (3) managing to find a person who really understands design and what it takes to bring design into a large traditional telco such as Telenor. All three elements require a level of adoption of service design that is simply not there yet. The few referents who have mentioned the need to establish a CDO agree that one of the main roles for the CDO is indeed to educate the board on the potential of design, and to ensure that designers are assigned to strategic projects that have high potential to impact customer experience. In other words, the CDO is somebody having to *do* and *build* design top-down in Telenor.

Take Away Insights: Recombinant Strategies

The enrichment strategy used to introduce the digital logic represents a source of organizational stability as the logic is not introduced to replace the dominant telco, but to enrich it with elements that contribute to make Telenor a better fit for the new emerging market demands.

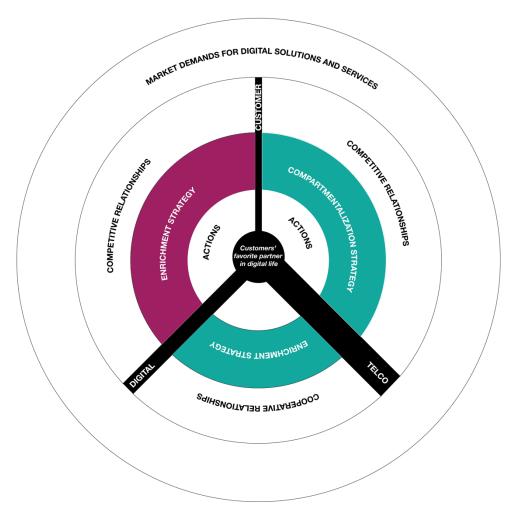


Figure 24. Third specification of Figure 20. The compartmentalization strategy used to introduce the customer logic, and the enrichment strategy used to introduce digital, are sources of organizational stability (green). The enrichment strategy between digital and customer emerges as a source of organizational change (purple).

Figure 24 represents the third buildup of the constellational forces operating on the constellation of logics, where the enrichment strategy between the telco and digital logics is portrayed in green—underlying a source of organizational stability. On the other side, the compartmentalization strategy used to introduce service design represents a way to balance the organizational tension created by the competitive

relationships that the customer logic shares with the remaining two logics. By compartmentalizing the customer logic's service design practices, stability is maintained, since service design is hindered from affecting current operations. Service design is therefore relegated to a pocket of the organization, to be tested and piloted. In Figure 24, the compartmentalization strategy is therefore green—representing another source of organizational stability. It is positioned between customer and telco, underlying that the compartmentalization is mainly introduced with the objective of protecting traditional telco operations. Although the compartmentalization strategy is a source of organizational stability, at the same time it hinders service design from becoming broadly diffused and entrenched. Thus, carriers of the customer logic start exercising agency to enrich the digital logic with key elements of service design. Such initiative shows strategic coordinated intentions that aim at organizational change. Hence, the enrichment strategy between customer and digital logics is portrayed in purple in Figure 24.

It's important to note that the enrichment between customer and telco logics does not appear in Figure 24 as it cannot be conceptualized as a strategy, but as single individuals' initiatives that are neither consistent nor coordinated. Figure 24 adds an extra layer to our understanding of constellational forces operating on the constellation of logics. However, the picture shown is not yet complete. Actors' actions, for example, through the effort to enrich the digital logic with key elements of the customer logic, start emerging as a key force operating on the constellation. Thus, the next section will explore in more detail individuals' actions and agency.

5.2.4. Logics in action

Previous sections have illustrated that there are three distinct logics present at Telenor; have explored the nature of their mutual relationships; and have analyzed the strategies adopted to recombine the three logics. By doing so, previous sections have started to shed some light on the organizational context within which service design is introduced, and the forces operating on the logic that service design represents.

The concept of a constellation of logics, adopted in this piece of research, offers an important new way to understand agency (Waldorff, et al., 2013; Martin, et al., 2017). As underlined in the theory section, studies in this field tend to constrain the

analysis to the field level—where the constellation of logics is a result of field level dynamics determining the options provided to different actors (Martin, et al., 2017). Research has paid less attention to the concept that constellations may be constructed, as opposed to given, and which dimensions of agency drive their formation (Smets & Jarzabkowski, 2013; Martin, et al., 2017). This section will therefore explore the individual level actions that have shaped and contributed to the introduction of the customer logic in Telenor, and therefore to the construction of the constellation itself. The choice to look solely at the actions enacted under the customer logic, excluding telco and digital, is due to the focus of this study on service design. Not enough data have been collected on actions activated by carriers of the other two logics, which are out of scope for this research project.

Carriers of the customer logic are primarily service designers and leaders who have believed and invested in service design since its introduction in Telenor. Examples are the Head of Innovation #1 and Project Director Service Design in Telenor Group, and the Products and Systems Experience Design Manager, in Telenor Serbia. None of these actors have a design background but an engineering or business background. They discovered service design in the past 5-7 years and became believers in its approach and potential for Telenor. It is interesting to note that both designers and non-designers who are carriers of the customer logic enact it in practice through service design. It is service design that they advocate to be of paramount importance for Telenor to embrace in order to become more customer centric. Thus, although service design operates within a wider customer organizational logic, at the level of individual actions, service design is the tangible unit that actors describe, push, and try to establish. At this lower level of analysis, service design becomes the *what* that needs to be conveyed and established so as to serve the higher customer logic. Under this light, findings suggest four key actions enacted by organizational actors who are carriers of the customer logic: *sensitizing* to service design principles, embedding service design practices, securing human resources, and growing enabling structures.

Sensitizing to Service Design Principles

Findings suggest that service design is not understood by carriers of the telco and digital logics. For most of the organizational actors operating outside of the Service Design Lab in Telenor, service design is extremely new and unclear. The Senior Vice President #2 illustrates this point by sharing the following: "You come up with

something that is a bit new age-ish. It's perceived not serious. It's not run by engineers and people with a Master's in Finance. So that's the shift." What this quote suggests is that service design is perceived as unreliable for tackling the business challenges Telenor is facing or to achieve the objectives set by the organizational strategy. Designers are considered not as serious and reliable as engineers or financial experts, who instead are trusted to suggest sound directions for the future of the business. Data show that service designers are perceived as able to visualize effectively; therefore, their presence is requested and understood only at the very end of the new product or service development. Thus, findings suggest that sensitizing organizational actors to the principles characterizing service design. The principles that are diffused throughout the organization are *human-centered*, *co-creative*, *holistic*, *experimental*, and *transformative*. The action of sensitizing encompasses three stages: *expose*, *simplify*, and *customize*.

Expose. Findings suggest that for organizational actors to be sensitized to service design principles effectively, they first need to be exposed to them and their potential impact on the organization. The process of exposure in Telenor is occurring through the Family Project. By being exposed to the tangible results of the service design process, the discipline becomes less "fuzzy." Tangible outcomes are better understood and positioned in relation to their contribution to the final organizational goal. The Head of Innovation #1 this without having experienced it. The Family Project was an eye opener for quite many business people being a part of that project, working in the steering group of that project." Similarly, the Senior Vice President #2 shares the following:

They have seen how powerful it can be to go from actually thinking you understand the opportunity and the problem you're trying to solve to actually find out that you don't necessarily understand it once you engage properly with customers, to iterate through solutions and finding out, well, what we thought was a good solution is not a good solution. I mean, experiencing that this process leads to much better products and culture.

These two quotes imply the exposure of the organizational actors to many service design principles. The first referent refers to the importance of being part (even if only in a limited way) of the process, hence exposing actors to the *co-creative* nature of service design. The second referent refers to the importance to engage customers to understand problems and opportunities, hence referring to *human-centricity*. The

interviewee also refers to the importance of exposing actors to the iterations of different solutions, hence to service design's *experimental* principle. Finally, the referent concludes that such exposure ultimately has the goal to showcase the transformative potential of service design both for the customer and organization to give birth to "much better products and culture." To conclude, when describing her attempt to expose a specific new team to service design principles, through their involvement in a new project, one of the service designers shares the following: "You [organizational actors involved in the project] have to feel this is about being holistic, this is about people's feelings, this is about call to emotions. I think they're slowly getting it." What the designer refers to in this quote is that the involvement of the specific cross-disciplinary team in this project has the objective to expose them to the *holistic* and *human-centric* principles of service design. In her opinion, the fact that they are exposed to them and understand them is even more important than the final project outcome. The next two elements, simplify and customize, describe the approach employed by carriers of the customer logic to expose actors to service design principles.

Simplify. The simplification of the language used to introduce service design, its positioning, and its principles, is paramount for organizational actors to fully understand it. The Head of Innovation #1 explains how, in her journey, she tactically opted to stop mentioning service design (newer, fuzzier, difficult to grasp) in favor of the better-established design thinking. She decided to describe an innovation process apt to explore new opportunities based on design thinking. Design thinking is understood in the context of new product development, and therefore easier to grasp for the widespread product mindset. In her own words, the referent shares the following:

And now I'm pushing it very much in terms of innovation processes. How we should use this, I'm trying to document the power of using more design thinking in general, not necessarily service design. And it very fast comes to services. But I think it has been tactical to talk about this, because you can use design thinking in development of physical products, that are a part of a journey, a service journey. So that's easier for people to grasp. That's my thing now. For us, for people like you and me, we know that this is about services. But to sell it internally, I think you should introduce it as a general approach for exploring new opportunities. Simplification implies the capacity of synthetizing key concepts thorough excellent communication skills. The same referent also shares how the Senior Vice President #2 has opted to use metaphors and examples to explain the values of service design that are not strictly representative, but that are simple enough to ignite interest and understanding. Thus, findings suggest that simple effective communication is key to introducing service design to new organizational actors. Exactness of the concepts shared should give way to simplicity and effectiveness within context. Visualization also emerges as a powerful tool to simplify and communicate complex concepts and abstract principles. For example, one of the service designers divulges that drawing is the best way she has experienced to simplify the *experimental* principle of service design:

You have to draw. You draw the fuzzy front end and you tell them this is where you get lost in the woods. This is where you're completely alone, and you might feel the anxiety, and you might get nervous. But this is the process. This is what we do.

Thus, easy language, a selection of only key concepts and visualization emerge as paramount in sensitizing organizational actors to service design principles.

Customize. A final element characterizing the action of sensitizing organizational actors to service design principles is the customization of content in a way that different stakeholders can recognize value for themselves. Findings suggest that the language must change according to the audience. Customizing the content requires an in-depth knowledge of the different key stakeholders, the context within which they operate, and the power plays they are engaged with. In other words, it requires empathizing with all key stakeholders. This empathic process is fundamental to customizing messages that can interest audiences and be understood. Referents share that by customizing supporters of service design can be found in the most unthinkable places. The Head of Innovation #1 shares that surprisingly the HR function was extremely responsive, as they saw an opportunity to engage employees in a meaningful way through service design. Similarly, the Products and Systems Experience Design Manager states that Finance was the department that first understood the power of service design, since they identified in it a potential to create cross-sell opportunities.

Embedding Service Design Practices

While the first action engages with the principles characterizing service design, the second engages with its practices. In case service design, key practices refer to *conducting design research, ideating, visualizing, prototyping,* and *sequencing*. The action of embedding service design practices encompasses two stages: *engage* and *locate*.

Engage. Engaging people in a timely manner is fundamental to enable service design practices to be embedded within stakeholders' habitual actions and routines. This is something that has been done systematically at Telenor and recognized as one of the key factors contributing to the diffusion of key service design practices. For example, the Lead Service Designer of the Family Project shares how the core team has systematically ensured that employees from different functions of the organization were involved during the design research and ideation workshops:

The service designer and I did a lot of work between workshops, so we sort of worked 100%. And then we had two or three workshops every week. And they were quite lucky, they just had to turn up and be here. They didn't do a lot of work between. But we made sure that whenever we went out, we had them with us, so that it becomes a team, not just us doing all the work.

The informant's quote accesses multiple insights. First, stakeholders do not necessarily need to be engaged to all service design practices. In this case, service designers have opted to expose the team to *conducting design research* and *ideation*. Different teams will need to be engaged with different service design practices, depending on their role and nature of the project that they have been involved in. Taking another example, the Service Design Academy that was rolled out across Telenor had *prototyping* as the only objective to engage stakeholders. Leaders did not need to understand, be familiar, and be engaged to all aspects of service design practices. Rather they needed to understand the value of prototyping to support and direct their teams to challenge their concepts and perform early testing. The second insight emerging from the previous quote is that engagement has the objective to create ownership of the process and outcomes for non-designers. In the project lead's own words: "I think it is really important because now, when they talk about the project, they have some ownership to the information that we have found. Because they've actually heard customers saying these things." Findings suggest that engagement should be a constant activity across the different design phases. It should also be done differently, depending on the design stage; for example, participation to workshops, co-led customer interviews, and participation in prototyping.

Locate. This refers to the need to locate the right people and projects to start and sustain the embedment of key service design practices. For example, the Lead Service Designer of the Family Project shares the importance of selecting the right stakeholders to be part of the project. Data suggest that the employees selected should have a certain tendency to cope with uncertainty. Further, findings suggest that prioritizing projects and locating those that have higher potential to impact customer experience is also important. For example, one of the Senior Service Designers talks quite extensively about the need to identify key projects to be involved in, even if that takes an act of force from the designer's perspective. In the context of the Customer Lifecycle Management project, the senior service designer explains how he forced himself in the project as he knew it had a high potential to impact customer experience. That enabled the establishment of new routines that got maintained in the longer run.

Securing Human Resources

The third action aims at securing human resources. The action of securing resources is paramount for the previous two—sensitizing and embedding—to take place. Human resources represent the very fabric to empower actors to exercise agency. It encompasses two key actions: *specialize* and *track*.

Specialize. One of the major challenges that arise in the process of both sensitizing to service design principles and embedding service design practices is to have service design specialists that can enact those actions. Service design, being heavy on the process, requires professionals familiar with the tools and methods to be enacted. Thus, forming a team of specialized service designers is paramount for sensitizing and embedding to occur. This finding is corroborated by more than half of the interviewees. Service design can indeed only take place at the scale and depth required at Telenor through design specialists. This is not as obvious as it might appear at a first instance. The way design thinking has been portrayed in the media and general publications for non-specialists assumes that design thinking is something that anybody can and should do. The underlying message is that anybody can be creative through the right process and tools. Although this concept has

contributed to the diffusion of the discipline, it does not do designers justice. The capacity to navigate highly uncertain and chaotic terrains, facilitate contributions from different stakeholders, empathize with customers or users, and effectively visualize concepts are all examples of skills that cannot simply be learned on the spot. Thus, findings indicate that ensuring the right number of specialists is paramount to be able to introduce and embed service design effectively. To corroborate this finding, one of the senior service designers shares the following:

The other problem is making people understand that you need experts. Just because you know the tools, and you know the buzz words, and you've been doing design thinking or service design doesn't mean that you can actually do it.

There are two aspects worth pointing out. The first is related to securing resources by hiring, growing, and maintaining a strong service design team. In the specific case of Telenor, this comes with several challenges as the organization has restricted the budget for new hires. Many interviewees share that, at data collection, the only way to hire somebody new is for an existing employee to be fired or leave. This presents a bottleneck when securing service design resources. While organizational actors are sensitized to service design, and practices start getting embedded across the organization, requests from different divisions for design support begin arising, requiring a scale of experts that Telenor just cannot provide.

Findings also suggest that even when hiring becomes a possibility, finding talent is perceived as extremely difficult. Service design is a new profession. Therefore, universities are struggling to produce the scale of talent needed by the industry. Many of the interviewees express this challenge, especially those in Serbia, Montenegro, and Hungary, where service design education is simply not present. Moreover, in areas where service design education is present, such as the Oslo area, Telenor is struggling to acquire talent as the company is perceived as unattractive in the design talent market. Telenor is indeed regarded as a traditional telco, hierarchical, unexciting, and incapable of providing the flexible environment designers need to create and grow. Also, referents share how designers look for work environments where they can be surrounded by like-minded people; however, Telenor, with its small group of designers, does not support that. Moreover, findings show that even when talent is acquired, retention is a challenge. The traditional, risk-adverse environment contributes to a high turnover of design talent at Telenor.

Interestingly, this is not only true for service design talent operating under the customer logic, but also for digital talent operating under a digital logic.

The Senior Vice President #1 also concurs with how Telenor is struggling to find and retain digital talent. Digital and design professionals, when hired as carriers of the digital or customer logic, meet the reality of an organization still profoundly dominated by a telco logic—characterized by lengthy decision-making processes, short-term KPIs, risk adverseness, and a traditional waterfall approach. The clash between values and beliefs produced the high turnover rates of talent that Telenor is experiencing. Findings suggest that to respond to the difficulty of hiring and retaining design talent, Telenor has started training non-designers in design thinking and service design. The objective is to specialize them in an aspect of the processes they need and can use in their daily work. However, this is also proving a difficult task due to limited design human resources. The situation creates a closed loop where lack of resources hinders the capacity to sensitize organizational actors to service design principles and to embed practices. To summarize, specialize refers to human resources, encompassing access to talent, retention, and training.

Track. Findings suggest that the lack of human resources able to introduce and enact service design in the organization needs to be evaluated and its effects tracked. The Project Director of Service Design shares how he keeps a detailed list of all the requests for design support he receives from different divisions and that he is forced to refuse due to lack of available designers. His objective is to be able to show some clear numbers of the real demand for design specialists, and the consequences of not being able to cater to those needs. By doing so, he hopes to create a business case to unlock budget to hire more resources in the future and to legitimize the expenditure on new hires.

Growing Enabling Structures

The fourth action aims at growing enabling structures. It refers not only to nonhuman resources such as technological infrastructure, but also to processes and procedures, such as setting up the right measurements and evaluation criteria of project success. As per the previous action (securing human resources), structures represent the very fabric to empower actors to exercise agency. It encompasses three key elements: *incentivize*, *measure*, and *evaluate*. **Incentivize.** Findings highlight the importance of rethinking internal indicators for teams' performances. Most organizational actors are measured through KPIs (Key Performance Indicators) deeply intertwined with the telco logic. Consequently, employees are not stimulated to innovate and experiment as these are not values characterizing the dominant frame in Telenor. The very nature of the current internal performance indicators is a display of conflicting organizational demands. For example, teams are asked to create value for customers (customer logic) while being measured and rewarded on efficiency (telco logic). Another example is provided by one of the service designers, who shares the following: "So it's a conflict of interests. You want me to create value for our customers, but actually I'm creating value for you. Because you have your leaders that are measuring you. That's the tumor right there." Findings indicate that attempts to change the internal incentive systems have been made, especially in regions like Serbia and Hungary, where teams are smaller and decision-making processes slightly faster. The Media Specialist in Telenor Serbia shares how her business unit managed to adjust the internal incentive system to contribute to cross-functional collaboration, an aspect that is extremely important in service design. Another example of an attempt to change the internal incentive system to facilitate the adoption of service design comes from Oslo, from the Family Project. The project manager shares that one of the criteria on which the team's performance is assessed is their ability to stop something early if it fails. This success criteria goes fundamentally against the established telco logic and its waterfall model, while it sits extremely well with the experimental and iterative nature of service design.

Measure. Findings suggest that setting up measurement systems that can evaluate the success of service design outcomes is of paramount importance to ensure key practices are embedded correctly. For example, the Service Design Lead of Telenor Hungary states that his unit has been developing a new way to measure customer experience based on design principles. When developing the blueprint for the service, the project team defines the design principles they are pursuing. Examples of design principles in this context are "Give customers full control" or "Enable the experience to be contextual" (i.e., timely and appropriate to each customer). Analytics are indeed used for user experience (digital) while design principles are used to inform the quality of the end-to-end service experience (multi-channel). Each design principle is associated with a rating or control system. Outcomes from the survey are used to inform the implementation teams to improve future iterations of the service. The Service Design Lead explains the concept as follows:

We can measure user experience when it is a digital service. Analytics can provide the information on how many people are using certain features, how much time they spend with their interactions. Mostly usability metrics. But the real end-to-end total quality of the service experience can be measured on the principles...So, in the beginning, we set the design principles, and we set the quality measures. And then we create a kind of survey to measure the real experience, when it's live. So, when the team is delivering the real service, the real feature, the real interactions. As they are built, and they are live, we can use a survey that tests the real experience against the design principles, such as the contextual or control principle.

In this example, making use of design principles to define new measurement systems forces teams to operate outside-in, supporting the embedment of service design practices.

Evaluate. Finally, growing enabling structures requires a detailed evaluation of those structures that represent a priority to be able to develop service design work effectively and consistently in the long run. In Telenor, such priority is represented by the state of the current technological infrastructure. In Telenor, IT (Information Technology) architecture is one of the key capabilities in the list of the seven key competences the organization wants to master. Being able to innovate services requires the possibility to redesign digital services. Findings suggest how Telenor's current systems are not flexible enough for innovation to happen. Heavy, old, backend systems are still dragged into new service delivery, hindering the capacity to innovate. The Vice President corroborates this finding, pointing to the clear need to evaluate the current infrastructure in view of future change:

All these big, giant, gigantic telecom back office systems. Some of them are needed for sure. But probably not all of them. But due to legacy, we're kind of trying to handle them the same way we've always been doing, just with a different perspective. So that's kind of where a big challenge resides: how do we get the organization to start experimenting with addressing old problems in new ways? or just forgetting about old problems and start solving new things?

The lack of flexible IT systems affects the implementability of certain service design outcomes, impacting projects and the kind of outputs produced.

Take Away Insights: Logics in Actions

Referents of the customer logic exercise agency towards an increased diffusion and adoption of service design through four key actions: sensitizing to service design principles, embedding service design practices, securing human resources, and growing enabling structures. Findings suggest that the first action deals with the symbolic aspects of service design, its values and beliefs. The second engages with the material aspects of service design, its practices and routines. The third and fourth with human and non-human structures. Securing human resources and growing enabling structures create the very fabric for actors to exercise agency. By securing human resources, evaluating what's possible within the current infrastructure, and setting up clear incentive and measurement systems, actors can influence the understanding and diffusion of service design. And vice versa, by sensitizing to service design principles and embedding its practices, carriers of the customer logic can increasingly secure human resources and influence the establishment of enabling structures.

The Customer Lifecycle Management project offers an exegesis of this finding. The project aimed at using data analytics to gain insights into users' behavior that can be used to generate personalized offers and communications with customers. The project team was initially staffed without any designer as it was regarded as a datadriven project. Being classified as a technical project, it was not expected to produce any impact on customer experience. A senior service designer, aware of the potential impact of the project on customer experience, forced himself into the project work. By sensitizing the team to the potential impact of the project on the customer experience (e.g., privacy and trust), the designer managed to influence the project process to be more customer centric, to redefine the privacy strategy and dashboard to ensure such a risk would be avoided in the future, and to establish the presence of a designer within that team. This projects. In other words, by sensitizing to core service design principles and embedding key practices, the designer has created the right conditions to increasingly secure human resources.

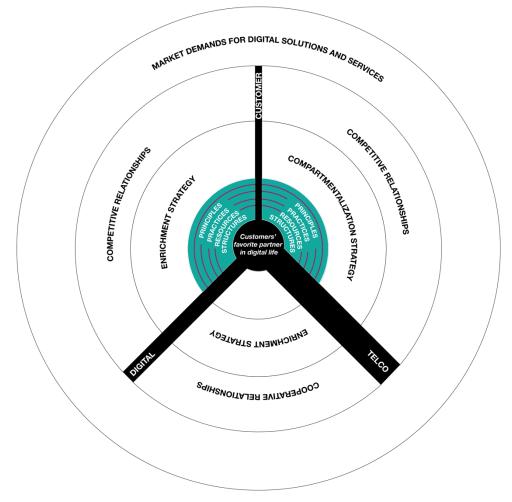


Figure 25. Fourth specification of Figure 20. The actions of sensitizing to service design principles, embedding service design practices, securing human resources, and growing enabling structures contribute to diffuse service design in the organizational context. These constellational forces emerge as both sources of organizational stability and change. Hence, the circle is green and purple.

Through this dynamic process, actors instigate change and simultaneously favor temporary organizational stability. It's through sensitizing to service design principles, embedding service design practices, securing human resources, and growing enabling structures that service design is increasingly diffused in the organization. Thus, the customer logic becomes increasingly more legitimized within the constellation. Hence, Figure 25 shows the four actions enacted by carriers of the customer logic as both green and purple. The figure portrays no actions between the digital and telco logics, as this aspect has not been explored in the context of this study. Data on actions enacted by carriers of the other two logics have not been collected at this stage since they are out of scope.

Chapter 6: Conclusion

This study represents one of the very first attempts to analyze service design in an organizational context through an institutional logics perspective. Through such a novel perspective, the work has benefitted from a peculiar positioning that, although offering some difficulties and limitations, has also created the opportunity for fresh findings and new contributions to the existing body of knowledge on service design. This section aims at distilling those findings that are relevant to answering the research questions this study poses; reflecting on them vis-à-vis the theory; and offering an analysis of the contribution of this study to the existing body of knowledge. The chapter will continue by sharing a brief analysis on the transferability of the findings, limitations of this study, suggestions for future research, managerial implications, and the conclusion.

6.1. Answering the Research Questions

Chapter 5 has unfolded a series of findings with the objective to answer the two research questions this study aims to explore. This section now aims at reflecting on the findings to provide answers to those questions. As a reminder to the reader the two research questions addressed in this study are the following:

- 1. What are the elements characterizing the organizational context within which service design is introduced that influence its introduction and existence?
- 2. How do the mechanisms that favor service design adoption in an organizational context operate?

Each research question will be explored in a separate section below.

6.1.1. The *what*: Elements characterizing the organizational context and their influence on the introduction and existence of service design

In the introduction to Chapter 5.2, I introduced a generic framework (Figure 20) to summarize the high-level findings emerging from the single case study. The framework shows a constellation of three logics subject to five constellational forces: (1) exogenous forces, (2) constellational relationships among the three logics, (3) the nature of the recombinant strategies used to introduce each of the logics, (4) individual actions, (5) and organizational goal.

Throughout Chapter 5.2, each of these five constellational forces has been explored, detailing whether in the specific setting of Telenor they emerge as sources of organizational dynamism and change or, on the contrary, if they represent a source of organizational stability. Such source of organizational change or stability describes the type of influence each constellational force exercises on the constellation of logics.

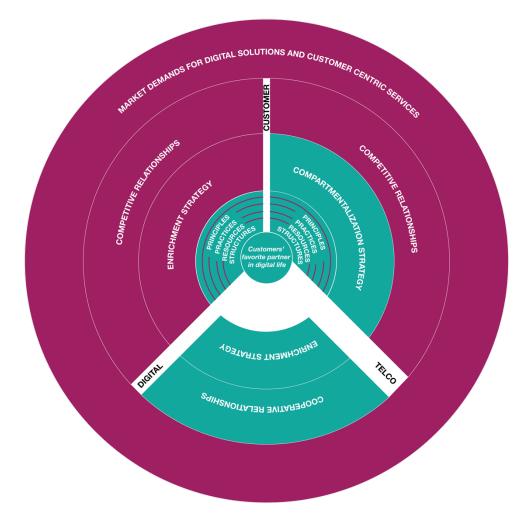


Figure 26. Framework portraying the constellation of logics and the constellational forces operating on the constellation. Some of the constellational forces emerge as forces of change (purple), the remaining emerge as forces that contribute to maintain organizational stability (green).

Figure 26 portrays the final specification of Figure 20, emerging as a build-up from the analysis offered in Chapter 5.2. In the specific setting of the Telenor Group, Chapter 5.2 has shown the following:

1. Telenor is subject to pressures exercised by two key exogenous forces, that are affecting the telecommunication industry at large: *market demands for*

digital solutions and *customer centric services*. These two forces challenge the very identity of Telenor, requiring organizational members to rethink the value the company produces for customers and its way of delivering such value. The two exogenous forces pressurize Telenor to challenge its dominant frame of reference (telco logic) and to introduce new models offering alternative ways to compete in the industry (digital and customer logics). It can be argued that the exogenous forces, while representing a driver of change for Telenor, they also represent a positive influence in respect to service design's introduction and existence. It is because of the pressure generated by *market demands for digital solutions* and *customer centric services* that the customer logic and service design are introduced in Telenor, to offer an alternative competitive model.

- 2. There are three distinct and present logics at play in Telenor, forming a constellation of logics; service design enters the organization through the channel offered by one of the three logics, the emerging customer logic, representing its enactment in practice. The very presence of the customer logic and its constellation, enables the very being of service design in the organization. Thus, the constellation of logics emerges as an element favoring service design introduction and existence.
- 3. The three logics show cooperative as well as competitive relationships. The nature of the relationships (competitive vs. cooperative) between logics is dictated by the relationships that each set of logics displays at the level of their defining attributes (see Table 16 for a description of the logics' attributes and Figure 22 for the logics' attributes relationships). The customer logic shows competitive relationships at the level of most attributes with the remaining two logics, acting as a source of dynamism and change for the entire constellation. The telco and digital logic portray a cooperative relationship acting as a source of stability for the constellation. If it was just for the nature of the relationships between logics, the customer logic including service design, given its competitive nature in respect to the other two logics' attributes, would be expelled from the constellation. Thus, it can be argued that the constellational relationships among the three logics emerge as a negative influence on service design introduction and existence in Telenor. One exception is worth to be noted. The category organizational goal, as portrayed in Figure 22, emerges cooperative among all three logics. This is particularly important as the conflicting prescriptions do not engage

the organization at an ideological level, prescribing the goals that are legitimate to pursue, but rather engage the organization at a functional level, prescribing the means the organization should adopt (DiMaggio & Powell, 1983; Oliver, 1991; Scott & Meyer, 1991; Townley, 2002; Pache & Santos, 2010). As argued in section 2.2.2, Pache and Santos (2010) argue that incompatibility at a mean level is substantially easier to resolve since the demands are relatively peripheral to the organization. Goals are simply not negotiable, as a conflict at a goal level requires organizational members to question what their organization is about. This tells us that the category *organizational goal* plays an important role both to contribute to organizational stability and to maintain the customer logic as part of the constellation. It can be argued that the *organizational goal* has a positive influence on service design introduction and existence in the organizational context of Telenor.

- 4. Two types of recombinant strategies are in place—compartmentalization and enrichment. The compartmentalization strategy is introduced to balance the negative influence of the competitive relationships among logics, on the introduction and existence of service design. Although the compartmentalization strategy emerges as a source of organizational stability and positive influence on service design, at the same time it hinders its diffusion and adoption. Thus, the enrichment strategy between customer and digital logics represents an attempt to adopt service design more broadly, that however undermines organizational stability. Nonetheless, the enrichment strategy between customer and digital logics represents a positive element favoring service design existence in Telenor.
- 5. Actors are exercising agency through four key actions to ensure service design is introduced and increasingly adopted in the organization. This is in line with current literature on organizational logics and agency. As presented in the theory chapter, Spicer and Sewell (2010) argue that the emergence of contradictions and tensions between organizational logics, offer the opportunity for actors to exercise projective agency that promotes, transforms, and hybridizes discourses. Projective agency is deployed in response to these contradictions and tensions, creating the opportunity for organizational logics to change. In the deployment of projective actions, the authors argue, individuals or groups articulate a project to influence future activities, to develop and defend legitimacy. Thus, in the case of Telenor

organizational members exercise projective agency creating the opportunity for the customer logic to increasingly be legitimized and for service design to increasingly be adopted. This element emerges as both source of organizational stability and change. Certainly, it also emerges as a critical mechanism to ensure service design existence and adoption.

Figure 26 represents the organizational context of Telenor within which service design is introduced. Following the argument shared so far, it can be argued that there are six elements that characterize the organizational context within which service design is introduced that influence its introduction and existence: (1) the constellation of logic service design is part of, (2) exogenous forces, (3) the constellational relationships among the logics, (4) organizational goal, (5) the nature of the recombinant strategies used to introduce each of the logics, (6) projective agency to grow the adoption of service design in the organization. Elements 2 to 6 have been defined in this thesis as constellational forces. Thus, it can be argued that in response to RQ1, the case of Telenor shows that the constellation of logics through which service design is introduced, and the constellational forces operating on the constellation, characterize the organizational context within which service design is introduced influencing its introduction and existence.

6.1.2. The *how*: Mechanisms operating to favor service design adoption in an organizational context

Study1 has revealed Telenor as a case of *medium service design adoption*. The team is experimenting with service design, mainly through a lengthy pilot—the Family Project. The project is led by a core team that managed to involve several key stakeholders across the organization, although for a limited percentage of their time. However, service design has not yet secured sufficient human resources for its effective adoption in the organization, and it has not yet been translated into organizational routines and structures—it is still at the reach of only a few people in the company. Service design is not yet fully adopted.

Study2, going deeper into the organizational environment, has portrayed the context within which service design takes place. As with opening up a matryoshka doll, Study2 has guided the reader through all the different layers that influence service design introduction and existence in the organizational environment. Study2 has led the reader through the investigation of the exogenous forces that have influenced

Telenor's strategy going forward, the resulting three logics emerging and their composition, the recombinant strategies used to introduce and govern the three logics, and the individual actions in place to influence the constellation of logics. From mega-trends to small individual actions, Study2 has attempted to portray a full picture of the cross-level dynamics influencing service design. By so doing, service design is analyzed and placed into context.

Findings suggest that service design enters Telenor thanks to the increasing new focus of the organization on customer centricity. Service design does not get introduced and established in Telenor per se, but as a way to achieve superior service experiences that meet customers' real needs and wants, offering Telenor a new possible source of competitive advantage. Thus, service design does not land at Telenor as a one-off, but as a way to achieve long-term transformation. The customer logic that enables the introduction of service design in Telenor is in full opposition against those existing organizational logics of competitiveness that still operate within the company. These existing logics are certainly more established and legitimized than the newly landed customer logic. Thus, to facilitate the diffusion of service design in Telenor, organizational actors respond by exercising agency to grow service design adoption in the organization.

Under this light, the Telenor case suggests that the key mechanism for adoption of service design in the organization is represented by the role of individual actors in the introduction and diffusion of service design in the organization, thereby delivering a response to the context within which service design is introduced. Their ability to adapt the approach, sunder its principles and practices, maneuver the language depending on the audience, and set small incremental steps to achieve longer term results are all fundamental elements that keep service design alive (stable and operating in the constellation) and growing (changing and transforming) in Telenor. Study1 has described four high level steps that define the increasing service design maturity: *awareness of service design principles, enactment of service design practices, dedicated human resources,* and *enabling structures.* Study2 has validated those stages, looking between them to offer an understanding of what happens in Telenor to increasingly move the organization from one step to the next. Actors perform four actions, each characterized by a specific set of activities:

1. Sensitizing to service design principles: expose, simplify, customize

- 2. Embedding service design practices: familiarize, engage, locate
- 3. Securing human resources: specialize, track
- 4. Growing enabling structures: incentivize, measure, evaluate.

Figure 27 showcases the service design adoption maturity model as emerging from the findings of this study. The four steps of the ladder represent the four stages identified in Study1. The elements described underneath each step represent the individual actions and set of activities that organizational members, carriers of the customer logic, enact in Telenor to ensure service design becomes increasingly more established in their organization. Thus, it can be argued that in response to RQ2, the case of Telenor shows that the mechanisms that favor the growth of service design adoption are enacted by organizational members carriers of the customer logic, and are exercised across four stages (*sensitizing to service design principles, embedding service design practices, securing human resources, growing enabling structures*) via eleven distinct activities (expose, simplify, customize, familiarize, engage, locate, specialize, track, incentivize, measure, evaluate).

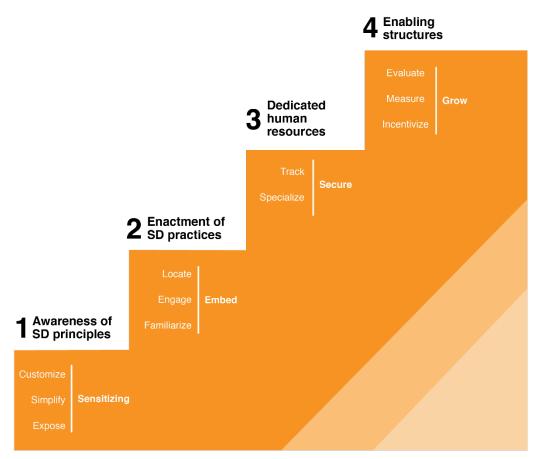


Figure 27. Transformative model of service design adoption.

6.2. Transferability of Findings

In line with the interpretivist world view adopted by this research, this study does not aim to generalizability of the findings. However, I believe that this study well enables a reflection on the transferability of the findings in other contexts. The findings of this study have been primarily generated on the base of a single in-depth case study; however, the analysis shared in Study1 offers an opportunity to provide an initial speculation on the relevance of this study's findings in other contexts. The key finding of Study1 is the definition of the stages of service design adoption. All cases under analysis in Study1 share the recognition of these four stages, even if not yet mastered. The four stages have been validated by Study2, deepening our understanding of the mechanism to grow from one stage to the next.

The nine cases show precise patterns in the way sponsors introduce service design and activate certain mechanisms to ensure service design is accepted and increasingly diffused. Patterns across cases can also be found in terms of the barriers interviewees encounter at different stages of maturity. Virtually all sponsors have referred to a difficulty in facing the dominant "culture" of "the way of doing things" and how that required a specific response from them and their team. Thus, it is plausible to assume that the findings of Study2 could be relevant to all the cases analyzed in Study1. The theory on institutional logics tells us that virtually all these organizations will be a theatre for multiple organizational logics to simultaneously operate. Although requiring validation through further research, it is plausible to assume that in each of these nine cases, one of these emerging organizational logics of competitiveness introduced has enabled service design to enter the organizational realm. The logic of competitiveness doesn't necessarily have to be a logic of customer as emerged in Telenor. Different cases might offer different emerging models of competition, still representing an opportunity for service design to be established. It is, however, plausible to assume that the categories characterizing these logics will find a counterpart in the list defined in this study (see Table 15), and that organizational actors will have to deal with the same constellational forces defined here. Given the patterns emerging from Study1, it is also plausible to assume the transferability of the findings related to individual actions, because the sponsors interviewed in the remaining eight cases share similar experiences in terms of expectations, barriers, and approaches to resolution. Thus, although findings cannot be generalized, we can assume the transferability of the findings on similar contexts

such as those characterizing the cases of Study1. This aspect is important to note in view of the theoretical contributions shared in the next section.

6.3. Discussion and Contributions

In the first part of this chapter, I reflected on those particular findings relevant to answering the specific research questions this study aims to explore. The result is defining two elements that more than others offer new lenses to understand and study service design in an organizational context:

- 1. The study offers a way to analyze the intra-organizational context within which service design is introduced. It does so by recognizing the central role of the constellation of logics and by identifying several constellational forces operating on the constellation (Figure 26).
- 2. The study offers a transformative model (Figure 27) to describe how the mechanisms for service design adoption operate, and the role of organizational actors for its growth.

The following two sub-sections will expand on these two elements, offering an analysis of the contribution of this study to the existing body of knowledge on service design.

6.3.1. Logics and constellational forces defining the organizational context

One of the key messages of this study is that service design is not introduced in an organization per se, but rather framed within a larger organizational logic of competitiveness that in the case of Telenor is the shift towards customer centricity. Such logic is embedded within a constellation of logics subject to several constellational forces. Hence, in order to understand the introduction and existence of service design in an organizational context, this study suggests it is useful to understand the logics as well as the constellational forces operating within the intra-organizational field.

The idea that there are competitive models within an organizational field has consolidated (Thornton, et al., 2012). This study suggests a shift of the focal point towards the intra-organizational field, showcasing how different organizational logics of competitiveness drive the organization at the same time, exposing organizational actors to conflicting demands. While institutional logics represent

archetypical forms of cultural norms and values, organizational logics of competitiveness reflect systems that guide competitive choices to adapt and respond to the external environment. Within this context, service design enters the organization using the channel offered by the emerging customer logic, representing a way for the logic to materialize itself in practice and to suggest a clear alternative model to new service development and innovation. Thus, the introduction of service design is not limited to an ad-hoc solution to tackle a specific business challenge, but it reflects the transition towards a new logic of competitiveness. Such positioning implies service design gets introduced as a means of organizational transformation towards the establishment of a new competitive model; in the case of Telenor, this model emerges as customer centricity.

In the theory section, I have shared how Sangiorgi (2009) describes three major areas of investigation on service design: interactions, complexity, and transformation. Under the light of what has been described so far, this piece of research certainly aims to contribute to the third area, contributing to enhance our understanding of the introduction and existence of service design as a transformative force. Under a *transformation* area of investigation, organizations are conceptualized as complex social systems including people's norms, values and beliefs, procedures, hierarchies and tasks, and organizational resources and strategies (Junginger & Sangiorgi, 2009). Within this context, the fact that service design might have a transformative power over organizations, generating lasting changes in their ability to change and innovate, is well consolidated in the literature (Junginger & Sangiorgi, 2009; Sangiorgi, 2011). Within this study, by considering the environment of constant change that organizations operate in, service design starts to be seen as a means to continuously respond to such change and to innovate. Thus, service design shifts from an ad-hoc solution to an issue to a model to achieve a desired competitive advantage. This insight is certainly revealed by Study2, but it is also corroborated by Study1, where organizations that move from a low to a medium or high adoption are characterized by a long-term investment in service design (via multiple projects or lengthy programs) towards a new strategy or positioning in the market.

Within the large area of investigation identified as *transformation*, the first contribution of this thesis is to the specific stream of research on *design legacies*. The major exponent of this emerging stream of inquiry is Sabine Junginger, who,

in a series of articles published from 2014 to 2017, calls scholars, managers, and designers alike to acknowledge and consider those existing design legacies already present and established in organizations. Junginger argues that the mainstream approach in practice is to try and bring service design into organizations, focusing on how to embed it, ignoring the fact that design principles, methods, and practices are already embedded virtually in any organization (2014). That means organizations are full of design legacies. Hence, in the best scenario, managers and designers can try to introduce *new* design practices and ways of thinking about design in organizations. As shared in the theory section, the author identifies three elements characterizing design legacies: organizational purpose, organizational design approaches, and organizational design practices (2014; 2015). The approach of Junginger certainly opens a new way to interpret the context within which service design is introduced in an organization. However, it showcases the limitations of keeping the focus of analysis too close to existing design practices and approaches as the main source of influence on *new* design practices and approaches introduced in an organizational context. The only exception is made by Junginger's acknowledgement that the organizational purpose also influences the introduction of service design in the organization. What this study has tried to convey is that the introduction of service design as a means to reaching a new logic of competitiveness is not only influenced by specific existing design approaches and practices (such as waterfall or lean) but it is also influenced by an array of constellational forces operating on the logics established within the intraorganizational field.

This study acknowledges that organizations are full of legacies, but advances Junginger's position by arguing that those legacies that service design needs to deal with are not only *design* legacies—referring mainly to design approaches and practices—but rather are a broader set of *constellational forces*. As service design enters the organization as part of a broader logic, it is those logics that service design needs to deal with. Thus, this study contributes to the concept of *design legacies* enlarging it towards the one of *constellational forces*.

Interestingly, the three elements Junginger refers to as characterizing *design legacies* find counterparts in three of the categories used in Chapter 5.2.1 to define the three logics (see Table 15). It can be argued that the three elements traced by Junginger (2014; 2015) belong to a lower level of analysis entering into the very

fabric constituting the logics operating in the intra-organizational field. Following, I'll support such a statement with an analysis of the three elements traced by Junginger vis-à-vis the categories presented in Table 15.

The first element Junginger refers to as characterizing design legacies is *organizational purpose*, defined as the very reason why an organization exists—its aim and vision (2014; 2015). The author explains the concept as follows (2015, p. 214):

Organizational purpose or vision is an element in an organization's design legacy because it encourages certain actions and discourages others. Ideas that seem too far away from the organization's purpose or its vision will be dismissed. Certain products and services will not be developed because they are identified as misfits with the organizational purpose.

In Table 15, this element is portrayed as *organizational goal*, described as the overall perceived objective of the organization and its very reason for existence; that is, its aim and vision under the lens of the specific logic. Through the lenses adopted in this piece of work, the *organizational goal* as a logic attribute represents the interpretation that carriers of the logic assign to the aim of the organization. In the specific case of Study2, the three logics showcase three different views on the organizational goal: *profitability, market acquisition*, and *customer centricity*. In the case of Telenor, this tension is resolved by the fact that the whole three elements represent three distinct aspects of one strategy for the organization going forward. The *organizational goal* also emerges in this study as a key constellational force.

The second element Junginger refers to is *organizational design approaches*, defined as the values that govern the organization, which in the author's argument should be in line with the *organizational purpose*. As examples of organizational design approaches, the author refers to human-centered, process-oriented, problem-solving, or cost-saving, arguing that (2015, p. 215):

In a human-centered design approach, the core focus on the organization rests on identifying and developing products and services that are meaningful to people and empower them in one way or another. In a process-oriented design approach, products and services first and foremost fit into existing structures and processes of the organization, making use of current resources. This is also sometimes referred to as "design for fit." The problem-solving approach is one that begins after a problem has been identified. This approach tends to follow top-down, linear decision-making and has a tendency to fragment otherwise connected design activities (Junginger, 2014). In a cost-saving design approach, the design is strictly guided by identifying and realizing cost-reducing opportunities. Most lean approaches fall in this category.

In table 15, this concept is covered by the element labelled *organizational strategy*, which is defined as the perceived strategy to achieve the organizational goal—its values and trajectory under the lens of the specific logic. In the specific case of Telenor, the three logics portray three different attributes at the level of organizational strategy: efficiency, digitalization, and service experience. The first attribute, *efficiency*, aims at maximizing existing assets, making use of the current resources and capabilities available. This approach is similar to what Junginger refers to as a *process-oriented* design approach. The second attribute, *digitalization*, aims at digitizing core operations to achieve faster time to market. Under this logic, products will be generated and brought to market in a cheaper and faster fashion. This attribute reflects the *cost-saving* design approach identified by Junginger. The last logics' attribute identified at the level of the category organizational strategy in Telenor is *service experience* that aims at improving customer experience through services. The approach is to deliver services to the market, designed around real customers' needs and wants. This element reflects the human-centered design approach identified by Junginger. The three distinct organizational strategies are present and operate simultaneously in Telenor.

Finally, the third element identified by Junginger as defining *design legacies* is *organizational design practices*, which refers to how design actually takes place and becomes apparent within the organization. To understand what the organizational design practices existing in an organizational environment, the author asks the following questions: "How does design take place, what methods are being used, and who participates?" Thus, this final element encompasses the practices, methods, and actors involved. This finds a counterpart in the last element in table 15, *development practice*, defined as the development approach perceived to best serve the logic in practice. In the Telenor case, the three approaches identified as distinct attributes of the three logics forming the constellation are *waterfall, lean*, and *service design*. The first is a linear approach where development cascades down in isolated phases, the second is an iterative approach that focuses on speed, and the third is an iterative approach that focuses on humans.

Thus, it is possible to argue that the elements traced by Junginger (2014; 2015) as characterizing *design legacies* are in fact three categories characterizing the logics at play in the intra-organizational field. *Design legacies* constitute an integral part of the logics that determine the organizational context within which service design operates. This study suggests two elements characterizing the organizational environment within which service design exists: (1) the constellation of logics through which service design is introduced, and (2) the constellational forces operating on the constellation. Thus, I suggest that it is plausible to argue that not only do the remaining categories defining the logics have an impact on the introduction of service design (remaining elements listed in Table 15), but also the remaining constellational forces that operate on the constellation of logics.

As a reminder for the reader, the remaining categories identified in this study that generate the remaining logics' attributes are organizational identity (what organizational actors identify the organization with); *product/service* conceptualization (deeply linked to organizational strategy, it refers to the conceptualization of the product or service that the organization delivers to the market); driver of innovation (the perceived major source of innovation worth investing into); and *perspective* (the perceived approach to innovation and new product/service development, inside-out or outside-in). The constellational forces are (1) exogenous forces, (2) constellational relationships among the logics, (3) the nature of the recombinant strategies used to introduce each of the logics, (4) individual actions, and (5) organizational goal.

I argue that the recognition that *design legacies* represent the fabric of higher organizational logics, and that a set of constellational forces operates on those logics, contributes to resolving the excessive focus on *design* elements showcased by Junginger's model. It provides a more precise view of those elements that characterize the environment that service design enters, and which influences its introduction and existence. Thus, I posit that the organizational context within which service design is introduced is not only shaped by existing design values, approaches, and practices—*design legacies*—but by an array of elements that define the logics operating in an organizational environment at large, and by the constellational forces operating on them.

6.3.2. Growing service design capabilities

The second element offering new lenses to understand and study service design in an organizational context is represented by the transformative model (Figure 27), which aims at explaining how service design adoption grows in an organizational context and the role of organizational actors in their evolution. This element contributes to advance our knowledge of a second stream of research developing within the *transformation* area of investigation—that of *design capabilities*.

In the theory section, I have shared the work of Lisa Malmberg (2017) as being one of the most recent and in-depth works on *design capabilities*. The author argues that an organization's design capability is a synthesis of three elements: *awareness of design, design resources,* and *structures that enable the use of design.* The author focuses on the *what*, describing the elements that constitute an organization's ability to use design. However, the author lacks to provide a full understanding of the *how,* meaning the micro-dynamics that contribute to developing design capabilities in an organizational environment. This thesis contributes to this vein of research in two ways. First, it expands on the elements constituting design capability. In this research, what Malmberg (2017) defines as *awareness of design practices.* Second, this research offers an account of *how* organizational actors contribute to the growth of service design capability, thus contributing to service design adoption.

In respect to the first contribution, this research conceptualizes service design as simultaneously virtual and material. In the theory section, I reasoned that literature on service design is characterized by descriptive studies, implying that without theory development any concept presented is vulnerable to waning in the literature. I noted the exception of Fayard, Stigliani, and Bechky's (2016) use of service design *ethos* to develop a set of values and practices characterizing service design. Their work has moved the discussion on service design towards a trajectory for possible theorization. In the hope of infusing this vein of literature with new life, the authors give rise to the idea of service design *ethos* encompassing both values and work practices, arguing that "values and work practices informed each other: while values defined how service designers worked, it was only in and through practice that values were enacted" (Fayard, et al., 2016, p. 12). The close analysis of the literature on service design presented in Chapter 2.1 has recognized the elements identified by Fayard and colleagues (2016) as recurring in literature. I compared studies on

service design, describing its principles (including values, assumptions, beliefs, meanings) and practices (including processes, methods, techniques) enabling the suggestion of a set of symbolic principles and material practices, recurrent in literature, characterizing service design. Through such analysis, service design emerges to be characterized by five principles (*human-centered*, *co-creative*, *holistic*, *experimental*, *transformative*) and five practices (*conducting design research*, *ideating*, *visualizing*, *prototyping*, *sequencing*). These elements have been corroborated by the data collected for both Study1 and 2 as the foundations to understand and practice service design within context.

Studyl reveals that the understanding of service design principles is usually the very first step in approaching service design. The ability to enact service design in practice requires organizational actors to be familiar with the principles first, as service design practices are the in-practice enactment of its principles. Thus, familiarization of organizational actors with service design principles and the enactment of service design practices are two distinct phases that represent a different level of maturity. This finding is corroborated by Study2, showcasing how organizational actors for their mastery. A conceptualization of service design as simultaneously virtual and material leads to the suggestion that the element described by Malmberg (2017) as *awareness of design*, in the case of service design encompasses two moments: *awareness of principles* and *enactment of practices*.

In respect to the second contribution to the stream of research on *design capabilities*, this study offers an account of *how* organizational actors contribute to growing service design capabilities, ensuring its increasing adoption. Malmberg (2017) focuses extensively on *what* defines design capabilities, paying less attention to *how* organizational actors influence the growth of such elements in an organizational context. The transformative model presented in Figure 27 offers an analysis of the actions organizational actors engage with to move from one step of the ladder to the next. The study looks at the activities organizational members perform in practice: how they diffuse concepts, engage stakeholders in practice, secure human resources, and contribute to growing enabling structures. Each step of service design maturity is characterized by a set of activities. At the first step, in order to *sensitize to service design principles*, organizational actors rely on three core activities: *exposing, simplifying*, and *customizing*. At the second stage of maturity, in order to *embed*

service design practices, actors rely on three core activities: *familiarizing*, *engaging*, and *locating*. At the third stage of maturity, in order to *secure human resources*, organizational actors rely on two core activities: *specializing* and *tracking*. Finally, at the fourth stage of maturity, to contribute to *grow enabling structures*, organizational actors rely on three core activities: *incentivizing*, *measuring*, and *evaluating*. This last contribution to the stream of research on *design capabilities* reinforces the concept that service design is introduced into the organizational context as a transformative force towards long-lasting change. Service design is not introduced ad-hoc to tackle a specific business challenge, not even as a random attempt, but as a long-term investment to reach a new model of competitive advantage—customer centricity in Telenor's case. Such positioning requires a long-term investment into mastering it as a core capability.

This study has the benefit to bring together two streams of research, *design legacies* and *design capabilities*, which so far have been treated separately. The two streams of research are brought together as a way to simultaneously understand the context within which service design is introduced, and the actions organizational actors enact to contribute to service adoption within that very organizational context. The two streams are complementary in explaining the organizational environment within which service design is introduced, offering a multilayered view of the forces that influence service design introduction and existence, and consequently the actions organizational actors enact to ensure service design is increasingly adopted.

6.4. Limitations

This study, on which findings and frameworks are based, has some important limitations that need to be recognized. First, the methodological choices made in this investigation represent a possible limitation of the study. In particular, limitations are present in the data collection. The common approach behind qualitative research is to *purposefully select* participants and sites that are best suited to help the researcher understand the problem and the research question (Creswell, 2014). In the case of Study1, such purposeful selection has been limited by the dependency I had on Livework's partners to put me in contact with respondents; the interviewees' limited availability; and their sparse geographical distribution. Ideally, I would have preferred to interview at least a few people in each organization. Unfortunately, this was extremely difficult, and in some cases even impossible—many of the interviewees had recently changed jobs and relocated. In

the case of Study2, such purposeful selection was limited by the limited availability of some of the respondents. Thus, it is reasonable to assume that some key referents have been omitted. Given the focus of this study on service design, insufficient attention has been paid to referents' carriers of the remaining two logics that eventually emerged during the data analysis. To resolve the challenge, I could have opted to run a second round of interviews after the first round of data coding, and to make use not only of direct interviews but also of online open questionnaires for those respondents not available to be interviewed. Moreover, the data collected are representative of a specific moment in the history of Telenor. The study represents a snapshot in time, thus lacking data able to provide an account of the evolution of the three logics and their development. Moreover, the choice to primarily use data generated from interviews represents a limitation. While I had access to the documentation generated by most projects included in Study1, I did not get access to any project documentation for Study2. This was due to the privacy of the projects described within Study2 as most of them were still ongoing at the time of data collection. The limitation of relying primarily on data generated through interviews is linked to the fact that data are based on individual respondents' opinions and perceptions of facts. To avoid this pitfall, I tried as much as possible to use the official website, especially to refer to the organizational goal and strategy, and social media channels.

A second limitation is inherent in the choice of using an institutional logics perspective; not all aspects of the existing research on institutional theory have been considered. For example, research on institutional work could have most likely opened up new opportunities of theorization in respect to actors' agency. The choice to use institutional logics as the main theoretical lens, although performed to offer an opportunity for new theorization, could in itself represent a significant limitation of this study. The institutional logics perspective is usually employed on longitudinal studies where the analysis develops at the inter-organizational or field level. The data collected on the Telenor case represent a specific moment in time for Telenor, they do not enable an analysis on the emergence and transformations of logics. The data collected are indicative of an intra-organizational level; although this might be considered a creative approach, it is not a common viewpoint in institutional theory.

Finally, my double role of practitioner and researcher certainly has represented a limitation of the study. I was recognized by the interviewees as a practitioner working at Livework studio, therefore assumed to be knowledgeable about specific project dynamics and outcomes. As a result, some interviewees demonstrated the tendency to omit aspects of their experience with service design. It has taken a few iterations to learn not only how to prepare interviewees but also how to prepare myself to be as objective as possible. Despite these limitations, I believe the study provides a significant contribution to the existing body of knowledge on service design.

6.5. Implications for Future Research

I believe this study offers multiple opportunities for future research. It is one of the very first attempts to apply an institutional logics perspective to study service design. More research in this direction is needed to validate the input of the perspective in this area, opting for a longitudinal study that could enable the understanding of the introduction and adoption of service design in a longer time frame. In this case, for example, it would be useful to understand whether the relationships between constellational attributes change over time, and whether organizational actors' actions follow such change, adapting to the resulting new intra-organizational environment. A second opportunity would be to develop an indepth comparative study to understand whether service design enters the organization always using a customer type of logic or whether it could accomplish this through other logics of competitiveness. In this case, I suspect an analysis of the service dominant logic and its relevance could be beneficial by opening opportunities for new findings and contributions.

Finally, in respect to the stream of research on design capabilities, it is important to note that while Malmberg (2017) analyses the *what* (elements constituting design capabilities), and this study attempts to explore the *how* (how organizational actors contribute to the development of such elements), it is still not clear what is the impact of such developments on the final *outcomes* (i.e., services and experiences). A study on the outcomes of organizations portraying different levels of design maturity could shed some light into the actual benefit in practice of investing into service design as a means towards the achievement of a new competitive advantage. Research on service design lacks to empirically clarify whether companies that opt

to invest into design as a main approach of new service development do, in fact, demonstrate a better positioning in the market.

6.6. Implications for future practice

I believe this research offers some interesting implications for service design practitioners, managers, and designers alike. The first is certainly the acknowledgment that service design does not exist in a vacuum, or within a single team's reality, but rather it exists within a larger organizational environment where certain logics operate. This work offers a framework to understand such an environment. The framework is relevant to both managers and designers in understanding the potential gaps and connections between service design, the constellation of logics, and the constellational forces dominating the organizational environment, accordingly equipping actors with tools to plan service design introduction and development. This study also offers designers a language useful to operate within an environment where service design is neither established nor understood. Such a language is neutral to design or managers, offering a common ground within which actors can operate, plan, align, and act. Framework and language can influence the expectations of those organizations that decide to introduce service design for the first time, with consequences on the way projects are set up and run. They can also influence the way both designers and managers choose to approach the development of service design internally, helping them to avoid some common pitfalls.

6.7. Conclusion

I opened this thesis by sharing the personal journey that has brought me to explore service design in organizations. I was keen to contribute to making service design wiser and better apt at helping organizations respond to market demands effectively. My purpose was to contribute to laying the foundations to systematically investigate service design in an organizational context. I feel that through this thesis I have opened a new potential trajectory to lay such foundations. I hope the thinking and frameworks shared in this piece of work will be examined by academics and practitioners alike, dismantled and improved. In the introduction, I've also shared that I've always profoundly believed in the potential of design. Through the work developed with this thesis, I became even more convinced of the transformative power of design to help organizations achieve their objectives. For me, the end of this thesis represents the beginning of a new exciting journey, translating into practice what I have here explored academically. Exciting times ahead.

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Appendices

Appendix 1: Service Design Tools and Methods

Summary of key service design tools and methods as described by Stickdorn and Schneider (2010), and Reason, Løvlie, and Brand Flu (2016).

Name	Descriptions as reported by authors	Reference
Cross-channel views	A cross-channel view maps each channel as a "swim lane" in relation to a customer lifecycle or journey. This enables service designers to show what is happening in each channel and look at the channels in relation to one another. Channel views can be used to map the current <i>as is</i> situation, or a future <i>to be</i> design, or the gap between the two.	(Reason, et al., 2016, p. 171)
Customer insights	A customer insight is an enlightening understanding of a specific customer perspective. This could be an understanding of what they find most frustrating, what they really need to do their job, or what they really don't understand. Customer insights can come from prior experience, data about customer behavior, or first-hand observation and testimony. Insight is also a way to tell stories about customers in a manner that cuts through all the data and gets to the human story.	(Reason, et al., 2016, p. 164)
Customer journeys	Customer journeys are used to describe experience from the customer's perspective. A customer journey describes the steps that customers go through when they use a service.	(Reason, et al., 2016, p. 167)
Customer lifecycles	A customer lifecycle is a strategic tool to understand the business and how customers fit into it. It describes the phases and stages a customer moves through during their relationship with a sector. The four general phases of <i>before</i> , <i>begin</i> , <i>during</i> , and <i>after</i> apply to all customer relationships. Each sector will have differences in the specific phases and the language used but will have common structural elements.	(Reason, et al., 2016, p. 168)
Customer profiles	Simple portraits of an individual customer (B2C or B2B) portraying the customer key characteristics in terms of specific context needs and experiences. They are created from direct testimony from customers through an interview, conversation, or shadowing.	(Reason, et al., 2016, p. 162)
Personas	Fictional profiles, often developed as a way of representing a particular group based on their shared interests. They represent a "character" with which client and design teams can engage.	(Stickdorn & Schneider, 2010, p. 178)

Service blueprints	Service blueprints are a way to specify and detail each individual aspect of a service. This usually involves creating a visual schematic incorporating the perspectives of both the user,	(Stickdorn & Schneider, 2010, p. 204)
	the service provider, and other relevant parties that may be involved, detailing everything from the points of customer contact to behind-the- scenes processes.	
Service prototypes	A service prototype is a simulation of a service experience. These simulations can range from being informal "roleplay" style conversations to more detailed full-scale recreations involving active user-participation, props, and physical touchpoints.	(Stickdorn & Schneider, 2010, p. 192)
Service safaris	During a service safari, people are asked to go out "into the wild" and explore examples of what they think are good and bad service experiences.	(Stickdorn & Schneider, 2010, p. 154)
Service scenarios	Service scenarios tell the stories about how customers will move through all or parts of the new service. Scenarios can be used to explore a range of options for a future service.	(Reason, et al., 2016, p. 173)
Shadowing	Shadowing involves researchers immersing themselves into the lives of customers, frontline staff, or people behind the scenes, in order to observe their behaviors and experiences.	(Stickdorn & Schneider, 2010, p. 156)
Stakeholder maps	Visual or physical representation of the various groups involved with a particular service. By representing staff, customers, partner organizations, and other stakeholders in this way, the interplay between these various groups can be charted and analyzed.	(Stickdorn & Schneider, 2010, p. 150)

Appendix 2: Telenor's Strategy

Following is an extract of Telenor's strategy as shared on the official website (date accessed 31 January 2017).

Our Strategy

We will retain the focus on growth and value creation. The growth will come from both our telco business, current digital verticals (IoT/M2M, Online Classifieds, and Financial Services), and in new digital verticals.

Strategic Ambitions

To deliver on the ambitions of growth and value creation, we will take the position as our customers' favorite partner in digital life. We will be delivering a broad range of relevant, personalized, and engaging digital services. These include connectivity and communications services, selected internet services within, for example, storage and communication, and selected stand-alone digital verticals. Four strategic ambitions are defined to reach this position:

1. Loved by Customers

Subscriber growth is reaching saturation in most of Telenor's markets. To achieve above-industry growth going forward, Telenor needs to create a superior experience for our customers and turn them into promoters of our services. We will provide the best network experience, personalized customer interactions, and digitized and automated customer journeys.

2. Engaging Digital Products

The time our customers are spending on our core services is leveling off or decreasing across all our markets. To stay relevant to our customers and to secure digital marketing channels we need strong end-user positions, and our ambition is to create this within selected internet service categories (e.g., communication and storage) and in digital verticals (e.g., IoT/M2M, Online Classifieds).

3. Winning Team

The shift from a traditional teleo to becoming the customers' favorite partner in digital life requires a significant change in culture and capabilities. We will become a more expertise driven company and be an attractive employer for people with a digital mindset and competence.

4. Most Efficient Operator

With diminishing growth in telco revenue and increased competition on services from internet players, Telenor needs to operate smarter and more efficiently. We will accelerate technology efficiency, pursue process simplification, and deploy new operating models, to significantly reduce costs.

We have established a global transformation program to drive the implementation of the strategy.

Appendix 3: Interview Schedule Study1

Interview schedule used to guide the discussion with the interviewees in the nine organizations.

- 1. Please introduce yourself, the organization you work for and your role.
- 2. For how long have you been working with service design in your organization? How many projects have you run? Please select one project to discuss and to refer to during our interview. You can choose the one the lasted the longer or that in your opinion had the higher impact.
- 3. How long was the project? How many months did it last?
- 4. When did it start?
- 5. What was the initial brief? What was the challenge that you were experiencing internally?
- 6. Who wanted this project, who was responsible and who pushed for it?
- 7. How many of your colleagues got involved in the project, from which departments, and under which role? How did they contribute to it?
- 8. Can you please describe the project? What are the phases you went through?
- 9. Why did you decide to contact Livework and with what brief?
- 10.Did the brief change over time?
- 11. What was the expected outcome of the project?
- 12. Were the expected outcomes achieved, in your opinion?
- 13. Was the project implemented?
- 14. If yes, why do you think you managed to implement it? If not, why not?
- 15. Would you define the project successful?
- 16. What were the tangible deliverables of the project?
- 17. What was the role of Livework? And how was their role communicated to the people involved in the project?
- 18. What are, in your opinion, the top three success factors for a project like the one you ran?
- 19. And what are the top three challenges or barriers?
- 20. If you had to give a piece of advice to someone who is about to start the same journey, what kind of advice would you give?
- 21.Is there anything else that you would like to add? Or any questions for me?

Appendix 4: Interview Schedule Study2

Interview schedule used to guide the discussion with the interviewees in Telenor.

1. Please introduce yourself, and your role in the organization.

- 2. For how long have you been working in Telenor?
- 3. What kind of projects are you involved in? Can you describe a few?
- 4. When was the first time you came across service design?
- 5. What do you think about it?
- 6. How has service design been introduced in Telenor?
- 7. What impact has it produced?
- 8. How has it developed?
- 9. What were the main difficulties encountered?
- 10. What's Telenor objective for the next few years?
- 11.Do you think Telenor understands 'services'?
- 12. How important do you think it is going to be for the future of Telenor to understand services?
- 13.Do you think Telenor understands 'customer experience'?
- 14. How important do you think it is going to be for the future of Telenor to understand customer experience?
- 15.Do you think that the customer drives decision-making in Telenor?
- 16.Do you think Telenor is accustomed and used to collaborative practices and open to accept creative processes?
- 17. What's the top one tip you'd give to somebody in another organization that is trying to introduce service design?

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