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# Creating a Service Design Coach concept – Case FORGE Service Lab

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# Creating a Service Design Coach concept – Case FORGE Service Lab

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**Laurea University of Applied Sciences** **Abstract**
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**Creating a Service Design Coach concept – Case FORGE Service Lab**

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This thesis is a research-oriented development project, with the purpose of creating a new service concept. The case company for this thesis is DIGILE and its FORGE Service Lab, which is a development laboratory for digital services. Digital development typically starts product-based development with a focus on technical requirements and features and the customer-focus is often missing. The objective of this Master's thesis was to create a Service Design Coach concept, which will allow project development to better incorporate customers and their perspectives.

The three main theories for this thesis were Service Marketing, New Service Development and Design Thinking and deeper discussion examined Service-Dominant Logic and the concept of value, Customer-Dominant Logic and value creation, Service Design, Service Concept and Lean startup. The service-dominant logic created the fundamental understanding of the customer-centricity to the service creation while the customer-dominant logic emphasized the customer's contexts, activities, practices and experiences. In turn, the service concept offered the structure to the concept creation and the lean approach brought agile thinking and quick methods to develop digital services. Service design for this thesis was a method to understand customers, organizations, and markets, to create ideas and turn them to solutions.

The empirical part of this thesis was planned using the Double Diamond service design process, but restricted to its first three stages. The three stages for this research were to Discover the current state, Define the learning, and Develop the concept. As data collection tools, observation provided information on the current process of FORGE Service Lab, contextual interview clarified the vision and mission, customer journey map helped in visualizing points for improvement, and customer perspectives provided comprehension regarding service expectations and what they value. In the second stage, contextual interviews with service design professionals collected opinions on service design and the FORGE Service Lab. Using the results from the interviews, the proposed concept was generated in an ideation workshop. The third stage included the creation of a prototype of the Service Design Coach concept, which was piloted with customers in order to gain feedback and improve the service. The prototype of the concept was finally improved using an iterative process and elements of lean thinking.

As a result of the research, the Service Design Coach concept was generated with focus to add support and value to the service process of FORGE Service Lab. The foundation of the concept is built on four sections, which represent service design methods that are useful during different stages of creating new digital services in the FORGE Service Lab. As a conclusion, the customers of FORGE Service Lab indicated a desire to see service design support implemented. Also, service design specialists promoted the benefits of the approach.

Keywords: co-creation, coaching, new service development, service concept, service design

**Laurea-ammattikorkeakoulu** **Tiivistelmä**
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**Palvelumuotoiluvalmentaja-konseptin kehittäminen - Case FORGE Service Lab**

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Tämä opinnäytetyö on tutkimuksellinen kehittämisprojekti, jonka tavoitteena oli kehittää Palvelumuotoiluvalmentaja–konsepti. Projektin kohdeyrityksenä on DIGILE ja sen digitaalisten palveluiden kehityslaboratorio FORGE. Digitaalisten palveluiden kehitys alkaa tyypillisesti tuotepohjaisesti keskittyen palvelun teknisiin ominaisuuksiin ja laitteisiin, jolloin asiakaslähtöisyys jää vähemmälle huomiolle. Tämän opinnäytetyön tarkoituksena oli kehittää konsepti, joka mahdollistaa palveluiden kehittämisen asiakaslähtöisesti FORGEssa.

Tutkimuksen teoreettinen viitekehys muodostui palveluiden markkinoinnista, palvelukehityksestä ja design-ajattelusta. Teorioiden syvällisemmän tarkastelun pohjalta palvelulogiikka muodosti periaatteellisen ymmärryksen asiakaskeskeisyyteen, kun taas asiakaslogiikka korosti asiakkaan taustan, aktiviteettien sekä käytäntöjen ymmärtämistä. Teoria palvelukonseptista puolestaan toi konseptin suunnitteluun jäsennystä ja lean-ajattelu ketterän kehittämisen mallin. Palvelumuotoilua käytettiin ymmärtämään asiakkaita, yrityksiä, eri aloja, luomaan ideoita ja muuttamaan ideat palveluiksi.

Tutkimuksen empiirinen osa on suunniteltu Double Diamond –menetelmän mukaisesti, keskittyen sen kolmeen ensimmäiseen osuuteen eli nykytila-arviointiin, kehitettävien asioiden määrittelyyn sekä konseptin rakentamiseen. Tutkimusaineistoa kerättiin hyödyntäen erilaisia palvelumuotoilun menetelmiä. Havainnoinnilla kerättiin tietoa FORGEn nykyisestä prosessista, kun taas asiantuntijahaastattelu toi ymmärryksen FORGEn visiosta ja missiosta. Asiakaspolun kautta kehityskohteet tehtiin tunnistettaviksi ja asiakkaiden haastattelut toivat ilmi asiakkaiden odotukset ja arvostuksen FORGEn palveluja kohtaan. Palvelumuotoilun asiantuntijoiden haastattelut puolestaan auttoivat ymmärtämään palvelumuotoilumenetelmiä ja niiden hyödynnettävyyttä FORGEn toiminnassa. Kerätyn aineiston pohjalta ideoitiin konsepti yhdessä DIGILEn kanssa ja tutkimuksen lopuksi konseptista rakennettiin prototyyppi, jota pilotoitiin kahden asiakasprojektin yhteydessä.

Opinnäytetyön tutkimuksen tuloksena kehitettiin Palvelumuotoiluvalmentaja–konsepti, jonka tavoitteena on tuoda lisäarvoa ja asiakaskeskeisyyttä FORGEn nykyiseen palveluprosessiin. Konsepti on rakennettu neljän osa-alueen ympärille, jotka kaikki osaltaan edustavat palvelumuotoilun menetelmiä ja ovat hyödyllisiä kehitettäessä digitaalisia palveluja. Opinnäytetyön tutkimuksen mukaan konseptille on tarvetta, sillä FORGEn asiakkaat ilmaisivat kiinnostuksensa palvelumuotoilutukeen, jonka lisäksi palvelumuotoilun asiantuntijat suosittelevat menetelmiä käytettäväksi FORGEssa.

Avainsanat: palvelukehitys, palvelukonsepti, palvelumuotoilu, valmennus, yhteiskehittäminen

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# 1 Introduction

The competitive nature of business forces companies to constantly develop new and better services to exceed the customer expectations. In many cases the focus is on products, and a system or a device can become all-encompassing as the centerpiece of development efforts. The challenges of competition, force companies and organization to prioritize customers and end-users in order to differentiate within the market. Service-Dominant Logic is a fundamental framework used to understand that customers are not only being offered the product itself, but also the service affiliated with the product (Lusch & Vargo 2004). The service is exchanged for service, while goods are seen as a mere distribution mechanism for service. The service-dominant logic approach uses the term *value-in-use*, which means that the customer determines the value received during the service process (Grönroos & Voima 2013, 3). Companies do not deliver products exclusively, they also deliver value propositions, and the customer is key in the process used to determine value.

One method for incorporating the customer's voice in to the development process is a discipline called *service design*. Service design is a holistic view used to understand the customer's world and embrace the value created through the service (Helle 2010). Service design is an approach that emphasizes co-creation, iteration, team-work and innovative solutions. The focus is on understanding the customers, market and stakeholders to develop new ideas of the services with effective tools. (Stickdorn 2010.)

The purpose of this thesis is to create a new service concept for a case company that works with digital development projects. Digital development typically starts product-based development with a focus on technical requirements and features; the customer-focus is often missing, with time and money instead devoted to technical development (Vainionpää 2015). This thesis will offer a strategy to overcome the product-based emphasis by creating a service concept that supports both service-dominant and customer-dominant logics, as well as customer-centricity, through service design methods. The result of this thesis will be a Service Design Coach concept, which will allow project development to better incorporate customers and their perspectives.

## 1.1 Objective of the thesis

The objective of this Master's thesis is to create a Service Design Coach concept for a case company DIGILE and its FORGE Service Lab. The process will entain an analys of the current service process of FORGE Service Lab, research regarding the customers, identifying opportunities for a service design approach and the creation of a Service Design Coach concept, which will fit the current service process. The research is based on five research questions:

- What is the current service process used by FORGE Service Lab?
- What value will the service design support bring to FORGE and its customers?
- What kind of service design would support the FORGE Service Lab projects?
- What processes would benefit from the use of a Service Design Coach?
- Which tools and methods would support the deployment of service design thinking?

This thesis is a research-oriented development project, with the purpose of creating a new service concept. According to Ojasalo, Moilanen and Ritalahti (2014, 18), the research-oriented development approach attemps to solve issues that are noticed in a practical setting, to renew current practices, and to create new data from the business environment. Data is analyzed using central theoretical concepts. Research methodologies are diverse and active co-operation among stakeholders is underlined. Ojasalo et al. (2014, 20) also explain that research-oriented development requires knowledge of project management and development, as the projects usually require good planning, including initiative and innovative mindsets, networking, change management and criticality. The overarching aim is to both uncover problems and to solve them.

The process of research-oriented development requires not only identification of the target but also understanding through the acquisition of deeper knowledge. It is essential to define the perspective for the research, to find an appropriate theoretical framework, to choose methods and to make delimitations for the work. The process continues with analysis of the research-oriented development project, delivering results and synthesizing conclusions. (Ojasalo et al. 2014, 24.)

This thesis research and concept creation was done in the of spring 2015. The thesis is limited to the case company DIGILE and its FORGE Service Lab. The research follows a service design process, specifically the Double Diamond model, utilizing the first three stages but omitting the fourth stage. The service design process is introduced in the second chapter.

## 1.2 Structure of the thesis

The outline of this thesis includes four chapters. The first chapter introduces the research questions, the context of the research and the key concepts. The second chapter examines the theoretical framework for the thesis with three main theories: service marketing, new service development and design thinking. The focus includes service-dominant logic and the concept of value, customer-dominant logic and value creation, service concepts, lean startup thinking, service design and service design process. The theoretical perspectives are summarized in a visualization of the theoretical framework.

The third chapter introduces methods and tools used in the research. Within the discussion of the tools, insights from the research are presented to the reader. The practical development has three main stages: discover, define and develop. At the end of chapter three, the created concept of Service Design Coach is presented. The last chapter of the thesis reflects on the findings through the use of central theoretical concepts. Additionally, conclusions and recommendations for further research are presented. References and appendices are also included.

## 1.3 Key concepts of the thesis

The key concepts discussed in this thesis are service, new service development, service concept, service design, coaching, customer and co-creation. In this section, brief definitions are provided to enable understanding of the concepts as they are specifically used in this context.

*Service* is support for a person or organization's everyday processes that facilitates the person or organization's value creation (Grönroos & Gummerus 2014). Service is the fundamental basis of business and can be understood as part of the logic of value creation, which represents the ultimate goal of business and marketing (Grönroos 2011).

*New service development* (NSD) aims to create new markets through the innovation of the service provision and enabling customers to co-create value (Gremyr et al. 2014). New service development is typically an iterative process with input from customer involvement, cross-functional development teams, technology and knowledge (Santos & Spring 2013).

*Service concept* is a combination of processes, people skills and materials that support the planned or designed service (Goldstein, Johnston, Duffy & Rao 2002).

*Service design* is an interdisciplinary platform of expertise intended to create value propositions for the customer. It includes designing and marketing service that improves customer experiences and interactions between the service providers and customers. Service design is a holistic view of the business and provides deep understanding of the customer perspective. (Stickdorn & Schneider 2010, 29-33.)

*Coaching* is a coherent application of integrated professional, interpersonal and intrapersonal knowledge to improve one's competence, confidence, connection and character in a specific coaching context (Côte & Gilbert 2009).

In the context of this thesis, the *customer* is represented by a B2B (Business to Business) company or organization that purchases services from DIGILE. Because DIGILE does not offer services to a single customer, the B2B companies or organizations form a project group referred to here as a business ecosystem.

*Co-creation* includes the actions taken by all actors - such as providers and customers - involved in a process, regardless of how they relate to each other (Grönroos & Gummerus 2014). Simply stated, co-creation is the shared creation of value by the company and the customer, which allows the customer to co-construct the service experience to suit his or her own context (Prahalad & Ramaswamy 2004).

### 1.4 The case company DIGILE and FORGE Service Lab

The case company of this thesis is DIGILE and its FORGE Service Laboratory. DIGILE, founded in 2008, is a non-profit Finnish limited company that focuses on the development of Finnish information and communication technology (ICT) and digital businesses. Because digital services are a key aspect of various of businesses, DIGILE is responsible for much of the digital service development in Finland, which is expected to result in growth for business and create new jobs. Within DIGILE's role as one of Finland's Strategic Centres for Science, Technology and Innovation (SHOKs = Suomen Strategisen HuippuOsaamisen Keskittymä), it aims to participate in research and development, as well as the application of findings to business practice. The three main services provided by DIGILE include research, specially national and international research programs to create new technological and business innovation; solutions such as facilitation of business ecosystems and lead solutions creation to explore global business opportunities; and digital service creations by the FORGE Service Lab for fast digital service creations and competence scaling. The owners of DIGILE are the industry, universities and other active Finnish innovation system contributors. (DIGILE 2015.)

The focus of this thesis is the FORGE Service Lab. FORGE Service lab is a development laboratory for digital services that offers services in two dimensions: a cloud service for technological development and business coaching for creating a successful new service. The objective is to create a cloud-based service from idea to scalable implementation. FORGE Service Lab produces added value for the projects, also acting as a forum in which solid open-source thinking is gathered. In addition to technology, a service development community is assembled around the laboratory. The FORGE Service Lab started in spring 2014, and by March 2015, six projects had been accepted to FORGE. (DIGILE 2015.)

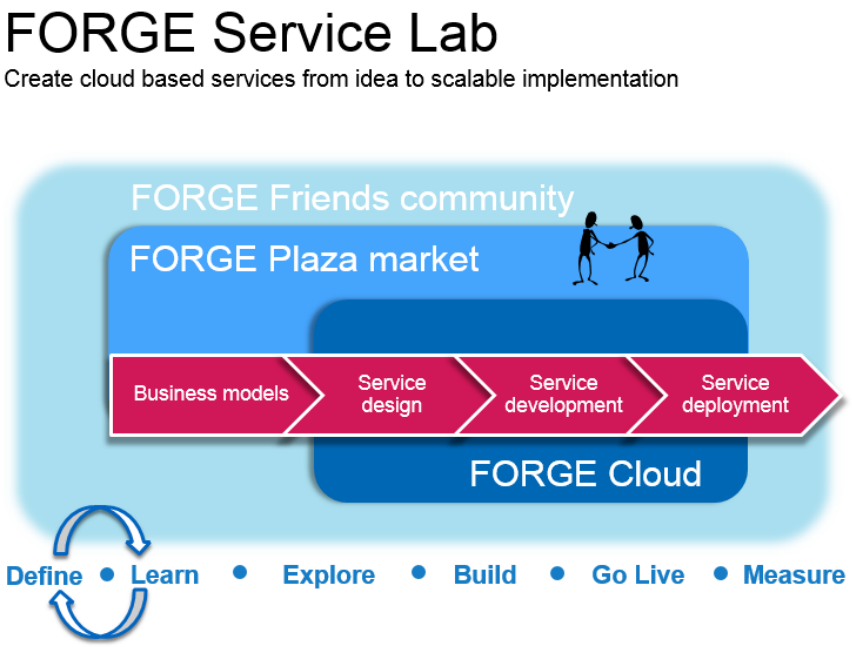



Figure 1: The visualization of the FORGE Service Lab offering (DIGILE 2015)

Figure 1 illustrates the business support of FORGE. The key services offered through FORGE Service Lab support how to define, learn, explore, build, go live and measure your service. The methods used in the Service Lab are Business Models, Service Design, Service Development and Service Deployment. The technical component of this service is the FORGE Cloud, supplement with the community and plaza market environments intended to ensure project success and create new services. The FORGE cloud base is available for project use following the preparation stage an acceptance process. Projects using Forge Service Lab utilize a 1 million euro budget. (Vainionpää 2015.)

The customers of FORGE Service Lab include companies, educational institutions and ministries that want to develop digital services together in a group, also referred to as a business ecosystem. Typical the ecosystem groups include 3 to 10 stakeholders which represent either ICT or non-ICT fields. The role of DIGILE is to facilitate the projects in such a way that stakeholders are able to uncover common interests and idea, share roles, create an action plan, and successfully accomplish the project. (Vainionpää 2015.)

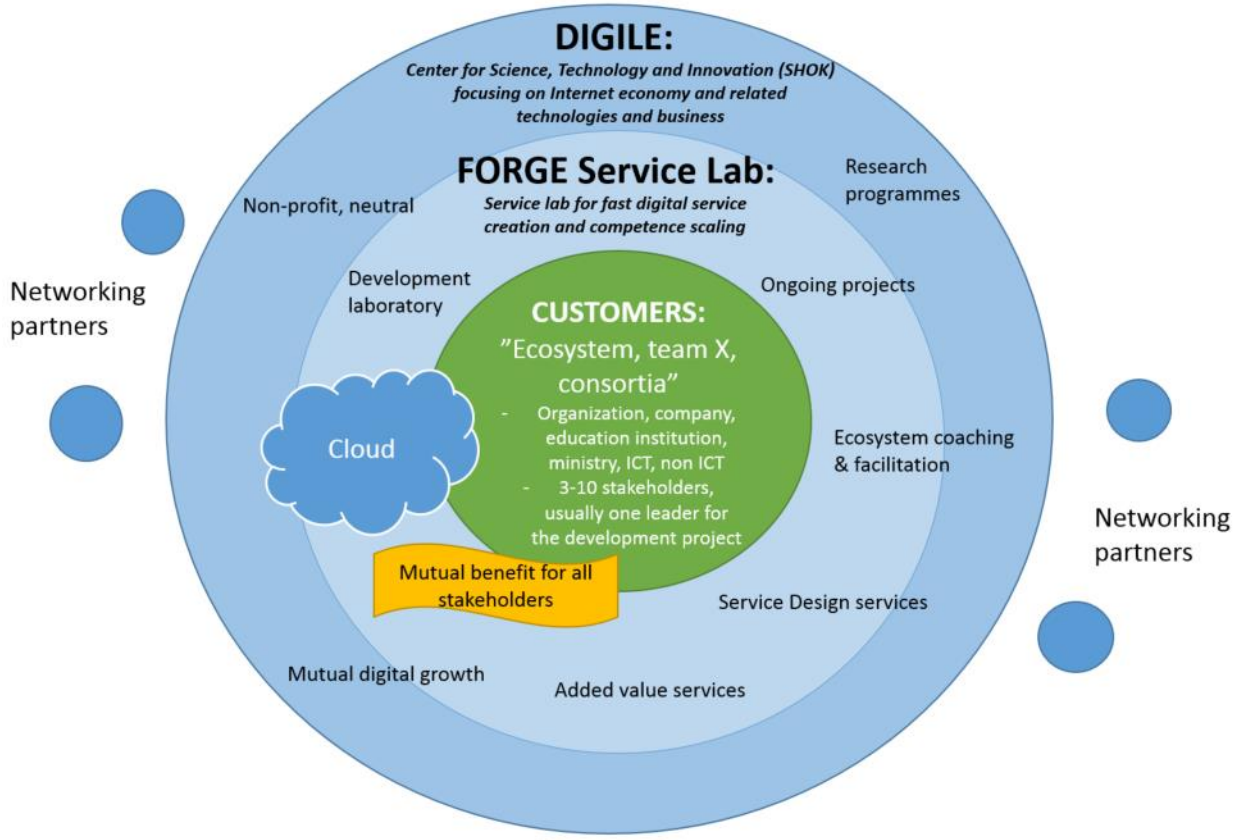



Figure 2: A stakeholder visualization of the organization

Figure 2 represents the stakeholder map of FORGE Service Lab. In the center are the customers, the projects groups that use the FORGE Service Lab to create new digital service with the cloud capacity and business support from DIGILE. The middle ring represents FORGE Service Lab, which offers ecosystem coaching and facilitation, as well as added value and service design services. DIGILE is represented by the outer ring which includes its research programs and networking partners that enable the provided service. A key advantage of the FORGE Service Lab is that by doing development projects in business ecosystems teams, the new knowledge and benefits will be distributed to a larger group instead of working exclusively with one company. The companies and organizations that participate in a business ecosystem project group collaborate, share ideas and risks, and mutually benefit from the project. (Vainionpää 2015.)

# 2 Service concept creation

The present chapter focuses on the theoretical perspective for this thesis. The theoretical research is built on three main theories: Service Marketing, New Service Development and Design Thinking. The discussion examines specific components of the main theories, namely Service-Dominant Logic and the concept of value, Customer-Dominant Logic and value creation, Service Design and Service Concept, and Lean startup. A visualization of the theoretical framework is presented at the end of this chapter.

## 2.1 Service Marketing in academic discussion

The development of service marketing officially started in the 1970s with the research and development of service-based concepts. In Europe, two different schools were recognized: one in the Nordic countries and one in France. Both schools proposed a unique perspective of the marketing position arguing that customers were co-producers in the service production process. The schools argued that marketing should not remain as a distinct function, a customers are actually taking part in shaping the service offering. (Grönroos 2006.)

The Nordic school conducted research and concluded that marketing actually has several functions and concepts aside from the traditional functions of advertising and market research. Marketing can also be seen as interactive, drawing resources from other functions, as well taking place simultaneously with the production and consumption processes. In addition, several concepts were put forward: *part-time marketers*, which suggests that all employees are marketers, and *moments of truth,* referring to the motivation, skills, and knowledge of the employees, who have also been described as important functions of market research. (Grönroos 2006.)

The academic discussion of market theory during the last decade has extensively investigated the theories of service-dominant logic and customer-dominant logic. These two principles extol the customer-involvement and value created through a service. The next two chapters will focus on these two logics and how they serve as support for the concept creation of the thesis.

### 2.1.1 Service-Dominant Logic and concept of value

The traditional logic for business has been goods-dominant logic, which refers to the product and manufacturing industry. The production and exchange of goods are the central components of the business and value is established by exchanging goods, thus creating value-in-exchange. The logic supports goods and company centricity, as the company is seen as the

primary actor of the process, whereas the market and customers are passive participants. (Lusch & Vargo 2014, 6.)

The traditional logic has been waning in popularity as service-dominant logic has been promoted over the past couple of decades. Lusch and Vargo (2006) define a service as an application of specialized competences - operant resources, knowledge and skills - through deeds, processes and performances for the benefit of another entity or the entity itself. Therefore, customers are not being offered the product but instead the service the product offers. Lusch and Vargo (2006) explain that service is exchanged for service and goods are just a distribution mechanism for service. They further propose that know-how is an essential component of differentiation, all economies are service economies, customer is always a co-creator of value, and the process is customer-centric and relational. The nature of service-dominant logic can be summarized into four axioms: service is the fundamental basis of exchange; the customer is always a co-creator of value; all economic and social actors are resource integrators, and value is always uniquely and phenomenologically determined by the beneficiary. (Lusch & Vargo 2014, 15.)

A key concept of service-dominant logic is the term *value-in-use*. Grönroos & Voima (2013) describe the difference between concepts of value-in-use and value-in-exchange, which refers to goods-dominant logic (Figure 3). Specifically, they argue that value-in-exchange is utility based on the labor process, and can be exchanged for other utilities or represents something the customer is willing to pay for. The value-in-use is instead based on customers' experiences related to consumption, the customer either feels better off (positive value) or worse off (negative value).

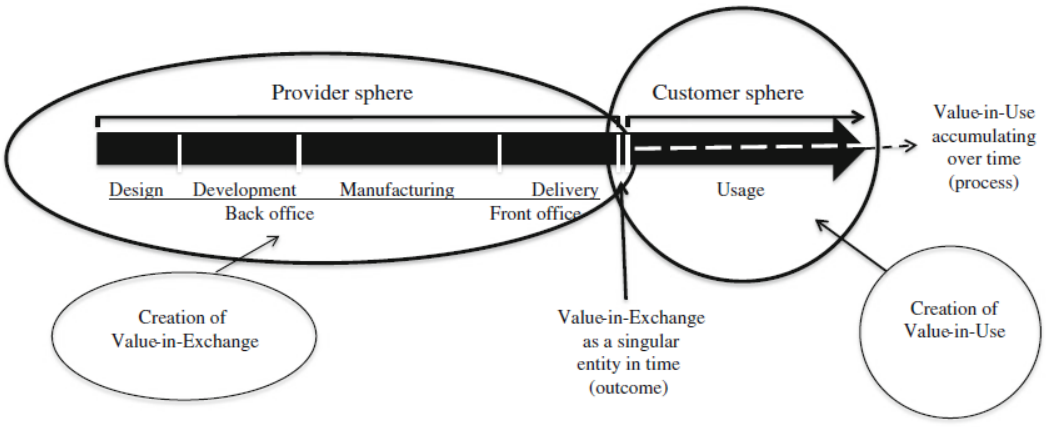



Figure 3: A comparison of value-in-use and value-in-exchange concepts (Grönroos & Voima 2013, 136)

Lusch and Vargo (2006) continue by stating that value-in-use indicates that the customer determines the value received during the service process. In comparison, the term value-in-

exchange signifies that the service happens only after the product is delivered. Any company seeking to understand service-dominant logic should take into account the value proposition for the customer, the benfits that the customer receives from the company's service.

Michel, Brown and Gallan (2008) examined the customers' logic and argue that customers do not seek productsspecifically: instead, they seek satisfaction. Service business should therefore find new ways to address customer's needs and problems both recognized and latent. Companies must change the customer thinking and customer participation in order to make service-oriented innovations possible. Michel et al. (2008) also state that value is not released because the value is not relegated to the exchange, but instead found in use, and the customer's role should be seen as integrsl part of the company's strategy. The customer role can serve to alter approaches to the configuration of value networks.

Chesbrough (2011, 4) defines four concepts that should be considered when defining one's business as a " service business". First, you need to regard your business as a service in order to sustain profitability and achieve new growth. Second, the innovators should co-create with customers to create meaningful experiences and to give customers what they truly want. Third, open innovation deepens service innovation by promoting specialization with the customers, suppliers, and third parties. Fourth, effective service innovation requires new business models that profit from internal innovation initiatives and stimulates external innovation activities that add value to the company's business.

Helle (2010) created framework for value creation focused on two processes; co-creating an underlying basis of value, and then signifying and evaluating the meaning with the outcomes of the co-creation process. The framework defines service-centric value creations as an interactive process of creating and sharing common productivity benefits. Michel et al. (2008) conclude that companies can only create value propositions; the company does not define the value at all, instead the customer must be involved in the process. This requires understanding of how customers use and co-create the value for the company's offerings. This comprehension can then lead to new service-logic innovations, which can provide new opportunities for competitive advantage. Grönroos (2011) also asserts that the customer creates the value while the firm facilitates the value creation process. Customers are in charge of their value creation, but the company can create value with the customer.

In this thesis, the value-in-use can be seen as the value DIGILE gets from the development project. The value is based on DIGILE's experience through the process, not just the end-result. Instead, the value proposition can be seen in the value that FORGE Service Lab offers with its service to its customers.

### 2.1.2 Customer-dominant Logic and value creation

The service-dominant logic serves as the theoretical base for this thesis in understanding the project from customer's point of view. However, in order to really understand the customer's world, customer-dominant logic must also be examined. The next chapter introduces customer-dominant logic and describes how value is created through the process.

According to Heinonen, Strandvik and Mickelsson (2010, 535), customer-dominant (C-D) logic suggests that companies should assess their service in relation to customer contexts, activities, practices, and experiences, as well as the implication these have for the company. Instead of focusing on what companies do to create preferable services for customers, they suggest that the focus should be on that what customers are doing with the services and how the service could facilitate their daily goals.

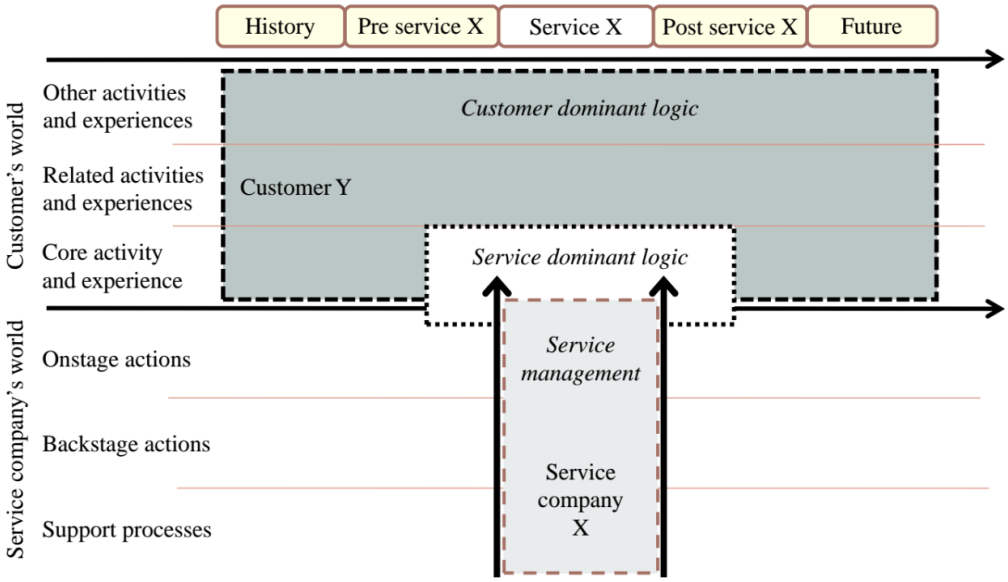



Figure 4: C-D logic contrasted with service management and S-D logic (Heinonen et al. 2010, 535)

Figure 4 provides a visualization of C-D logic compared with S-D logic and service management. In the figure, S-D logic is in the center and represents the co-created service experience that the company and the customers share during the service process. C-D logic represented as larger area and indicates the customer's world. Heinonen et al. (2010) argue that C-D logic specifically differs from S-D logic in that the latter considers only activities and experiences that are directly related to the service. Alternatively, C-D logic seek to discover what customers are doing or trying to do and how the service can fit these activities.

According to Heinonen et al. (2010) the key issues of the customer-dominant logic are co-creation of service, value-in-use, and customer experience. Figure 5 breaks down the key issues as compared to provider-dominant logic, which can also be referred to as service and goods-dominant logic. In provider-dominant logic, the customer is always seen as a co-creator of value, but Heinonen et al. (2010) argue that a more critical view needs to be seen because the company can be involved in customer activities and the customer actually controls the value. In addition, the value-in-use could be seen as all the things the company does that the customer can use to improve his life or business. This also considers unseen, or mental actions. Finally, the customer's experiences emerge from his life, not only within the service. This means that the character of the service risks becoming mundane.

| | Provider-dominant logic | CD logic |
|---|---|---|
| *Co-creation* | | |
| Involvement | Customer involved in co-creation | Company involved in customer activities |
| Control | Company controls co-creation | Customer controls value creation |
| *Value-in-use* | | |
| Visibility | Focus on visible interactions | Also considers invisible and mental actions |
| *Customer experience* | | |
| Scope | Formed within the service | Emerges in customers' life |
| Character | Extraordinary and special | Also mundane and everyday |

Figure 5: The comparison of C-D logic to provider-dominant logic (Heinonen et al. 2010, 542)

Voima, Heinonen and Strandvik (2010) examined C-D logic from a value creation perspective. As C-D logic places the customer in the center of the process, value is not always an active process of creation; instead the value is formed in the dynamic and multi-contextual reality and life of a customer. The main difference between S-D logic and C-D logic in terms of value perspective is that in C-D logic the value formation can be a passive process, subcounscious or emotional, whereas in S-D logic the process is active, a cognitively effortful and conscious process. Also, in S-D logic the scope of the value is the service, whilst the scope of the value in C-D logic is the life of the customer. Finally, S-D logic describes the value creation as relative within a service context, whereas the value is relative on multiple levels in C-D logic, requiring new methods to measure and study the value formation.

According to Voima et al. (2010), value cannot be considered actively created, as it is instead formed in the cumulative reality of the customer. Value is experienced in a phenomenological manner and should be studied using a multi-contextual perspective including several persons. Finally, value should be seen as collective and shared.

Nevertheless, companies may fail to recognize the need to consider the value and customer-dominant logic when designing the services. Voima et al. (2010) reiterates that companies

need to know both their customers and prelevant customer mindset. The focus should no longer be on how customers consume a service, but instead what affects customers' lives. Customer-dominant logic focuses on customer activities and practices and serves as a guideline for how the service process could be successfully designed. The emotional foundation of the customer determines how the customer acts, believes and behaves. The main point should not be how the customer wants to be served, instead examining the everyday circumstances of the customer.

Understanding C-D logic is integral to this thesis, as it offers comprehensive perspective of the customer's world. The designed service should not only meet the company's goals but also seek to accomplish the customer's ambition. For the FORGE Service Lab, the projects should prioritize focusing on customers - their behaviors, beliefs and goals - instead of just the technical features of a digital service. This can be accomplished using a needs analysis of the emotional foundation of the customers in the beginning of the development projects.

## 2.2 New Service Development to create new services

The following section focuses on the creation of new services. According to Edvardsson, Gustafsson, Kristensson, Magnusson & Matthing (2006, 1) new service development is an essential business activity for profitable business and companies trying to increase their viability by introducing new services that will create value for existing customers and attract new ones. The process in new service development is typically both iterative and cyclical, including customer involvement, cross-functional development teams, technology and knowledge (Santos & Spring, 2013).

Service-dominant logic can be seen as the basis for new service development as services are created through co-creation with customers. The focus of this section is on service concept creation, and its evolution towards the Service Design Coach concept. Additionally, a new method for new service development is discussed: the lean startup model.

### 2.2.1 Service concept to define the service

According to Goldstein et al. (2002), the service concept is a combination of processes, people skills and materials that support the planned or designed service. Edvardsson, Gustafsson and Roos, (2005) expand this idea by asserting that the service concept can be portrayed through a perspective on value creation. Specifically, the focus is on value through the customer's perspective, co-creation of value with customer is key and interactive, and experiential and relational approached form the basis for the service.

Unlike the manufacturing field, the components of service industries are frequently not physical entities, which make the service itself vulnerable to evolving circumstances. Creating a concept requires numerous decisions, proceeding from ideation and design phases to deliverable service. Those decisions affect the strategic level, operational level, and service encounter level. and ensuring that the decisions will respond to the customer's needs can present a challenge. (Goldstein et al. 2002.)

The service concept creation process has several elements, but Meiren and Burgen (2010) prodiced a review identifying the elements that appear most often in the literature. Those elements include opportunity identification, customer understanding, concept development and refinement, and implementation. These steps might also be described as idea generation and evaluation, requirement collections, definition of service levels, processes and resources, and training and market launch. Meiren and Burgen (2010), also suggest conceptual, usability and practical tests for concept development in order to verify the customer understanding.

Service development can be a lenghty and multi-faceted project, but the service concept brings structure for the development process. The service delivery system covers the structure, facilities and equipment, infrastructure such as design and skills, and processes for delivering the service. Nevertheless, the role of the service concept can be primarily seen as an integrator of the customer's world and the organization's strategic intent. Altogether, a clear and shared understanding of the nature of the service provided is necessary to create service concept. (Goldstein et al. 2002.)

The service concept discussed in this thesis, the Service Design Coach, offers structure for concept creation; including opportunity identification, customer understanding, concept development, and refinement and implementation as emphasized by Meiren & Burgen (2010). A combination of processes, skills and materials is presented and synthesized to support the concept (Goldstein et al. 2002).

### 2.2.2 Lean startup as an agile concept

The lean startup model embraces the new service development and tries to create a modern service concept. In this thesis, the FORGE Service Lab projects aspire to create successful and scalable new digital services necessitating an overview of the nature of a lean startup model.

Many startup companies fail soon after they are established, often suffering from a lack of customers, lack of information and knowledge, lack of income, or prohibitively high maintenance costs. One explanation for this pattern is that the traditional business model rarely corresponds to the reality of the modern business life. Eric Ries (2011) wrote *Lean Startup*, in

which he proposed the five key factors of lean startup thinking (Figure 6). He underscores the idea that entrepreneurs are everywhere, and startups exist to create new products using innovative mindsets under uncertain conditions. Testing, and learning from mistakes, are the fundamental activities for businesses and the work should be measured with innovative assessment.

1. Entrepreneurs are everywhere and the definition of a startup is a human institution designed to create new products and service under uncertain condi-

2. Entrepreneurship is management and a startup is an institution with all modern companies dependen on innovation

3. Startups exist to learn how to build a sustainable business and learning can be validated scientifically by frequent testing

4. Build-Measure-Learn; the fundamental activity is to turn ideas to products, measure the customer respond, and learn where to pivot or persevere

5. Innovate accounting is used to measure progress, to set milestones and to prioritize work.

Figure 6: The five key factors of lean startup thinking (Eric Ries 2011)

Blank (2013), through his research into the lean startup model, has determined three key principles. First, the startup's purpose is to search for a business plan, not execute one as the traditional business has done. Instead of writing a traditional business plan, the idea is to sketch out the hypothesis of the business to a business model canvas. Table 1 shows the key points of a business model canvas, in which the concept of the business can be sketched. Blocks in the model represent key partners, activities, resources, value propositions, customer relationships, channels, customer segments, cost structure and revenue streams. Currently there are several versions of the business model canvas but the original one originates from the work of Osterwalder (2010).

- Key Partners; who are your key partners and suppliers?
- Key Activities; what are the key activities the value proposition needs?
- Key Resources; what key resources the value proposition needs?
- Value Propositions; what value do we deliver to the customer?
- Customer Relationships; how can we get, keep and grow customers?
- Channels; how the customers want to be reached?
- Customer Segments; for whom are we creating the value?
- Cost structure; what are the most important costs to our business?
- Revenue Streams; for what value our customers are willing to pay?

Table 1: The Business model canvas (Osterwalder et al. 2010)

After the lean startup company has defined the business model, potential customers, partners, suppliers are interviewed to ascertain whether the concept can be succesful. After completing their research, the company does a quick development and implements a minimum viable product, which can be tested with customers in order to gain valuable feedback that will be analyzed and implemented to improve the service. An enhanced prototype will be launched and the startup will again test the service. The cycles of testing and evaluation will be repeated many times during the implementation process until the company is satisfied that the service is ready. This piloting an revision process is the key reason why failure rates of lean startup companies are less than within companies that have used traditional business perspectives. (Blank 2013.)

Blank (2013) describes lean startups as fast, cheap and less risky compared to traditional startup companies. Lean companies are more likely to hire people who want to learn in their work, not necessarily experts who already think they know the process. In addition, the reporting system is different within a lean startup company compared to a traditional company. The traditional company follows the numbers and cash flow, while lean startups follow customer acquisition costs, product lifetime, and customer value. Also, the lean startup company acknowledges that the business might fail, but the hypothesis and testing process gives them an advantage over the traditional companies that hesitate to make changes to the business and risk failure. Finally, lean companies venture forward with prototypes and ideas even though they are not in their final stages, which is much cheaper than committing to a length development process only to realize that changes are necessary.

The lean startup as a fast, cheap and agile method is useful for the FORGE Service Lab and its goal of creating successful services. Agile development and testing are especially beneficial when creating new digital solutions.

## 2.3 Design thinking as a mindset

*Thinking like a designer can transform the way you develop products, services, processes – and even strategy.*
- Tim Brown, 2008

The theories of design thinking and service design will be discussed in the sections that follow, and the service design process, which is the method utilized to execute the empirical part of this thesis, will be introduced. The relationship between design thinking and service design is close. In this thesis, design thinking is analyzed as a mental mindset, whereas service design offers more practical perspectives.

Design thinking is a complex approach to understanding new realities and expressing design culture and methods into business. The method offers process models and toolkits to improve, iterate and visualize the creative process within multidisciplinary teams. Design thinking is a cognitive process, making it an effective method for innovation and problem-solving. Design thinking supports visual, sketching and prototyping tools, collaborative and co-creative working methods and emphatic and human-driven mindsets. (Tschimmel 2012, 2-4.)

Johansson-Sköldberg, Woodilla, Çetinkaya (2013) have examined design thinking and propose five theoretical perspectives: creation of artefacts, reflexive practice, problem-solving activity, a way of reasoning or making sense, and a way of creating meaning. When compared to the management level of design thinking, three perspectives were described that include design thinking as design company IDEO's way of working with design and innovation, as a way to approach indeterminate organizational problems and skills for practicing managers, and as part of management theory.

Tim Brown (2008), CEO of IDEO, defined several key features the design thinkers should posses. First, the designer needs empathy, which enables the designer to imagine the world from multiple perspectives, observe the details, and inspire innovation. Secondly, design thinkers need integrative thinking, which means that they do not exclusively rely on analytical processes but also examine the other key issues to create new solutions. Thirdly, optimism is needed to discover potential solutions, even if the topic is challenging. Fourth, experimentalism is needed to pose questions and explore creative ways to find new directions. Fifth, collaboration and wide experience is needed to handle the complexity of products, services and experiences.

Sangiorgi (2012, 103) argues that design researchers work at two levels. Initially, they introduce a new way of thinking about value co-creation and innovation called *service thinking*. Service thinking is also referred to as design thinking, and it aims to change the company's perceptions regarding their role, offerings and innovative process. Next, they introduce design-for-service methods intended to improve the service experience and offerings through alignment with customer needs. Service design and its methods are discussed below.

### 2.3.1 Service design as an effective creation method

According to Moritz (2005, 39), service design is incorporated into the overarching design of the experience as a whole, specifically focusing on the process and strategy that provide the service. The process steps include understanding the client, organization, and market, developing ideas, and translating those ideas into feasible solutions. Service design is about renewal of existing services as well as creating new ones within iterative projects.

Stickdorn and Schneider (2010, 34) proposed five fundamentals of service design thinking: user-centered, co-creative, sequencing, evidencing and holistic. In practice, these concepts suggest that services should be experienced through the customer perspective, all stakeholders should be included in the process, the service should be visualized as a series of interrelated actions, intangible services should be also visualized and finally the entire environment of a service should be taken into account. A service design approach requires the involvements of customers, service providers, stakeholders and service designers in the process in order to improve services.

Curedale (2013, 14) explains that service design takes a human-centric approach, seeking to uncover unmet needs and desires and respond to them with innovative design solutions. According to Moritz (2005, 40), service design is an ongoing process that is translated into companies' business structures and processes. It often includes working in teams in a workshops-setting on projects intended to create new opportunities for services with in-depth customer-focus. Service design incorporates the planning of useful, desirable, effective and efficient service experiences for customers. Understanding the customer, market, resources and customers' expectations is a priority, as is using that information to create new business. Service design allows companies to create added value for customers, to differentiate in the market, to use resources better, and to communicate with customers in a new way.

Polaine, Loelie and Reason (2013, 23) states that the fundamental characteristic of a service is that the service creates value only when it is used. According to Miettinen and Valtonen (2012, 9), service design plays a strategic role in the co-creation of value. This result is due to service design methods utilizing a wider approach that integrates service thinking, user connections and constructing service propositions.

### 2.3.2 Service Design process

The service design process is complex and versatile, with four different stages. The service design process introduced in this section as a method for empirical research in this thesis.

Tschimmel (2012, 9) introduced the Double Diamond model of the British Design Council (Figure 7), which describes the steps of the service design process. The model is based on divergent and convergent stages, which broaden and narrow the perspective of the service design process. The model is sometimes called the 4D model based on the stage names: discover, define, develop and deliver. Stickdorn and Schneider (2010, 122) have also used this traditional model of the design process, but they renamed the four phases exploration, creation, reflection, and implementation. Below, each stage is defined in turn.

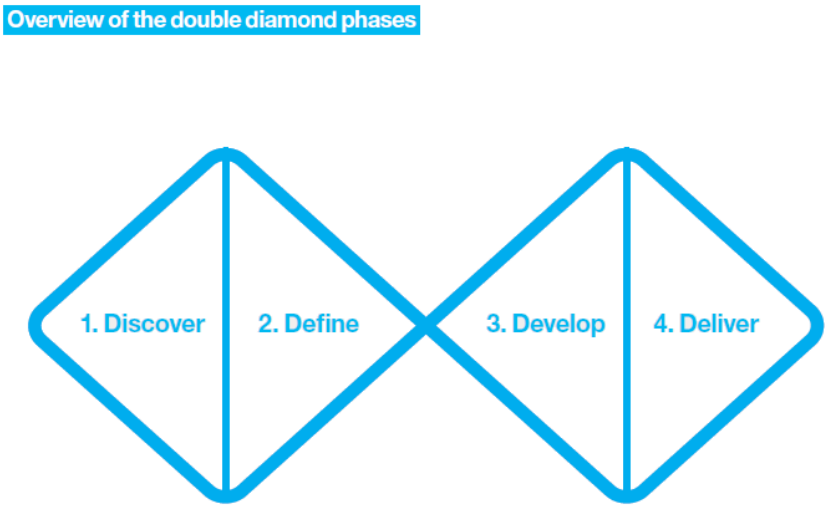



Figure 7: Double Diamond model of the British Design Council (2005)

*Discover*

The first stage entails discovering possibilities and gaining an understanding of the service provider and services. The service design process starts with identifying a problem that the service designer will focus on. It is crucial to focus first on the problem, then find the customers' needs, motivation and expectations, and finally compare them to the service providerss' processes. Visualizations of the problem add structure to the service process. In the Double Diamond model, the first stage, discovery, is a divergent action intended to broaden the perspective by searching for new opportunities, new information, new trends and new insights. (Stickdorn & Schneider 2010, 128; Tschimmel 2012, 9.)

*Define*

The second stage focuses on creating opportunities based on the identified problems. Idea selection and progress is achieved through co-creation among customers, service provider, employees, engineers, and other stakeholders. Quick illustrations with service design tools aid in understanding the processes and relationships used to create new opportunities. Mistakes are desirable at this stage because it is much cheaper to learn from them early in the process. In the Double Diamond model, the definition stage is convergent because initial insights are filtered, with some selected ando thers discarded. The team continues to work with the ideas to improve them. This stage includes more in-depth planning of the project as well as team member inclusion decisions. (Stickdorn & Schneider 2010, 130; Tschimmel 2012, 9.)

*Develop*

The third stage, development, entails reflection on the previous stages. In this phase, prototypes are built to test ideas with potential customers. Because services are usually intangible, it is vital to demonstrate the service in order to gain valuable feedback that enables improvement of the service. The prototype might represent the service using a poster, application, or even a role-play of the situation. For service design, an iteration process is crucial. After customers have given feedback on the prototype, the service will often return to stage two for modification and further improvements. After that, a new prototype will be built to again receive feedback on the service, repeating the process as often as necessary. This iteration will go over so many times it is necessary. The third stage is divergent with new possibilities being discovered through the testing phase. In addition to prototypes, sketches and scenarios can also be used to gain insights. (Stickdorn & Schneider 2010, 132; Tschimmel 2012, 10.)

*Deliver*

The fourth stage revolves around service implementation. The implementation should be based on the improved service offerings, and employees should be included into the process. Alterations to the business mindset can be challenging for employees if they have not been involved in the early stages of the process. Employees can contribute valuable input to the service design process, leveraring their roles as frontline troubleshooting and recovery experts. Support for change is more likely if they share a clear vision of the concept. The iterative process of continuous improvement takes place also in this stage. The implemented service should be regularly evaluated with ongoing developments ensuring that the service matches the customer's needs and expectations. This stage, deliver, is convergent, representing the production and launch of the tested service. The Double Diamond model, with its inclusion of divergent and convergent phases that represent created opportunities, with their selection and development process, enables understanding of the development process. (Stickdorn & Schneider 2010, 134; Tschimmel 2012, 10.)

## 2.4 Combining design thinking and lean startup

Design thinking and lean startup methods have many similarities with both aiming to create innovative services using customer feedback. Mueller & Thoring (2012), have conducted comparison of these their findings are explored below.

Although service design and lean startup methods both aim to create innovation design or business solutions based on customers' feedback, there is no specifically defined method for each model. The processes include intangible elements, practices, experiences and mind-sets

that affect every situation. The most significant difference between the methods is that the design thinking process is arranged in a linear way while lean startup is illustrated using a circular model. Additionally, design thinking starts with understanding, while the lean cycle does not have a clear beginning or ending. Key touchpoints of the lean cycle include building, measuring, and learning, allowing for a focus on learning by doing. In design thinking, a comparable stage would be understanding the current situation. Still, similarities between the two approaches exist. For example, the lean term *build* matches well with the step *prototype* in design thinking. The lean cycle is also applicable on a meta-level, for the entire process, or on a micro-level, useful for a specific piece. Design thinking is typically applicable only to the development process in its entirety. (Mueller & Thoring, 2012.)

As for the usability of these approaches, design thinking starts with a problem or question, ideas are developed during the process, and the ideas are based on understanding of applicable situations. Qualitative methods and ethnography are often used to gather information. Ideas are developed through ideation techniques, then select ideas are visualized or prototyped to be tested with customers or users. Iteration will ensure the continuous improvement of the project through return to earlier steps. (Mueller & Thoring 2012.)

In the Table 2, Mueller & Thoring (2012) clarify similarities and differences between these two approaches. Primary similarities include the fact that both methods have the same goal – that of fostering innovations – they are either user or customer-oriented, the process includes testing prototypes, and the development entails an iterative process. Additionally, both concepts tend to lack initial clarity regarding both the solution and the problem. The motto “Fail early or fail fast” can be used to describe the overarching theme for both methods.

| What | Design thinking | Lean Startup |
|---|---|---|
| Goal | Innovations | Innovations |
| Scope, Focus | General innovations | High-tech innovations for Startups |
| Approach | User-centered | Customer-oriented |
| Uncertainty | Solve wicked problems | Unclear customer problem |
| Testing | Fail early to succeed sooner | Pivoting is at the heart of the 'fail fast' concept. The sooner you realize a hypothesis is wrong, the faster you can update it and retest it. |
| Iteration | Yes ("Iteration") | Yes ("Pivoting") |
| Ideation | Ideation is part of the process, solutions are generated in the process | Ideation is not part of the process, product vision is initially provided by company founders |
| Qualitative Methods | Strong focus: elaborated ethnographic methods, user research, observations, etc. | Not a focus |
| Quantitative Methods | Not a focus | Strong focus: metric-based analysis; provides matrices, and testing |
| Business Model | Not a focus | Focus |
| Adaption of deployments | Not a focus | Five Whys Method |
| Typical Methods | Shadowing, Qualitative Interview, Paper Prototyping, Brainstorming (with specific rules), Synthesis, etc. | Qualitative Interview, Smoke Test, Paper Prototyping, Innovative Accounting, Split (A/B) Tests, Cohort Analysis, Funnel Metrics, Business Model Canvas, Five Whys, etc. |
| Hypothesis Testing | Not a focus | Focus |
| Prototype Testing | Yes | Yes |
| Rapid iteration | Yes | Yes |
| Target Group | Users (usually end users, sometimes other stakeholders) | Customers (distinguished between Users, Influencers, Recommenders, Economic Buyers, Decision Makers) |

Table 2: Comparison of important aspects of design thinking and lean startup (Mueller & Thoring 2013)

In considering differences, it has been noted that design thinking focuses on general innovations, while lean startup mainly targets startups. Also, in design thinking, the project starts with a challenge or problem, while, in lean startup, the business idea is already developed. In the research process of design thinking, the starting point focuses on an understanding of the situation. Methods such as personas and customer journeys are utilized in design thinking, while lean startups focus on quantitative methods such as metric-based analysis, testing and innovative accounting. In lean startup methods, the business model canvas is seen as an important tool, while it is not an element so typically found in design thinking. (Mueller & Thoring 2013.)

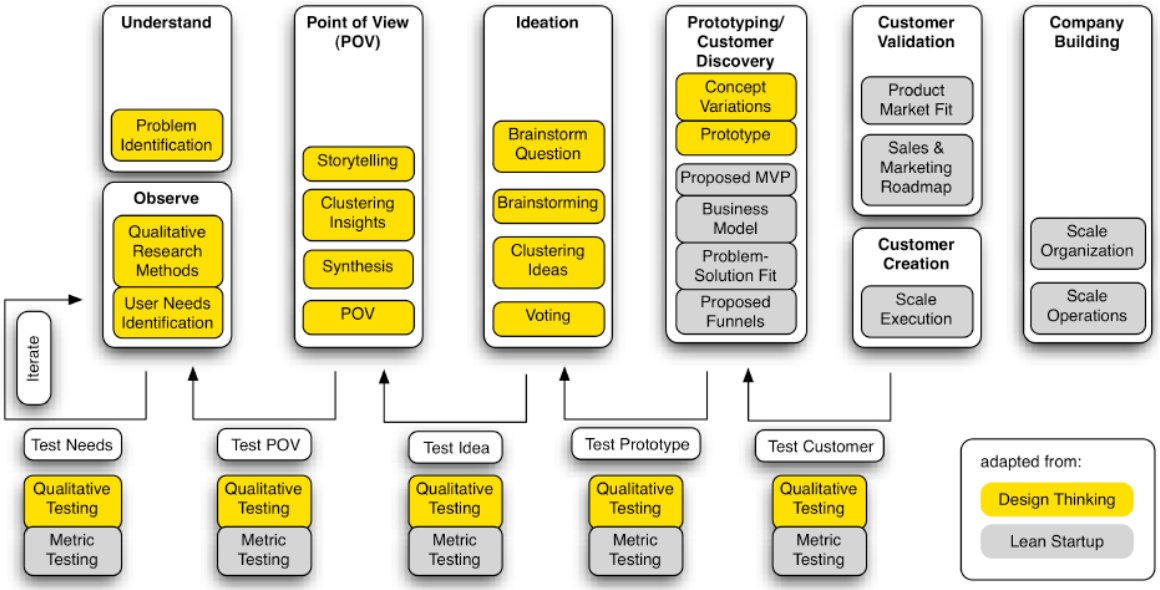



Figure 8: Model of "lean design thinking" (Mueller & Thoring, 2013)

A combination of design thinking and lean startup can be seen as beneficial for this thesis project, lending support to the empirical part of this project. A design thinking approach will focus on the ideation aspect of the projects and lean startup on the development and scalability. Figure 8 is a visualization of the model *Lean Design Thinking*. It is a service development model that has adopted features from both design thinking and lean startup. Design thinking has a strong role in the initial stages of a project when problem identification, point of view, and ideation are underway. However, lean startup processes have a greater impact once prototyping, customer validation, and company building are proceeding. Both methods have strengths and contribute to the quality assessment and metric testing that should be ongoing throughout the development process.

## 2.5 Summary of theoretical perspectives

The theories presented in this chapter form the theoretical framework for this thesis. The three theories discussed were Service Marketing, New Service Development, and Design Thinking. Also examined were Service-Dominant Logic and the concept of value, Customer-Dominant Logic and value creation, Service Design, Service Concept, and Lean startup. The theoretical framework is presented in Figure 9.

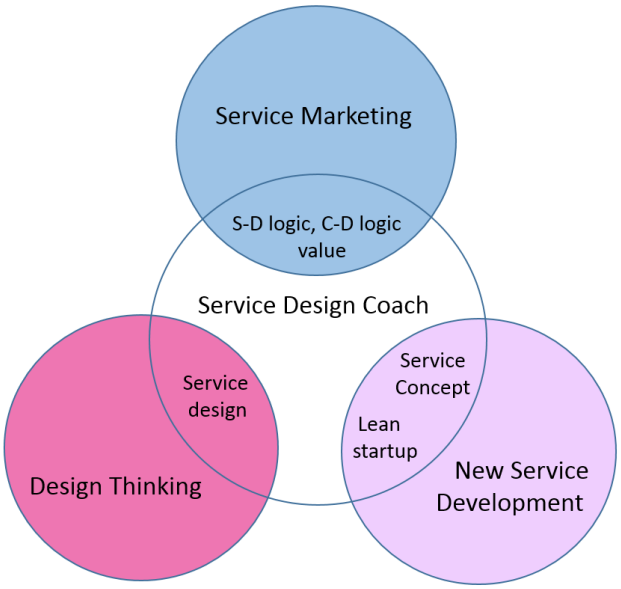



Figure 9: The theoretical framework of the thesis

Within this framework, service-dominant logic creates a fundamental understanding of the customer-centricity necessary for service creation. According to Lusch and Vargo (2006), a service is an application of specialized competences – operant resources, knowledge, and skills – through deeds, processes and performances for the benefit of another entity or the entity itself. The customer is always a co-creator of value, thereby making the process customer-centric and relational. The term value-in-use refers to a customer's experience with the service (Grönroos & Voima 2013). In this thesis, the value-in-use can be seen as the value DIGILE gets from this development project.

While service-dominant logic refers to the specific service experience, customer-dominant logic emphasizes the customer's contexts, activities, practices and experiences. Using this perspective, companies should create services that accomplish customers' daily goals (Heinonen et al. 2010, 535). Consequently, in the context of the thesis, customer-dominant logic suggests that FORGE's development project groups should create services that concern users' activities and practices. The focus should not be on the technical requirements of the service, but instead on how the service is able to support the customer's daily goals. The value formation represents a multi-contextual passive process in the life of a customer (Voima et al. 2010).

Again, service concept creation entails opportunity identification, customer understanding, concept development and refinement, and implementation (Meiren & Burgen 2010). The service concept provides structure for the new service development by concretizing the nature

of the service (Goldstein et al. 2002). In the context of this thesis, the service concept offers structure for the concept creation.

Lean startup is a fast, cheap and agile method to create service concepts. The lean approach suggests continuous testing cycles in order to develop and improve the service (Blank 2013). For this thesis, a lean approach brings agile thinking and quick methods to support digital service development.

In this thesis, service design represents a method for understanding customers, organizations, and markets, then creating ideas and turning them into solutions (Moritz 2005, 39). The features of service design are user-centric, co-creative, sequencing, evidencing and holistic. Services should be visualized through the customer experience and processed using co-creative workshops (Stickdorn & Schneider 2010, 34). Service design plays an integral role in this research because it is not only used as a research method, but the coaching service also includes tools of service design. In addition, combining design thinking and lean startup approaches will be beneficial when building the Service Design Coach concept (Mueller & Thoring 2013). Design thinking will be utilized during the ideation part of the projects and lean startup during the development and scalability pieces.

# 3 Creation of Service Design Coach concept

The current chapter focuses on the empirical aspect of this thesis, which has its foundation in development-oriented research and the service design process. The methods and tools used in this thesis are defined and explained in the sections that follow. The project timeline for this thesis encompassed dates of December 2014 through June 2015. Prior the actual project launch, a planning workshop was held in order to brainstorm the scope and direction of the topic. As a result of this discussion, a project plan was generated (Appendix 1), including timeframe and thematic elements.

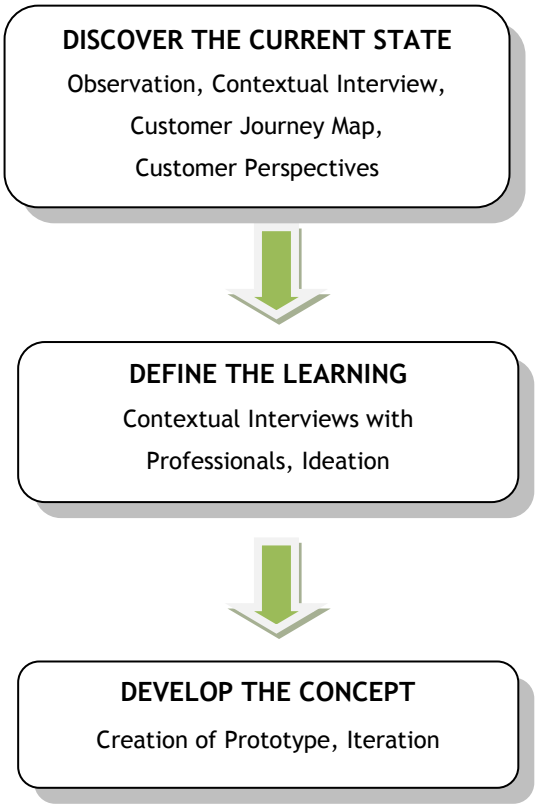



Figure 10: The process and tools for Service Design Coach concept research

The thesis project was planned using the Double Diamond service design process, but restricted to its first three stages. Figure 10 shows the three stages of the empirical research: Discover the current state, Define the learning, and Develop the concept. The data collection tools utilized in this project include observation, contextual interview, customer journey maps, customer perspectives, ideation, prototypes and iteration. The stages and accompanying data tools will be introduced and expounded in the following sections.

## 3.1 Discover the current state

The first stage of the project entailed developing a clear understanding of the FORGE Service Lab and its current service offerings. As stated previously, the discovery stage represents a divergent action intended to broaden perspective by examining opportunities, information and insights (Stickdorn et al. 2010, 128; Tschimmel 2012, 9). Data used to achieve understanding was gained by observing meetings, participating in workshops, and conducting contextual interviews with DIGILE employees. The results were presented using a Customer Journey Map tool. In addition, customer perspectives were assessed to to understand customers' world.

### 3.1.1 Observation as a tool and insights

Observation was the first service design tool used in this project and is typically described as an efficient way to uncover customers' actions and needs. Mariampolski (2006, 109-110) explains that observation is key to seeing the customer's point of view, allowing the researcher to explore contexts and conditions, as well as gaining perspective on the feelings and emotions motivating customer actions. According to Mariampolski, observation also enables the researcher to probe meanings and truths, providing additional customer insight. In the role of observer, it is key that the researcher remain dispassionate, neutral, polite, and open-minded.

Observation processes can be divided into what is referred to as *pure observation* and *participant observation*. Pure observation requires little to no interaction between the observer and the individuals of interest. However, participant observation involves interactions between the observer and the target group. For example, an observer can take the role of a participant in order to gain a deeper understanding of the target group by entering into the activities. (Mariampolski 2006, 111-112.)

In the case of this thesis, the technique of pure observation was utilized, taking place during January 2015 at DIGILE's office. An ecosystem group meeting had been set up by members of the DIGILE team for the purpose of generating ideas for the project. The objectives of the meeting included allowing the stakeholders to get to know each other, while also building trust and relationships, as well as taking part in a project idea brainstorming session. The workshop was designed around the ATLAS Game model, a service design tool that aims to generate the big picture perspective of the planned service using co-development methods (ATLAS Game 2015). There were eight participants representing stakeholders, three facilitators from DIGILE, and one researcher observing the process present for the meeting.

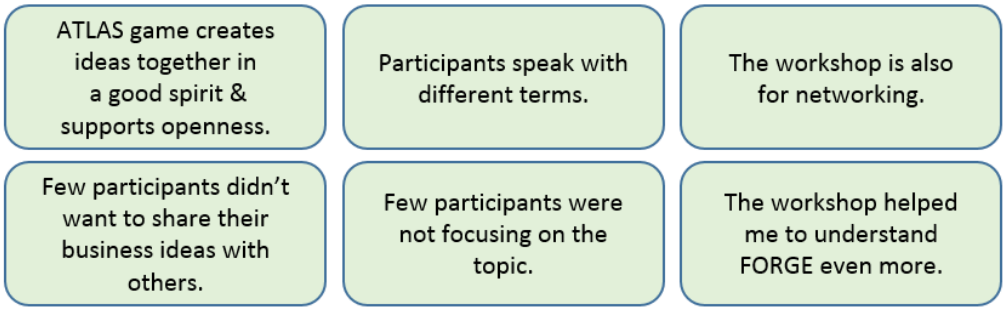



Figure 11: Key insights from the observation

Key insights gathered from the observation experience are displayed in Figure 11. One positive takeaway was that the ATLAS tool is effective for enabling participants to create ideas together and network, getting to know their project partners. Challenges included a tendency on the part of participants to spoke using industry-specific terms, a lack of focus on the topic by some participants, and resistance by a few to sharing their business ideas with other participants. The resistance represents a concern in the FORGE Service Lab, since the culture supports openness and encourages companies to develop services within an ecosystem group, not as single company.

The workshop observation enabled a solid initial understanding of the early steps of the FORGE Service Lab projects, providing insight into both the customer's perspective and the processes of DIGILE. In addition, it was important to note that DIGILE presently makes use of service design tools such as ATLAS game.

### 3.1.2 Contextual Interview as a tool and insights

For the next step of the data collection process, contextual interviews were organized with DIGILE employee in order to have a better understanding of the current state of DIGILE and its service process. A contextual interview is a face-to-face interview method that takes place in an environment or context where the service process happens. The method is considered ethnographic, as it allows the interviewer to observe the situation as well (Stickdorn & Schneider 2010, 162). Portigal (2013, 6-8) states that the interview is a valuable method used to identify new opportunities, redefine hypotheses, and redesign and relaunch existing products and services. Curedale (2013, 186) expounds that a contextual one-to-one interview is a discussion between the researcher and a target participant in a face-to-face situation. It is a useful method for gaining personal information and insights, as well as obtaining information about the research topic. Typical tools utilized during a personal interview include audio recording devices and means for taking notes, as well as an interview guide that includes an introduction, a question route, and other logistical considerations.

Mariampolski (2006, 171-172) remarks the researcher to remain neutral, avoiding informing the respondent, asking leading questions, and injecting personal opinions into the conversation. Additionally, the researcher should keep the sequence of questions in a logical order, perhaps starting the conversation with small talk and saving the most important questions for the end of the conversation. An introduction explaining the purpose of the interview to the volunteer persons is also important. Overall, the contextual interview tool should bring holistic understanding to the research (Stickdorn & Schneider 2010, 162).

In an effort to collect data for the purpose of this thesis, a contextual face-to-face interview was held with DIGILE's Senior Manager of Service Creation in her work setting. The interview focused on analysis of DIGILE's current state and its services. To this end, the organizational structure, service offerings, and development ideas were discussed. Although the interview was initially intended to be highly structured, the discussion became more conversational in nature. Key themes from the interview are presented in Figure 12.

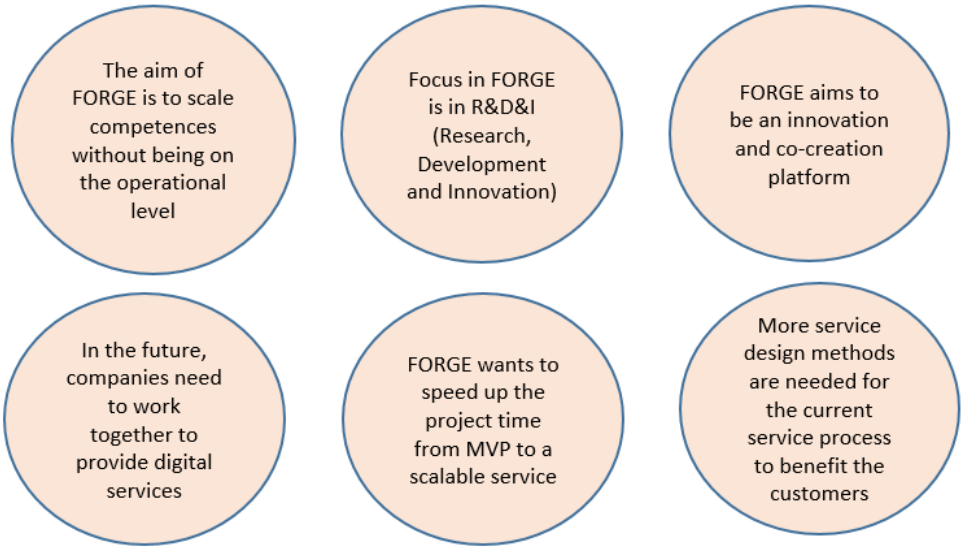



Figure 12: Key insights gathered during the contextual interview

Conclusions derived from the contextual interview included that the FORGE Service Lab aims to be a platform for innovation and co-creation utilized by ecosystem groups. The FORGE group embraces the belief that, in the future, a single company cannot exclusively provide digital services. Instead, a network of multiple companies is needed. Currently, the time from minimum viable product (MVP) to scalable service is deemed too long, and FORGE, with its service offerings, seeks to speed it up. FORGE objectives do not include functioning at the operational level, but rather in Research, Development and Innovation (R&D&I) in order to guide innovation of digital projects. In addition, FORGE aspires to offer service design sup-

port, enabling higher project success rates. This research step was used to clarify the vision and mission of FORGE Service Lab and the ideology of their services goals.

### 3.1.3 Customer Journey Map as a tool and insights

The third research stage entails a visualization of the current customer experience using a customer journey map, a service design tool. A customer journey map is a visual representation of the customer experience, which defines the different touch points of the interactions between the customer and the service. This tool is intended to identify key elements of the service, understand significant relationships in the journey, and potential points of opportunity. In addition to interactions, the journey map can also reveal the emotional engagement of the customer during the service chain. (Design Council 2012, 12; Stickdorn & Schneider 2010, 158.)

The touch points of the journey can represent a variety of connections: face-to-face contacts, virtual interactions via the Internet, call centers and so on. In order to recreate the customer journey, the service design team needs customer insights. These can be assembled through using customer interviews, blog and video diaries, observation and service safaris. The commencement point for a journey is typically the point when the customer becomes aware of the service, continuing until the service has concluded. Different stages of the service can be identified during the journey, including pre-service, service, and post-service stages. Unique customer journeys can be designed to represent the various needs of specific target groups. (Design Council 2012, 12; Stickdorn & Schneider 2010, 158.)

The customer journey tool creates a high-level overview of the service experience. The journey map can be personalized with photos and quotes, making it even more user-focused. The tool provides data that allows for the identification and analysis of both opportunities and problems (Stickdorn & Schneider 2010, 159). Polaine (2013, 104-105) explains that if the customer journey maps are done correctly, they incorporate multiple organizational functions, potentially encouraging personnel to understand their role in the customer experience. Secondly, it is an effective tool for recognizing what customers feel, think and do in the detailed interaction points. Finally, the customer journey map reveals a story about the customer in a format which can be more easily comprehended than written text.

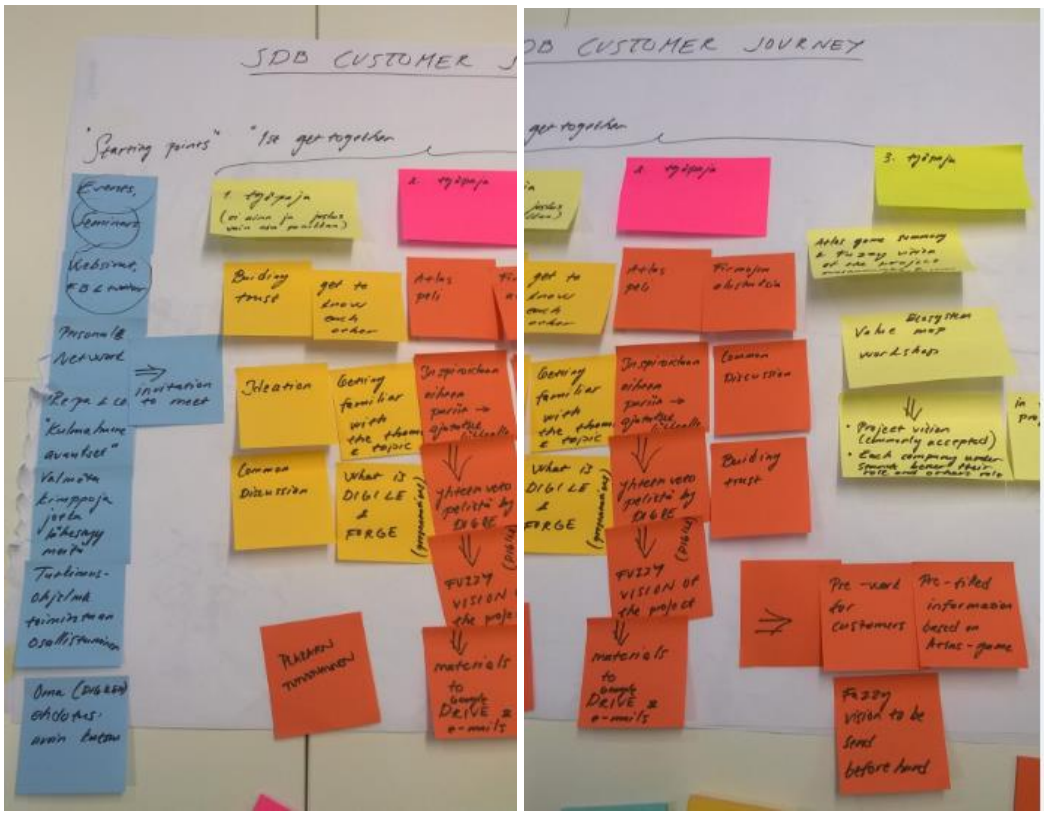



Figure 13: Creating the Customer Journey Map - drafting

For this project, a customer journey map was prepared to help the FORGE Service Lab, as well as the researcher, have a better understanding of the current service process and identify opportunities for improvement. The preliminary version was created using sticky notes based on discussion with DIGILE employees (Figure 13). During this process, the customer step and different stages for the service were identified.

Using conclusions gathered during the workshop and findings from earlier stages, a customer journey map visualization was created (Figure 14). Key touchpoints of the service process, customer actions, and backstage service processes are highlighted in the figure. Three main stages are also identified and named: preparation stage, FORGE stage, and exit stage. After the customer journey map was created, critical analyses of the current situation were possible.

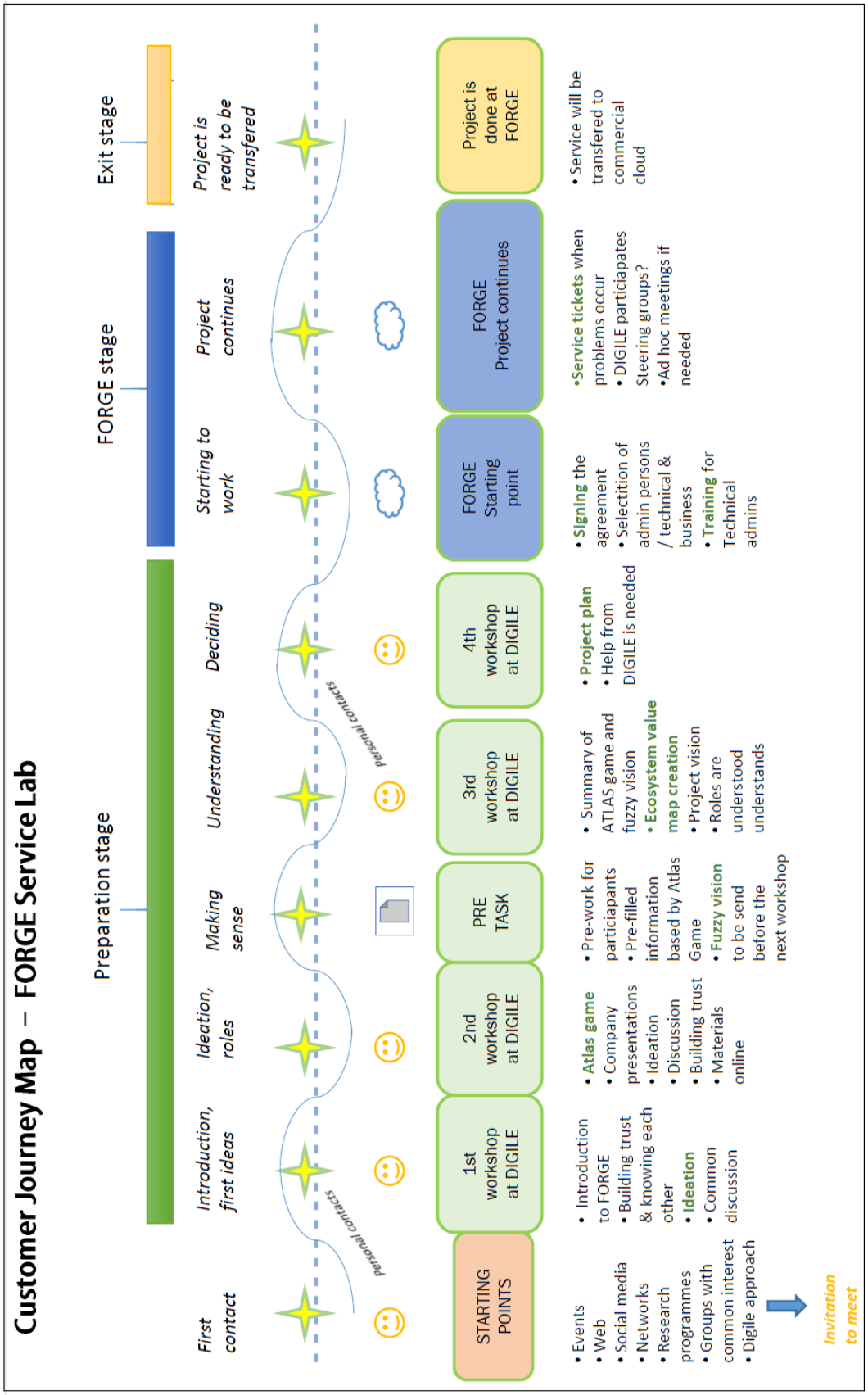



Figure 14: The Customer Journey visualization

The key finding from the journey map was that the preparation stage, which requires multiple meetings and workshops, and is time-consuming. This stage is the laborious for DIGILE, as many projects never enter the FORGE stage. Additionally, the steps and process for the preparation stage are highly structured, but when the project enters the FORGE stage, communication is somewhat limited. At that point, communication occurs exclusively through the technical cloud environment, creating a situation in which DIGILE personnel are very hands-off with the project. Finally, none of the current projects have succeeded in reaching the exit stage. Therefore, although the current process includes a few steps of Service Design, such as ATLAS Game, the service design is not well-planned, so there is definitely a need for further development.

### 3.1.4 Customer Perspectives as a tool and insights

The final step in the Discover stage was to understand the customer's world by examining customer perspectives. Customer perspectives and needs can be identified and addressed using service design. Ideal design solutions take into consideration the customer's ideas, desires, fears and wishes. (Curedale 2013, 19.) In this thesis, all references to "the customer" indicate a user of the FORGE Service Lab. The purpose of this step was to determine customers' viewpoints regarding FORGE and then compare them to the current service process and offerings. The findings are based on existing data collected from previous interviews conducted by other individuals for separate projects.

The first dataset was collected by DIGILE employees, who interviewed the current FORGE Service Lab users in March 2015. There were three interviews representing three different cases. The sample was small but includes valuable information. Key insights gathered from the interviews are displayed in Figures 15 and 16 below. Figure 15 summaries the elements of the FORGE Service Lab that are viewed positively by customers, such as the opportunity to learn and share experiences, finding mutual interests, free capacity of the computing platform, culture that encourages experimentation, and reliable technical support.

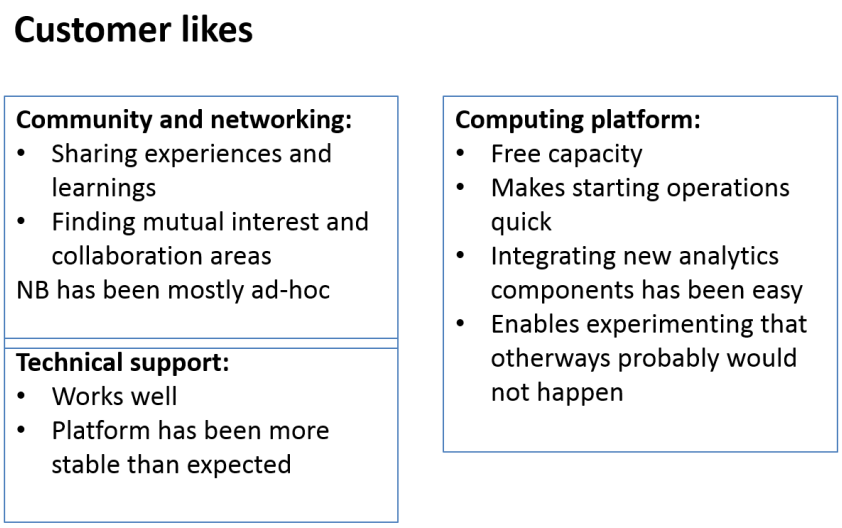



Figure 15: Summary of DIGILE customer likes (Kalatie 2015)

Figure 16 represents the customer's world, with a specific focus on needs, desires, and ideas. Key takeaways from this data included a perception that the FORGE value proposition, the promise, is unclear and some aspects of the service, such as agreements, come across as cumbersome. Additionally, customers are interested in service design approaches, learning more about other users of FORGE, and receiving training about induction for new projects. Finally, an interest towards commercialization, internationalization, and marketing support was brought up by the FORGE Service Lab users, none of which is currently offered by FORGE.

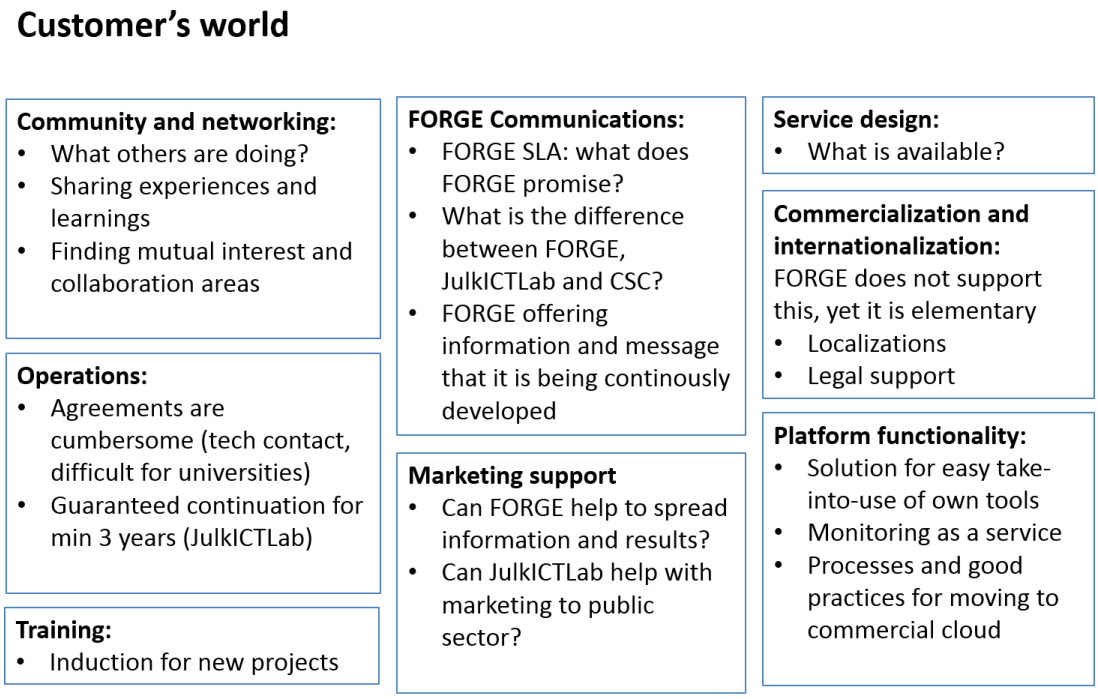



Figure 16: Summary of DIGILE customer's world (Kalatie 2015)

The second dataset that was analyzed was initially collected by Laurea University as part of a Master's level course, in which a group of students interviewed persons representing prospective FORGE Service Lab companies. The data was collected by five students groups who interviewed 23 individuals during the fall of 2014. For their study, the FORGE Service Lab was introduced to the interviewee in order to explain the service and describe potential benefits for customers. The feedback from prospective customers enabled understanding of how a potential customer perceives the utility and attractiveness of the DIGILE service offerings.

- Having a cloud as an offering does not add value, especially if the project has to migrate to another cloud when it is launched.
- FORGE does not stand apart from any basic IT firm from potential customer's point of view.
- Working with public sector is not attractive, project times are too long and project leads are poor. Time is the key resource in projects.
- Customers want help for making contacts & building networks.
- Agility and flexibility are key issues, quick decision-making is essential.
- FORGE could be a facilitator of service design tools.
- Joining FORGE should be effortless, open and intuitive.

Table 3: The insights from the data review

The main insights from the interviews are presented in Table 3. The key finding is that FORGE is not very attractive to potential customers in its current state. The chief obstacle is that companies can develop their service in the FORGE cloud, but, as the process concludes, they will need to transfer the service to a commercial cloud because the FORGE cloud is not commercial. Additionally, the potential customers anticipate difficulties in working with FORGE, expecting less agility and flexibility due to the fact that FORGE is assimilated into the public sector where project times are long and projects have poor leads. Nevertheless, the interviewees suggested that service design tools could be used to improve the current service, incorporating the customer perspective into the projects.

### 3.1.5 Summary of the first stage

The purpose of the initial step of the research plan was to understand the current state of the FORGE Service Lab and gather customer insights regarding the service. Again, this stage is considered divergent in nature, broadening the perspective for the service process. The tools used included observation, which provided information on the process of FORGE, allowed interaction with customers, and enabled insight into effective ways of working with FORGE. The second tool was the contextual interview, which clarified the vision, mission and ideology of

both DIGILE and the FORGE Service Lab. Utilizing a customer journey map helped in visualizing points for improvement within the current process. Finally, customer insights provided comprehension regarding service expectations, current experiences with the service, and what they value.

A synthesis of the information gathered during the first stage suggests that DIGILE should endeavor to speed up the timeframe from idea to scalable implementation and service design could bring the needed customer perspective to the projects. Currently, the process makes use of service design tools such as ATLAS Game, but the focus is on the preparation stage, and service design tools are not utilized in subsequent stages. Customers have expressed interest in service design, but they are unclear about the purpose and process. The creation of a Service Design Coach concept could furnish tools, frameworks, and customer-oriented thinking for FORGE projects. Finally, customers desire more agility and flexibility from FORGE Service Lab. Current customers would like to see commercialization, internationalization, and marketing support provided in the future.

## 3.2 Define the learning

The second stage of the research involves the creation of opportunities based on the current situation of the FORGE Service Lab. This stage, the Definition stage, is convergent in nature, collecting insights from the previous stage, then filtering and selecting ideas to be further developed. The tools utilized in this stage included interviews from experienced service designers, as well as concept ideation, in order to gather opinions regarding service design and the FORGE service Lab from experts and then generate the concept based on their information. In the initial project plan, persona tool was also included, but due to time limitations, that step was omitted so that the focus could remain on the conceptual interviews with the service design professionals.

### 3.2.1 Contextual Interviews with professionals

Data collection for the second stage of the research began with contextual interviews of service design professionals. The interviews had several goals: to determine how professionals clarify the meaning of service design, to learn more about the methods used by professionals, and to gather insights on how service design could assist the FORGE Service Lab. Between March and June of 2015, four service design specialist were interviewed in Helsinki. The interviewees represent four leading design companies in Finland. Key insights gathered from the interviews are presented in Figure 17, which provides both an overview and response summaries.

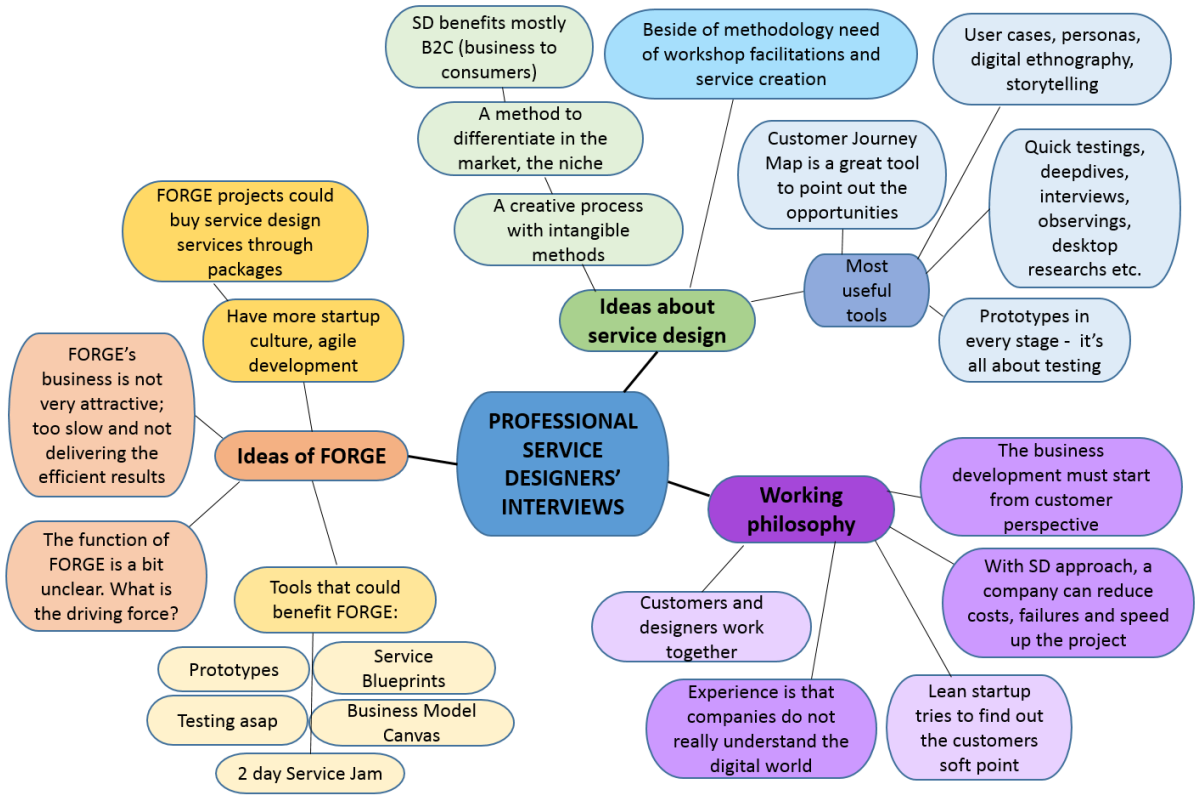



Figure 17: Insights from the service design professional interviews

The key insights from these interviews are divided into three categories: general ideas about service design, working philosophy, and ideas about the FORGE Service Lab. According to the professional designers, service design is a creative process with intangible methods used to create something new. With service design, companies can determine the niche that will differentiate them in the market. Service design is typically more useful when creating services for Business-to-Consumer (B2C) markets, as Business-to-Business (B2B) markets can be more limited. The interviewees identified customer journey maps, user cases, personas, digital ethnography, quick testing, interviews, and prototypes as the most useful tools. The specialists endorse completing testing as soon as possible in order to incorporate customer insights into the projects.

When discussing philosophy, the professionals expressed belief that all development should start from customer perspective, and that this is fundamental with new businesses. Additionally, co-creation is important; customers and designers need to work together to accomplish the projects. A service design approach is valuable to companies, as it can reduce costs, minimize failures, and speed up projects. Lean startup thinking is also useful in discovering the soft point of customers. Overall, professionals state that a service experience in the digital

world can be challenging to fully understand, but service design helps in overcoming difficulties.

In responding to questions seeking ideas for FORGE Service Lab, the professionals recommended that FORGE strive for more startup culture and agile development, especially because FORGE is seen as slow and inefficient when to a commercial cloud. Additionally, the function and driving force of FORGE were unclear to the professionals. Each of the professionals encouraged FORGE to use service design tools such as a business model canvas, which provides understanding of the business as a whole; a blueprint, which provides guidance on how to move the process forward; a prototype, which allows for a more tangible vision of how the process will work in reality; and regular testing of the service, which creates opportunities for improvement. Some professionals expressed interest in the creation of service design packages for FORGE projects, so that service design support would be available for purchase. One interviewee even suggested a "two-day service jam," whereby customers could develop their ideal service using agile methods and incorporating their perspectives, as opposed to the current approach in which service design support is divided into different phases of the project process.

### 3.2.2 Ideation as a tool and insights

The second step in stage two was to generate the concept in collaboration with DIGILE employees. According to Stickdorn & Schneider (2010, 228), idea generation and brainstorming is motivated by a variety of desired outcomes. For example, idea generation can be used as an icebreaker intended to relax participants, to encourage imagination and out-of-the-box thinking, or just to discuss various aspects of the chosen topic. An assortment of techniques has been developed to structure and inspire the idea generation process. Brainstorming is considered one of the oldest and fastest methods for producing new ideas, and it can be undertaken either in a group or individually (Curedale 2013, 152).

Using knowledge gained from theoretical research and insights gathered during previous stages, the key elements of the proposed service design support concept were ideated and drafted, as seen in Figure 18. The Service Design Coach is intended to establish a fundamental understanding of service design, as well as use examples and case studies to highlight the benefits of using service design. The Service Design Coach is expected to engage the participants as a members of the service design project, assisting with the selection of appropriate methods and tools, as well as taking scheduling and timeframe decisions into account.

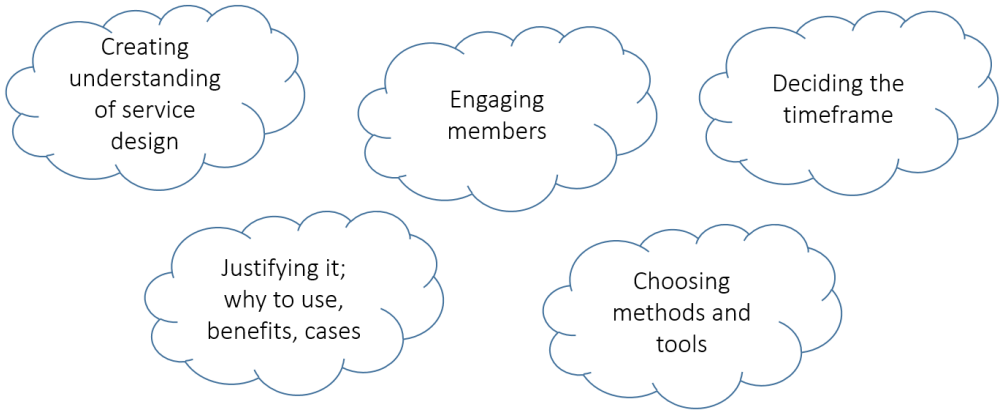



Figure 18: Key elements of the service design support concept

Next, using information regarding customer expectations, professional suggestions, and shortcomings of the current service process, specific steps for Service Design Coach were drafted. Because the new concept should fit to the current service offering and process, the customer journey map was examined closely at this point. Key steps in the planning stage are presented in Figure 19.

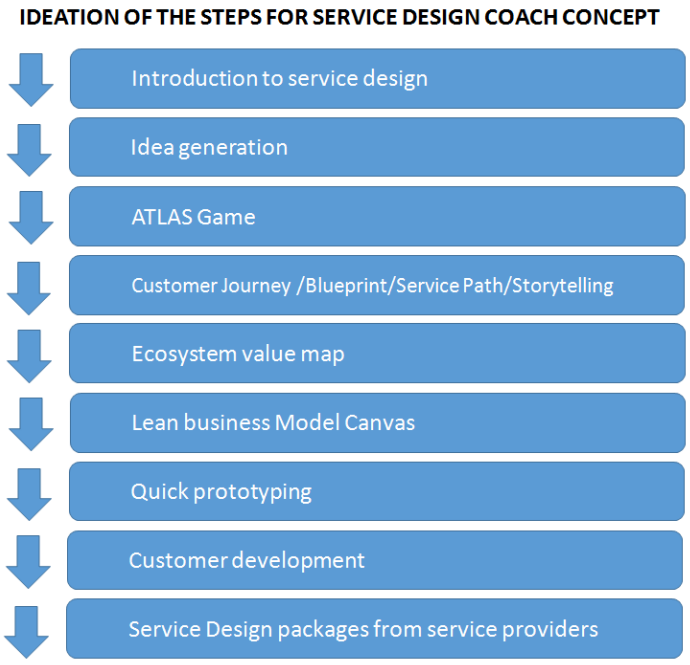



Figure 19: The drafting of steps for Service Design Coach Concept

As shown in Figure 19, the actions of the Service Design Coach begin with an introduction to service design, which creates an understanding of service design tools and their benefits. Ideally, service design would support the idea generation with new innovative methods, and AT-

LAS game is included as it is considered an effective service design tool. The customer journey map or, alternatively, a blueprint or service path, can also be seen as useful for FORGE customers seeking to define a service using the customer's perspective. Additionally, ecosystem value maps, lean business model canvases, quick prototyping, and customer development were each mentioned as vital steps within the concept. Finally, service design packages from professional service providers are also considered important.

### 3.2.3 Summary of the second stage

The focus of the second stage was on creating opportunities based on the current situation of FORGE Service Lab. The stage was convergent, providing analysis and then definition of the gathered data. Contextual interviews with service design professional were conducted in order to collect opinions on service design and the FORGE Service Lab. Using results from the interviews, the proposed concept was generated in an ideation workshop.

The service design professionals encourage companies to use service design methods in order to reduce costs, minimize failures, and speed up the project. Additional benefits for FORGE include making the service more agile, faster, and more attractive to potential customers. The professionals also suggested that FORGE should use service blueprints, customer journey maps, business models canvases, and prototypes, as well as incorporating service testing as early in the process as possible. Essential elements of the service concept include creating understanding of service design, justifying the need for it, engaging members, choosing methods and tools, and deciding the timeframe.

## 3.3 Develop the concept

The third stage, Development, is meant to be a reflection of the previous stages, and the aim is to develop the concept of a Service Design Coach and then test it. Specifically, although it will not possess all of the elements of the full concept, a prototype of the Service Design Coach will be created for piloting with customers in order to gain feedback and improve the service. The prototype of the concept will be enhanced using an iterative process and including elements of lean thinking. The final version Service Design Coach concept will be presented at the end of this section.

### 3.3.1 Prototype as a tool and insights

A service prototype is a simulation of the service experience. Prototypes are used to gain deeper understanding of the service and to reveal opportunities for improvement. The proto-

type can be a mock-up, application, or even role-play that enables a reenactment of the service situation. (Stickdorn & Schneider 2010, 192.)

One part of the Service Design Coach concept, the customer journey map tool, was tested with project groups in June 2015. The facilitation of a two-hour customer-focus workshop was planned, and after analyzing several existing customer journey canvas tools, a template unique to support needs of the workshop was designed by the researcher (Attachment 2). The template includes defining the persona, describing the service experience, and analysis of the service experience. The tool was intended to be improved for the second workshop using feedback from the first workshop.

The customer journey tool (Figure 20) was tested with a project group that was focused on the creation of a mobile diagnostic tool. Individuals attended the workshop and were split into two groups. The proposed tool was introduced and facilitators assisted the groups in their efforts. The greatest challenge for the groups was the initial selection of a persona, because the group was concerned their choice forced them to dismiss other potential user groups for the service. Once a persona was selected, the groups proceeded to describe her needs, feelings, experience, and fears. In the next step, touchpoints within the current service process are identified, as well as potential feelings and perceptions associated with those interactions. Finally, touchpoints and hypothetical channels were mapped for the new service. Participants were instructed to trust their feelings, opinions, and ideas because the workshop was intended to produce innovative results. At the conclusion of the workshop, both groups presented their ideas, providing the research team with two different user cases for the proposed service. Feedback from the  group revealed that the workshop was considered useful for them and the new tool was nice to work with, but the instructions were a bit unclear.

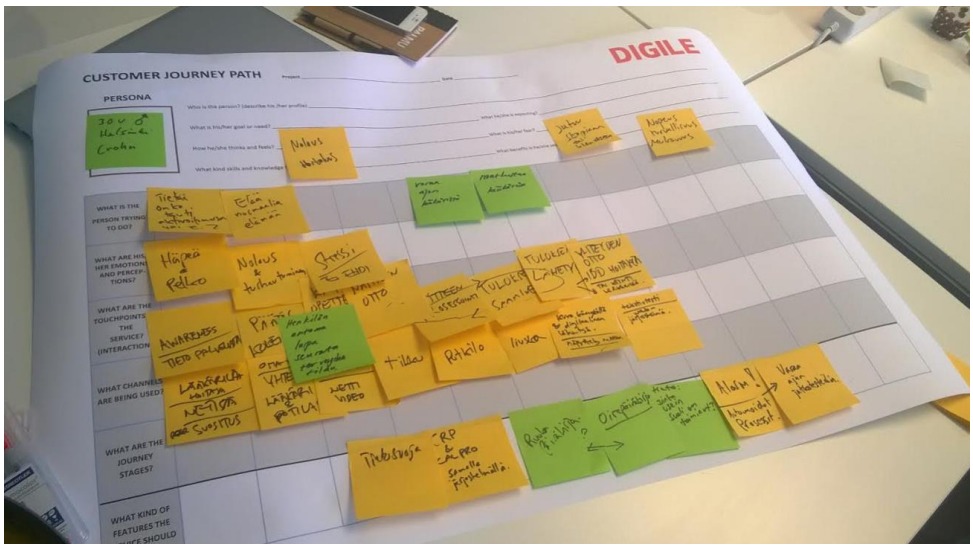



Figure 20: Customer journey map template from first workshop

### 3.3.2 Iteration as a tool and insights

Iteration is a cyclical process whereby improvements are made to the idea or service regardless of the development stage. Iteration can be conceptualized as feedback loops used to improve the service with responses and suggestions from customers or users. (Curedale 2013, 34.)

After the first facilitation session, the next step was to improve the customer journey map tool. In discussing the template, both DIGILE employees and I determined that the template was useful in helping the groups deliberate and think using the customer perspective. However, it was also decided that the tool required greater clarification, making it easier to complete. In addition, we added questions in the end of the template to propose analytical aspects of the service. Changes to the template were made in order to increase functionality, clarity and analytical thinking (Attachment 3).

The new version of the template was again tested with a customer group, this time focused on the creation of digital sustainable energy solutions, as shown in Figure 21. This group was also divided to two smaller groups. The workshop lasted approximately 2 hours and included a lengthier introduction, providing descriptions of both service design and how to use the template. In addition, the groups needed to answer questions regarding analysis of the service.

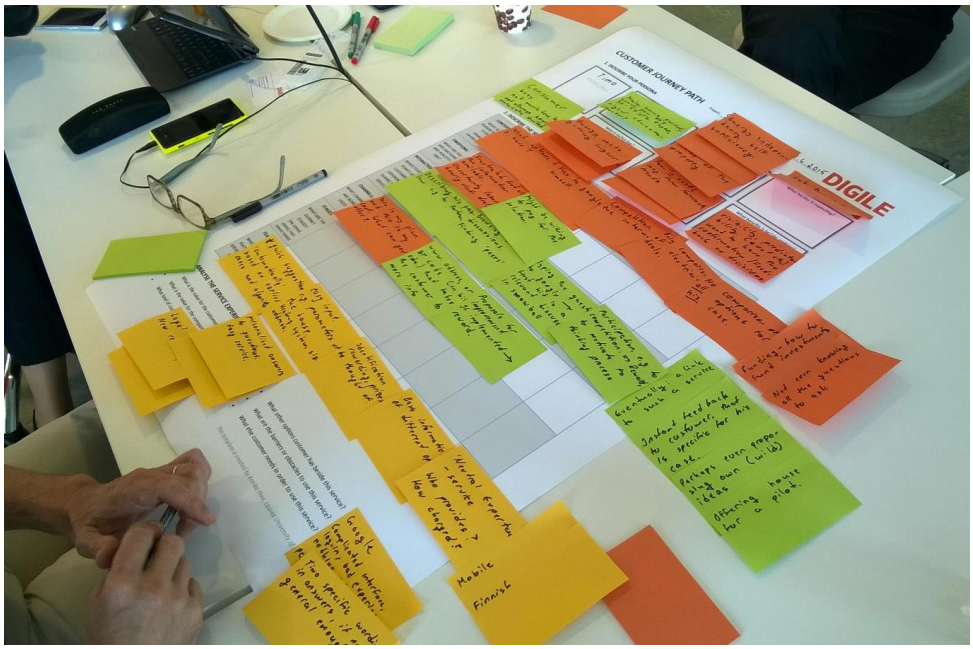



Figure 21: Customer journey path template from the second workshop

Evaluating participant responses from the second workshop revealed that the participants viewed the tool and workshop positively, enabling them to consider the service from the standpoint of a customer. Again, the most difficult task for the groups was selecting a persona to represent the target group. The groups needed facilitators in order to fully understand and proceed with the task, but there were a sufficient number of individuals present to provide support. Both project groups were able to have meaningful discussions, suggesting new ideas and retaining a customer focus. These workshops, each providing experience with the concept prototype, made the development of the final version of the concept possible. It is presented in the following section.

### 3.3.3 The final concept of Service Design Coach

The Service Design Coach concept was generated as a result of the research in order to add support and value to the service process of FORGE Service Labs. Four building-blocks that support project development in FORGE Service Lab also represent the foundation for the concept of a Service Design Coach. The four sections – introduction and ideation, creation of customer understanding, experience prototyping and insights, and defining and scaling the service – represent service design methods that are useful during different stages of creating new services in the FORGE Service Lab.

The concept of a Service Design Coach includes the following actions:

- **Introduction to service design and ideation**
  Create an understanding of service design, introduce the benefits of service design, and assist with project ideation using service design tools
- **Creation of customer understanding**
  Create understanding of the customer perspective using co-creation and collaboration methods, as well as Customer Journey Path and Persona tools
- **Experience prototyping and insights**
  Create a prototype of the service, then test the idea or prototype, implementing an iterative process that incorporates user insights and feedback
- **Defining and scaling the service**
  Introduce the Business Model Canvas and Lean Startup thinking, enabling project developers to analyze and scale the growing business by creating and communicating their vision

The visualization of the concept is presented in Figure 22.

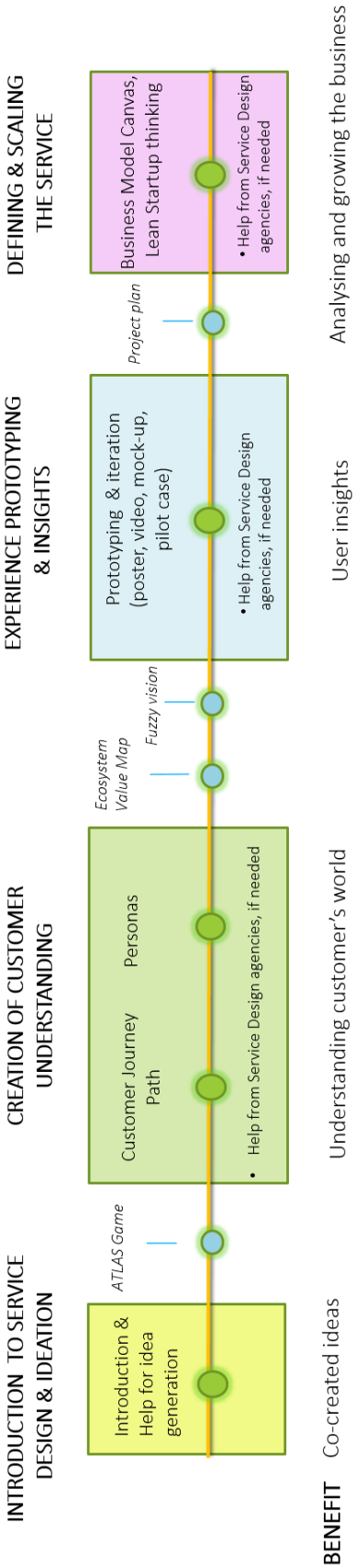



Figure 22: A visualization of the Service Design Coach concept

The benefits of these services and methods include co-created ideas, customer understanding, user insights, prototypes, analysis, and clear definitions. Each project entering the FORGE Service Lab requires unique planning and service design support. The Service Design Coach will provide these services and coach the project teams in their use of service design tools.

The Service Design Coach would represent a single individual responsible for this process within FORGE Service Lab. The primary task of a Service Design Coach is to provide service design support in different stages of the service process using workshop preparations, facilitations, reporting, and customer support. The Service Design Coach is expected to work closely with customers, DIGILE employees, and other stakeholders. The Service Design Coach is also responsible for providing guidance if there is a need for the project groups to purchase service design from professional agencies.

If it is not possible to create a position with exclusive Service Design Coach responsibilities, there are existing alternatives. DIGILE employees could be educated to provide the described service design support. The service could be purchased from freelance service designers or professional service design agencies. Or DIGILE could choose to work with educational institutions and students that have service design education.

As proposed, this concept enables ongoing service design support for FORGE Service Lab projects. Also, intensive two-day service design workshops could be created to introduce project groups to service design, allow them to co-create new ideas, and then test those ideas with customers and design concepts.

As the research project concluded, the Service Design Coach concept was presented to DIGILE's employees in order to provide a full explanation of the concept. DIGILE employees gave feedback regarding the concept, stating that the employees found the concept useful for FORGE Service Lab. The concept created deeper understanding of service design, as well as its different methods and tools, and highlighted how service design could benefit projects in the FORGE Service Lab. The project was completed according to initial timelines and cooperative efforts during the project were successful.

# 4 Discussion and conclusions

This chapter summarizes the key findings of this thesis and provides a discussion of theoretical perspectives. The aim of the thesis was to create a Service Design Coach concept for a case company DIGILE and its FORGE Service Lab. This concept was focused to add a more customer-centric focus and service design to FORGE Service Labs digital development projects.

The theoretical framework for this thesis included the three main theories: Service Marketing, New Service Development, and Design Thinking. Additionally, Service-Dominant Logic and the concept of value, Customer-Dominant Logic and value creation, Service Design, Service Concept and Lean startup were essential to understanding the service design approach as a framework for this thesis was created based on these theories. The empirical aims of this thesis included the creation of the Service Design Coach concept using the first three stages of the Double Diamond model: Discover, Define and Develop.

Using this framework, service-dominant logic created the fundamental understanding of the importance of a customer-centric focus for service creation. The customer is always a co-creator of the value and the process is both customer-centric and relational (Lusch & Vargo 2006). DIGILE and FORGE Service Lab represent a typical modern company, following service-dominant logic and seeking to improve their service offerings through an increased focus on customer needs. As Grönroos (2011) stated, the customer creates the value, whereas the firm merely facilitates the value creation. FORGE Service Lab offers project facilitation, but the value is created by the customers during the project development process. Additionally, the value of FORGE Service Lab is generated by successful customer projects.

As an alternative, customer-dominant logic instead focuses on the customer's personal context, specifically daily activities and practices. Using this perspective, the service should seek to support the customer's daily goals, not just goals determined by the company (Heinonen et al. 2010, 535). Customer-dominant logic played an important role in the empirical part of the thesis, especially in the two customer journey map workshops in which a persona was mapped out and then described in terms of desires, goals, etc. Voima et al. (2010) emphasize that companies should have an awareness of their customer base, and, instead of prioritizing how customers consume a service, concentrate on what affects customers' lives. For the workshops discussed in this thesis, the process began with mapping out the persona and his life, then proceeded to discussion of what kind of digital service could assist the customer. The focus was truly on the customer's world, and the features of the proposed service were discussed as they related to customer goals.

The theory of service concept served as a foundation for the concept with specific key points: opportunity identification, customer understanding, concept development and refinement, and implementation (Meiren & Burgen 2010). Additionally, a modern method for new service development, the lean startup, allowed for the inclusion of agile thinking and quick methods in the Service Design Coach process. As Blank (2013) states, the lean startup is a fast, cheap and less risky method used to run startup companies, thereby making it valuable for FORGE projects as well. Finally, service design was utilized in this thesis as a research method, as well as a toolkit for the Service Design Coach concept.

The aim of the first research question was to determine the current service process of FORGE Service Lab. The current service process of FORGE Service Lab was examined using observation, contextual interviews, and customer insights. The current situation was visualized using a customer journey map, which also highlighted potential opportunities for improvement. Analysis revealed that FORGE is currently using some design tools, such as ATLAS game, but overall, the process lacks service design methods and tools that would support customer projects. The focus is mainly on the first stage, with improvements still needed for the two latter stages. Regarding customer perspective, the current state analyses indicated that customers are interested in service design, but they lack knowledge of its benefits and value. Finally, customers expressed interest in seeing the FORGE Service Lab as agile and flexible, complete with commercialization, internationalization, and marketing support.

The aim of the second research question was to determine the value of the service design support for FORGE and its customers. According to interviews with service design specialists, the value of the service design support for the FORGE Service Lab comes from customer support, agility, rapid development processes, and attractive services. Service design support for customers enables market differentiation, cost reduction, minimizes failures, and speeds up the development process. According to Moritz (2005, 39), service design is intended to enhance understanding of the client, organization, and market, as well as developing ideas and translating them into feasible solutions. Service design allows companies to offer added value to customers, along with more efficient use of resources and improved customer communication. Polaine et al. (2013, 23) also states that the fundamental characteristic of a service is that a service creates value only when it is used. In conclusion, service design support brings value for both FORGE Service Lab and its customers.

The aim of the third research question was to determine what kind of service design would support the FORGE Service Lab projects. According to Stickdorn and Schneider (2010, 34), service design should be user-centered, co-created, sequencing, evidencing and holistic. In essence, the service design approach should involve the customers, service providers, stakeholders and service designers in the process in order to improve services. In their interviews,

service design specialists encouraged FORGE to make use of various service design methods to enhance the current process. Generating the Service Design Coach concept enabled the identification of key elements of the service concept: creating understanding of service design, justifying the need for it, engaging members, choosing methods and tools, and establishing the timeframe. Additionally, individual support for each project in the FORGE Service Lab was highly encouraged.

The aim of the fourth research question was to identify the steps of the process performed by a Service Design Coach. A combination of design thinking and lean startup was utilized in this stage. In the beginning, when problem identification, point of view, and ideation is taking place, the influence of design thinking was stronger. However, the influence of a lean startup approach was greater once prototyping, customer validation, and company building is underway. (Mueller & Thoring 2013.) Using these theories, as well as suggestions from the empirical research, the Service Design Coach process was generated. The different stages include introduction and ideation, creation of customer understanding, experience prototyping and insights, and defining and scaling the service. Co-created ideas, customer understanding, user insights, prototypes, analysis and clear definitions comprise the benefits of these services.

The aim of the final research question was to determine which tools and methods would support the deployment of service design thinking. The service design professionals encouraged FORGE to use service design tools such as a business model canvas, which provides understanding of the business as a whole; a blueprint, which provides guidance on how to move the process forward; a prototype, which allows for a more tangible vision of how the process will work in reality; and regular testing of the service, which creates opportunities for improvement. Additionally, the specialists expressed interest in providing ready-made service design packages, which would offer existing tools and methods for purchase. Stickdorn and Schneider (2010, 149) have also identified tools such as ideation, personas, customer interviews, and lean startup thinking as supportive.

According to Silverman (2005, 242), aspects of quality research include a theoretical approach to the data, development of reliable and valid findings, use of methods that are demonstrably appropriate to the research problem, and whenever possible, contribution to practice and policy. Validity and reliability are achieved by documenting the data collection and demonstrating that categories are used consistently (Silverman 2005, 224). In this thesis, the project was executed using the project plan and documented with photos, recorded interviews, and illustrations that demonstrate the project was done together with DIGILE.

Qualitative research can involve a variety of different approaches, and pragmatic choices should be made based on the research problem (Silverman 2005, 15). Because the goal of this thesis was to create a service design concept, the logical selection was a service design process, the Double Diamond model. The chosen method was effective, providing both divergent and convergent perspectives.

There were some limitations to the project brought on by time constraints. Rather than personally conducting interviews with FORGE customers, interviews that were completed for other projects were used. Although, the project plan which was generated in the beginning of the project, was useful and assisted to keep up the timeframe, some deviations, such as omitting the development FORGE Service Lab customers personas, were required.

Replication of the present study is possible due to the detailed descriptions of the process, tools, and steps. However, if this research is repeated with another company or using another timeframe, the findings and final concept would likely be different, instead unique to the wishes and requirements of the chosen case company. This concept was co-created with DIGILE employees who participated in interviews, workshops and meetings throughout the research process, thus ensuring that the concept fits the current service process and meets the expectations of the DIGILE team.

Suggestions for further research include the development of prototypes for other aspects of the concept, because currently only one part has been tested with customers. Also, the idea of a “two-day service jam” for FORGE customers was proposed during the interviews, presenting an interesting opportunity for a future approach.

As a conclusion, the customers of FORGE Service Lab indicated a desire to see service design support implemented. Existing theories and service design specialists both promote the benefits of the approach. Overall, the DIGILE team summarized that this concept will be beneficial for them, allowing them to bring the customer voice into digital development projects.

References

Printed:

Blank, S. 2013. Why the lean Start-Up Changes Everything. Harvard Business Review.

Brown, T. 2008. Design thinking. Harward Business Review.

Chesbrough, H. 2011. Open Services Innovation: Rethinking Your Business to Grow and Compete in New Era. Jossey-Bass.

Côte, J. & Gilbert, W. 2009. An Integrative Definition of Coaching Effectiveness and Expertise. International Journal of Sports Science and Coaching. Vol 4. No. 3. 307-323.

Curedale, R. 2013. Service Design. 250 essential methods. Topanga: Design Community College Inc.

Curedale, R. 2013. Service Design. Pocket guide. Topanga: Design Community College Inc.

Grönroos, C. 2006. Adopting a service logic for marketing. Marketing Theory. Vol. 6. No. 3317-333.

Grönroos, C. 2011. Value co-creation in service logic: A critical analysis. Marketing Theory. Vol 11. 279-301.

Grönroos, C. & Gummerus, J. 2014. The service revolution and its marketing implications: Service logic vs service-dominant logic. Managing Service Quality. Vol 24. No3. 206-229.

Grönroos, C. & Voima, P. 2013. Critical service logic: Making sense of value creation and co-creation. Academy of Marketing Science, Vol. 41, 133-150.

Edvardsson, B., Gustafsson, A., Roos, I. 2005. Service portraits in service research: A critical review. International Journal of Service Industry Management. Vol 16, no 1. 107-121.

Edvardsson, B., Gustafsson, A., Kristensson. P., Magnusson, P. & Matthing, J. 2006. Involving customers in new service development. Series in technology management. Vol 11. Imperial College Press.

Edvardsson, B. & Olsson, J. 1996. Key Concepts for New Service Development. The Service Industry Journal. Vol. 16. 140-164.

Goldstein, S., Johnston, R., Duffy, J., Rao, J. 2002. The service concept: The missing link in service design research?. Journal of Operations Management, 20, 121-134.

Gremyr, I., Witell, L., Löfberg, N., Edvardssson, B. & Fundin, A. 2014. Understanding New Service Development and Service Innovation through Innovation Models. The Journal of Business & Industrial Management, Vol 29. 123-131.

Heinonen, K., Strandvik, T., Mickelsson, K. 2010. A customer-dominant logic of service. Journal of Service Management. Vol. 21, 531-548.

Helle, P. 2010. Re-Conceptualizing Value-Creation: From Industrial Business Logic to Service Business Logic. Hanken School of Economics. Accessed 26.9.2015. https://helda.helsinki.fi/bitstream/handle/10227/783/554978952232l121.pdf?sequence=2

Johansson-Sköldberg, U., Woodilla, J. & Çetinkaya, M. 2013. Design Thinking: Past, Present and Possible Futures. Creativity and Innovation Management. Vol 22. No 2. 121-146.

Lusch, R., Vargo, S. 2004. Evolving to a new dominant logic for marketing. Journal of Marketing, 68, 1-17.

Lusch, R., Vargo, S. 2006. Service-dominant logic: reactions, reflections and refinements. Marketing theory articles, Volume 6(3), 281–288.

Lusch, R., Vargo, S. 2014. Service-dominant logic. Premises, perspectives, possibilities. Cambridg University Press.

Mariampolski, H. 2006. Ethnography For Marketers. A Guide to consumer Immersion. Sage Publications.

Meiren, T. & Burger, T. 2010. Testing of service concepts. The Service Industries Journal. Vol. 30. No.4. 621-632.

Michel S., Brown S. W. & Gallan A. S. 2008. Service-Logic Innovations – How to Innovate Customers, not Products, California Management Review, Vol. 50, No.2, 49-65.

Miettinen, S. & Valtonen, A. 2012. Service Design with Theory: Discussion on change, value and methods. Vantaa, Finland: Lapland University Press.

Moritz, S. 2005. Service Design, Practical Access to Evolving Field. Köln International School of Design.

Mueller, R. & Thoring, K. 2012. Design Thinking vs. Lean Startup: A comparison of two user-driven innovation strategies. Leading innovation through design. International Design Management Research Conference.

Ojasalo, K., Moilanen, T. & Ritalahti, J. 2014. Kehittämistyön menetelmät. Uudenlaista osaamista liiketoimintaan. Sanoma Pro.

Osterwalder, A. & Pigneur, Y. 2010. Business Model Generation. Hoboken, NJ: Wiley.

Polaine, A. Loelie, L. & Reason, B. 2013. Service Design – From insight to implementation. Brooklyn, New York: Rosenfeld Media.

Portigal, S. 2013. Interviewing users. How to Uncover Compelling Insights. Rosenfield Media.

Prahalad, C. & Ramaswamy, V. 2004. Co-creation experiences: The next practice in value creation. Journal of Interactive Marketing. Vol 18. No 3. 5-14.

Ries, E. 2011. The Lean Startup; How Today's Entrepreneurs Use Continuos Innovation to Create Radically Succesfull Businesses. Crown Business.

Sangiorgi, D. 2012. Value Co-creations in design for services. In Miettinen, S. & Valtonen, A. (eds.). Service Design with Theory: Discussion on change, cvalue and methods. Vantaa, Finland: Lapland University Press. 96-104.

Santos, J. & Spring, M. 2013. New service development: managing the dynamic between services and operations resources. International Journal of Operations & Productions Management. Vol 33. No 7. 800-827.

Silverman, D. 2005. Doing Qualitative Research. Trowbridge Wiltshire: SAGE Publications.

Stickdorn, M. & Schneider, J. 2010.This is Service Design Thinking: basics – tools – cases. Amsterdam: BIS Publishers.

Tschimmel, K. 2012. Design Thinking as an effective Toolkit for Innovation. In Proceedings of the XXIII ISPIM Conference, Barcelona, 9-10.

Voima, P., Heinonen, K. & Strandvik, T. 2010. Exploring Customer Value Formation: A Customer Dominant Logic Perspective. Hanken School of Economics.
Accessed 26.9. 2015 https://helda.helsinki.fi/bitstream/handle/10227/630/552-978-952-232-088-9.pdf?sequence=1

Non printed sources:

ATLAS Game. Accessed 12.4.2015.
http://atlas-research.fi/

Design Council 2012. Design methods for developing services. Accessed 22.2.2014.
http://www.mbsportal.bl.uk/taster/subjareas/techinnov/tsb/153100Keepingconnecteddesign11.pdf

DIGILE. Accessed 15.3.2015.
http://www.digile.fi/

Four interviews of leading service design specialist in Finland (Anynomous interviews). Helsinki 2015.

Kalatie, K. Presentation of customer interviews. 5.3.2015.

Laurea Master's students interviews for interviewing prospect customers for DIGILE. 2014. Unpublished.

Vainionpää, S. Interview with Senior Manager, Service Creation, Digile Oy. 4.2.2015. DIGILE, Espoo.

Figures

Tables

Appendixes

Appendix 1: Project plan

# PROJECT PLAN

12.12.2014

## DISCOVER *January- February 2015*

- OBSERVATION
- CONTEXTUAL INTERVIEWS
- ILLUSTRATIONS OF VALUE NETWORK & CUSTOMER JOURNEY MAP

The first stage of the project is to gain the understanding of the FORGE Service Lab and its services. The stage is called Discovery which is a divergent action to broaden the perspective by searching opportunities, information and insights. The researcher will gain the understanding by participating meetings and workshops by observing the situations and the topics. Contextual interviews will be done with the employees and customers of FORGE Service Lab to obtain deeper understanding of the current service offering. The findings will be presented through illustrations of value network and Customer Journey Map.

## DEFINE *March 2015*

- CO-CREATED WORKSHOP & BRAINSTORMING
- CONTEXTUAL INTERVIEWS
- PERSONAS

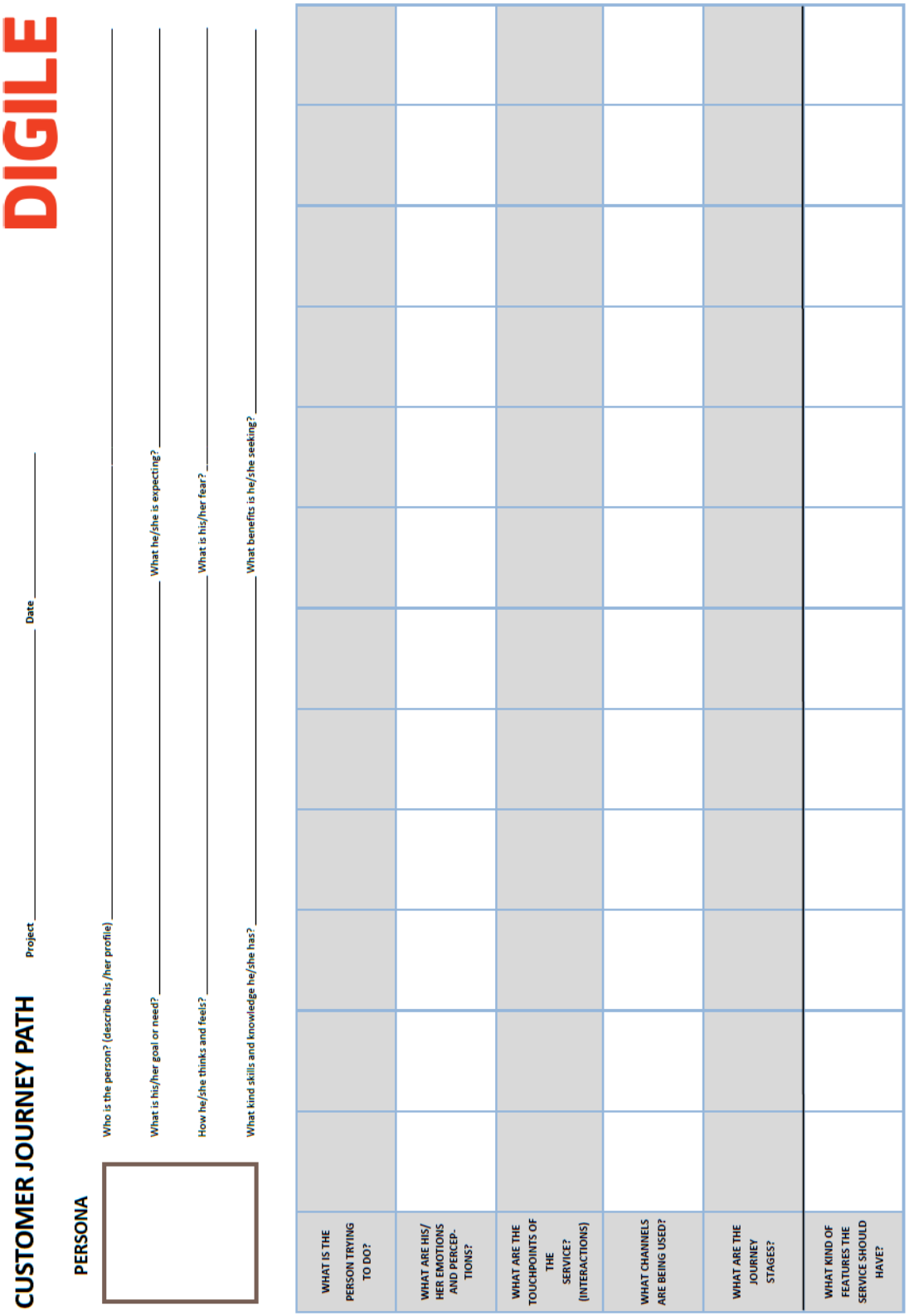
The second stage of the project is to analyze of the collected material and to create opportunities based on the current situation. The stage is called Definition and its convergent action to make the insights, filter and select the ideas to be developed further. In this stage co-created workshop and brainstorming will be done with the FORGE Service Lab employees, stakeholders and customers to develop for the Service Design Coach idea. New insights will be also generated by interviewing professional Service Designers to understand their best practices and ideas. Also persona cards will be made to describe different customer types and their needs.

## DEVELOP *April - May - June 2015*

- PROTOTYPE
- ITERATION
- LEAN MODEL CANVAS & SERVICE BLUEPRINT

The last stage of the project is to create solutions based on the previous stages. The stage is called Develop and the aim is to develop the concept of Service Design coach and to test it with customers. The prototype of the concept will be improved by iteration according to customer feedback. Lean thinking will support the quick iteration of the prototype. The final Service Design Coach concept will be presented by using Lean Model Canvas and Service Blueprint tools.

Appendix 2: Customer Journey Map template for DIGILE



Appendix 3: Customer Journey Map template for DIGILE, iterated version

## CUSTOMER JOURNEY PATH

Project _____ Date _____

DIGILE

### 1. DESCRIBE YOUR PERSONA

| PERSONA | Who is the person? (describe his /her profile) | What is his/her goal or need? | What he/she is expecting? |
|---|---|---|---|
| | What is his/her fear? | What kind of things affect his/her behaviour? | What benefits is he/she seeking? |

### 2. DESCRIBE THE SERVICE EXPERIENCE

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CONTEXT:** WHAT IS THE PERSON TRYING TO DO? (PROBLEM, OPPORTUNITY) | | | | | | | | |
| **EMOTIONS:** WHAT ARE HIS/ HER EMOTIONS AND PERCEPTI-ONS? | | | | | | | | |
| **INTERACTION:** WHICH TOUCH-POINTS DO CUSTOMERS EXPERIENCE DURING THE SERVICE? | | | | | | | | |
| **CHANNELS:** WHAT CHANNELS ARE BEING USED? | | | | | | | | |
| **STAGES:** WHAT ARE THE JOURNEY STAGES? (PRE-SERVICE, SERVICE, POST-SERVICE PERIOD) | | | | | | | | |
| **FEATURES:** WHAT KIND OF FEATURES THE SERVICE SHOULD HAVE? | | | | | | | | |

### 3. ANALYSE THE SERVICE EXPERIENCE

- What is the value for the customer?
- What is the value for the company?
- What kind of customer needs this service satisfies?
- What other options customer has beside this service?
- What are the barriers or obstacles to use this service?
- What else customer needs in order to use this service?