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The adoption of service design methods and tools by Nordic technology startups

Gianelli, Ekaterina

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The Adoption Of Service Design Methods And Tools By Nordic Technology Startups

Gianelli Ekaterina
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Laurea University of Applied Sciences **Abstract**
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Today's changing business environment together with an increased global competition creates high pressure for companies to create useful products and services at an increasing speed. Consumers demand intuitive and seamless experiences from the products and services they interact with. The relevance of service design as a contributor to service innovation has grown significantly. While service design is important to any business, to an early-stage technology startup discovering the right business model it could be critical.

Service design can help early-stage technology startups secure venture capital. Many investors agree that technology startups with design expertise are more attractive to them as potential investment targets. Therefore, the general objective of this thesis is to expand the knowledge of service design methods and tools among technology startups (and especially first-time entrepreneurs) and to establish the link between the use of service design methods and tools and a successful fundraising process.

The theoretical part of this thesis examines value creation in contemporary business logics for service and addresses supplier-customer relationships to understand potential implications for an early-stage technology startup. Furthermore, the thesis explores the methodologies of lean startup and service design. While it is important for startups to generate good ideas, creation of customer value in a lean manner is crucial. Service design approach brings a human focus to the development of services, helping startups see the big picture as customers see it. At the same time, it offers practical tools to design all the interactions between the customer and the business in a consistent way.

The empirical study conducted for this thesis explores seven technology startups, based out of the Nordic countries. The data gathered during the research using mainly qualitative methods (face-to-face interviews, observations, shadowing) has been used to understand the adoption of service design methods and tools by Nordic technology startups.

The study shows that the role of service design is not yet well understood by the first-time entrepreneurs. While many understand that good design is always helpful, they don't yet see a clear link between the use of service design and successful fundraising process.

To create the awareness of service design among technology startups in the Nordics, the thesis provides recommendations on how to adopt service design methods and tools in a startup. Additionally, this paper proposes further research topics relevant to integrating service design processes with business development practices.

Key words: Startup, service design, service design methods, service design tools, lean startup, service innovation, value co-creation.

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1 Introduction

1.1 The increasing importance of service design in technology startups

Today's changing business environment together with an increasing global competition creates high pressure for companies to create useful products and services at a very high speed. Consumers have very big expectations, and hope that the quality of the products and services they use is consistent. With new digital channels and tools constantly emerging, companies must become more agile, iterating much more quickly to adapt to rapidly changing market conditions (Bjornland et al., 2016). The relevance of service design as a contributor to service innovation is increasing significantly, as it helps to develop the in-depth customer understanding to manage this transition.

According to McKain (2013), recent technology advancements have lowered the barriers to start new companies. Many established corporations find it hard to innovate at the same speed as young fast growing ventures, startups, do (Owens & Fernandez, 2014). The term "startup" has been used in both academia and business with an increasing frequency over the past decade. Graham (2012) describes a startup as "a company designed to grow fast". Blank (2006) sees as startup as "an organization, formed to search for a repeatable and scalable business model". Ries (2011) defines it as "a human institution designed to create a new product/service under conditions of extreme uncertainty".

It is important to note that startups are not smaller versions of large corporations (Blank, 2010), but temporary organizations that have to deal with high uncertainty on their way to scaling into large companies. They are typically fast and flexible. According to Blank (2013), they are one of the main driving forces behind the economic development of the country.

They contribute to a quick development of new technologies, they promote research and development, they provide additional dynamics and competitiveness to the economic system (Kritikos, 2014), and they do change the values of the society (Gelobter, 2015), bringing a new mindset of knowledge, creativity and proactivity. Therefore, innovation and growth policies in Europe have been strongly targeted to enhance the creation and exploitation of innovation, particularly in small and medium firms (Heimonen, 2013).

Finland is an emerging startup hub, with many different innovations being accelerated to create economic growth. The country has the best education system in the world, resulting in highly educated workforce. Finnish government provides support and funding to entrepreneurs building innovative businesses, in addition to increasing amount of private capital. Finland has a lot of talented technologists. Overall, many elements of a successful startup ecosystem are already in place.

At the same time, many startups still find it hard to become enduring companies. There are many different reasons for startups to fail, ranging from lack of product-market fit to disharmony on the team. Blank (2006) suggests that many cannot achieve product-market fit. Heimonen (2013) suggests that one of the main issues in startups is “managerial”. The recent research carried out by CBInsights (2016) suggests that there is rarely one reason for a single startup’s failure (see Figure 1).

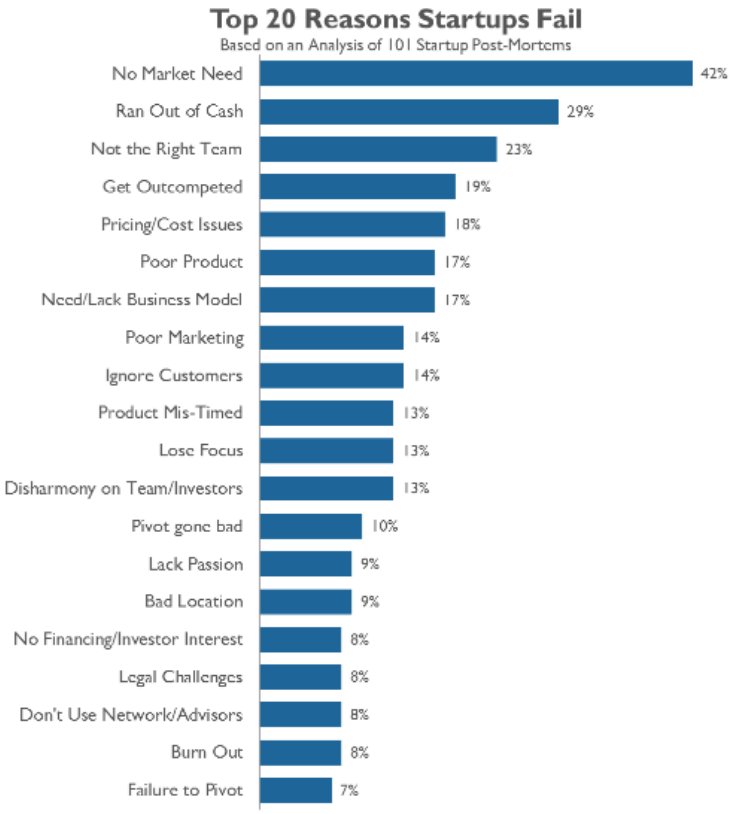

Figure 1. Top 20 reasons startups fail, CBInsights 2016

In this research (CBInsights, 2016), tackling problems that are interesting to solve rather than those that serve a market need was cited as the number one reason for startups to fail. In other words, often they fail within a couple of years from starting their operations because of building products and services customers don’t want to use.

Therefore, one way for entrepreneurs to decrease the failure rate is to become more customer-centric and to adopt new methods and tools of co-creating services with their customers. Service design approach brings a human focus to the development of services, helping startups see the big picture as customers see it. At the same time, it offers practical tools to design all the interactions between the customer and the business in a consistent way.

In general, the population at large is gaining an appreciation for high quality design through

the exposure to more consumer products and services, and is starting to demand it from products and services they use to do work (Aaron, 2011). Increasingly, people want their interactions with technologies to be simple, intuitive, and pleasurable (Kolko, 2015).

The development of new products and services is shifting from technology itself towards designing experiences we get from interacting with technology. According to Fjord (2016), faster technology doesn't surprise people anymore, while better design can strongly increase customer satisfaction. Service design offers methods and tools to design the winning experiences. According to Sangiorgi et al. (2015), it is an important contributor to service innovation.

There is no single definition for service design. It has been described as "an interdisciplinary approach that combines different methods and tools from various disciplines" (Stickdorn & Schneider 2011, 29), as "a new holistic, multi-disciplinary, integrative field" (Moritz 2005, 7), as a human-centred approach (Brown, 2008) and as "design of interactions at different interfaces" (Pacenti & Sangiorgi, 2010). One of the main origins of the service design methodology is certainly the shift in the paradigm of innovation from producer innovation to user and open collaborative innovation (Baldwin & von Hippel, 2009), as well as the change in the value creation logic from goods-dominant to service-dominant (Vargo & Lusch, 2004).

Considering that service design is human-centred by nature, it is more relevant for this study to look at it in context of contemporarily logics of value creation (Vargo & Lusch, 2004; Grönroos, 2006; Heinonen et al., 2010). According to these logics, customers are seen as co-creators of value and do play a crucial role in the production and consumption of services.

Service design offers a set of principles – empathy with users, a discipline of prototyping, and tolerance for failure among others – which, according to Kolko (2015), "might be one of the best available for creating pleasurable customer interactions and developing a responsive, flexible organizational culture". Even in context of technology startups, innovation has to emerge from other means than technology alone in order to attract customers and investors.

1.2 The value of a startup can be increased through service design

Many entrepreneurs still underestimate the value of service design in the process of building a business. As mentioned earlier, service design is not only about a visual appearance of a product or a service. Instead, it is the process of figuring out what a product or a service should be, what it should do, how it should work, how it should look, and what it should say.

Service design can help foster collaboration within the team, open up communication with customers, validate ideas, create new services, gain better understanding of the competition, differentiate the brand, and deliver better user experience. In other words, service design

can have a significant impact on all of the key performance indicators of a company, including brand perception, customer engagement, satisfaction, and ultimately revenue. Moreover, only a few understand that it can also make a company more attractive to investors.

Venture capital community is starting to recognize the value of user-centered design (Aaron, 2011). Investors constantly see many startups, and typically have a good sense to what a business is worth, and what they are willing to pay or it. Investors use different ways of defining a value of a startup (Carver, 2011) – analyzing the stage of development of the company, the market opportunity, the team, evaluating supply and demand of similar companies, comparing the startup to other companies in the industry (including recent financing rounds and M&A transactions), analyzing revenue, cash flow and net income multiples. Increasingly, venture capital firms recognize good design as a competitive advantage, as it can affect many of the above criteria (Aaron, 2011).

"Design is a critical element of any business but it's especially important for startups who have the unique challenge of discovering the right business model for their innovation. Too often, companies spend all their time on the innovation itself and miss one or two key elements that would really connect with a particular market. By identifying and really understanding their customers early on, companies can save a lot of time and money in discovering that successful business model," Erik Steed, VP of Programs at LACI.

Today, most of the first-time technology entrepreneurs lack the variety of methods and tools to help them design new services, as they haven't been educated as designers. There is a need to increase the adoption of service design in technology startups in order to improve their development process, their internal communication, and their communication with customers, ultimately making their businesses perform better. Therefore, it is important to share the best practices, both globally and within the local ecosystem.

1.3 Research objective

The objective of this study is to explore how service design can help startups secure external funding. Moreover, it is my intention to increase the adoption of service design methods and tools among technology startups, and especially first-time entrepreneurs. The findings of this research should also provoke them to think differently.

Based on the knowledge gap identified during the literature review, the exploratory research phase and the context of selected companies, the following questions have been formulated:

1. Are the startups familiar with service design, its methods and tools?
2. Is the application of service design methods and tools understood by entrepreneurs?

3. Are there any tools and methods of service design in use in the Nordic startups?
4. If so, which ones?
5. Have the startups been using professional design services?
6. Is there a relationship between service design and fundraising process?

To achieve the defined research objectives and address the research questions, the application of service design methods and tools, and their relation to the fundraising process has been analyzed in the context of Nordic technology startups. Service design and lean business development approaches are used as main methodologies to support the research.

1.4 Existing research on the topic

Numerous theoretical and empirical studies have examined the innovation, growth and success of firms separately. At the same time, very few empirical studies have focused on factors affecting performance in a startup context holistically. More detailed understanding of empirically confirmed characteristics of high performance entrepreneurial firms and their entrepreneurs is also required to understand and support the creation of innovation, growth and success, locally and globally (Heimonen 2013, 8). Moreover, the factors leading to high growth and high success in entrepreneurship have not been analyzed.

Research exists around the role of service design in shaping services in a new effective way (Sangiorgi, 2011; Meroni & Sangiorgi, 2011, Steen et al., 2011). At the same time, previous research on the application of service design tools and methods in technology startups is very limited. While the role of service design in big corporations has been studied previously (Muratovki, 2015), the role of service design (and especially service designers) in startups is not yet well documented.

Steen et al. (2011) suggest that service design methods have been shown to provide businesses with certain benefits and competitive advantages through multiple successful cases. Omar (2014) highlights that there is a strong correlation between the level of design use in startups and the capability of the company to advance towards the “company building phase” defined by Blank (2013) in his customer development model: the more a startup utilizes human-centered design practices, observation, and prototyping as an integral part of the service development process, the faster it can reach that phase.

Overall, there is a gap in the modern literature in how service design tools and methods could be applied in the context of young technology companies. The relationship between the use of service design and fundraising process is not yet extensively studied. In order to bridge the gap, the qualitative research is conducted for this thesis with a sample of seven Nordic startups (see Chapter 5).

2 Value creation process

Following the contextual background, this chapter provides the theoretical frameworks related to this study. The theory examines different logics for service emerged during the past decades, which emphasize customer's active role in value creation. While the creation of the idea is important for early-stage technology startups, the creation of value for the customer is crucial.

Value and value creation have long been among the central concepts among both academics and practitioners. Within marketing and management literature, value and value creation have been widely discussed. At the same time, they are poorly defined. Recent service literature suggests that there is no common understanding of value and value co-creation. Service-Dominant Logic (Vargo & Lusch, 2004), Service Logic (Grönroos, 2006), and Customer-Dominant Logic (Heinonen et al., 2010) are some of the key concepts discussing value and value creation.

With the introduction of the Service-Dominant logic (Vargo & Lusch, 2004; 2008) the value, which services provide for the customers has become the focus of much of the service management discourse (Blomkvist et al., 2014). According to the contemporary logics (Vargo & Lusch, 2004; Grönroos, 2006; Heinonen et al., 2010), the service provider doesn't control the process. Instead, the service provider co-creates it with the customer. The customer with their hidden opinions, emotions, and experiences plays a crucial role in the production and consumption of the service.

2.1 Service-Dominant Logic

Over the past decades, the academic discussion has strongly shifted away from goods-dominant logic to Service- and Customer-Dominant business logics, emphasizing the active role of the customer in the value creation process. While Goods-dominant logic, by definition, puts goods at the center of exchange, Service-Dominant logic suggests service as the core concept replacing both goods and services.

According to Service-Dominant logic (Vargo & Lusch, 2004), service represents the general case of the economic exchange process, while goods are a special method. Service-Dominant logic views knowledge and skills as the focus of economic exchange, and goods as instruments for service provision.

Value creation, and particularly the value-in-use concept stating that value for customers is created during use of resources, are foundational issues for understanding the service logic (Grönroos & Ravald 2013, 8). According to Goods-Dominant logic value is stated in exchange,

while in Service-Dominant logic value is stated in use (Vargo et al., 2008). Goods-Dominant logic suggests that the customer is a recipient of goods, and the producer determines the value. Within the Service-Dominant logic the customer is a co-creator of value.

Customers are not buying goods or services, but value propositions to be of service to them. They are co-creators, and the value is actualized in the customer usage process rather than in the supplier value chain. According to Gummesson (2007, 5), the value is the outcome of co-creation between suppliers and customers. Ravald (2008) suggests that the value of an object is related to what individuals want objects to be and do for them. The object can only gain value for the customer when it is enclosed within her own value creation activities (Grönroos & Ravald 2013, 9).

The foundational principles of the Service-Dominant logic are (Vargo & Lusch, 2004):

1. Service is the fundamental unit of exchange.
2. Indirect exchange masks the fundamental unit of exchange.
3. Goods are distribution mechanism for service provision.
4. Knowledge is the fundamental source of competitive advantage.
5. All economies are service economies.
6. The customer is always a co-creator of value.
7. The enterprise cannot determine value, but only make value propositions.
8. The customer is the center of value creation.
9. All social and economic actors are resource integrators.
10. Value is always determined by the beneficiary.

As the customer is always a co-creator of value, and value is always determined individually based on the unique experiences of the beneficiary, it could be concluded that the service-centered view is inherently customer-oriented. The logic captures contemporary marketing views, in which marketing could be seen as a facilitator of ongoing processes of voluntary exchange through collaborative, value-creating relationships among different actors.

At the same time, there are certain issues in the logic that would need further development. As highlighted by Grönroos & Ravald (2013, 6), it is claimed that customers are always co-creators of value, but no thorough conceptual elaboration has been made on what this really means and what implications for customers and service provider follow from this. The knowledge of how exactly the value is created is limited.

2.2 Service Logic

Service logic was proposed by Grönroos (2006) as an alternative view to Service-Dominant logic of Vargo and Lusch (2004). Although there are many features in common between the two logics and they both see service-based exchange as a norm, there are some differences.

According to Grönroos (2006), goods do not render services as such, and customers do not consumer goods as services. Instead goods are one of several types of resources functioning in a service-like process, and it is this process that is the service that customers consume (Gröönroos 2006, 330).

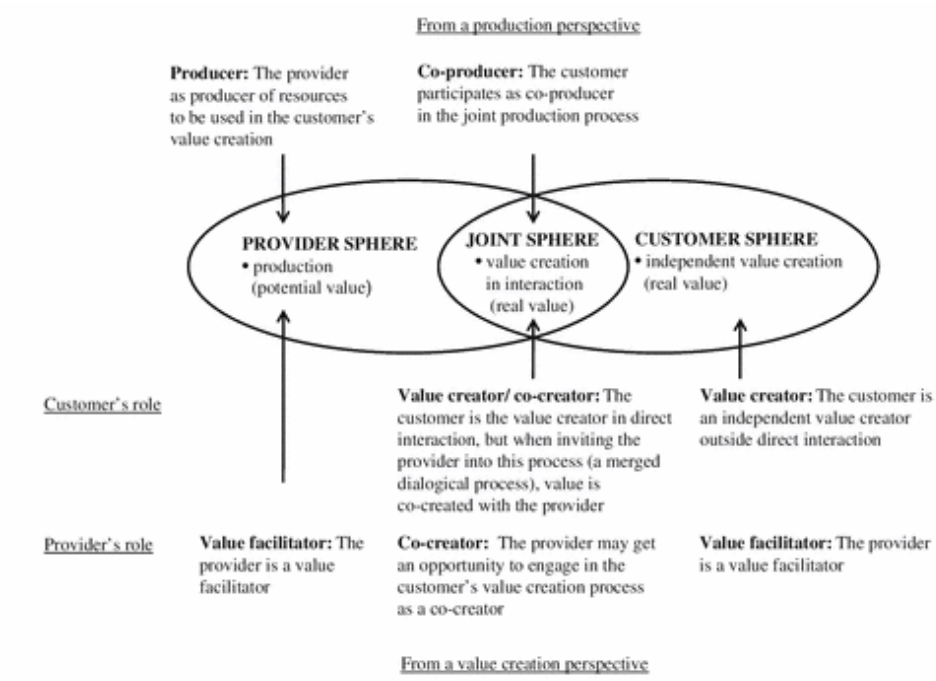

Figure 2. Value creation spheres, Grönroos 2006

Value creation refers to customers' creation of value-in-use. Usage can be a physical, virtual or mental process. The role of supplier is to facilitate the value creation with their resources and processes. Therefore, customers and suppliers are co-producers of the service and co-creators of value. The value creation process by the customer is not liner, nor does it automatically follow the provider's activities (Grönroos & Voima, 2012). Instead, most customer experiences are everyday, mundane, and spontaneous.

Grönroos & Voima (2012) stress that defining value creation as the customer's creation of value-in-use and determining that co-creation of value only may take place in a joint value sphere suggests that service providers must address their processes and activities in a struc-

tures manner. They suggest that managers should avoid talking about their firm delivering value to its customers, and focus on co-creation instead. Furthermore, they provide a list of managerial implications related to value creation.

2.3 Customer-Dominant Logic

Customer-Dominant logic applies customer focus on service. In contrast, Service-Dominant logic is seen as provider-dominant logic. Instead of focusing on economic exchange and service as such, Customer-Dominant logic explores how a company's service is and becomes embedded in the customer's contexts, activities, practices and experiences, and what implications this has for service companies (Heinonen et al., 2010). Figure 3 below illustrates the Customer-Dominant logic of service contrasted with the Service-Dominant logic.

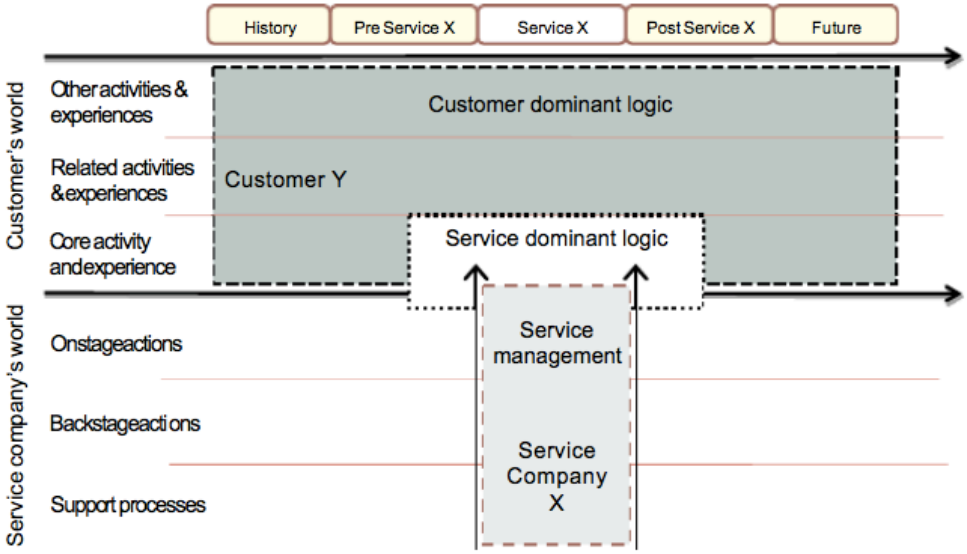

Figure 3. Customer-Dominant logic of service contrasted with service management and Service-dominant logic, Heinonen 2010

The logic suggests that it is not only the determination of value, but also value creation that gets controlled by the customer. According to Customer-Dominant logic, the value extends beyond the co-creation interactions and consumption, and rather than being co-created by the company and beneficiary in the interaction value emerges also in the customers' sphere. In Customer-Dominant logic, value formation has a different scope than in other logics. In provider-dominant logic, the customer is involved in co-creation, which is dominated by the service provider. In contrast, in Customer-Dominant logic the customer controls the creation of the value, and the service provider is involved in their activities.

Customer-Dominant logic suggests that value emerges in customers' practices, in everyday life processes, and that it extends beyond the interactive service process. Value mostly

emerges beyond the visibility of service providers, making it crucial for companies to understand customers' activities. The logic argues that, if we only focus on interaction, we will fail to take into account what the role of the company is in the customer's life. It suggests that the ultimate outcome should not be the service but the customer experience and the resulting value-in-use (Heinonen et al., 2010).

In provider-dominant logic customer experience is formed within the service, while in Customer-Dominant logic "experiences are something that customers orchestrate themselves, and that arise within their own activities" (Heinonen et al. 2010). Therefore, the customer is in control of actively creating her own experience. Heinonen et al. (2010) suggests that service providers should focus on becoming involved in customers' lives instead of engaging them in co-creating with their companies.

Therefore, the main differences of the Customer-Dominant logic compared to provider-dominant logic are (Heinonen et al., 2010):

1. The company is involved in customer activities.
2. The customer controls value creation.
3. Considers both visible interactions and invisible and mental actions.
4. Customer experience emerges in customer's life.
5. Customer experience is mundane and everyday, not only extraordinary and special.

According to Ravald (2010), one of the challenges for the future will be to create business models that successfully integrate the service provider's processes with the customer's process of value creation, rather than the opposite case. Service providers have many possibilities to contribute to customers' value creation, and provide resources and processes to support that value creation.

Customers produce value for themselves independently, but service providers may offer assistance (Storbacka & Lehtinen, 2001). The supplier is fundamentally a value facilitator, but during interactions with its customers, the supplier may, in addition, become a co-creator of value with them as well (Grönroos & Ravald, 2013). Co-creation opportunities that suppliers have are strategic options for creating value (Payne et al., 2008). Without interactions, the possibilities for the supplier to actively to become a salient co-creator of value in the customer's process of value creation are limited (Grönroos & Ravald 2013, 12).

The presented approach has direct implications for early-stage technology startups. It points out that a startup has a direct impact on how the customers' preferences and future purchasing behavior develop. Furthermore, it suggests that no value co-creation opportunities exist

without frequent startup-customer interactions. The methods and tools of service design can therefore be utilized to encourage co-creation of value and improve the overall performance of the company.

3 Lean startup and lean business development

The term “startup” has been used in both academia and business with an increasing frequency over the past decade. Blank (2006) sees as startup as “an organization, formed to search for a repeatable and scalable business model”. Ries (2011) defines it as “a human institution designed to create a new product/service under conditions of extreme uncertainty”. Both authors highlight the factor of uncertainty in startups. Other factors, such as the size of the company, organizational structure, funds, business models, or industry-related identifiers may differ (Ries, 2011).

It is important to note that startups are not smaller versions of large corporations, but temporary organizations that have to deal with high uncertainty on their way to scaling into large companies. Due to their nature, they need new ways of creating and launching their products and services in a rapid manner. Traditional models of product and service development still heavily used amongst big corporations can’t be applied to technology startups. Therefore, many have started using new methods, such as agile and lean development.

Lean development is based on iterative and incremental development process. The ideas of customer development are central to lean development and lean startup concepts, which suggest involving customers in the development of a company starting from the early days. Introduced by Blank (2006), the model of customer development is often referred to as a “path to epiphany”.

Lean development aims at making the process of starting a company or launching a service a lot less risky. Comparing to the traditional product and business development, the lean development model is very iterative. Although the methodology is just a few years old, its concepts—such as “minimum viable product” and “pivoting”—have quickly taken root in the startup world, and business schools have already begun adapting their curricula to teach them (Blank, 2013).

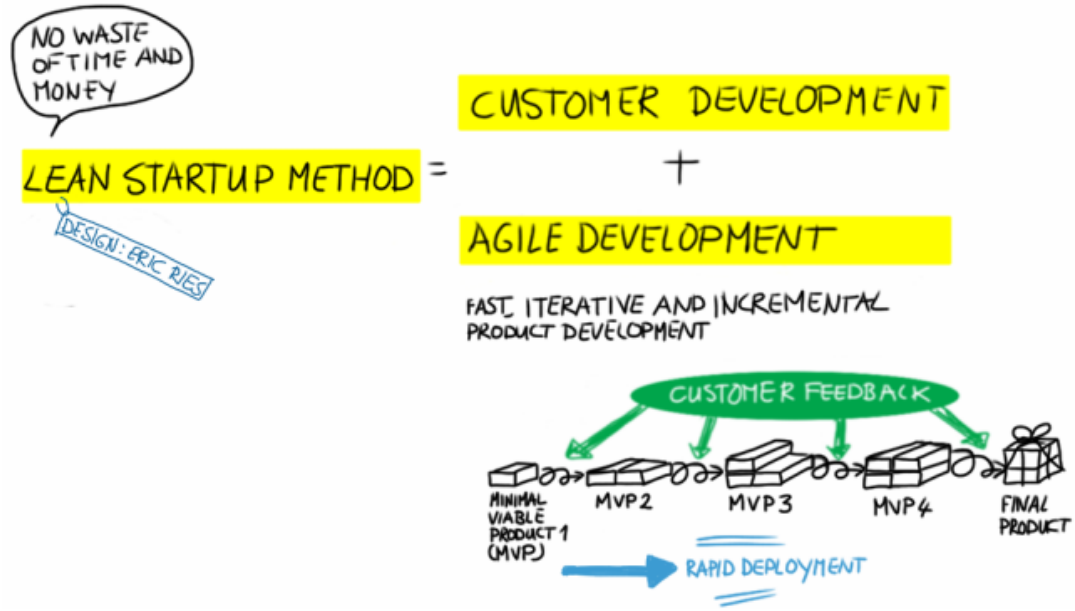

Figure 4. Lean startup methodology, New Entrepreneurship 2015

The lean development approach was traditionally designed for startups (Blank, 2006), which typically do not know their customers and their needs. Many of them fail very quickly after they start their operations due to various reasons – lack of funding, expensive product launchers, lack of customers – and even more often because they build products or services that nobody wants. They need a different way of taking their products and services to market.

The lean development methodology includes the phases of customer discovery, customer validation, customer creation, and company building, addressing many of the challenges startups have to go through.

Ries (2011) defines the lean startup method as a set of five principles:

1. Entrepreneurs are everywhere – anyone can create new products or services.
2. Entrepreneurship is management – processes to navigate uncertainty must be managed.
3. Validated learning – startups exist to learn building sustainable businesses.
4. Build-measure-learn model – startups need to validate the ideas and iterate quickly.
5. Innovation accounting – the process of learning has to be measured.

According to Ries (2011), the process of bringing the product or service to market is iterative and cyclical. It follows the 3-steps model – build, measure, and learn. Following this model, a startup aims at shortening the time it takes to launch the product or service, while delivering higher quality after each iteration round.
Most of the startups cannot afford being dependent upon a success of a single product launch;

therefore Ries (2011) suggests building and releasing a minimum viable product (MVP) early and iterating it based on customer feedback. Instead of building in isolation, startups are advised to iterate their services with customers throughout the whole development cycle. By doing that, the lean startups can achieve dramatically lower development costs, faster time to market, and higher quality products.

3.1 Key principles of lean startup

Lean startup methodology follows a set of principles. First of all, the startups are advised to drop a business plan, and search for a business model instead. It is very difficult or almost impossible to create an advanced business plan before raising external capital and starting to execute the idea. In most of the cases, business plans have to change completely after the first iterations of a product with customers. In addition, it is beneficial to use other lighter frameworks, such as Business Model Canvas (Osterwalder & Pigneur, 2010) to develop a feasibility plan.

The second principle of lean startup methodology is customer development. One of the big problems of many start-ups is that they spend a lot of time designing and building products or services that customers do not want. Instead of working in a vacuum, startups are recommended to gather the data to support their design process. It is crucial to be out there with customers and get their feedback on products, services, features and pricing strategies as early as possible. It is also important to constantly iterate the product based on customers' feedback, failing fast and cheap.

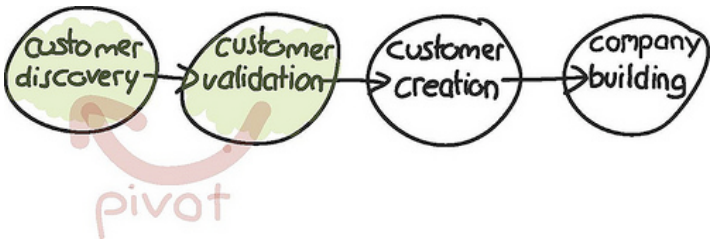

Figure 5. Stages of customer development process, Business Model Alchemist 2015

It is recommended to involve the key stakeholders from potential customers' side and to try to understand if the product or service will be of any value to them. By doing so, the startup can define the requirements for a minimum viable product and prioritize different features accordingly. Processes, features and ideas that have merit are to be kept, while those that do not become extinct. On top of that, the stakeholders involved in the development of a product or service typically become the first customers of the company.

Finally, Ries (2011) recommends switching from the traditional linear product development to agile and iterative product development together with customers. Startups are advised to develop minimum viable product, then measure how customers respond and learn. Ries (2015) defines the minimum viable product as "that version of a new product which allows a team to collect the maximum amount of validated learning with the least effort". In other words, the minimum viable product is a test of a specific set of hypotheses, with a goal of proving or disproving them as quickly as possible.

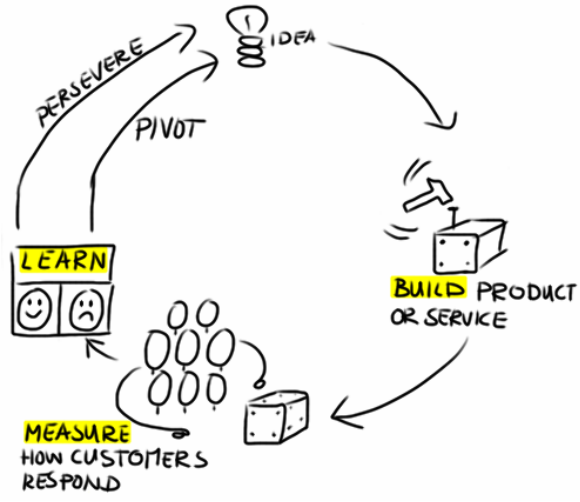

Figure 6. Lean startup methodology, New Entrepreneurship 2015

Today, many startups try to improve their chances of success by following the principles of failing fast and leaning continuously. During the dot-com boom, startups often operated in "stealth mode" (to avoid alerting potential competitors to a market opportunity), exposing prototypes to customers only during highly orchestrated "beta" tests. According to Blank (2013), the lean startup methodology makes those concepts obsolete because it holds that in most industries customer feedback matters more than secrecy and that constant feedback yields better results than cadenced unveilings.

Although lean startup methodology has a holistic approach to creating new services or businesses, there are certain aspects that lean startup methodology could be criticized for. First of all, "the results of trying to reduce time-to-market often have unexpected and negative consequences" (Cooper & Edgett 2005, 14). Minimum viable products are optimized for learning, not scaling. They are not meant for generating revenue, but for generating data to support informed decisions.

Some customers are not ready to invest time and energy, helping a startup develop a minimum viable product or service, even if promised early access or lower price. Trying to be

lean, some entrepreneurs start sacrificing on the quality of their services. While it isn't dangerous for some startups, others might be badly harmed.

The lean startup methods don't fit well to certain industries, especially with tight quality regulations. They are not designed to be used in case of mature products, which are already on the market. It is important to be critical towards lean development and lean startup methods instead of assuming that they will be equally effective for any type of company.

The ideas of lean development and lean startup have been used in both software development and business development of startups for a long time. At the same time, these principles are not yet fully adopted to service development. In order to provide a business model framework that takes into account the principles of contemporary business logics described in the previous chapter, Ojasalo & Ojasalo (2015) introduced a new view to service design framework.

Ojasalo & Ojasalo (2015) encourage service developers to co-create, test and experiment together with the users of the service, supporting the implementation of the fundamental philosophy of business logics for service. The core idea behind the new concept is that the value formation in customers' everyday lives/businesses is in the core of the business development (Ojasalo & Ojasalo, 2015). The Service Logic Business Model Canvas is described in more details in the following chapter.

4 Service development

The earlier chapter of this report presented the lean business development and lean startup methodologies. While speed to market is vital to success in service innovation (Cooper & Edgett 2005, 11), there are certain challenges in the lean way of thinking. As lean aims at reducing variations and eliminating waste (Ries, 2011), it leaves little room for creativity. At the same time, lean approach is focused on learning from the past, and doesn't encourage exploring future opportunities that could be crucial to success of a startup.

Service design is a modern approach that has developed out of a multiple perspectives and methods from various disciplines. As opposed to stand-alone academic disciplines, it can be categorized as a new way of thinking. One of the main origins of the methodology is certainly the shift from goods to service and experience economy, and change in the value creation process logic. An important part of the service dominant logic is that services create value-in-use for customers. Customer-focused disciplines such as many design disciplines have a history of working with prototyping to understand the value-in-use, and service design has a similar approach to the development of services (Blomkvist et al., 2014).

Mager (2009) presents service design as approach that understands human activities, feelings, needs and motives and sees that service design is about creating services from the users' perspective. Service design is all about the users and clients. It targets to ensure that service touch-points are useful, feasible and desirable from the customer's point of view. According to Miettinen & Koivisto (2009, 25) it aims to create services that are effective, efficient and distinctive from the supplier's viewpoint, generating win-win solutions for all stakeholders.

While there are certainly different views on service design, many authors (Stickdorn and Schneider, 2011; Mager, 2009; Moritz, 2005; Prahalad and Ramaswamy, 2004) agree on the human-centric approach to creation of innovative services, the importance of user experience, and the importance of interface between organizations and customers.

Service design helps to create new or improve existing services to make them more useful, usable, desirable for clients and efficient as well as effective for organizations. It is about "making the service you deliver useful, usable, efficient, effective and desirable" (UK Design Council, 2010).

Service design and design thinking have been moderately covered in the business press. The first article by Tim Brown (2008) covering Design Thinking was published in Harward Business Review (HBR) in June 2008. Since then, Design Thinking came a long way. There is a big gap between the two articles of Brown - the second article exploring Design Thinking appeared in HBR only in August 2015. In the article, Brown (2015) mentions that "designers are on the founding team of countless disruptive startups". However, he doesn't provide any insights on how design is used in startups.

Service design, as any other discipline, has a set of key principles and methods that help innovators throughout the service design project. The methods are usually tailored to match the nature of the project to reach the best results. Companies recognize the importance of service design as an approach to facilitate innovation. Yet, many don't manage to integrate its methods and tools into their innovation process.

The following chapter provides a description of the key principles of service design highlighted by design gurus, such as Stickdorn, Mager, Miettinen, Meroni and Moritz, and introduces some of the methods that could be used by entrepreneurs and service designers through the design project.

4.1 Service design principles

Stickdorn & Schneider (2011, 34) suggest five core principles of service design – it is user-centred, co-creative, sequencing, evidencing and holistic. The principles described in this

chapter are among the ones defined by other service design gurus, such as Moritz (2005), Mager (2009), and Miettinen (2011). Mager (2009) emphasizes service design as co-creative, inspiring, visual, holistic and interdisciplinary. Both Moritz (2005) and Miettinen (2011) highlight participatory nature of service design and empathy towards service users.

4.1.1 It is user-centred

Meeting customer's needs is the main goal of a service provider; therefore the customer has to be always in the centre of service design process. The main methods in user-centred design are aimed to meet the needs of the user by collective, analysing and interpreting data. The difficult part is to identify the hidden needs and expectations. Therefore, the starting point of the human-centred innovation process involves exploration of the needs, dreams, and behaviours of the people that will be involved in a solution: providers, final users and those inadvertently involved.

According to Meroni (2010, 38), "human-centred design looks at the people in their context within their community, considering the experience of all the actors, and trying to provide a response to their expressed or latent needs". IDEO (2013) considers human-centred approach as an approach that, aimed at enhancing the lives of people, can help organisations to better connect with their existing network of stakeholders, while discovering new opportunities for change. Stickdorn & Schneider (2012), suggest that gaining authentic customer insights includes the application of methods and tools that enable innovators to slip into customer's shoes and understand their individual service experience and its wider context. Some of these methods and tools will be introduced in the following chapter of this report.

4.1.2 It is co-creative

Co-creation typically refers to customer's involvement in the value creation process. Researchers have different views of the co-creation process between the service provider and the customer. Miettinen & Koivisto (2009) see co-creation as a way, in which a customer is allowed to co-construct the service experience to suit their content. Stickdorn & Schneider (2012) see services as irrelevant by nature without customer's involvement. Moritz (2005) see co-creation as collaboration between the players. Ojasalo et al. (2009) highlight that the customer will have a strengthened role in the production of innovation in the future.

It is important to keep in mind that customer is not the only stakeholder in the service innovation process. There are many different stakeholder groups that have to be involved into a service design process, each of them with different needs and demands. All of them have to

be integrated into the process of designing a service, as all of them will be consuming it later on. The role of a service innovator is to facilitate the generation of ideas in a group of people with different backgrounds and needs using different service design methods. A service designer has to create an open and creative environment and make sure that co-creation happens.

According to Stickdorn & Schneider (2011, 39), "co-creation during the design process facilitates a smooth interaction between the stakeholders during the actual service provision – essential for both sustainable customer and employee satisfaction". The more a customer gets involved in the service provision, the more likely this service is of evoking co-ownership which in turn will result in increased customer loyalty and long-term engagement.

4.1.3 It is sequencing

Any service is a sequence of interrelated actions taking place over a certain time period. Service experience as a whole consists of multiple events, and each individual encounter is important in creating a composite image of the service in customer's mind. According to Stickdorn & Schneider (2011, 40), every service process follows a three-step transition of pre-service period (getting in touch with a service), the actual service period (when the customers actually experience a service) and the subsequent post-service period.

In order to gain a common understanding of a sequence of actions, it is important to visualize a service process using service design methods and tools (such as customer journeys and service blueprint). Consistent experience should be maintained across all the channels to succeed with customers. Few companies are capable of providing such an experience nowadays, but it is crucial for them to gain the competitive advantage in the future.

4.1.4 It is evidencing

It is highly important to make the intangible service more tangible. Physical artefacts play important role in the service experience, as they can trigger good memories and prolong the service experience beyond the service period. They make the service more tangible. Utilizing this effectively has the potential to increase customer loyalty and for customers to recommend the service to others (Stickdorn & Schneider 2011, 42). Service evidence can as well help reveal or promote backstage services.

4.1.5 It is holistic

When designing a new service, it is important to keep the big picture and see the wider context in which a service process takes place. Event though the main focus is always a user, a service designer has to consider the environment of the user and the service provider, understand how they affect the service. It is impossible to keep track of all the small aspects, but a service designer should always look at the service in a holistic way.

Stickdorn & Schneider (2011, 45) see service design thinking "supporting the co-operation of different disciplines towards the goal of corporate success through enhanced customer experiences, employee satisfaction, and integration of sophisticated technological processes in pursuing corporate objectives". Miettinen & Koivisto (2009) suggest that holistic approach to the project requires viewing the project as all systems and subsystems of relationships and interactions.

The holistic approach could be seen as an alternative to working on the project in isolation, within the limits of your organization. Mager (2009) suggests that customer's experiences don't end within the boarders of a company. Instead, all the aspects of customer's environment should be considered as important. The sustainability of the service and its impact on both stakeholders and society are crucial to evaluate.

4.2 Service design process

Service design process can be defined as stages that a product or service will pass through during its design. There are many different models of service design process used by service design practitioners. None of them is the only right alternative, as service design process is constantly developing. Though many of them use different terminology and number and names of service design process stages, they all share a similar ideology and follow similar process – understanding the problem and gathering insights, innovating and working on new concept ideas, and then prototyping and implementing.

As highlighted by Moritz (2005), the stages are generally shown in a chronological order but the process is highly iterative instead. Stickdorn & Schneider (2011) agree that design process is nonlinear. At every stage of a service design process, it might be necessary to take a step back or even start again from scratch.

While service design process defined by both researchers and practitioners of service design (Stickdorn & Schneider, 2011; Moritz, 2005; Design Council, 2005; Spirit of Creation, 2014; Frog, 2013) have many similarities, they are divided into different stages.

Stickdorn & Schneider (2011) suggest that there are four steps in the service design process – Exploration, Creation, Reflection and Implementation. **Exploration** is the first stage, during which a service designer has to find the real problem. The main tasks during this stage are to understand company, its goals, the problem to work on from company's point of view, the real problem from customer's point of view, gather insights (using ethnographic approaches), and visualize the findings.

Creation is the second generative stage of the service design process. Testing ideas and concepts, making mistakes and learning from them, exploring different options based on the identified problems and gathered insights generated during the first stage – these are some of the main tasks of a service designer. Co-creation is key during this stage. Following the five principles of service design, Stockdorn & Schneider (2011) suggest that it is important to work user-centred to co-create solutions considering the whole touchpoint sequence and create holistic concept.

Reflection stage is about building prototypes and testing the ideas developed during the previous stage with customers in circumstances close to reality to gain feedback. The main challenge at this stage in the process is dealing with the intangibility of services, "since you cannot simply put a service on a table and ask customers what they think about it" (Stickdorn & Schneider 2011, 132). A service designer needs to generate the emotional engagement.

Implementation is the final stage of the service design process. During this stage the change should be implemented. In order to succeed, a service designer needs to gain support from both the management and employees. Therefore it is really important to involve all the stakeholders early in the process. Ideally, the change implementation is followed by another exploration to evaluate its progress. This leads to the iterative process of service design thinking. (Stickdorn & Schneider 2011, 135.) The process is also iterative within each of the stages and each of the workshops.

Moritz (2005) proposes another process, which defines six categories of service design (SD) - SD Understanding, SD Thinking, SD Generating, SD Filtering, SD Explaining and SD Realising. The six categories described below are used as the basic structure to develop the service design process. According to Moritz (2005), these categories provide an overview of different tasks that have to be undertaken in different stages of service design.

Figure 7. Six categories of service design, Moritz 2005

The focus of the first stage, **SD Understanding**, is on researching user needs, wants, motivations, and desires, finding out context and exploring possibilities. This stage is very similar to Exploration stage in Stickdorn & Schneider's (2011) process.

During the second stage, **SD Thinking**, scoping of the project, specifications and project framework are completed. This stage creates direction and structure for the project. The purpose of the third stage, **SD Generation**, is to generate different ideas and concept alternatives. The focus is usually on creativity. During the forth stage, **SD Filtering**, results of the previous stage are evaluated and the best ideas and concepts are selected to be developed during the following stages. The three stages described above are also similar to Creation stage in the process suggested by Stickdorn & Schneider (2011), during which generation of ideas happen.

SD Explaining, the fifth stage in Moritz's model, is about visualisation of ideas and concepts, and mapping potential scenarios in order to gain the common understanding in a team. During the last stage, **SD Realising**, specifying and prototyping selected ideas takes place, and business plan is prepared. After this stage, the service is ready to be implemented.

These two stages are similar to Reflection stage in Stickdorn & Schneider's (2011) process, during which they suggest to visualize ideas, build prototypes and also test them with customers. The implementation itself is carried out during the Implementation stage according to the Stickdorn & Schneider's (2011) process.

The models developed by the practitioners of service design follow very similar steps. “The Double Diamond” model developed by British Design Council in 2005 is divided into four distinct phases: Discover, Define, Develop and Deliver. The core of the service design model developed by Spirit of Creation (2014) is DGSE process, which consists of four stages: Discovery, Generation, Synthesis, and Enterprise. The process used by Frog (2013) is one of the simplest, it consists of the three stages – Discover, Design and Deliver.

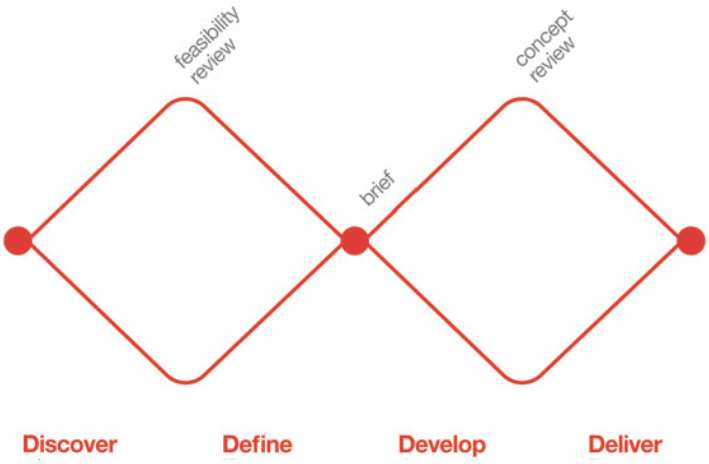

Figure 8. The “Double Diamond” model, Design Council 2012

The first **Discovery** stage (first quarter of the diamond) starts with identifying user needs utilizing different research methods and forming an initial idea. Frog (2013) gains insight into customers, competitors, client brand, and key opportunities through intensive design research and strategic analysis during the Discover stage. Spirit of Creation (2014) typically conducts the research and analysis during the first **Discovery** stage. It is easy to conclude that this stage is the same in all the three models, and very similar to Understanding & Thinking stages suggested by Moritz (2005).

During the second **Definition** stage, the identified user needs are being interpreted and aligned with the business objectives. Different design solutions are prototyped, developed and tested during the third stage of **Development**. For Frog (2013), **Design** stage is mainly about working on the development of the new concepts and testing them.

Spirit of Creation sees the second stage, **Generation**, as the stage to generate different ideas that meet the needs identified at the first stage. During the stage of **Synthesis**, selection of the best ideas happens.

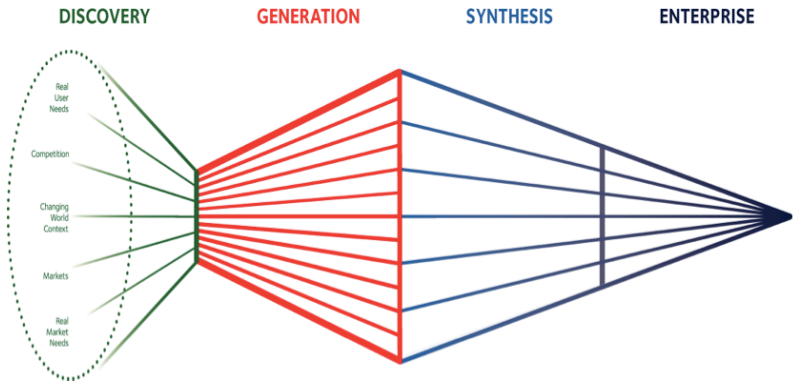

Figure 9. DGSE process framework, Spirit of Creation 2014

During the final **Delivery** stage, "Double Diamond" model suggest to conduct final testing, finalization, launch of the product and feedback collection. Frog (2013) focuses on specification, documentation and implementation of the project. Spirit of Creation (2014) suggest to work on the implementation and business plans during the final stage, which they call **Enterprise**.

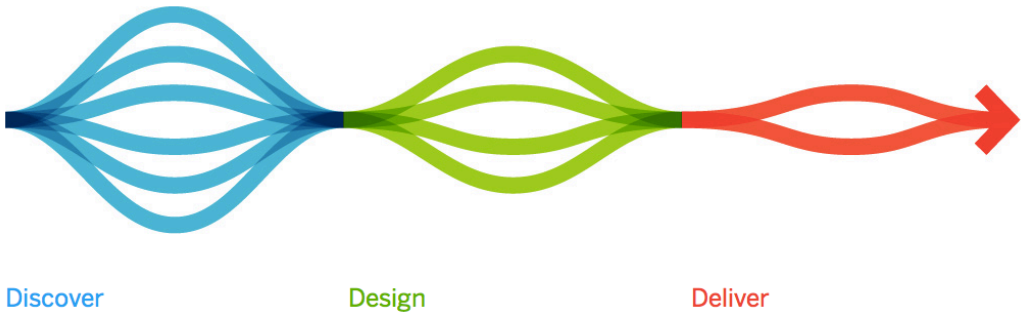

Figure 10. Frog design process, Frog 2013

The "Double Diamond" model could be used when designing more traditional services, however, when designing online services the tasks carried out during described stages would often differ. The border between Development and Discovery stages becomes less visible, as the service is often tested and launched already during the Development stage to collect feedback from users as early as possible.

While the three processes used by design practitioners have many similarities (first discover, then develop/generate/design, then deliver the results), they lack the continuation after the implementation of the design process. Design consultancies are hardly ever involved in the "live" of the developed service after the implementation, therefore they don't have a good understanding of how to keep the service evolving. How can a company continue to innovate

and develop the service further? Moreover, these processes are simplified and might not be suitable for designing complex systems.

Finally, it is worth mentioning that service design and lean startup approach have a lot in common, as they both emphasize the importance of focusing on users and understanding their hidden emotions and needs. Both of them involve real users in the service development process to understand their needs and desires and create more desirable products and services. And both of them use certain tools through the development process with the aim to create desirable services for customers. Therefore, there is a potential to combine lean and service design methodologies to complement each other in creating better services, and ultimately better user experiences.

4.3 Service design methods and tools

Innovation is key for startups as they bring to market something that no one has ever done before. While general theories, strategies, and market approaches can be seen as critical steps towards innovation, they are hardly the only steps (Kumar 2013). Startups need structures and processes, which haven't been widely spread.

Service design offers tools to design every little interaction between the customer and the business in a consistent way across the company (Livework, 2015). To drive innovation in an organization, there is a number of techniques that could be used. Kumar (2013) alone provides a selection of 101 methods that could be used by a startup throughout the innovation process. The choice of the method depends on the context of the design research.

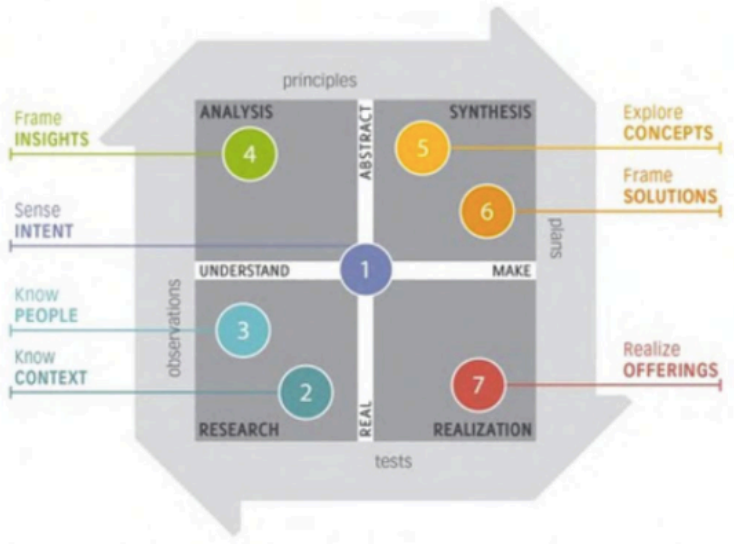

Figure 11. Design innovation framework, Kumar 2013

There are different ways to categorize these tools and methods. Kumar (2013) defines seven modes of activity for design innovation – Sense Intent, Know Context, Know People, Frame Insights, Explore Concepts, Frame Solutions, and Realize Offerings – and clusters the methods accordingly. Meroni (2010) clusters them into four main stages of design process - analysing, generating, developing and prototyping. Stickdorn (2012) provides a different model to illustrate how the tools and methods are related to each other (see Figure 12).

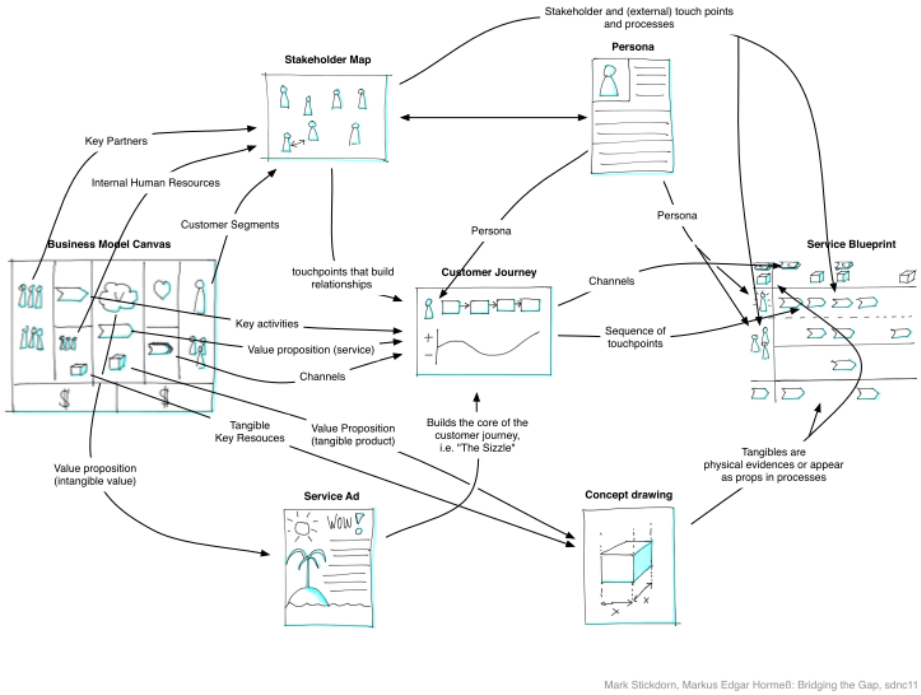

Figure 12. “Bridging the Gap”, Stickdorn 2012

As mentioned earlier, the development of the business model is not a linear process, but iterative and incremental instead. The process of using the methods and tools of service design is similar by nature. While creating new services, startups are suggested to apply different tools and frameworks, which will strongly affect the development of one another.

While all of the methods and tools of service design could be of great benefit for a startup, I have selected ten of them for the further research - observation, shadowing, design probes, storytelling, personas, service moodboards, service blueprinting, business model canvas, lean canvas and service logic business model canvas.

The selected methods and tools of service design could be used by any member of a startup team in order to collect the insights from customers, partners and other stakeholders, as well as to initiate internal workshops and to come up with new service concepts. They cover different stages of a service design process (and business model development) that a startup typically goes though.

Some of these tools and methods have also been utilized for the research conducted for this thesis in order to fulfil the research objectives. The combination of selected methods and tools allows the researcher to acquire the unique knowledge in the natural context of entrepreneurs. At the same time, the selected methods and tools help the researcher to understand the culture and way of working in selected startups and to identify shared behavioural patterns out of the data.

4.3.1 Participant observation

Observation is one of the methods that fit into the general category of qualitative research. According to DeWalt et al. (2011, 3), participant observation is a way to collect data in naturalistic settings by ethnographers who observe and/or take part in the common and uncommon activities of the people being studied. It is a method in which a researcher takes part in the daily activities, rituals, interactions, and events of a group of people as one of the means of learning the explicit and tacit aspects of their life routines and their culture. In contrast, pure observation seeks to remove the researcher from the actions and behavior so that they are unable to influence them (DeWalt 2011, 21).

Traditional participant observation is usually undertaken over an extended period of time, ranging from several months to many years. According to DeWalt et al. (1998), the strength of observation and interaction over extended periods of time is that researchers can discover discrepancies between what participants say—and often believe—should happen and what actually does happen, or between different aspects of the formal system; in contrast, a one-time survey of people's answers to a set of questions might be quite consistent, but is less likely to show conflicts between different aspects of the social system or between conscious representations and behavior.

Participant observation is both a data collection and an analytic tool (DeWalt 2011, 10), as it enhances the quality of the data obtained during fieldwork as well as the quality of the interpretation of data, whether those data are collected through participant observation or by other methods.

Observation can help uncover what people really do – as opposed to what they say they do. The goal of observation is to get detailed insights into a specific activity, find out how users behave while interacting with the service in their natural environment. According to Meroni (2011, 40), observation of behaviours while recording sophisticated user’s requirements can open up completely new opportunities for innovation, revolutionizing the traditional ways of thinking about a problem, as well as offering new forms of collaboration.

Startups can use observation as a method to inspire new ideas and provide context for existing ones at the early stages of design process. It helps to achieve deep customer understanding and co-design. It is a way to find out what is really important for the users and target the service development to answers the right issues. Observation helps in understanding users' motivation, their unmet needs and their behavior. According to Moritz (2005, 195), many different service improvements can be considered from observing how users behave.

4.3.2 Shadowing

Shadowing is a qualitative research technique, which involves a researcher closely following a user over an extended period of time and quietly observing their activities and behaviour without distracting or influencing their behaviour in any way. During the shadowing, the researcher writes an almost continuous set of field notes. Text, video and photographs can all be used, however, video often works best, as it captures the details that a person doesn't always notice. According to McDonald (2005, 4), at the end of the shadowing period, the researcher has a rich set of data to provide him with a first-hand picture of the user studied.

Shadowing offers a vital advantage over traditional forms of research like surveys or focus groups: they let you spot the real moments when problems occur as well as situations where people say one thing but actually do something quite different. According to Engine (2015), shadowing helps you understand how people really use your service, and how you could improve the experience in terms of what they would like the service to offer and not.

Spending time within the service environment is often the only way to develop a truly holistic view of how the service is operating, as it provides an intimate understanding of the real-time interactions that take place between various groups and touchpoints involved (Stickdorn & Schneider 2011, 156).

At the same time, shadowing data is typically more detailed than data gather through other approaches. According to McDonald (2005, 10), the data surface through shadowing is significantly less constrained and interpreted by participants that the views obtained via a series of interviews.

To conduct shadowing, a research typically needs to gain permission from both organizations and individuals. Security and confidentiality might be an issue for some. Another challenge with shadowing is gathering, processing and analysis of a huge data set, which can be exhausting and overwhelming experience.

Startups could use this method at the early stages of their innovative project to gain valuable insights, which would form the basis of the project work. Shadowing could help startups identify customer needs and problems, and come up with initial service ideas. It could also be used as a method to test service prototypes with users to understand how the proposed solution answers their needs.

4.3.3 Service Blueprinting

Service blueprinting is a customer-centric approach used to map the customer journey as it is linked to provider actions. It helps to clarify the interactions between service users, digital touchpoints, and service employees, including the frontstage activities directly impacting the customer, and the backstage activities that the customer doesn't see.

According to Bitner (2008, 67), "service blueprints are first and foremost customer-focused, allowing firms to visualize the service processes, points of customer contact, and the physical evidence associated with their services from their customers' perspective". They illuminate and connect the underlying support processes throughout the organization, driving and supporting customer-focused service execution.

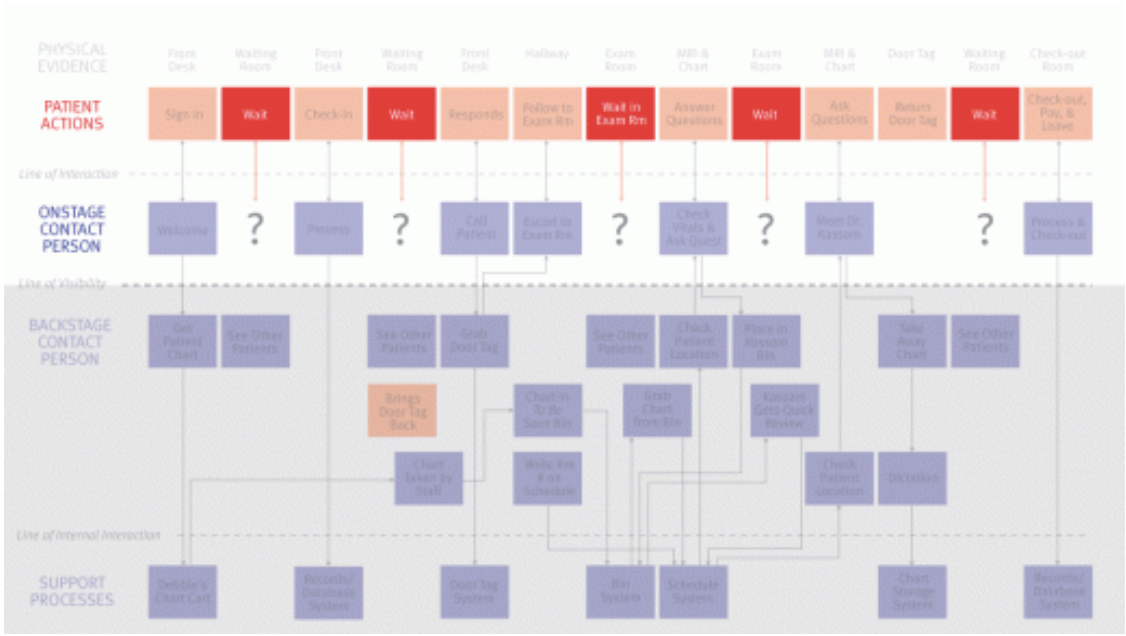

Figure 13. Example of service blueprint, Service Design Tools 2013

Delivering customer value through distinctive, memorable service experiences requires a cross-functional perspective. According to Bitner (2008, 69), service blueprints help all members of the organization to visualize an entire service and its underlying support processes, "providing common ground from which critical points of customer contact, physical evidence, and other key functional and emotional experience clues can be orchestrated".

Service blueprints are often produced collaboratively, as this is a great way to bring together various departments or teams, which may exist within the organization of the service provider (Stickdorn & Schneider 2011, 204). According to Engine (2015), they can form a shared focus for the various stakeholders responsible for the development and delivery of a new service, and collaboratively developing or reviewing a service blueprint in a workshop setting can help bring people on board.

Traditional service blueprinting technique could be extended to “expressive” by introducing the human quality dimensions. According to Meroni (2010, 113), the human elements add insights to the mapping of customer and provider actions by noting customer behaviours and emotional states during the service engagement. These may be realised through observations, comments, or anticipatory behaviours and are mapped onto the blueprint in the form of text, icons, or graphics that mark these human attributes effectively (Meroni 2010, 256).

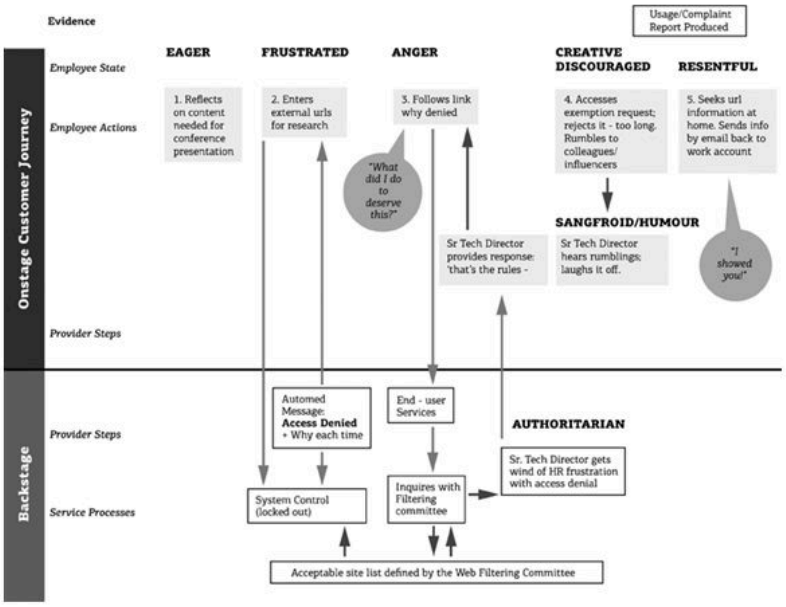

Figure 14. Example of expressive service blueprint, Meroni 2010

The expressive service blueprint helps to identify the human level experience of interacting with the service and areas of frustration that users are experiencing, and to respond with the right message.

In context of startups, service blueprint can be used as a technique to better deliver a successful customer experience and to identify new business opportunities. When designing a new service, service blueprints could be used very early on during the design process to help specify the various components of the service. When improving an existing service offering, service blueprints could be used to find out the areas that have to be reviewed and corrected (service gaps). When there are many players involved in providing a service, the technique

can help coordinate the complexity. Certainly, service blueprint is not the ultimate tool for all. Startups designing fully digital services might consider journey mapping or process flows instead.

4.3.4 Storytelling

Storytelling is a method to encourage users to tell rich stories with the purpose of identifying their needs, or underlying rationale, relevant in a particular situation (Holst & Ståhlbröst 2006). According to Stickdorn & Schneider (2011, 202), it is a method for sharing insights and new service concepts. The purpose of the customer story is to describe the service experience as a whole consisting of several events, as each individual encounter is important in creating a composite image of the service in customer's mind.

A story can be communicated in different ways, including text, visuals, video or a combination of then. Afterwards a story be analysed based on the TRACE method. According to Nyman et al. (2011, 5), the TRACE is foremost a scheme to analyze the service stories by identifying the customer's tasks (T), results (R), activities (A), contexts (C), and emotions (E). It exposes the customer's reasoning, actions, reactions, practices, experiences, preferences, focus, energy and involvement, or lack of these over time within and beyond interactions with the service provider. The events outside the interactions with service provider can be of utmost importance for customer, explaining a major part of the service experience.

According to Meroni (2011, 71), the benefits of the method include quickly identifying patterns in service experiences that can be addressed or further researched and, at the same time it provides designers with the opportunity to become immediately empathic with the audiences they are designing for.

Startups can use storytelling as an exploratory tool at the early stages of an innovative project. The more stories are documented (through a series of storytelling sessions), the richer the data for interpretation and pattern analysis is available. Based on the analysed service stories, there could be many suggestions provided for the further development of the service. Each of the suggested improvements could make a significant difference for the experience of the users.

Startups can also use storytelling while searching for a sustainable business model. Storytelling could be a useful tool while filling in some of the building blocks of Business Model Canvas, including Customer Segments, Value Proposition and Customer Relationships (or Value Creation in the Service Logic Business Model Canvas). Storytelling could be used as a method to explain and communicate different service offerings. Good stories make it easier to attract

customers, employees, partners and investors. Without storytelling, content is often uninspiring and nondescript.

4.3.5 Personas

Personas are usually imaginary characters built based upon real people. They assume attributes of the group of users (with similar behaviour) they represent – their lifestyle, social and demographic characteristics, cultural background, habits, needs, and desires. The aim of persona is to illustrate the user's behaviour patterns. According to Designing with People (2013), the persona should be believable to the viewer and can both stimulate new design concepts and help to validate them.

Figure 15. Personas example, Service Design Tools 2013

Personas can be built based on the data collected during earlier stages of design process, for example, during observations, or based on the quantitative data about the users. According to Engine (2015), posing questions and answering them as the persona character is often helpful to build up a character - quirky or unusual questions are often more insightful.

Startups can use personas for analysis, idea generation, proposition development, and validation of the current service offering. It is a great tool when one wants to test different ideas, but doesn't have access to potential users of your service. The design of the service should be constantly evaluated against personas in use. Personas could be a great tool while searching for a sustainable business model. It is advised to use personas to identify Customer Segments while filling in the Business Model Canvas. In service design, creation of personas is often followed by building customer journeys to determine how a particular person experiences the service.

4.3.6 Service Moodboard

A service moodboard is a composition of images and other materials that is used to represents the mood, atmosphere and style of a service or the environment where the service will take place. It derives from the adaptation, to the service context, of a tool usually applied in areas such as fashion, interior, communication or product design. According to Meroni (2010, 252), its purpose is to make the character of the service interaction emerge.

Figure 16. Moodboard example, Service Design Tools 2013

Moodboards make it is easier for users to understand the service. According to Moritz (2005, 227), it helps explain unconscious, sensual and intangible values of a service that are difficult to capture by words. Given that service design develops and designs experiences that involve different elements and work with different people this method helps to establish a shared understanding of the mood and atmosphere that a service uses and represents.

Startups can use moodboards to improve internal collaboration (between designers, developers and management), as well as collaboration with partners and customers, and to avoid wasting time developing features no one needs. The best time to create a moodboard is in the early stages of the project, when the solution or its style is not yet defined. A moodboard allows sharing the vision in a way that speaks much louder than words alone.

4.3.7 Design Probes

Design probes are an approach of user-centred design for understanding human phenomena and exploring design opportunities (Mattelmäki 2006, 39). Probes are self-documentation tool that is used to gain qualitative data about peoples daily lives. The users or potential users

collect and document the material, working as active participants in the user-centred design process. According to Mattelmäki (2006, 40), probes are a collection of assignments through which or inspired by which the users can record their experiences as well as express their thoughts and ideas.

The most popular types are diaries and camera studies, but probe kits can also include post-cards, stickers, mind maps and other tools. According to Moritz (2005, 195), designer should prepare a research kit in advance and provide it to users together with instructions on how to use it. Users are then asked to document a day in their life, or take photos while performing a certain task.

Figure 17. Probe kit, Designing with People 2013

One of the main benefits of this method is that it enables the researcher to access areas of research where they could not access through interview or observation. The other benefit of the method is that the influence of the observer on the person being observed is minimized. Experiences are recorder as they occur, minimizing retrospection.

Startups could use design probes during early stages of a project to collect information, build up interactions between users and designers, and support inspiration. Probes do not solve problems that are already known, but explore new opportunities. Making up the probes offers a researcher the liberty to act and apply their competence in a new situation. It also encourages them to approach the user. According to Mattelmäki (2006, 59), researchers can start thinking of future users with creative imagination, and exploring possible directions or hypotheses concerning their solutions while planning the probes.

4.3.8 Business Model Canvas

Business Model Canvas method is a strategic management tool that helps to generate, describe, challenge and improve an existing business model or create a new one to compete better. It is a way to the rationale how an organization creates, delivers, and captures value. It is important for every company to understand and address the challenge of business model innovation while creating value for a company and customers.

According to Osterwalder, a business model can best be described through nine basic building blocks that show the logic of how a company intends to make money. These blocks are customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. The nine blocks cover the four main areas of a business: customers, offer, infrastructure, and financial viability.

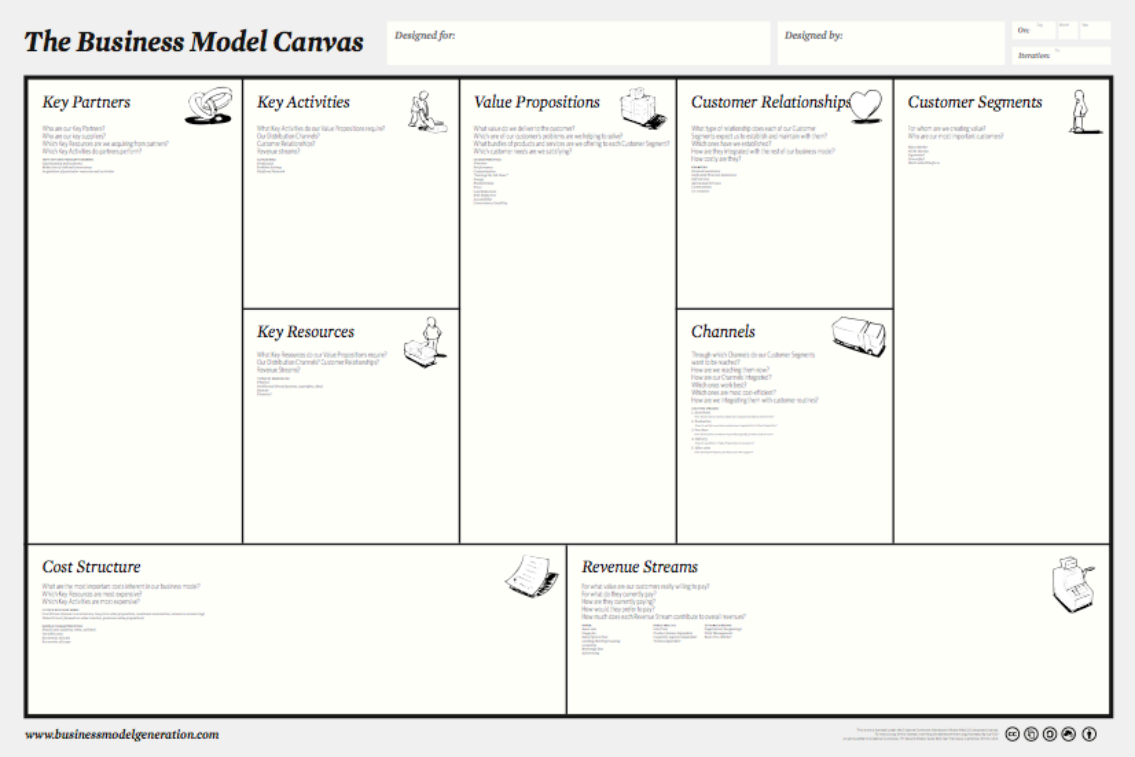

Figure 18. The Business Model Canvas, Business Model Generation 2015

The strategy and vision for the future of a company has to be based on the understanding of the business, the current position, the customers, what is offered to customers, and how the company has come to this point. It is also important to know how profitable the business is, how successful the company is doing compared to its competitors, and what the core capabilities and strengths of the organization are. Osterwalder & Pigneur (2014) provide a set of key questions to answer in order to evaluate each of the nine blocks (see Figure 18 above).

Even though the BMC has been described to be effective and fast method to understand and develop an entire business model of an organization, including value propositions and customer's segments, it has been claimed to represent goods-dominant logic instead of service-dominant logic (Ojasalo, 2013). In contrast, the Service Logic Business Model Canvas (Ojasalo & Ojasalo, 2015) was developed to include service logic philosophy.

4.3.9 Service Logic Business Model Canvas

Service Logic Business Model Canvas (Ojasalo & Ojasalo, 2015) is a modified version of Osterwalder & Pigneur's (2010) Business Model Canvas that was introduced in order to provide a business model framework that takes into account the principles of the contemporary business logics – Service Dominant Logic (Vargo & Lush, 2004), Service Logic (Gröönroos, 2006), and Customer Dominant Logic (Heinonen et al., 2010).

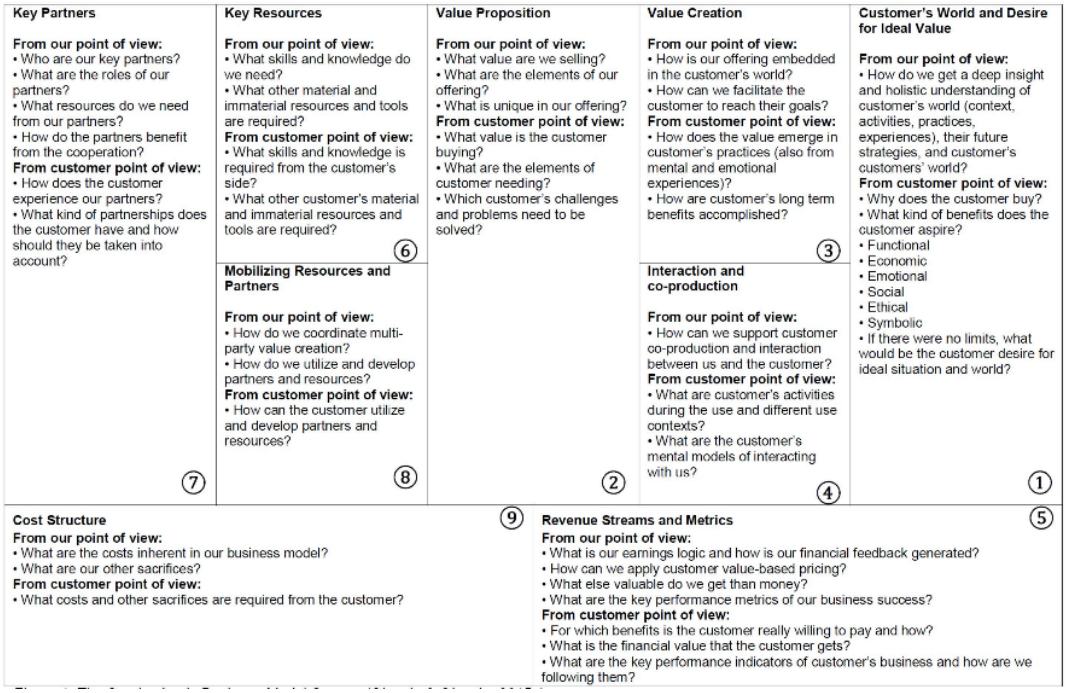

Figure 19. Service Logic Business Model Canvas, Ojasalo & Ojasalo 2015

Like the original Business Model Canvas, The Service Logic Business Model Canvas is composed of nine blocks, each of them meant to consider both the provider and the customer viewpoints. Instead of thinking only from their own perspective (as traditional Business Model Canvas suggests), companies are advised to constantly consider customers' experiences based on deep customer insights. As customer's understanding of service is considered to be different from the understanding of the service provide, the framework is more in line with Heinonen et al. (2010). This is the major change towards customer-dominant thinking.

First of all, the Service Logic Business Model Canvas suggests analyzing customer's life in depth instead of focusing on the actual business of the company. Value Proposition and Value Creation refer to the value customers can expect from the service provider, and the actual use of the value proposition by the customer. Interaction & Co-production block helps understand how the customer participates in the service provider's activities. Revenue Streams & Metrics and Key Resources blocks help understand the gains of the service provider (both tangible and intangible) and operational resources required (knowledge, skills). Key Partners and Mobilizing Resources & Partners deal with partners involved in value creation, while Cost Structure analyzes the costs related to the business model.

The model is designed to be applied individually to different customer profiles or customer groups with similar behaviors to consider specific contexts. The development of each profile is linked to and strongly affects the development of other profiles and business models.

With a new model of lean service development, Ojasalo & Ojasalo (2015) address the knowledge gap in the intersections of business logics for service, business models, and lean development. Lean and agile development, based on iterative and incremental process with frequent customer feedback, have already been adopted by many startups and small businesses. Ojasalo & Ojasalo (2015) propose an application of these approaches to be used in service development and business model development. Indeed, the Service Logic Business Model Canvas is more suitable to early-stage startups creating new services at high speed and low resources. Customer-focus is crucial for these companies.

4.3.10 Lean Canvas

Lean Canvas was created by Maurya (2012) as an adaptation of the original Business Model Canvas by Osterwalder & Pigneur (2011). Lean canvas was designed primary for entrepreneurs, not consultants or customers. It assumes higher risks and uncertainty, and lack of proper understanding of a (potential) problem, and therefore more suitable for startups.

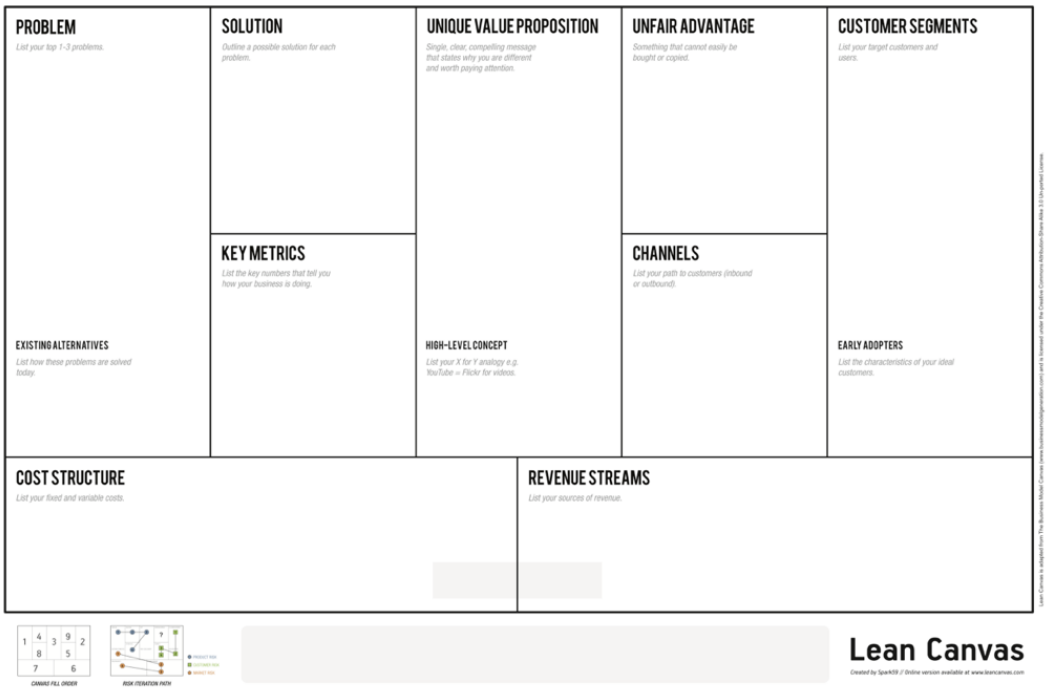

Figure 20. Lean Canvas, Leanstack 2015

Comparing to traditional Business Model Canvas (BMC) and Service Logic Business Model Canvas (SL BMC), Lean Canvas is often seen as simple and adaptive. Several blocks of the traditional BMC are replaced – instead of Key Partners and Key Activities Maurya (2012) suggests using Problem and Solution blocks. Many startups fail because they build wrong products. Therefore, reaching a good understanding of the problem is crucial for a startup to success. At the same time, startups need to think about solutions that customers will be ready to pay for. Key Partners and Key Activities blocks could be of more importance for an established or later-stages companies.

In Maurya's canvas (2012), Key Resources and Customer Relationships blocks are replaced with Key Metrics and Unfair Advantage. For startups, it is crucial to identify the relevant metrics early on, follow their development regularly and make necessary changes along the way in case of unsatisfactory performance. At the same time, the focus on resources is not relevant to many. The Unfair Advantage block is meant to help startups define their uniqueness and position themselves against the competition.

The Lean Canvas could be used by startups as one of the first steps on the way of defining a business model. It helps to quickly test the most risky assumptions and get the feedback from the market. It could also be used to test new product or service features.

4.4 The application of service design methods and tools

Due to the increasing number of service design methods and tools, their application in startups is not yet extensively covered in the contemporary literature. There is more data available on the practice of using of service design methods and tools in established enterprises. While some startups might be aware of the methods and tools of service design, they do not help entrepreneurs unless the application of them is well understood.

5 Research methodology

Prior to conducting the research, I have strengthened my understanding of service design methodology (including it's processes, methods and tools), as well as lean startup methodology by conducting the literature review.

During the research process, the insights have been collected from different sources and using different methods to ensure a holistic understanding of needs, requirements, constrains and opportunities (see Figure 20). Being a professional investor myself, I have observed many start-up companies while they were pitching to investors to better understand their behavior, as well as the issues they were facing when presenting their services. While the need for tech & sales expertise is typically well understood, the need for design expertise is still underrated. It would be interesting to understand the reasons behind this phenomenon.

5.1 Research background

During the observational study, my aim was to gather firsthand information about social interactions in a natural occurring context. My initial study was solely exploratory, and I didn't keep either sufficient notes, or recordings. I can only provide brief extracts to support my findings, making the accuracy of the research questionable. However, these findings form a base for further research. In addition, I have conducted desk research as well as collected market trends to familiarize myself with the setting before starting the sampling.

While planning the research study, I have also conducted several interviews and informal discussions with investors in the Northern Europe. My goal was to gather valuable insights from the experts in the field of venture capital in the exploratory stage of my research using qualitative methods. As I expected, most of the investors agreed that startups with design expertise were more attractive to them as potential investment targets.

5.2 Research design

During the research, my goal was to understand the concerns and motivations of entrepreneurs to invest in service design at an early stage of their company development. I have selected to use organizational ethnography as a method to collect the insights from a small sample of startups based out of the Nordic countries. The startups were based on the criteria described below (see Figure 22) to represent different countries and verticals. Even though the selected research method could be characterized by the relative slowness, being socialized in the field I could conduct it within several months.

Phase 0	Phase 1	Phase 2
Observational study Desk research Trend analysis Investor interviews	Organizational ethnography Face-to-face interviews Shadowing	Online survey

Figure 21. Stages of research, Gianelli 2015

Organizational ethnography is a multi-method approach (observation, interviewing, document analysis, examination of the use artifacts) whose pivotal feature is participant observation (Silverman 2011, 69). What most distinguishes ethnography (and observation as a method) from other methodologies is “a more active role assigned to the cognitive modes of observing, watching, seeing, looking at, gazing at and scrutinizing” (Silverman 2011, 15).

I used face-to-face interviews with carefully selected sample, as well as participant observation method to gain insights on the topic. In addition, I used the shadowing method to collect more behavioral data from the entrepreneurs. While conducting qualitative contextual research, my aim was to obtain context and stories that were critical to startups, as well as understand why certain patterns are happening.

While quantitative surveys can be used on much larger samples than qualitative interviews, allowing inferences to be made to wider population (Silverman 2006, 39), this data gathering technique doesn’t allow gathering contextual insights. A real strength of qualitative research is that it can use naturally occurring data to find the sequences (“how”) in which participants’ meanings (“what”) are deployed and thereby establish the character of some phenomenon (Silverman 2006, 44). Contextual sensitivity was crucial to my research.

According to Eriksson & Kovalainen (2008), the process of qualitative research is not linear. Instead, "the circularity of the research process can be related to the so-called hermeneutic circle. The hermeneutic circle refers to the methodological process of understanding, constructing and deepening a meaning in the interpretative process during research activities". Interpretation of the new information allows the researcher to reflect on previously analyzed information. During the reflection process, the research is critically evaluated.

While each individual's experience was important and unique, ultimately I was seeking to find patterns in the data. My aim was to explore the motivation of seven companies registered in Finland and the Nordics. To select the sample startups, I used the following criteria:

- The company has to be registered in the Northern Europe
- The company has to be incorporated no earlier than 2013
- The company can work either in B2B, or B2C domain
- The service of the company is delivered digitally (e.g. software, marketplace)
- The team is between 5 and 15 people
- The company has raised less than EUR 3 million external funding
- The company is led by firs-time entrepreneur

Company	Year Of Inception	Country	Domain	Vertical	Personnel	Funding
Startup 1	2013	Finland	B2B2C	Ecommerce	10	€450.000
Startup 2	2013	Finland	B2B	Software	7	€10.000
Startup 3	2013	Finland	B2C	Health	14	€2.500.000
Startup 4	2013	Denmark	B2B	Ecommerce	8	€300.000
Startup 5	2014	Finland	B2B	Software	5	€600.000
Startup 6	2014	Sweden	B2B	Software	5	€400.000
Startup 7	2013	Denmark	B2B2C	Software	13	€1.500.000

Figure 22. Startups selected for interviews, Gianelli 2015

To obtain insights from different types of companies, I have selected the representatives from different domains (business-to-business and business-to-consumes), verticals and countries. The startups were registered and based out of Finland (four), Denmark (two), and Swe-

den (one). Some of the companies had already raised seed funding; others were fundraising.

Based on the literature review, the exploratory research phase and the context of selected companies, the following research questions have been formulated:

1. Are the startups familiar with contemporary logics of service creation?
2. Are the startups familiar with service design, its methods and tools?
3. Are there any tools and methods of service design in use in the startups? Which ones?
4. Have the startups been using professional design services?
5. Can the startups see the relationship between design and fundraising process?

The data gathered during the research has been used to understand how the adoption of service design methods and tools affects the performance of the selected startups. The findings of the research were used to validate the hypothesis that startups with design competence perform better, and therefore are more attractive to investors.

5.3 Data collection

Based on the literature review and the theoretical frameworks discussed in the previous chapters, I have formulated several open-ended interview questions on each of the research topics to prepare for the semi-structured interviews. My goal was to make data collection as easy as possible, and focus on the data analysis instead. My aim was to gather an authentic understanding of people's experiences; therefore most of the questions used during the interviews were open-ended.

Research question	**Interview questions**
Are the startups familiar with goods-dominant and service-dominant logics?	• Are you familiar with goods-dominant and service-dominant logics of value creation?
Are the startups familiar with service design, its methods and tools?	• Are you familiar with service design? • Are there any methods and tools you are familiar with? Which ones? • If yes, do you use them in your startup? • Are you familiar with observations, shadowing, service blueprint and personas (explain using the cards)?

Are there any tools and methods of service design in use?	• Tell me about the tools and methods of service design in use in your startup • Why have you selected the tools?
Have the startups been using professional design services?	• Do you have a designer in your team? • Why/why not? • If not, when would you consider recruiting one? • Have you received funding from angel investors? • If yes, does any of them have design expertise? • Have you been using design agencies? What was your experience?
Can the startups see the relationship between service design and fundraising process?	• Do you think the design of your service affects your fundraising process? • Why/why not? • Tell me about your experience with fundraising

Figure 23. Interview questionnaire, Gianelli 2015

In addition to the above questionnaire, I have prepared 10 cards to illustrate the methods and tools of service design described in the previous chapter. My assumption was that people might be unfamiliar with the names of the methods, even though the methods might be in use in their startups. Hence, my goal was to make the abstract methods more concrete.

Interviews were carried out during second half of 2015. The interviews were audio-recorded, photographed and transcribed. Transcripts of the recording of the interviews provided a highly reliable record of my interactions with entrepreneurs, to which I could return during the data analysis stage.

In addition to conducting face-to-face interviews, I've spent time with each of the interviewed teams to see how they operate and communicate in their natural environment. To keep track of the observed data, I relied on the fieldnotes with the minimum amount of information recorded. I wanted to understand what people were doing, how and why, as well as observe how people interact with each other. Observational data can highly contribute to understanding how startups function.

While observational studies are not seen as an important method of data collection in quantitative research (Silverman 2006, 19), they have been fundamental to this research. Observing

entrepreneurs while they were pitching to investors prior to forming the questionnaire was very important. Observation was also crucial to understand different cultures, as I have been interviewing international entrepreneurs with different cultural backgrounds.

My aim was to better understand personal stories of the founders. To explore the experiences of the interviewed entrepreneurs and gain more insights, I have used storytelling technique myself to bring up certain examples from the industry.

To gather additional data for my research, I have created an online survey that was distributed to a wider group of entrepreneurs, mostly in the Northern Europe. According to Mattelmäki (2006), survey research belongs to the traditional methods used in human-centered design and focuses on giving statistical proof for issues already known. Therefore, the survey has been conducted post the interviews.

Online survey was favorable due to a random sample, ease of reach and speed. Internet technologies and online communities make it easy for researchers to reach a big variety of segments of society through online survey research (Wright, 2005). According to Wright (2005), it is easy to access people with specific interests, believes and values. The type of sample reached using an online survey may have an impact on the results. At the same time, the data reported by respondents might significantly differ from their actual behavior.

The online survey was created using Typeform service, which allowed to collect and analyze the data easily. The survey was carefully designed to include short and easy-to-understand questions. Most of the questions were multiple-choice; several were open-ended.

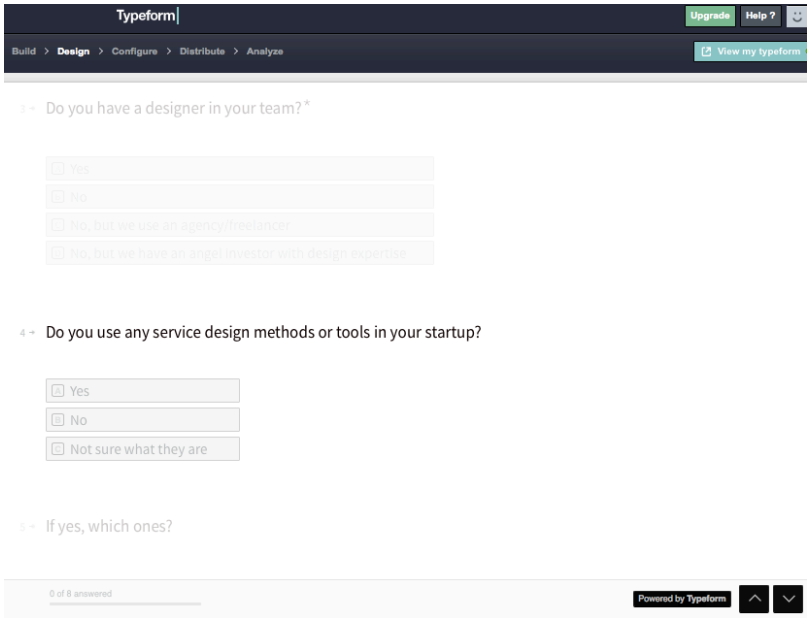

Figure 24. Screenshot from online survey, Gianelli 2015

Online survey allowed me to reach high variety of people at high speed and no cost. The survey was distributed to entrepreneurs in the existing database of a Finnish venture capital fund, as well as to entrepreneurs in a Finnish startup accelerator.

The online survey was meant to discover additional signals, and not to provide statistical significance, therefore a sample of 30 startups was considers acceptable. Respondents were from 8 countries, with the majority coming from Finland.

5.4 Limitations of the data collection process

There are certain limits to the methodology used in the research that should be noted. First of all, the size of the selected sample was small, but appropriate for the research. To increase the reliability of the results, it is recommended to work with larger sample. Authenticity rather than sample size is often the issue in qualitative research (Silverman, 2006). My aim was to gather an authentic understanding of people's experiences; therefore most of the questions used during the interviews were open-ended.

The reliability of the representativeness of the sample can be questioned. The reliability of the interpretation of transcripts may be weakened by a failure to note certain intonations or body movements, even though the interviews were recorded and transcribed carefully. The selected approach might neglect how each individual experience is shaped by cultural forms of representation.

The results of online survey do not generate sufficient insights to design new solutions, and do not reveal individual needs and motivations of entrepreneurs. However, while combined with other qualitative methods, it could be valuable technique to generate statistical proof.

Another criticism of the conducted research relates to how sound are the explanations it offers. This is sometimes known as the problem of anecdotalism, revealed in the way in which research reports sometimes appeal to a few telling "examples" of some apparent phenomenon, without any attempt to analyze less clear (or even contradictory) data (Silverman 2006, 47).

To make the research more valid, I have made an attempt to deal with contrary cases during the data analysis stage. When certain patterns were identified in the data, I tabulated instances of this pattern in all of the data available. The deviant cases were used to revise the understanding of the pattern.

6 Data analysis

During the research, I have restricted myself to work with only interview transcripts and field notes, and left out more complex data like video recordings. However, the amount of information collected was high. The risk of producing heaps of useless data but missing the essential material is very real in organizational ethnography if, for instance, one is going to try to describe and deconstruct the culture of an organization (Silverman 2011, 65).

6.1 Coding the data

The gathered data was organized using coding technique. Coding is one of the main activities done by qualitative researchers throughout the research process. It involves sorting data into categories for further analysis and theory building (Silverman & Patterson 2015, 27). Field notes and interview transcripts were read line-by-line and assigned codes to discrete excerpts in the data (open coding). Codes are words or brief phrases that capture the meaning conveyed in data (Silverman & Patterson 2015, 28).

Open code	Interview excerpts	Focused codes
Design thinking Customer-driven, agile, co-creation	Question: "Are you familiar with service design?" Answer: I'm familiar with design thinking. I studied it during my PhD in England. We have been using lean startup method, and there are certain design elements. It's a customer-driven method. I started with a book of Eric Ries. Actually,previously I had background helping companies in agile. So my key takeaway was that you learn with a customer. Have you heard of co-creation? Of course you have. So there was an article in HBR about co-creation. This co-creation is the concept we took in use, and merged with design thinking.	Design thinking Co-creation, agile
B2B, B2B2C, customer learning	Question: "Why have you selected to take it in use?" Answer: "In our case, it's not just B2B, it's B2B2C, so it's difficult to get customer learning."	Co-creation
Co-creation, agile methods, critical scrum method	Question: "Why?" Answer: "Our customers might not know how their customers want it to be. We want our real customers (users) to really understand when they search what they are after. Also, all customer requests go to our pipeline. Then, when there are several similar requests we would implement. So co-creation mixed with agile methods. We also use critical scrum method.	Co-creation, agile
Personas, business model canvas	Question: "Great. Are you familiar with other methods? For example, service blueprint or personas?" Answer: "No, service blueprint no. Personas I have done. Before starting with this startup, I participated in some workshops in Hub Helsinki, workshops on business model, business model canvas. I don't know if we used them (personas) at work nowadays in a formal way. I knew it from before."	Business model canvas
Front-line support, observation, customer feedback	Question: "What about observations?" Answer: Well, I'm not sure. What we do is. I spend time as a front-line support answering to customers and forwarding requests to relevant people in our team. It helps me observe the issues our customers might be facing.	User research methods
Brand design, graphics, visuals	Question: "Do you have a designer in your team?" Asnwer: "Yes we do. Yesterday I also interviewed one guy from the UK. Now we need someone on an international level. There are 2 persons being interviewed, they both have brand design as a backround, graphics & visuals."	Branding

Figure 25. Content analysis and coding, Gianelli 2015

After the open coding process was completed, the results were compared, and new broad data categories have been formed (focused coding). The goal of focused coding is to take discrete codes from the open coding process and organize them into overarching categories that can be used in subsequent analysis (Silverman & Patterson 2015, 28). Focused codes were generated based on the collected and analyzed data, as well as drawn from the analyzed literature.

Data has been organized into tables using Microsoft Excel & Word software with separate columns for open and focused codes. Figures X displays coded data from the interviews, while Figure Y includes coded data from online survey (open-end responses).

6.2 Additional data from online survey

The data from online survey was used to spot additional signals. Survey coding was conducted in a similar manner - the open-end responses were analyzed and categorized into different groups. The responses had to be interpreted carefully to avoid misinterpretation of the data. All the responses were read at once first to get a feel for the themes that are recurring in the data set. The responses to open-ended questions are the most unaffected parts of survey analysis, as the respondents could write anything that came to mind.

Open code	Excerpts from survey results	Focused codes
Sketching Prototyping Drawing Usability test	Question: Do you use any methods or tools of service design in your startup? If yes, which ones? Answer: Sketch, proto.io, unicorns.io, Google draw	Sketching Prototyping User research methods
Prototyping Mockups	Question: Do you use any methods or tools of service design in your startup? If yes, which ones? Answer: Invision	Prototyping
Prototyping A/B testing Surveys Interviews Sketching Visual feedback	Question: Do you use any methods or tools of service design in your startup? If yes, which ones? Answer: Methods: prototyping, a/b testing, surveys & interviews. tools: Sketch, Trackduck	Prototyping User research methods Sketching

Figure 26. Coded data from online survey (open-end responses), Gianelli 2015

I have worked through all the collected data to find examples, which don't fit my original supposition. A few outliers were added into the "Other" category. The results are provided in the following chapter.

7 Key findings

The data gathered during the research has been used to understand the adoption of service design methods and tools in Nordic startups, as well as to identify the link between the adoption of service design and fundraising process. Seven first-time entrepreneurs were interviewed, and thirty additional entrepreneurs responded to the online survey. The findings of the research are presented below per research question.

7.1 Startups are only partially aware of service design methods and tools

Based on the collected and coded data, it could be concluded that the adoption of service design methods and tools in the Nordic startups is fair. Some of the interviewees mentioned specific tools and methods. Others didn't know what these methods and tools are.

"I'm familiar with design thinking. We have been using lean startup method, and there are certain design elements. It's a customer-driven method." (Interview 1.)

"I'm not a designer myself, but I worked for a service design consultancy. I got exposed to many of these tools, like creating moodboards, storytelling, personas, scenarios, business model canvas, quick prototyping." (Interview 2.)

"Yes, I'm familiar with service design. We have been using many methods and tools in our startup. Personas, moodboards." (Interview 3.)

"I'm not sure. I've heard something about it. Like interaction design." (Interview 5.)

It's important to note that the interviews were conducted primarily with CEOs/founders of startups; some of them might be unfamiliar with service design while having a professional designer onboard. Most of the interviewed startups had designers in their team; however, mostly graphic designers responsible for the look and feel of their products and services.

Out of thirty responders of the online survey, at least eight (26%) were not sure what the methods and tools of service design were. Other two responders answered that they didn't use any – these people might have been unfamiliar with the methods either. All the responders who answered that they did use service design methods and tools were able to name some of them.

The online survey has also been shared primarily with startup CEOs/Founders. Six (20%) out eight responders, who were not sure what service design methods and tools were, answered that they had a designer in their team. The two responders who didn't use any answered that they didn't have any designers onboard.

Correlation between the origin of a startup and design in use is not obvious. Out of the seven interviewed startups, four were based out of Finland and three were based out of other Nordic countries. All the startups from outside of Finland were familiar with service design, while only some of the Finnish ones were. The results of the online survey were similar. All the three Danish startups answered that they were familiar with service design, while two out of three Swedish ones and seven out of fourteen Finnish ones were positive.

7.2 Service design methods & tools are already in use in some startups.

Based on the collected and coded data, it could be concluded that service design methods and tools are not yet widely spread. While some of the interviewees mentioned very specific ones, others didn't know what the methods and tools are.

There are certain tools that startups adopted easily - lean startup, co-creation, design thinking, business model canvas, and personas were familiar to most of the respondents.

"We have been using lean startup method, and there are certain design elements. It's a customer-driven method. Have you heard of co-creation? This co-creation is the concept we took in use, and merged with design thinking. Service blueprint - no. Personas I have done. Before starting with this startup, I participated in some workshops in Hub Helsinki, workshops on business model, business model canvas. I don't know if we used them (personas) at work nowadays in a formal way. I knew it from before." (Interview 1.)

"Personas, moodboards, focus groups. Observation we used, shadowing not." (Interview 2.)

"We are not using any today. At the beginning we engaged a designer to help us develop the application." (Interview 5.)

The top five techniques mentioned by online survey respondents were - prototyping (7), user research methods (5), sketching (4), personas (2), and design thinking (2). Other methods and tools were mentioned by one or two respondents each. Some of the respondents mentioned exact names of online software they used (instead of naming a method) – e.g. Invision was one of the applications for prototyping, Google Draw - for sketching.

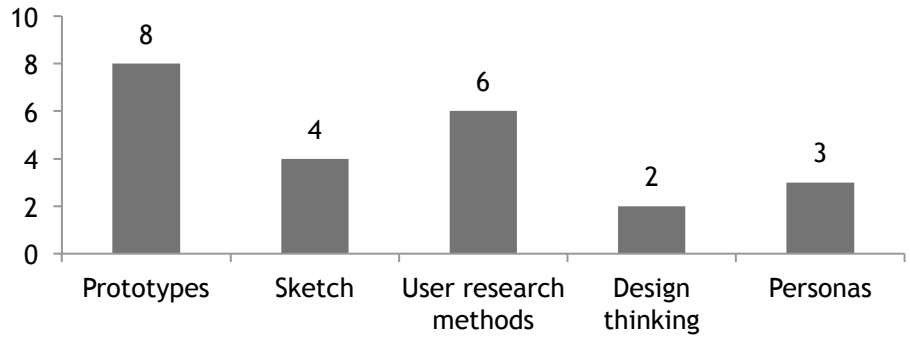

Figure 27. Top methods & tools mentioned by online survey respondents, Gianelli 2015

Both of the interviewed startups with more than €1.000.000 of external funding mentioned several service design methods and tools in use.

Both interviewees and online survey respondents that were familiar with service design methods and tools mentioned on average 5 methods each. This might illustrate that once a startup gets familiar with service design methods and tools, it takes at least several of them into use. Therefore, spreading the awareness of service design as a methodology as oppose of introducing separate tools could be considered important.

Based on the observations, several startups understood that good design was evidencing. Some startups demonstrated prototypes of new products and services around their office spaces, which serve as a way to communicate new ideas. These artifacts were good sings of a design-centric business. According to Omar (2014), “the habit of publicly displaying rough prototypes hints at an open-minded culture, one that values exploration and experimentation over rule following”. Most of the teams learn in the process of doing, iterating, and pivoting. Failure is accepted, and sometimes encourages.

7.3 Many startups have invited designers onto their teams

Based on the conducted interviews, it is easy to conclude that there are many designers in technology startups today. Surprisingly, six of the seven interviewees answered that they already had a designer in their team. At the same time, most of them were graphic designers. *"Yes, one (designer) is part of the team already. He hasn't been doing the work on a conceptual level, but executing based on our guidance. I have been concepting, and instructing him then." (Interview 1.)*

In addition, some of the interviewed startups used an external consultant or an agency. However, the experience of the startups from working with consultants or agencies varied a lot. When interviewees have had clear expectations and provided a good brief, they were typically satisfied with the results.

“Yes, we have used a couple of agencies. We used one for brand design. Our experience was not bad; that’s a British way to say it. They did a good work developing how brand should look like. Implementing that - they failed. That's why design shouldn't be outsourced. To make implementation easier, we need one (designer) onboard.” (Interview 1.)

"We have hired a consultancy of two guys, so can not call it an agency. Our experience was really good. We were clear in what we were looking for. They were hired exactly based on the skills we needed." (Interview 2.)

“Our experience with freelancers was really nice. I was first looking for a UI designer, and then he mentioned that we might need the interaction designer. Working with them was very nice. An interaction designer brought up very practical things on how to make the whole experience easier. I would really love to involve designers in the future.” (Interview 5.)

Similar results came up from the online survey - majority of the respondents (76%) answered that they had a designer in their team. Several startups had used an external agency or a freelancer. Only three responded that they didn’t have any designers involved. While having a designer onboard is typically good for a startup, the entrepreneurs or the management team can also introduce the service design approach.

Out of all the interviewed and surveyed startups, not a single one had an angel investor with design expertise. As design competence is especially needed at a very early stage of a service development, it could be beneficial for a startup to consider getting help from an experience angel investor or advisor with design background.

It was interesting to see that while 76% answered that they had a designer it their team, only 52% could name some service design methods and teams. This means that having a designer onboard is not enough to create awareness of service design methods and tools among the team. There might be multiple reasons for that: designers might not have necessary experience and skills, or they might not have enough authority or desire to promote service design.

While talking about service design, people often referred to a visual appearance of a product or service as oppose to methodology of designing with the service-dominant logic in mind to-

gether with customers. This might explain that some of the designers in interviewed startups didn't have any service design or user experience background.

"This person didn't have experience in UX from before. I think now my time is falling short, I truly believe we need someone thinking about the flow. Even if it's an email to customers, we need to design what to write etc. For me design is not visual part only, but communications is part of design. In total we are around ten (people) now. We are reaching to the point we need an experienced UX designer." (Interview 1.)

"I was first looking for a UI designer, and then he mentioned the interaction designer." (Interview 5.) The interviewed founder explained that he didn't realize the need for an interaction designer until his UI/graphic designer raised the issue.

There is a big misconception about the role of a designer. The need for branding, a visual facelift, UI, and communication material is easy to identify. The need for improved internal processes and better user experience is typically not that visible. At an early stage, many startups get junior designers onboard to fix a clear problem – e.g. to create a website, an application or certain communication materials. A junior designer is more affordable for a startup, but typically doesn't have a holistic view of a service.

In contrast, an experienced designer can help foster collaboration within the team, open up communication with customers, validate ideas, create new services, gain better understanding of the competition, differentiate the brand, and deliver better user experience. In other words, service design can have a significant impact on all of the key performance indicators of a company, including brand perception, customer engagement, satisfaction, and ultimately revenue. Therefore, it is important to utilize the skills of designers in all the key activities of a startup, and involve them in the decision-making process.

7.4 The role of design in fundraising process is not yet understood.

7.4.1 Can service design help you raise capital?

The connection between the use of service design and fundraising process is not yet well established. Some of the interviewed entrepreneurs responded that design might affect fundraising process; others didn't see any link. At the same time, several of the interviewed entrepreneurs mentioned that the use of service design methods and tools in the service development process helps them to advance in building the business faster. Therefore, it might have an indirect influence on the fundraising process.

“Depends on a company. If your product is more B2C - yes. Like if I'm starting a fashion business without having design sense, it will be difficult to raise money. But If I'm in data science, design is less important. I might be able to raise. Having design sense won't raise the probability. If it’s a tech company, you have to go to the substance when talking to investors.” (Interview 1.)

"We are not fundraising at the moment, because we've got customers. We didn’t want to dilute ourselves. So we invested in design to get these customers. But the investment in design paid back in terms of sales, a lot. We have even invested in designers to make slides for us, so that they would look really good and clear." (Interview 2.)

It’s difficult to find out how much value will be delivered through service design. It is also challenging to calculate the return on an investment in service design processes and tools. Entrepreneurs are likely not to get direct feedback from investors regarding the look and feel of their services. At the same time, internal processes aren’t visible to investors at all. Therefore, entrepreneurs might not be aware of the fact that design might affect their fundraising process.

It is worth mentioning that many startups focused on technology (or founded by individuals coming from an engineering background) see design as less important element comparing to technology itself. This could be argued. Today, unique technology is no longer enough to succeed. Investors do see technology as a differentiator; so do they see design.

Online survey brought up similar results. Only half of the respondents thought that design of their products or services affected their fundraising process. Assuming that most of the respondents were CEOs and founders directly involved in fundraising, the ratio isn’t that good. It would be interesting to conduct further research to understand the reasons for that.

7.4.2 Does it help to have a designer in a team when you are fundraising?

There is no clear correlation between the amount of external funding received and a presence of a designer in a team. The startup that received €600.000 seed funding didn’t have a full-time designer onboard, but used two external experts. The four startups with less than €500.000 in external funding had designers in their teams. The two startups with more than €1.500.000 also had designers.

At the same time, the profiles of designers onboard the interviewed startups were very different. At a startup, you need your first designer to be versatile and to have a diverse set of

skills, since she will be doing everything – from strategy to UX to branding. While an experienced designer might strongly influence the fundraising process, a junior designer might not be as important.

One of the interviewees pointed out that even if he had money to recruit a designer, he would have difficulties in finding an experienced designer available to join his startup. Experienced designers are hard to find and expensive to recruit.

Based on the analyzed data, one can conclude that startups recruit designers at different stages – some of the interviewed CEOs recruited a designer when their team was less than five people, others didn't have a single designer in a team of ten-fifteen.

"If I look at our startup, we need at least five full-time developers (to recruit a designer), so that makes eight to ten people all together. Right now we are three developers and one business developer. So when we are raising the next round and releasing the second version of the product, we can bring design into the company." (Interview 5.)

All the survey respondents who didn't have any designers in their teams answered that they have received less than €500.000 in external funding. Their teams were below ten people. All startups with more than €1.000.000 in external funding had a designer onboard. Their teams were above ten.

8 Conclusions

This study examines how service design can help a technology startup increase the chances to secure external funding, as securing external capital at the early-stage of development is one of the major challenges for technology startups. The aim of this research was to find a correlation between the use of service design methods and tools and the successful fundraising process. Moreover, it was important to understand if startups were aware of service design methods and tools, as they could be used to develop services in a more customer-centered way and to bridge the gap.

Based on the knowledge gap identified during the literature review, the exploratory research phase and the context of selected companies, the following questions have been formulated prior to conducting the research:

1. Are the startups familiar with service design, its methods and tools?
2. Is the application of service design methods and tools understood by entrepreneurs?
3. Are there any tools and methods of service design in use in the Nordic startups?
4. If so, which ones?
5. Have the startups been using professional design services?
6. Is there a relationship between service design and fundraising process?

To achieve the aim of the study and to find answers to the research questions, seven face-to-face interviews were conducted with first-time entrepreneurs in technology startups in Finland, Sweden and Denmark. The results of the conducted studies offer insights from different angles, providing a fair understanding of the challenges experiences by the Nordic technology startups. Due to the limitation of the gather data, the conclusions of the thesis are subject to generalization, and are influences by external factors and authors' background.

First of all, the results of the conducted study demonstrated that Nordic technology startups are only partially aware of service design methods and tools. Service design was perceived differently by all the interviewed entrepreneurs. Based on the data gathered during the research, today they fall into three categories: a) not familiar with service design; b) have some awareness of service design; and c) familiar with service design, and see it as an important methodology.

Majority of the interviewed founders represent the first two categories (with some entrepreneurs not familiar with service design at all). Therefore, there is a clear need to increase the awareness of service design methods and tools among technology startups in the Nordic countries, as they enable startups develop their products and services in a more effective way.

The second important finding is that every company uses service design differently. There are certain methods and tools that are familiar to and adopted by many interviewed entrepreneurs - lean startup, prototyping, sketching, personas, and business model canvas were among those. Many other tools are still not in use. At the same time, the application of service design methods and tools in a technology startup is strongly influenced by the previous experiences and background of the entrepreneurs.

Thirdly, the study reveals that many startups have invited designers onto their teams. At the same time, having a designer onboard is not enough to create awareness of service design methods and tools among the team. Neither does it necessarily make the startup's fundraising process more successful. Some designers might not have relevant background and skills to promote service design methodology; others might be excluded from the key activities of a startup. Therefore, to become more service design driven, startups have to ensure service designers are involved in all their key activities and in the decision-making process from the early days.

Furthermore, there is no strong correlation between using external design services and a successful fundraising process. The reason for that might be only partial involvement of external designers in the key development activities of a startup, which is not sufficient to promote service design methodology.

The research conducted for this thesis has proven that it is challenging to find a strong correlation between the use of service design methods and tools and the ability of the startup to secure external funding. There is no strong evidence that entrepreneurs familiar with service design are more successful in securing external funding.

Overall, it's difficult to conclude how much value can be delivered through service design. It is also challenging to calculate the return on investment in service design. The concrete benefits of using design are generally hard to measure, due to the unknown and qualitative nature of success factors (Weist, 2009). It is hard to draw the line between service design and other key activities of a startup, such as marketing, sales, and product development.

Moreover, entrepreneurs might not be aware of the fact that the use of service design might affect their fundraising process, as they typically don't get direct feedback from investors making negative investment decision. However, the more a startup utilizes the methods and tools of service design in their service development process, the faster it advances with building their business.

At the same time, the small sample of startups certainly affected the outcome of the research. In addition, some of the interview questions might have been formulated incorrectly. Therefore, it is recommended to continue the research with a higher number of technology startups.

Finally, the thesis work has resulted in a set of recommendations for seed-stage technology startups to better tackle the challenges they face at the early stage of their development using service design principles, methods and tools. The guidelines are provided based on the literature review, the analyzed data as well as the authors' industry experience.

To increase the awareness of service design among Nordic startups, the recommendations will be published in a series of blogposts and promoted by relevant organizations. Certainly, continuous improvement of the startup ecosystem is crucial for the development and competitiveness of the region.

8.1 Recommendations

Service design, its methods and tools could be of great help to seed- and early-stage technology startups searching for a product-market fit. Analysis of the findings of this study shows that service design practices can enable startups develop their solutions in a more effective way. Therefore, it is recommended to entrepreneurs to adopt the methods and tools of service design in their startups.

1. Service design should be used by all members of a startup team

Service design processes in startups have to be changed to reflect the differences between large corporations and young companies. While in big corporations it is relatively easy to get several designers to work together for a project, in startups there isn't necessarily a single one. Design processes should therefore be adjusted and simplified to include all non-design team members, including founders, engineers and business executives. Service design is a powerful approach that could be used by every member of a startup team to answer questions and make important business decisions.

2. Everyone should be involved in learning from customers

The team has to spend time with customers instead of executing based on the guidelines coming from within the organization. To develop relevant solutions customers are willing to pay for, it is extremely important to focus on listening and involving them in the development

process. Investing time and energy to learn early can help fix many problems prior to expensive launches. It is important to acquire in-depth understanding of customers' problems, which could be done by observing them in their natural context (as opposed to asking for feedback). Moreover, data about customer needs should be flowing through the whole team, including engineers, business people and founders/management. When the team doesn't know which problems to solve, little value is being created.

3. The use of service design tools should be encouraged

Early-stage technology startups are recommended to take multiple methods and tools of service design into use, as they might be helpful in building their businesses. Observing potential users in their own environments during service development could positively impact the development process. It is recommended to test the assumptions about user problems and needs in the context of real life as often as possible using prototypes and mockups. Prototypes are often time- and cost-efficient way to get feedback quickly. Overall, user participation in the development process should be encouraged.

4. Service designers should be involved in the decision-making process

As the study shows, it is not enough to hire a designer to become more design driven. Instead, startups have to ensure service designers are involved in all their key activities and in the decision-making process. It is strongly recommended to hire an experienced in-house service designer as early as possible, or invite one as a co-founder. If there is no opportunity to hire a full-time service designer at an early-stage when design competence is ultimately needed, startups could consider getting one onboard as an advisor or an angel investor.

5. Outsourcing service design at an early-stage could be dangerous

When designers work independently based on limited guidelines from the team, and are not involved in customer-facing activities, they create a lot less value. The utilization of their strategic skills is limited. At the same time, early-stage startups are recommended to keep long-term ownership of their service development and to know their users. Therefore, hiring an external service designer or an agency should be considered carefully.

6. Investors who understand the value of service design could be of great help

Entrepreneurs are recommended to do the background work and define the right type of funding for their startup prior to starting the fundraising process. When choosing the best investors, the factors to consider include the area of focus, the stage of development they in-

vest in, the competence they have in their team, and their reputation. Venture capital firms with service designers onboard will likely be able to support startups with building their products and services, as well as strengthening their design teams and design processes.

8.2 Suggestions for further research

Several suggestions for further research could be provided based on the present work. Firstly, further research is needed to examine the possibilities to measure how service design can improve the overall performance of a startup. Secondly, the research could be continued by gathering additional data from startups in the Nordics, as well as globally, in order to validate the recommendations of this study.

Thirdly, future research could further explore the venture capital industry in the age of design. The value of design is already understood by an increasing number of startups. Have venture capital firms recognized service design as a competitive advantage? Are there any service designers in their teams? How do they quantify the value of service design?

References

Aaron, M. 2011. Design, User Experience, and Usability. Theory, Methods, Tools and Practice. Part 1. Springer-Verlag, Berlin, Heidelberg.

Baldwin, C. & von Hippel, E. 2009. Modeling a Paradigm Shift: From Producer Innovation to User and Open Collaborative Innovation. MIT Sloan School of Management.

Bjornland, D.F., Boulard, F., Harle, N., Lehrer, Y., and Luisada, F. 2016 Digital Technologies Raise the Stakes in Customer Service. Boston Consulting Group.

Bitner, M., Ostrom, A. and Morgan, F. 2008. Service blueprinting: a practical technique for service innovation. California Management Review, 50(3), 66-94.

Blank, Steve 2013. Why the Lean Start-Up Changes Everything. Harvard Business Review, May 2013.

Blomkvist, J., Segelström, F. & Holmlid, S. 2014. Investigating Prototyping Practices of Service Design from a Service Logic Perspective. Linkoping University.

Brown, T. 2008. Design Thinking. Harward Business Review, June 2008.

Brown, T. 2009. Change by Design - How Design Thinking transforms organisations and inspires Innovation. New York: Harper Business.

Carver, L. 2011. Venture Capital Valuation: Case Studies and Methodology. John Wiley & Sons, Inc., Hoboken, New Jersey.

Cooper, R. G. & Edgett, S. J. 2005. Laen, Rapid, and Profitable New Product Development. Product Development Institute.

DeWalt, K. M., DeWalt, B. R., & Wayland, C. B. (1998). "Participant observation." In H. R. Bernard (Ed.), Handbook of methods in cultural anthropology. Walnut Creek, CA: AltaMira Press.

Eriksson, P. & Kovalainen, A. (2008). Qualitative Methods in Business Research. 1st Edition. London: Sage.

Furr, N. & Dyer, J. 2014. The Innovator's Method: Bringing the Lean Startup into Your Organization. Harvard Business Review Press.

Furr, N. & Dyer, J. 2014. Choose the Right Innovation Method at the Right Time. Harward Business Review, December 2014.

Gelobter, M. 2015. Lean Startups for Social Change: The Revolutionary Path to Big Impact. Berrett-Koehler Publishers, Inc.

Grönroos, C. (2006), "Adopting a service logic for marketing", Marketing Theory, Vol. 6 No. 3, pp. 317-333.

Grönroos, C. 2007. Service Management and Marketing: Customer Management in Service Competition. John Wiley & Sons, Ltd.

Grönroos, C. & Ravald, A. 2011."Service as business logic: implications for value creation and marketing", Journal of Service Management, Vol. 22 Iss: 1, pp.5-22.

Heinonen, K., Strandvik, T., and Mickelsson K-J. (2009). Rethinking Service Companies' Business Logic: Do We Need a Customer-Dominant Logic as a Guideline? Hanken School of Economics Working Papers.

Heinonen, K., Strandvik, T., Mickelsson, K-J, Edvardsson, B., Sundström, E. & Andersson P. (2010), "A customer dominant logic of service", Journal of Service Management, Vol. 21 No. 4, pp. 531-548.

Heimonen, T. 2013. Characteristics of Innovative, High-Growth and Highly Successful SMEs. Aalto University, Publication Series, Doctoral Dissertation 26/2013.

Holst, M., and A. Ståhlbröst. 2006. Enriching the Process of Appreciating Needs with Storytelling. International Journal of Technology, Knowledge and Society 2 (4): 61-68.

Kolko, J. 2015. Design Thinking Comes of Age. Harward Business Review, September 2015.

Kritikos, A. S. 2014. Entrepreneurs And Their Impact On Jobs And Economic Growth. IZA World of Labor.

Kumar, V. 2013. 101 Design Methods: A Structured Approach for Driving Innovation In Your Organization. New Jersey: John Wiley & Sons, Inc.

Mager, B. (2009). Service Design as an Emerging Field.

Mariampolski, H. 2006. Ethnography for Marketers – A Guide to Consumer Immersion. Sage Publications, Inc.

Mattelmäki, T. 2006. Design Probes. Publication series of University of Art and Design Helsinki. Vaajakoski: Gummerus Printing.

McKain, S. 2013. Collapse of Distinction. BusinessNews Publishing.

McDonald, S. 2005. Studying Actions in Context: A Qualitative Shawing Method for Organisational Research. Aberdeen: Aberdeen Business School, The Robert Gordon University.

Meroni, A. & Sangiorgi, D. 2011. Design for Services. Surrey: Ashgate Publishing Group.

Miettinen, S. & Koivisto, M. 2009. Designing Services with Innovative Methods: Perspectives on Service Design. Helsinki: University of Art and Design Helsinki.

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

Muratovski, G. 2015. Paradigm Shift: Report on the New Role of Design in Business and Society. Tongji University and Tongji University Press.

Nyman, H, Strandvik T, and Mickelsson K-J: Using service stories to trace the customer's logic, QUIS 2011, Ithaca, New York, USA, June 2-5, 2011.

Ojasalo, K. 2009. Designing Industrial Services – What is the Role of the Customer? The Business Review , Vol.14, Iss:1, pp. pp. 125-131.

Ojasalo, K. 2013. Service-Dominant Logic in business models: a workshop with Professor Vargo. Laurea.

Ojasalo, K., and Ojasalo, J. (2015), "Adapting business model thinking to service logic: an empirical study on developing a service design tool", in J. Gummerus, and K. von Koskull

(Eds.), The Nordic School – Alternative Perspectives On Marketing And Service Management, Hanken, Helsinki.

Omar, A. 2014. Service Design in Information Technology Startups: Unpacking Opportunities and Challenges Through Three Case Studies. Aalto University School of Arts, Design and Architecture.

Ostervalder, A. & Pignour Y. 2010. Business Model Generation. John Wiley & Sons, Inc.

Owen, T. & Fernandez, O. 2014. The Lean Enterprise: How Corporations Can Innovate Like Startups. John Wiley & Sons, Inc., Hoboken, New Jersey.

Payne, A.F., Storbacka, K. & Frow, P. 2008. "Managing the co-creation of value", Journal of the Academy of Marketing Science, Vol. 36 No. 1, pp.83-96.

Ravald, A. 2010. "The customer's process of value creation", Mercati e Competetitivita, Vol. 1 No. 1, pp.41-51 (special issue on the 2009 Naples Forum on Service).

Sangiorgi, D. 2011. Transformative Services and Transformation Design. International Journal of Design.

Sangiorgi, D., Prendiville, A., Jung, J. & Yu, E. 2015. Design for Service Innovation & Development Final Report.

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

Segelström, F. (2011). New Grounds, New Challenges? Exploring Stakeholder Research in Service Design. Nordic Design Research Conference, NorDes 2011. Helsinki, Finland.

Service Design with Theory (2012), edited by Satu Miettinen and Anu Valtonen, University of Lapland Press.

Sethi, A. 2016. From Science to Startups: The Inside Track of Technology Entrepreneurship. Springer International Publishing, Switzerland.

Silverman, D. 2006. Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction. London: SAGE Publications Ltd.

Silverman, D. 2011. Qualitative Research, Third Edition. London: Sage.

Silverman, R. M. & Petterson K. L. 2015. Qualitative Research Methods for Community Development. Routledge.

Steen, M., Manschot, M., & De Koning, N. (2011). Benefits of co-design in service design projects. International Journal of Design, 5(2), 53-60.

Stickdorn, M. & Schneider, J. 2011. This is Service Design Thinking: Basics - Tools – Cases. Amsterdam: BIS Publishers.

Storbacka, K. & Lehtinen, J. 2001. Customer Relationship Management: Creating Competitive Advantage Through Win-win Relationship Strategies, McGraw-Hill, Singapore.

Turk, L. 2014. Dear Startups, Don't Skip Design Thinking. Forbes, July 2014.

Vargo, S.L. & Lusch, R.F. (2004), "Evolving to a new dominant logic of marketing", Journal of Marketing, Vol. 68 No. 1, pp. 1-17.

Wright, K. B. 2005. Researching Internet-Based Populations: Advantages and Disadvantages of Online Survey Research, Online Questionnaite Authoring Software Packages, and Web Survey Services.

Zeithaml, V., Parasuraman, A. & Berry, L. 2009. Services Marketing - Integrating Customers Focus across the Firm. Singapore: McGraw Hill International Edition.

Electronic sources

Accel, https://theaccelblog.squarespace.com

AC4D Design Library, http://library.ac4d.com/

Blank Steve Blog, https://steveblank.com/2013/02/23/why-big-companies-cant-innovate/

CBInsights Blog, https://www.cbinsights.com/blog/

Creandum, http://www.creandum.com

Design Council, http://www.designcouncil.org.uk/designprocess

Designing with People, http://designingwithpeople.rca.ac.uk/methods

Engine Service Design, http://www.enginegroup.co.uk/service_design/our_process/

Fjord, https://www.fjordnet.com

Frog Design, http://www.frogdesign.com/services/process.html

Google Ventures, http://www.gv.com/sprint/

Graham Paul, http://www.paulgraham.com/

Index Ventures, https://indexventures.com

Inventure, http://www.inventure.fi

IDEO, http://www.ideo.com/

Kleiner Perkins Caufield Byers, http://www.kpcb.com

Northzone, http://northzone.com

Sequoia Capital, https://www.sequoiacap.com

Service Design Tools, http://www.servicedesigntools.org/

ServiceFellow, http://www.myservicefellow.com/

Smap.ly, http://www.smaply.com/

Spirit of Creation, http://www.spiritofcreation.com/

Startup Lessons Learned, blog by Eric Ries 2013, http://www.startuplessonslearned.com

The Lean Startup, http://theleanstartup.com/principles

Figures

Appendices

Appendix 1

Blogpost 1. Why Your Next Angel Investor Should Be A Designer.

When you bring an angel investor onboard, you want to make sure she is the right one. And it's not just about cash. Instead, you should pay attention to the value each individual can add to your company—industry experience, relevant network (to help you find partners, customers & investors), as well as tech, sales, marketing, design or other skills you might benefit from.

While the need for tech & sales expertise is typically well understood, the need for design expertise is still underrated.

Unique technology is no longer enough to succeed

Consumer expectations have changed—today, we demand seamless experiences from products and services we interact with. And businesses will have to adapt and reshape their offering. You think the situation is different if you sell to enterprises? Stop fooling yourself, it's not (or won't be in a couple of years).

Mobile as the first screen has already reshaped consumer experience. With other emerging platforms, our expectations will change even more. As we spend less time interacting with each service, simplicity of it often becomes the competitive advantage. Product development is shifting from technology itself towards designing experiences we get from interacting with technology. Today, more value is created by designers than ever before.

You can increase the value of your company through design

Many entrepreneurs underestimate the value of design in the process of building a business. When I'm talking about design, I'm not referring to a visual appearance of a product or a service. The role of a designer has evolved over the last years. A good designer understands the big picture of a service, has a cross-functional thinking and constantly pays hyper-attention to customer needs. Isn't it a perfect skill set for your angel investor?!

"Designers have traditionally been paid a lot of money to make what people want; meanwhile, most startups fail because they make things that people don't actually want," Enrique Allen, Co-founder of Designer Fund.

While every startup dreams of making a difference, many fail within a couple of years from starting their operations as they build services customers don't want to pay for. Service design can have a significant impact on all of the key performance indicators of a company, including brand perception, customer engagement, satisfaction, and ultimately revenue.
As an entrepreneur, you have already been a designer of business models and processes. However, you often lack the variety of design methods and tools to help you develop new services. Working together with your team, a good designer can help you foster collaboration within the team, open up communication with your customers, validate your ideas, create new services, gain better understanding of the competition, differentiate your brand, and deliver better user experience.

Typically, you can not afford hiring a full-time designer at a (pre)-seed stage, when design competence is ultimately needed. At the same time, design is too important to outsource. So why not getting a designer onboard as an advisor or an angel investor? Bringing design competence in addition to some cash could be a great way to boost your business.

Designers turned angel investors are the rare breed today.

It gets harder and harder for a startup to hire good designers. Many of them are better off freelancing or working for a top tech company than joining a design agency or a startup. The more experienced a designer is, the more options she has to choose from. Joining your startup as an angel investor might be an interesting opportunity for a designer to build something meaningful without commiting full-time (and with potential financial upside). While you as a founder will benefit from design expertise from the very early stage.

So how do you find one?

Today, most of the designers are not yet part of any business angel network, and don't see themselves as business angels (hopefully, that will soon change). They are neither easy to find, nor to impress. They chase something else than profit. If you want to get their commitment, you have to make them buy into your vision & your team.

- Start networking and spending time with people from your local design community. Attend design events & meetups. You will quickly find people who share the same values and are interested in solving similar problems.

- Check out different accelerators. Are there any mentors with design exper-

tise? These are the people who already work with early-stage startups. You might want to get in touch.

- Take a look at AngelList; there are some designers, who are investing (the list is sadly short today, but hopefully growing in the future).

- Talk to other entrepreneurs, who are ahead of you in their journey. Find out who has been helping them design their services.

- If an angel investor doesn't sound right, there are also seed VCs providing you hands-on design support—Proxy Ventures is a good example.

Finding the right designer to invest in your startup requires a lot of time, but you will quickly realize the gain is worth the effort when you see the increasing amount of happy customers.

Appendix 2

Blogpost 2. Venture Capital In The Age of Design: Is It Time for European VCs To Get Designers Onboard?

We live in the age of design. Many understand that design has become one of the biggest factors in venture-funded success stories. Companies that struggle with design are likely to have challenges attracting & retaining customers. According to the data from the Design Management Institute, design-driven startups have outperformed their peers by 228%. Many other studies prove that every $1 spent on design brings $2–100 in return.

Designers have already made their way into many corporations and a growing number of startups, but VCs haven't picked up on the trend yet. **While it seems natural that VCs should start adding designers to their investment teams, today's reality is very different.**

Certainly, some VCs have already recognized design as a competitive advantage. The last five years have seen an increasing number of US-based funds turning to design to guide their investments —Google Ventures, KPCB, Khosla Ventures, and True Ventures all added multiple designers to their teams (as explained in Marc Wilson's brilliant article on Co.Design). There are also first initiatives to encourage more designers to become entrepreneurs. For example, San Francisco-based Designer Fund, a community of angels and mentors, makes seed investments in design-led startups. However, the speed of change is still very slow.

European VCs are lagging behind their US peers with no design experience in their investment teams.

Late 2015, the team at TechStars Berlin published a great overview of 300+ European investors joining Seed, Series A or Series B rounds. These investors manage more than €15 billion of capital to be invested in European startups. Reviewing the backgrounds of their team members, one could easily notice there weren't any designers onboard. Which means no design competence in European VCs to help us lead €15 billion+ of investments. Quite alarming, isn't it?

Why aren't there more venture capital firms that turn to design to guide their investments? The resistance to design might be caused by the lack of urgency, the lack of the necessary skill, or a combination of the above. Design Partner is a fairly new position, established around 2010 (when Braden Kowitz was the first designer to join Google Ventures as Design Partner). It's not a surprise that only a few could adopt it during the past 5 years—due to the nature of the business, experiments in VCs aren't easy. Typically, one has to stick to the

same team for 10 years. While research proves that diverse teams are both more creative & more profitable, working with people one knows and understands is a lot more comfortable.

At the same time, the European VC landscape is changing. Increased competition is the best thing happening to Europe today, as many VCs are forced to differentiate. Along with many new funds come new approaches to investing. In addition to bankers, consultants and technologists come entrepreneurs, marketers and data scientists. Next, we could be seeing more designers.

Change can take many forms. There are already different accelerators, providing mentorship on design-related topics. There are seed VCs supporting startups with design—either as their core added value (e.g.London-based Proxy Ventures), or alongside other "services" (e.g.Helsinki-based Reaktor Ventures). Finally, there is the first Design Partner onboard a European VC—Ted Persson, co-founder of the digital agency Great Works, joined Stockholm-based EQT Ventures earlier this year. Soon, I'm expecting to see many more designers around.

The best designers could be truly spectacular, both for their investors and for the entrepreneurs with whom they partner. Despite there is still little data available to prove that a designer can improve a performance of a VC, I believe that using their skills in the area of venture capital is one of the best ways to bring smart money into the European tech ecosystem.