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Creation of Innovation Services for MuotoMyrsky

Master's Thesis
Leadership and Service Design

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CREATION OF INNOVATION SERVICES FOR MUOTOMYRSKY
This thesis explored how service design helps innovation productisation. Innovation workshops and hackathon models were used to find quick innovation ideas. In many cases, innovation ideas are not developed any further because of the lack of development processes. This thesis studied design thinking and service design processes. A set of service design tools were chosen, created and tested for product and service development innovation.

The thesis thus focused on how the service design way of working for innovation can be used as a service for companies and organisations that need more power for innovation productisation.

Document research, observation, conceptual interviews and prototyping were used to create an innovation service portfolio for the company MuotoMyrsky Oy.

This thesis gave an overview of design thinking and processes, ranging from the Archer model theories in the mid 20th century to design models created in the University of St. Gallen, which in turn use the University of Stanford model as a starting point. The observation and shadowing were conducted actively in different ways; by participating as a team member and instructor as well as observing the attendees of hackathon innovation events. The conceptual interviews revealed that innovation idea development usually fails or is incomplete due to lack of motivation, fear of time and effort or lack of trust. However, the budget could be available if there was enough motivation and spirit to drive the innovation ideas further.

In order to create the services for MuotoMyrsky, service and business design tools were designed by using a lean startup methodology. The tools helped develop customer insights and laid a basis for fluent service concepts for service design consulting. The customer insights helped understand that even though service design is better known as an abstract framework, there is still a shortage in the appreciation of the benefits of applying service design processes.

There is a great need to simplify service design product offerings and to give clear and tangible deliverables. Service design can accelerate innovation prototyping and productisation. Simpler stories need to be told to sell the clear concept for customers and thus deliver clear results for customer satisfaction and increase revenue expectations.

KEYWORDS: #innovation #servicedesign #workshops #productisation #businessdevelopment #designthinking
Innovaatiopalvelujen kehittäminen MuotoMyrsky Oy:lle

Tässä opinnäytetyössä tarkastellaan sitä miten palvelumuotoilun työkalut helpottavat innovaatioiden tuotteistamista. Ideointityöpajat ja hackathonit auttavat löytämään uusia ja nopeita ideoita. Monissa tapaamuksissa ideoiden työstäminen tuotteittain palveluiksi jää kesken, koska ei ole löydetty nopeaa tapaa testata aikaansaatuja ideoita tai käytössä ei ole nopeaa tuotekokeitusprosessia. Tässä työssä analysoidaan design thinking- ja palvelumuotoiluprosesseja, joita hyödynnetään valitsemaan ja luomaan palvelumuotoilutyökalusarja innovaatioiden tuotteistamiseen ja testaamiseen. Työssä keskitytään ymmärtämään miten palvelumuotoilun keinoissa voidaan suunnitella innovaatiopalvelu osaksi MuotoMyrsky Oy:n palvelutarjontaa.

Dokumenttianalyysi, varjostaminen, havainnointi, haastattelut ja prototyöntehdyt sekä löydöt sekä tulokset ovat pohjana innovaatiopalvelu MuotoMyrsky Oy:lle. Opinnäytetyö luo katsauksen design thinkingin historiaan ja prosesseihin: 1900-luvun puolivälistä olevasta Archerin mallista St. Gallenin yliopistossa kehitettyyn design malliin, jonka pohjana käytetään Stanfordin yliopiston teoreettistä kehystä. Havainnointi ja varjostus tehtiin aktiivisesti osallistumalla innovaatio-

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Innovaatiopalvelujen kehittäminen MuotoMyrsky Oy:lle

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AIVAISANAT #innovaatio #palvelumuotoilu #työpajat #tuotteistaminen #businesskehittäminen #designthinking
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1 INTRODUCTION

Entrepreneurial ecosystems are essential platforms for producing new services and products with far-fetching innovation and design thinking. While global entrepreneur ecosystems differ from each other, they still rely on eight requisite pillars (Fig. 1.). These pillars are accessible markets, human capital and workforce, funding and finance, support systems and mentors, government and regulatory framework, education and training, major universities as catalyst, and cultural support. (Entrepreneurial ecosystems around the globe and early-stage company growth dynamics 2014, 6). Larger companies use start-up companies as catalysts for their own business development and scaling. They follow early stage companies through their own accelerator programs and funding support. (Entrepreneurial ecosystems around the globe and early-stage company growth dynamics 2014, 56.)

These eight pillars are the basis for new innovative products and services and how the team is supported to get the service or product on the market. Innovation ideas are often collected and accelerated through challenge competitions and hackathons.

The idea of a hackathon is based on the hackfest or code night which was invented in the software developing culture. In a hackathon, it is typical that a given problem or challenge is solved or ‘hacked’ intensively over a short period of time, for example one day or one week, by a group of developers collaborating together. These events are encouraging for experimentation, creativity, and prototyping. Since the early age of hackathons, the events have been organised in different industries to create a good pool of new innovations. The ideas are tested and judged and there may even be funding available for the first minimum viable products. (Briscoe 2014, 4).

The roots of hackathons can even be traced to the early days of the Hardbrew Computer Club in 1975. Several innovation ideas have been turned into real businesses through hackathons since the late 1990s when they started becoming
Figure 1. Eight pillars of an entrepreneurial ecosystem (Entrepreneurial ecosystems around the globe and early-stage company growth dynamics. 2014).
more common. The best known businesses that are based on hackathons thus far are Facebook and Yahoo (Söhne 2015, 8). However, the attitude and culture to invest in and develop innovations are different in the US and in Europe. Where investors and business angels in America see earlier failure as a sign of experience and forward thinking, in Europe failures are a sign of weakness (Söhne 2015, 28).

The future of hackathons is recognized both on the national and EU levels. For instance, in 2016, an EU-wide hackathon challenge handled visualization of copyright evidence on the data sources available at the Copyright Evidence Wiki. (6th edition of the EU hackathon: Visualizing copyright evidence|EU hackathon, 2016).

Though hackathons and innovation challenges have proved to be good tools for creating new innovations in a short time period, the subsequent development processes for idea productization are entirely missing or unclear. The aim of this thesis was to create a service design product offering to be used throughout the innovation process from idea to productisation. The emphasis were on the innovation productization and rapid prototyping to evaluate the innovation business model. This thesis had two main targets. The first target was to study and observe the innovation challenge workshops and understand the dynamics of idea creation in the short and long term. The second focus was to create, use and test service design tools which can be used in different innovation development processes.

This thesis was created as a tool and process to develop the innovation process to be launched as service products for the author’s company MuotoMyrsky Oy, (FormStorm Ltd. in English). The company was founded in autumn 2016. Throughout the thesis, the focus was to study which of the service designs canvases helps create a toolkit for innovation workshops. The focus was on finding service design tools that can be used in the innovation productisation process and understanding if the hackathon process could be part of the service portfolio of MuotoMyrsky.
The design philosophy, methodology and processes are studied theoretically. The research section concentrates on understanding the quick innovation processes by participation and observation of hackathons and innovation workshops. The conceptual interviews give insight into the innovation challenges, and therefore, experts on innovation processes are interviewed.

The mid-review after the research gives direction for how to continue with the development of innovation services for MuotoMyrsky. Following this, the creation and design section focuses on developing the company’s culture, values, stories, design and services by selected service design tools. These tools help create a bigger picture of business development.

The aspiration of the thesis is based on the book Creating a brand identity, a guide for designers by Catherine Slade-Brooking. It elegantly and effectively summons the essence of creating a brand.
2 RESEARCH FRAMEWORK AND PLAN

The objective of this thesis is to create a service design toolkit for innovation productisation. The aspiration is to create a service product offering for the author’s company MuotoMyrsky Oy, which helps companies to create quick innovation prototyping and productisation validation in a cost-effective way.

This thesis is based on empirical research by observation and shadowing, conceptual interviews, and discussions with the different professionals in MuotoMyrsky's partner network. Contextual interviews are made by interviewing different stakeholders: city developers, employees of a governmental economic development company, innovation experts and potential customers.

Service design tools are chosen, created and tested during the process. Prototyping will be completed by creating different toolsets and testing them in the actual innovation service process.

Currently, many new innovations, after innovation challenge workshops, are not used due to lack of money and human resources. The services created alongside this product will help these companies enhance their willingness and understanding to invest in new innovative products. The frame of reference shows the key players and tools of innovation. There are different players offering hackathons and innovation workshops: companies, universities and other organizations. Design thinking, design processes and service design tools are essential methods of research and results.

On the other hand, it is important to understand the segmentation of potential customers, i.e. the companies who need and gain value from innovation productisation services. Innovation processes are typically quite solid in bigger companies, when there is enough time, resources, and money. The focus is on making small and medium size enterprise (SME) companies interested in increasing their investments in innovation. (Fig. 2.).
Figure 2. Framework of innovation services.
2.1 RESEARCH QUESTIONS AND FOCUS GROUPS

The research questions focus on how service design tools can accelerate ideas to concrete services or product innovations:

1. How does the hackathon process help and improve the innovation process?
2. How can MuotoMyrsky as a company and its services be developed by using service design tools?

The progress of this thesis follows the service design process and the start-up company process. These steps follow the design process “Discover - Create - Prototype - Implement”. (Fig. 3.).

The first process step “discover” discovers how hackathons and innovations camps work. This will be conducted by participating in hackathons and innovation workshops as a participant and a coach, shadowing and observing the other participants and processes and testing service design tools in the hackathons. In this step, service design tools are used to determinate the stakeholders and understand the customer groups. This step focuses on emphasizing customer insight and needs.

The following step of the process “create” concentrates on creating the first ideas and value creation for the customer with the help of brainstorming and interviews with the stakeholders. In this phase it is also important to create a customer journey and customer personas. The results of this stage are different from service concept proposals. The “create” process is followed by the “design” process step, which give the look and feel to the service offering and targeted it to the right customer segments.

“Prototyping” adapts service concepts to real ideas and paper prototypes. These service concepts are tested with a business model canvas to understand the monetisation of the process.
In the last step, the process is implemented as a service or services which are easy to customize based on the customer needs. The “implementation” phase is shown as a vision and steps in the future.

The intention and aim is to develop a service design productisation service and a focused customer group with service design tools for the author’s company MuotoMyrsky.

Figure 3. Framework of innovation services.
3 MUOTOMYRSKY

MuotoMyrsky Ltd. offers service design consulting for companies and organizations. The company was founded in autumn 2016. MuotoMyrsky’s creation and business plan uses the lean startup methodology. Earlier the service offering was not based on focused customer groups. The customer base varies from public organizations to SME companies.

The projects have varied from user experience (UX) design for mobile and web applications to facilitating workshops for service design trainings.

An example of using service design in user experience design is a mobile fan application for a football club. An example of facilitating a service design workshop is a series of workshops made for the city of Salo which intended to gather the entire personnel of the employment services to work together for the city. Another example of service design trainings was a session for microentrepreneurs as part of the public organization research for microentrepreneurs.
4 HACKATHON AND CHALLENGE COMPETITIONS

The history of challenge competitions dates back to the hackathons that were invented to solve or ‘hack’ a problem in computer programming. The event was a contest to pitch a program, and present prototypes of digital innovation that were created by multidisciplinary teams. Subsequently, the activity or form of event spread and expanded in different business areas. This method can be used to accelerate innovation processes across different types of organizations from business, educational, public or governmental innovation process. (Briscoe 2014, 4—5.)

According to Tauberer, the hackathon can be used in different areas with or without any technical challenges. In fact, hackathons are used for almost anything: innovation collection, acceleration of the ideas, finding new business areas, learning and training tools or strengthen the community. Even though a hackathon is a competition, the fun element and positive attitude creates an innovative and enthusiastic atmosphere. (Tauberer 2017.)

A hackathon has a certain format and structure that can be facilitated in different ways. Hackathon challenges can be kept a secret, but the results will be better if the challenges and aims are framed in advance with marketing communication. A typical duration for a hackathon is 24 hours, but it can last from a few hours to several weeks (Fig. 4.). The format begins with a presentation introducing the challenges and giving the timetable for the event. It is a good practice to clarify ownership to the rights for the new ideas. Challenges can also be presented by the owners or sponsors.

There are two ways of creating teams; either they are asked to enroll as a team or participants form teams at the beginning of the event based on individual interest and skills. The teams then go on to invent solutions for the challenges. An external specialist can be involved and invited to coach the teams. It is recommended to give some innovation tools and guidelines to help the teams with the task. A hackathon ends with presentations by the teams. A hackathon presentation can also be instructed to have a particular format and duration. The judges or evaluators can be specialists of the topic or peers
and colleagues. The winners can be given a cash prize or an opportunity for future development. However, hackathons can simply be a learning experience without any prizes. (Briscoe 2014, 4.)

Briscoe divides hackathons into two categories: tech-centric and focus-centric. (Briscoe 2014, 5). The given subcategories are defined, but the number of fields have multiplied since the report was published.

The hackathon idea is widely used in different industries, businesses, universities, and schools. However, document research does not currently provide any deep analysis of the business impact of hackathons, even though it often mentions how much impact it really has.

Briscoe’s report refers to a survey that was conducted among 150 hackathon participants in 2012. The survey questions focus on the participants’ knowledge of hackathons, their gender, and motivation for attending them. The results showed that 70% of the participants were familiar with the concept and format and the rest of the participants were newcomers. The top motivations for participating in a hackathon were learning and networking. (Briscoe 2014, 8.)

Grijpink, Lau and Vara point out that hackathons are seen as a value-added way to accelerate innovation, particularly in digital transformation. It is suggested as a new way of working to meet quicker cycle times and better customer-friendly approach. (Grijpink, Lau & Vara 2015.)
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<tr>
<th>Time</th>
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<th>DAY TWO</th>
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<tr>
<td>08:00</td>
<td>Opening and intro challenges</td>
<td>Breakfast</td>
</tr>
<tr>
<td>10:00</td>
<td>Diving into the teams</td>
<td>Pitching the ideas</td>
</tr>
<tr>
<td>12:00</td>
<td>Working</td>
<td>Finalizing the presentations</td>
</tr>
<tr>
<td>15:00</td>
<td>Keynote speaker</td>
<td>Prize ceremony</td>
</tr>
<tr>
<td>21:00</td>
<td>Pizzas and cokes</td>
<td>Working, evening program</td>
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*Figure 4. Example of hackathon schedule.*
5 DESIGN THINKING AND SERVICE DESIGN

Design thinking focuses on placing a person, a client or a user, in the centre. The goal is to ensure that the created service touchpoints for users are meaningful, efficient, usable, and desirable. On the other hand, the service provider needs to have fluent and efficient processes that help ensure their business are usable and desirable. (Miettinen & Koivisto 2009, 15.)

Service design has been recognised as its own discipline since the late 1990s. Recently, it has received more attention but still its value is not fully appreciated by all business areas. Service design is a way to deal with a customer, a business, and organisational challenges by engaging customers in co-creation (Reason, Flu & Løvlie 2015, vii). The increasing importance of customer expectations has caused a change from product-focused engineering towards service-focused experience. To meet customer expectations and differentiate from other services providers, the user experience needs to be better (Reason, Flu & Løvlie 2015, 3). Products can be enhanced with better service experience or they could be entirely replaced by a service.

Service design for innovation can be especially beneficial for start-up companies and mid-sized enterprises which are able to move fast to testing and prototyping and evaluate the innovation for business case, (Reason, Flu & Løvlie 2015, ix).

5.1 DESIGN THINKING

Design thinking can be separated into three different paths: as a mindset, the nature and origins of design thinking; as a design thinking process, how the design process can be set as a combination of innovations for macro and micro processes; and as a design thinking toolbox, focusing on various methods and techniques. (Brenner & Uebernickel 2016, 3.)
Brenner and Uebernickel summarise design thinking into one sentence; Innovation is made by humans for humans. The simplicity of this sentence can both be applied as a guiding rule to define design thinking and as a process and toolkit. (Brenner & Uebernickel 2016, 3.)

The basis of design thinking is a holistic approach and reframing the challenge; a comprehensive perspective of the problem behind the problem. Luchs, Griffin and Swan approach the problem from the ‘fuzzy front end’ (FFE) (Fig. 5.). The puzzle of FFE is to be studied with design professionals. The FFE-challenge investigated by design professionals, with the help of design tools, will lead to valued added innovative solutions. To find a way of dealing with the innovation process with involvement of different stakeholders, design thinking approach will give contextual guidelines. (Luchs, Griffin & Swan 2015, 41w—41y.)

The innovation process itself is the result of innovation. Idea hackathons and open innovation are examples of the need to accelerate processes. Passionate and brave individuals and teams, alongside the agile working model and quality are recognised as a model for success. Combining creativity and business might be challenging, as creativity is seen as a free spirit without any economic objective. (Andresson & Kaivo-oja 2012, 177). Design thinking and service design tools introduce the mixture of creativity and business thinking to find user-oriented innovative solutions.

Design thinking and creativity are most valued in companies, organizations and teams that allow the possibility of thinking differently, modern flexibility and open innovation culture. Product and material-oriented culture is shifting towards a culture focused on services and the immaterial, as ideas are developed into innovations and further on to human commodities.
Figure 5. Fuzzy front end with design professionals’ practices and design professionals’ tools. (Luch, Griffin & Swan 2015, 41y).
According to Howkins, a creative economy is based on the following ground rules and preconditions.

1. **Renew yourself and be unique**
2. **Own your ideas, define yourself and understand the immaterial rights**
3. **Live like a nomad**
4. **Live both in real and virtual life**
5. **Behave equitably and with good will**
6. **Recognize when to work alone and when the team is needed to realize the ideas**
7. **Learn endlessly, credit with style, renew the things and recycle the ideas.**
   - Learn to win with failure. When needed be persistent
8. **Make use of your fame, the celebrity and publicity. Value other in success**
9. **Have fun but keep the ambition high**
10. **Recognize the critical moment of breaking the common rules**

(Howkins 2007.)
5.2 SERVICE DESIGN

Service design combines different tools from various disciplines. This has led to a working definition of service design, but there is no stable, single or common definition for service design as the field is expanding. (Stickdorn & Schneider 2011, 29.)

Service design focuses on creating value both for users and customers. The secondary main perspectives are the interaction processes, co-creation and holistic approach. With these principles, companies will be able to create services together with users. (Miettinen & Koivisto 2009, 11).

Service designers’ tasks are to visualise, qualify and create design scenario solutions for future service challenges. Service design methods can help with identifying and specifying service innovation and with refining existing services (Miettinen & Koivisto, 2009 15). In the beginning of the service design process it is necessary to understand and explore the challenge in order to create a service framework that is as simple and tangible as possible (Miettinen & Koivisto 2009, 35).

Different service design experts and specialists divide service design thinking and processes into smaller segments slightly differently. Based on Mager’s definition, Miettinen and Koivisto break service design down into ten different principles (Fig. 6.). These principles can be used as guidelines to pilot different service design systems and to crystalise the key interactions and relationships.

1. Look at your service as a product
2. Focus on the customer benefits
3. Dive into the customers’ world
4. See the big picture
5. Design an experience
6. Create perceivable evidence
7. Go for a standing ovation
8. Define flexible standards
9. A living product
10. Be enthusiastic
Good design is connected to a good strategy. This is true just as much as for the products. If service design is to be used in a substantial, in a non-decorative manner it has to be connected to business strategies. It is about fundamental questions of positioning and portfolio management.

Rethinking the organisation might be part of the service design process in order to create structures and processes that are focused on the delivery of benefit to a customer. It is a radical change of perspective: moving from frontstage to backstage is revolutionary for many service providers even though it seems so natural.

Often knowledge about the customer is very much rooted in the past and frozen in Excel sheets and diagrams. Service design explores in depth and vividly the world of emotion and experiences, it reads observation and probes, and helps people to envision and describe more about their own desires.

Service design experience might start long before the customer gets in contact with a provider, and the experience does not end with the “Goodbye”. Services are embedded in larger systems of relationships and interactions, and they need to take into consideration the changes users go through throughout the duration of the relationship.

The choreography of experience or at least of conditions that enable certain experiences is a major challenge in service design processes. Use techniques that have their roots in performing arts: learn from experience and interaction design in order to “design time”.

Making the invisible visible and the not yet existing perceivable is a contribution of service design. The invisible service needs to be transformed into perceivable evidence along the touchpoints of the service experience.

In many service encounters success depends on people. The service performance needs to be supported by a designed setting that serves the needs of the “actors”. This might require a fundamental reflection upon the recruiting, development, empowerment and appraisal of people.

A 100% standardisation as we often find it in production sites is not applicable to services: the right balance of standardisation and flexibility need to be defined, considering the type of service that is being designed.

Service needs to be designed for learning and development, an open membrane towards customers, employees and environment needs to be part of the service system.

The corporate culture has a major impact on the quality of the delivered service. An attentive observation of the existing culture and a support of cultural change is thus part of the design process.

Figure 6. Service design principles (Miettinen & Koivisto 2009; Mager 2006).
These principles provide the fundamentals for creating a new service but can still be adapted for organisational behaviour and learning how to create the best customer experience in an existing service. (Miettinen & Koivisto 2009, 35-37.) (Mager 2006, 62—64.)

Stickdorn and Schneider emphasise a dynamic approach to service design and express service design thinking in 5 principles: user-centric, co-creative, sequencing, evidencing and holistic. It is important in service design to put the user in focus (Fig. 7.). A service cannot function if the user and the service are not speaking the same language. Stakeholders in the process will provide valuable insight that might not have been recognised earlier. When different stakeholders co-create together, they will learn from each other and the interaction will bring about a coherent understanding of the services. By editing services in different sequences, it is easier to understand how different sequences can be influenced and designed. Though the service might be very unnoticed in the background, the physical or digital evidence makes it more perceivable. It can be an opportunity to create better customer and user loyalty. Thus, it will explain more background processes to the customer and help them navigate through the touchpoints that cannot be designed fluently or are still a work in progress. At least the bigger picture needs to be considered; a holistic approach gives flexibility to alter the customer’s journey.

Service design leads to a point where the service is developed with different unities cooperating to create the best customer experience, employee satisfaction and use of technology. (Stickdorn & Schneider 2011, 34—45.)

Reason, Flu and Løvelie divide the process of service design for business into three fundamentals: movement, structure, and behaviour (Fig. 8.). “Movement” represents the customer movement during the service journey and how to qualify the importance of the services. It can express the service experience, journey, user stories and processes that can be read horizontally from left to right. “Structure” represents service touchpoints and channels which are influenced by experience, engagement, organization or performance of the service. “Behaviour” will give customer insight into how different users and customers use the service interactions. Behaviour also includes actions of the backstage service performance factors, such as workforce instructions and technology requirements and algorithms. (Reason, Flu & Løvlie 2015, 15—17).
Figure 7. Five principles of service design thinking (Stickdorn & Schneider 2011, 34).

1. USER-CENTRIC
   Services should be experienced through the customer’s eyes.

2. CO-CREATIVE
   All stakeholders should be included in the service design process.

3. SEQUENCING
   Intangible services should be visualised in terms of physical artefacts.

4. EVIDENCING
   The service should be visualized as a sequence of interrelated actions.

5. HOLISTIC
   The entire environment of the service should be considered.
Figure 8. Three principles of the process of the service design for business. (Reason, Flu & Løvlie 2015, 15—17).
5.3 DESIGN PROCESS

The history of design process research and definition dates back to the Bauhaus school in the early 20th century. The attitude of design was to be changed from the idea of handicraft into a part of industrial business. The Bauhaus theory and process had a great impact on the product development of companies and created successful business stories. (Papanek 1997, 30—31.)

A Design Council report from 2017 refers to Bruce Archer as one of the pioneers in creating a practical model for design process (Fig. 9.). His design process model was published in 1963 as part of a series of articles for Design magazine (Eleven Lessons of Desk Research Report 2007, 5.)

![Diagram of design process](image_url)

*Figure 9. Model of design process according to Bruce Archer (Bruce Archer, 1963).*
The Design Council is a Royal Charter charity founded in 1944 to work in the public interest. It has defined the design process as a ‘double diamond’ process (Fig. 10.). The Double Diamond model illustrates the creative model of the ways of working with a problem and with a solution. The design process is typically seen as a nonlinear and fuzzy chaotic process, as the customer needs might vary and the market is constantly changing. (Design Council 2007, 4.)

The double diamond diagram was developed by the Design Council in 2005 by studying ways of working in in-house design studios of larger companies. The double diamond process is divided into four phases - Discover, Define, Develop and Deliver. The “discover” phase will explore the challenge and decode the problem with a wider sphere. The “define” phase will take all the insights, and reduce and refine the design challenge. The “develop” step will open the range of solutions and designs to innovate the challenge output. Finally, the “deliver” stage further limits the possible solutions to be delivered the best innovative result. (Design Council The Design Process: What is Double Diamond? 2015.)

The tools in each double diamond design process model can be defined according to the innovation project or design process. Design processes might be hard to standardise by similar processes as the problems might be of different sizes and shapes. The project size or topic defines the number of design tools and what kind of methods need to be used. (Design Council 2007.)

Furthermore, the Design Council's 2015 report introduces the Technopolis model for commercializing science and technology. This model utilises the double diamond model for invention and innovation, and starts from establishing functional technology, moves on to agreeing the application and results in a user-friendly prototype (Fig. 11.).
Figure 10. Double diamond process. (Design Council, 2005).
Figure 11. Double diamond for commercialisation of science and technology. (Design Council, 2015).
The Stanford Design Innovation Process is a loop of iterations of defining the problem, needfinding, benchmarking, brainstorming, prototyping, and testing (Fig. 12) (Stanford Design Innovation Process, 2010).

Building on the Stanford design innovation process, more detailed and defined design thinking micro and macro processes have been developed by the design experts at the University of St. Gallen (Fig. 13.). The design process is seen as an endless loop that redefines the problem after every loop. The first step “define the problem” expresses the design challenge brief and can also be expressed in the form of questions. The customer and user needs are to be found and re-lived in the second phase “needfinding & synthesis”. It reveals that user needs can be both observable and hidden. In this phase it is necessary to dive into the topic with contextual interviews, literature, and user interviews. The “ideate” step will create and

![Diagram](Figure 12. Stanford design Innovation process (Stanford Design Innovation Process 2010).)
brainstorm the solutions and design ideas with user insights and substance knowledge of the topic. The “prototype” means an early stage low-cost paper prototype that is tested with early stage customers or beta users. The prototype resolution can be better and closer to the production phase in each iteration round. The “test” phase will give more information for design detailing and starts the next round of the design loop. (Brenner & Uebernickel 2016, 10—11.)

The design thinking macroprocesses are based on prototype functionality including the microprocess of each phase. When prototyping, resolution starts from the “Design Space Exploration” in the diverging space. The maturity of the prototype changes in the “Funky Prototype” stage and enters the converging space. Each seven prototype phases have their own purpose and, if the prototype fails, it is important to refine the problem in order to improve the design functions.

1. **Design Space Exploration** — finding common ground and testing customer reactions.
2. **Critical Function Prototype** — finding the first critical functions and revealing new micro problem areas.
3. **Dark Horse Prototype** — will be created from scratch even though the critical functional prototype already exists. It helps find a different solution.
4. **Funky Prototype** — closes the divergent phase and can bring forward all the best ideas developed in the prototypes so far.
5. **Functional Prototype** — needs to set the requirements and boundaries to choose the solution ideas for the final prototype.
6. **X-is-finished-Prototype** — tests functionality and leads to discarding unrealistic components or postponing them to the later release.
7. **Final Prototype** — needs to be good enough to impress users and decision makers. It can be used for early stage product testing and pre-marketing the product.
Figure 13. The design thinking macroprocess. (Brenner & Uebernickel 2016).
5.4 DESIGN MANAGEMENT

Design management and branding are tools to make a company's image appear in all products and services. It sets the base of awareness and recognition of the company. In addition to identifying the product and services, the brand is also tied with the company's values and business strategy. Design management and branding create customer expectations, positioning and quality. (Slade-Brooking 2016, 14.)

Wheeler and Millman divide branding in three functions that assist customers; navigate to make the right choices, reassure the quality of the product and services and engage the customer with identifying the brand. The brand identity needs to be tangible, attractive and appealing to all senses. Brand design management is strategy, planning and implementation of a company's shared values and core purpose, engaging the employees, leadership strategy and products and services that delight the customer. (Wheeler, Millman 2017, 6—8.)

Brand design distinguishes companies offering the same kind of services and products. A brand demonstrates and embraces the company's competitive advantage within similar service and product categories. (Slade-Brooking 2016, 15; Wheeler, Millman 2017, 8).

Branding is part of marketing, advertising and everything else to do with how the company performs its services. It is an act of creating design elements and attributes to demonstrate the company and support the customer journey (Fig. 14.). It includes people, processes and tools. (Slade-Brooking 2016, 15; Wheeler, Millman 2017, 8—9).
Figure 14. Brand touchpoints (Wheeler, Millman 2017).

Brand touchpoints
Each touchpoint is an opportunity to increase awareness and build customer loyalty.
5.5 LEAN METHODOLOGY

Lean is about understanding the unused time or waste in processes and production and using resources efficiently (Maurya 2012, 9). According to Frendendalla and Thürer the lean methodology can indicate two concepts, lean operation and work design. The lean operation in production achieves operational excellence by minimizing operational costs, inventory, capacity and lead time buffer. This system gains a throughput at minimum production cost. The lean work design concept is a thoughtful consideration of all activities needed for providing a service or product. The actions are designed to provide fluent interaction between the involved processes. (Fredendall & Thürer 2015, 1—2).

Customers’ wants and needs must be identified in order to recognise the unique value of how the product or services are provided. The products and services demand to meet the customers expectation to be designed a quick and follow the resilient workflow. There are five questions that help determine the customer wants:

- What is our business?
- Who is the customer?
- Where is the customer?
- What does the customer buy?
- What is the value for the customer?
(Fredendall & Thürer 2015, 11—12).

The lean technique uses process diagrams to identify the workflow and understand the process boundaries. One of the analysing methods is SIPOC (Supplier of Input for Processes for Output to Customers) (Fig. 15.). Based on the SIPOC analysis the work can be shown as process flow chart (Fig. 16.). The process flow chart does not focus on the location of the activities,
Figure 15. Lean SIPOC analysis example (Fredendall & Thürer 2015).

**SIPOC analysis of Ice Cream Shop**

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Inputs</th>
<th>Process</th>
<th>Outputs</th>
<th>Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ice supply Co</td>
<td>Ice-cream cones</td>
<td>1. Unload cones from truck&lt;br&gt;2. Put cones in store room.&lt;br&gt;3. As needed, move cones to stocking point at center.&lt;br&gt;4. Fill cone requested by customer with requested ice cream.</td>
<td>Filled ice cream cone that meets retail customer’ expectations.</td>
<td>Individuals request the best flavours in the world.</td>
</tr>
</tbody>
</table>

Figure 16. Lean work design.(Fredendall & Thürer 2015).
but instead focuses on sequencing the activities. Testing the process flowchart in a real service, in lean terms ‘gemba’, can reveal delays and complexity and shows the wasted time or motion during the service period (Fig. 17). Gemba is Japanese for workplace. Based on a real service, the actions can be timed and measured. (Fig. 18.). (Fredendall & Thürer 2015, 28—33).

Lean startup is a trademarked term by Eric Ries and the process is based on Customer development by Steve Blank (1990), Agile Software Development techniques created by 17 software developers in 2001 and lean practices initially developed at Toyota manufacturing centre in the 1980s. The lean startup methodology aims to understand how to build a company
Figure 18. Two stage process example with the time management (Fredendall & Thürer 2015).

Figure 19. Maximizing for speed, learning, and focus (Maurya 2012).
with a successful product and plan. It is rather a systematic process than trusting on intuition and luck. The idea is to find a plan that works before running out of resources. (Maurya 2012, xxi—xxii.)

The speed in the process for finding the right business plan is essential. The lean startup methodology advises how to use the resources, learn from the customers and focus on the right things (Fig. 19.). Using the available resources wisely and in the right balance will maximize the product or service validation (Maurya 2012, 59—61.)

The lean startup principles are not only based on lean but they also use the framework of innovation methodologies such as design thinking and discovery-driven planning. Lean startup processes are looking for disruptive possibilities in businesses by studying customer problems with interactive, customer-centric and data informed approaches. This is completed by using quick approaches and selecting only the tools that really add value to the process and it helps setup a scalable business quickly. (Cooper, Vlaskovits & Ries 2016, 18—19.)
6 RESEARCH AND RESULTS

In this chapter the research methods, benchmarking, shadowing, observation and conceptual interviews are introduced and presented. The results and observation of each research is summarized.

6.1 BENCHMARKING AND COMPETITOR ANALYSIS

Benchmarking is a tool that gives the basic understanding to compare similar products or services. It can also give an insight into the customer experience. Additionally, benchmarking can include a concept of similar services in other businesses. This can help find new ideas and collect and identify best practice. (Curadale 2013, 49.)

It is essential for a company to understand that it is not alone in the market, but that its products and services also relate to those of the competitors. Benchmarking of competitors gives an understanding of the size of the market (Maasalo 2013, 42). Benchmarking and competitor analysis lay the fundamentals for strategic leadership. The impact of the strengths and weaknesses can be managed by comparing them to cost and market differentiation. Essential points are expressed by choosing strategic market positioning and segmentation, cost management and product and service differentiation. (Haverila, Uusi-Rauva, Kouri & Miettinen 2009, 67—68.)

Maasalo suggests using a checklist to analyse the market situation (Fig. 20). Business models and operational models can be studied. Some information will not be available as companies often ensure competitiveness by protecting their essential competitive expertise. (Maasalo 2013, 42.)

Using benchmarking tools from service design perspective will give an understanding of and insights into the service process. It is helpful to benchmark companies to obtain more information and facts of competing or similar services or products. The aim is to establish a structured process of finding the best practice and processes and identifying the key measurements for performance. Many companies treat benchmarking only as a one-off tool but it is actually important to keep all the benchmarking data up-to-date. (Curadale 2013, 49.)
CHECKLIST OF COMPETITIVE ANALYSIS BENCHMARK

Geographical location
Market
Product mix
Distribution channels
Cost
Payment terms
Advertising
Marketing
Production strategy
Quality control
Product development
Economical situation
Growth

(size, business model, market size and outlook)
(coverage, specialization, unique vs. product standardization, production size)
(automation, production location, machinery)

Figure 20. The checklist of competitive analysis benchmark (Maasalo 2013).

6.2 REVIEW OF THE BENCHMARKING AND COMPETITIVE ANALYSIS

By using benchmarking tools such as competitive analysis, service design companies started to understand the size of service design markets both globally and in Finland. The size of these markets has been growing in the last few years, since the concept of service design has become more commonly known and the advantages have been acknowledged (Figure 21.). However, research by service design companies was just scratching the surface. The following step was to understand the markets, companies and operators involved in hackathons.

The big picture of hackathon operators is quite confusing. Universities and schools use hackathons as a learning tool for students. They can do this either by focusing on innovation by their own students, creating multidisciplinary teams within
Figure 21. World and Finland benchmark of Service Design companies. 
World benchmark figures from 2015 and Finnish company records from 2016 from latest turnover reports. 
(Companies reports 2016; Finder 2018).
own university or across university level in innovation camps, or by selling a hackathon as a service product to companies. Large international companies use in-house organisations to run and operate hackathons on both small and global scales. Companies offering hackathons as a service operate under different models, either using students or volunteers as resources, using a partner model or having their own employees run the hackathons. The fragmentation of service operators makes it difficult to conduct a comprehensive analysis e.g. of the cost model. Where a company with its own employees needs to build a profitable business model, universities with the student resource can offer the same service at much lower cost.

Companies running hackathons need to differentiate themselves by raising the quality of participants to those who really can create innovative solutions to demonstrate to the customer the possible added value. Lucrative prizes can also attract companies with wide knowledge and deep new skills.

A benchmarking tool with a set of criteria was created to understand and validate the resources, time spent, brand, distribution channels, cost structure, quality assurance, and fitting to future trends. The valuation of this example of benchmarking tool goes from 1-4, One being the lowest grade and 4 the highest. Benchmarking shows that where universities can offer hackathons with a lower price, a brand with tools can create quality that is more interesting for companies and they are willing to pay for the quality of the service (Fig. 22.).
### BENCHMARK TOOL

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESOURCES</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>TIME</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>BRAND</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>DISTRIBUTION</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>COST</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>QUALITY</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
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<tr>
<td>FITS TRENDS</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
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<tr>
<td><strong>SUMMARY</strong></td>
<td><strong>16</strong></td>
<td><strong>16</strong></td>
<td><strong>20</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

*Figure 22. Benchmark table example.*
6.3 SHADOWING

Shadowing is an ethnographic method to understand user actions in a real-time environment. It also gives silent information of people's interactions and behaviour in a particular situation. The method is used in a focused event or sequence of service. The advantage of shadowing is that the user is not led by the questions or actions of the interviewer or facilitator. (Miettinen & Koivisto 2009, 20.)

The researcher is involved in the process behind the scenes without taking part in the action. The actions are documented by notes, images or videos. Shadowing provides an opportunity to discover problems in the service process or in the environment. (Stickdorn & Schneider 2011, 156.) Shadowing is different from observation, where people do not know they are being shadowed (Curedale 2013, 201).

Shadowing also deepens a researcher’s insight into the experience and environmental ambiance of the service. Without experience, understanding of the service situation can be monotone and fictional. At the same time, it gives inspiration for innovative solutions, and on the other hand, limits the possibilities. (Hyysalo 2009, 84.)

6.4 OBSERVATION

Ethnographic methods are used to understand the context of the service even deeper. Documentation and sharing of the findings will give the whole team more insight of the process. Observation is a method to explore people in their natural environment and context. (Miettinen & Koivisto 2009, 20.)

Observation has its challenges as it does not give any root cause for the users’ behaviour. Users’ knowledge of observation might also make them act differently to how they would of normally or they might change their behaviour. (Curedale 2013, 201.)
Hyysalo sets out observation as one of the most important tools for understanding the product or service in the actual environment where it is used. The observer can be actively involved and ask users why they are doing something or behaving the way they do. Observation should be more widely considered for the service stage, not only focusing on the moment when the service or product is used. The unspoken behaviour or the conditions of the service milieu might create improvements or completely new ideas for the situation. (Hyysalo 2009, 107.)

Documentation is part of the observation methodology. Notes with supporting images or videos or recordings ensure the moment stays fresh and the observer can return to the notes later if needed. Documentation is also a good communication tool for getting the whole team involved in the process. (Hyysalo 2009, 107.)

It is important to define objectives and create a hypothesis when planning the observation tool. Observation of users is tied crucially to place and time. For instance, a holiday season can distort the results if there are less or more people using a service or product than usual. However, if the hypothesis is to observe the service during the holiday season then the analyses would reflect the objectives. (Curedale 2013, 200.)

According to Hyysalo, the observation method can be divided into passive observation, shadowing observation, observation interview, indirect observation (also known as stimulated recall), staged lab observation and participant observation. He also emphasised that, depending on the topic, the observation methods can be combined. (Hyysalo 2009, 107.)

Curedale lists observation methods under the topic “know people and context”. The listed observation methods are: covert, direct, indirect, non-participant, participant, structured and unstructured observation. (Curedale 2013, 200—207.)

The tools used for documentation and how much the observer and users are actively attending and managing the situation and environment are the leading guidelines for observation. The value of observation is being able to identify the user, use the case to see how it stacks up against the hypotheses and see how the findings can influence design improvement and innovation. (Curedale 2013, 205—207.)
6.5 OBSERVATION BY PARTICIPATION

Participant observation gives the observer an opportunity to be one of the users, experience the service as a user and get empathic knowledge of the other users. In this method, the researcher will be part of the studied community and might get even more insight into the situation. The goal is to understand user behaviour empathically and capture it as it happens. (Curedale 2013, 205.)

Human behaviour is under continuous change and it is not always easy to predict. It is not inevitable that today’s good service will be used by the loyal user in the future. The service design approach observes user behaviour. There might be a huge gap between the business strategies and users' expectations of high-performing services. Differences in motivation between a service provider and the users of the service decrease service quality. (Reason, Flu & Løvlie 2015, 44—45.)

The challenge of observation is that it is time-consuming and costly. It can also lead the researcher to influence others’ behaviour, and privacy and confidentiality aspects need to be taken seriously. Another problem with observation can also be the used language and foreign, unknown, or unethical culture. Service situations can also involve health and safety risks for the observer (Curedale 2013, 205.)

6.6 THE OBSERVATION AND SHADOWING RESULTS

The observation method, and especially observation by participation, has been chosen as one of the key methods to understand the process and finding the key hurdles in the agile innovation process.

The author’s experiences from the innovation camp in summer 2016 sparked an interest to understand the concept of innovation with short-term agile way. This led to the idea of creating hackathon services for MuotoMyrsky Oy. After innovation service creation was chosen as the topic for this Master’s thesis, the author started to study the concept of hackathons
in autumn 2017. The author participated in five different hackathons with different observation angles: one by shadowing, three events by participant observation as a team member or with original idea and one participation observation as a coach.

Alongside these hackathon events it was possible to attend four idea evaluation events created with the Dragons' Den concept. The author participated in idea evaluation events as a visitor or judge organized by Yrityssalo in autumn 2016.

Dragons' Den is a reality-TV series concept dating back to 2001, created and owned by the Japanese production company Nippon Television. The TV-series is distributed by Sony Pictures Television and produced under the same or local name in over 30 countries. In the concept, business ideas are pitched to business angels by entrepreneurs or inventors. (BBC, 2014.) The ideas can be products or services. The business angels then evaluate the ideas and decide whether they are interested in investing in them.

6.7 TEKSTIIILI 2.0 HACKATHON

A textile hackathon was held in September 2016 as part of the Turku University of Applied Sciences' project Tekstiili 2.0 to explore and invent new sustainable ways of reusing or recycling textile waste (Image 1.). There were four challenges from different companies and public organisations. The target groups for joining the hackathon were students and start-ups. The groups were given two working days to present their ideas for solving the challenges.

The supporting tools were created that the teams were able to use along the developing the solutions. The tools were selected among the service design and lean startup tools and graphically designed for the event by the author. They were chosen to help the participants in the different phases: teaming up, exploring the challenge and possible ideas, developing
and testing the idea, prototyping and visualizing the idea and hints for the presentation. (Fig. 23.). This was an excellent opportunity to prototype the initial toolkit that could be used in innovation processes.

During the event, it was possible to shadow the participants. The atmosphere in the event was very enthusiastic and many of the participants were attending a hackathon for the first time. Experts from the organisations attended the event to answer questions from the teams.

The environment was conducive to creativity as teams were able to find their own corner to work on the challenges (Image 2.). The toolkit helped teams with exploring the challenge and framing the problem. The tools also helped create and brainstorm solutions. However, the toolkit was too comprehensive for this type of event and some of the tools could have been simplified and explained better to the teams.
Image 1. Image of the beginning Tekstiili 2.0 hackathon from ice breaking exercise.
DEVELOP THE IDEA

FIND YOUR TEAM

GET TO KNOW EACH OTHER

From groups of 3 you give them small theme paragraphs with different colors. Let the teams discuss and come up with new ideas. Then they discuss with the team. Put the ideas on the wall and number them. Then in the back you can see the ideas. Be aware of the ideas. Ask the team people later more upon personal ideas. Ask the teams to vote for the best ideas. Give everyone more and they can vote for the best ideas. At the end, vote for the best ideas. MATERIALS: gros paper of Sitra inspired.

TEAMING UP

PROTOTYPE

A4 papers (colored papers)

MATERIALS NEEDED

for the team.

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and find the correct people

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Image 2. One of the teams in Tekstiili 2.0 hackathon.
6.8 TEAM MEMBER IN TURKULAB

The TurkuLab innovation challenge series in Autumn 2016 was created to celebrate the 50th anniversary of TYS - the Turku student village foundation. The aim was to find new ideas to improve the daily lives of students living in Turku. The series consisted of five challenges that were solved simultaneously, with sponsors from private business and public partners. 20 000 € was reserved for prizes. (TurkuLab 2016).

The author attended the TurkuLab challenge in September 2016 as a member of a community that is building up a co-working and makerspace in the city centre of Turku. The community formed the HUB Turku Team and attended the TurkuLab to accelerate and crystallize our idea, aiming high to win one of the prizes. The challenge the team was tackling was how to improve the student community and entrepreneurship.

The challenge competition format was to work out and present the solution in one working day. The creation and working methods were hectic as the idea was to be presented to the judges in several rounds to achieve some points. The ongoing results were shown on the screen with support of a point scoring mobile application (Image 3.).

Although the HUBTurku team had a good idea for solving the challenge, the time limit brought both pressure and fun to the work. While there was almost no time to use proper innovation or service design tools to explore the idea, the repeated presentation format allowed the team to significantly improve pitching their ideas to the coaches at each development stage (Image 4.). The experience of working as a team to present the solution was excellent, even though the whole team was involved in the presentation. It clearly bonded the participants together as a team and improved team spirit. The experience of being part of a team working intensely to achieve a common goal was an inspiring feeling.

From all five TurkuLab innovation challenge events, the best presentations and teams were chosen for the finals. The HUBTurku team managed to secure a place in the finals, however without any success in the final event.
Image 3. Point calculation at TurkuLab.
6.9 COACH AT TURKULAB

One of the TurkuLab challenges was economy. This event was organized in October 2016. The challenges in this event were all about how to improve the student financial economy, student employment and start-ups. (TurkuLab 2016).

As TurkuLab was partly managed by students and volunteers, the author took the opportunity to become involved in the event as a coach. This was an opportunity to test an improved version of the innovation toolkit created by author and initially used for the Tekstiili 2.0 hackathon. Some tools were taken away and it was possible to present the value the of tools and how to use them at the beginning of the event. Teams were able to use the tools much better than in the previous event. With the presentation of tools it was possible to emphasize not only the tools but also that the tools are there only to help, and that the teams should only pick up the tools that they find most beneficial during the event.

Spirits at the event were high, and all the teams presented their solution ideas to an excellent standard. The environment was less supportive than in other events, however it brought the team better to the same place and the collective spirit among the teams was better than in the first two events. (Image 4.).

Working as a coach was a new experience for the author and it was enjoyable to assist the teams develop their ideas further. This was a useful extension to the observation method, to be part of a hackathon operator team and observe work by facilitators, coaches, and judges. The main negative experience in the event was that one of the coaches was not able to attend the event in person and the video and voice connection did not work properly. This highlighted the importance of having all mentors and guides attending the event in person; remote access will only confuse and deflate the atmosphere.
Image 4. TurkuLab economical challenge teams.
6.10 TEAM MEMBER IN A HACKATHON ORGANIZED BY A COMMERCIAL HACKATHON OPERATOR WITH A SME COMPANY

In October 2016, a commercial operator organized a hackathon for a SME company looking for improvements to their production and customer satisfaction. The target group of participants was limited. It was only possible to attend with a team of at least two people. The idea solution in response to the challenges needed to be applied for in advance. One of the team members needed to have a company with valid VAT-ID. The applications for the ideas were submitted online and all the team members needed to validate the information and write a motivation letter both on working together and why they wanted to take part in the hackathon.

In learning about the challenge competition, the author contacted an old colleague who has experience in the field but is also a great fun to work with and has excellent innovation skills. Before applying for the challenge, a meeting was organized to explore the challenges and innovate solutions together. As soon as the application to the challenge was accepted, the team signed a non-disclosure agreement, and following this the data of the company and its production was opened.

Before the event, one more team meeting was organized to innovate the solution idea further. At the meeting, the team explored the data and chose the best solution idea to follow. One part of the solution prototype was also created before the event by an external partner.

The time reserved for the hackathon was 24 hours, starting on Friday and ending late Saturday afternoon. The event took place at the company's premises and it was possible to observe the production process in its real environment.

The hackathon operator had produced several gadgets to inject enthusiasm in the hackathon. The attendees received patches, stickers, and jumpers. There was also technical equipment available if needed. The company's employees acted as coaches and facilitators during the event. The teams were able to work through the night as accommodation was provided by the operator in a local hotel. The team did indeed work late on the solution presentation.
The following morning was reserved for finalizing the presentations for the judges. The judging panel included the owner of the company and key employees. The competition presentation was ready just half an hour before the final zenith of the event.

All the teams presented good solutions to the challenges and all of the ideas were capable of bringing about changes in the company’s production or customer experience. All the solution ideas were also possible to be productise. The team’s solution came fourth, but the idea was validated as an innovative future concept.

Although the hectic atmosphere and time pressure limited the observation of the other teams and attendees during the event, it provided a good opportunity for the author to observe persona feelings during the event and afterwards. The atmosphere at the event felt good and there was a feeling of being amongst professionals. The process of pre-selection gave the feeling of being part of a qualified community. It also encouraged the team to give its best, not only because of the possibility of a prize but also because of a passion to change the industry which grew during the process.
Image 5. Team at the hackathon. Image by Industryhack.
6.11 ACCELERATING PERSONAL BUSINESS IDEA IN KARHUNPESÄ

In November 2016, Karhunpesä was seeking to create and accelerate business ideas that support the vitality of the Finnish countryside and local production. The target group were young countryside entrepreneurs, people interested in entrepreneurship and people interested in solving tricky challenges all over Finland. The innovation camp was organized as a 48-hour camp near Helsinki, so that all participants would be able to attend the business, tech and startup festival Slush after the innovation camp. (Karhunpesä 2016; Slush 2018).

The author enrolled in Karhunpesä with a business idea that could support local production. Maaseutuverkosto, the organisation which organised the event, had chosen an entrepreneur network as operator of the event. This network has its roots in Tiimiakatemia, which teaches team entrepreneur leadership at the Jyväskylä University of Applied Sciences. (Karhunpesä 2016; Tiimiakatemia 2018.)

Before the event, webtools were created to become familiar with all the ideas and interact with the participants. There were about 50 participants at the event. The facilitators divided participants into groups with similar ideas. The talks with specialists suggested and encouraged contacting people with similar interest or potential customers. It was interesting to get to know people all over Finland and learn about their ideas and challenges. The atmosphere during the event was more relaxed compared to the earlier events the author attended. This was because participants came from different backgrounds and areas. Only a couple of people were from southern Finland. The passion to develop the Finnish countryside was the unifying factor among the group.
6.12 CONCEPTUAL INTERVIEWS

Conceptual interviews are conducted with the customers, users, staff, experts or other relevant stakeholders. The benefit of the contextual interview is to focus on the interviewee's specific experience, options and details of the topic. If possible the interview is conducted in an authentic and familiar environment to the interviewee. (Stickdorn & Schneider 2011, 162—163.)

The method unveils hidden knowledge about people's experiences and lets them consider the topic from a different angle. The collaboration of the interviewee and researcher is essential to frame the topic and focus on the context. The intimate atmosphere of one-to-one discussions generates results that can be used for further development of the ideas. (Curedale 2013, 205.)

The interview can be seen as a three-step process. In the beginning, it is good to give the person an introduction to the interview. This should consist of leading the person into the context, raising questions about confidentiality and explaining that the method includes recording the interview. The body of the interview is pulled together with questions, but it is good to give the freedom to step out of the context if needed. At the end of the interview, the interviewer should wrap up with the interviewee, summarizing the content and leaving space for verification and clarification. (Curedale 2013, 205.)

6.13 RESULTS

The author conducted five conceptual interviews. The interviews were conducted in two different ways: formal interviews and more flexible and open-minded conversations. The main aim of the interviews was to understand the main obstacles to innovation and prototyping within companies and public organizations. The hypothesis was that money for investments would
be the main reason not to continue with testing the innovation. The second aim was to understand what is the best way to innovate.

The interviewees were chosen based on experience in innovation in different roles: potential customer, expert in innovation and doctorate at Aalto University, employee from a governmental economic development company, city developer and start-up entrepreneur. The first interview with the city developer was carried out in May 2017 to understand the basics of innovation hurdles. The three interviews with a potential customer, a governmental economic developer expert and a startup entrepreneur were conducted in autumn 2017. The last interview was held in September 2018. The idea to hold the interviews in different phases of the thesis process was to understand and reflect the assumptions and the findings during the process.

Most of the interviewees had experience of hackathons or similar events. The ideation phase of innovation is seen as the easiest and most fun part. For the ideation part, a lot of tools that can be proposed and used have been developed. To achieve the best results for innovation, it is good to invite a group of people that have deep knowledge of the challenge but also have the power to decide budget and allocate time.

The startup entrepreneur was the most experienced and had been to hackathons many times to test his own business ideas and to learn. He stated that attending a hackathon is an excellent way to network and dive into the startup scene. The other interviewees shared this view. The only interviewee who had not attended a hackathon or similar event was the potential customer, who was an entrepreneur whose company had just passed the start-up phase and can be seen as a SME.

Among all the interviewees, the most important reason seen as an obstacle not to carry on with the innovation was not budget or money, but the lack of encouragement to follow up with the idea of innovation and test it with potential customers. The interviewees also mentioned that money can be found if the idea is good enough. Lack of encouragement, exacerbated
by a fear of failure were seen as big obstacles at least in bigger organisations, but also fear of breaking cultural barriers and the will to avoid an increased workload are significant obstacles. In larger organizations, ideas created in external events or workshops are often buried within the organization to suffocate innovation ideas of externals. Even great ideas are concealed to avoid admitting the power of open innovation.

All interviewees agreed that company or organizational atmosphere needs to be open, including a need to listen to ideas and a readiness for something new and experimental. If the innovation process takes place in a network ecosystem, trust is seen as one of the foundations for good results in multidisciplinary innovation processes. If there is overlapping competition or old grudges between participants, innovation sharing cannot succeed. There is no way to force the innovation process, if there is no short term success in sight, companies are not interested but rather move their focus on to the next project.

For a company and organisation, it is valuable to follow trends, week signals and legislation to understand future needs. A creative idea bank for new ideas was mentioned as a tool, and hackathons and similar events are seen as a good way to bring new ideas to the company, however there were doubts as to how much it will effectively give to companies.

From time to time it will also be beneficial to take someone from outside the company to boost the internal development of innovation. A larger network of innovation facilitators would accelerate the innovation process and create larger ecosystems. The task of facilitators is not only to create and hold workshops, but also to coordinate suitable spaces that are close to the companies and organisations; as well as providing support and reminders for the participants.

For testing, a matrix of prototyping matureness and methods would support quick prototyping. For product prototyping, makerspaces and proto labs could help to create the physical items but they could also provide a test audience. Service testing models can be done with abstract conceptual models, for instance, blueprint, miniature paper models or design walkthroughs by the developer team.
7 MID PHASE CONCLUSIONS / REVIEW

All attended hackathons were great experiences and the atmosphere in the events was fabulous. After pulling together the results from observation and shadowing, it was clear that hackathons need a lot of human resources. To make it work professionally, the digital interface of also needs to be in place.

Even if there would be space yet for another hackathon company, it was not obvious that hackathons will bring enough added value to boost the innovations. It was also worrying how many of the hackathon ideas were not developed or tested. There is not a lack of ideas, but there is not always an organized way for how the organizations might develop the innovation further.

This realisation brought the author to an idea for how service design could help bring the innovation to a phase where it can really be validated and productised. With this initial idea, the design and prototyping phase was created.

The initial assumption and thought that hackathon services could be part of MuotoMyrsky’s services changed during the thesis process. Due to the fact that the production of hackathons requires a lot of human resources, the team needs to be much bigger. On the other hand, the early phase of the thesis process revealed that there are lot of ideas already available but a huge gap in the innovation development. The research helped to understand that there are obstacles such as missing processes, lack of open attitude and suitable talents that companies need to recognise and act upon in order to develop their businesses, products and services.

Based on this experience and through research, the focus of the thesis changed to developing and selecting service design tools for MuotoMyrsky by focusing on customers wants and developing and productising the service design offering.
8 CREATE

The creation and design phase needs to include design and business development side by side. The business development process focuses on the process, values and brand identity of MuotoMyrsky Oy. As described earlier, MuotoMyrsky was founded in Autumn 2016 and the customer segmentation had not been studied rigorously. The company’s vision is supported by service strategy in product offering. In this stage, it is inevitable that alongside the service design tools, business creation tools are also used.

8.1 HAPPY STARTUP CANVAS

Happy Startup Canvas has been developed from the business model canvas invented initially by Alexander Osterwalder in 2008. Osterwalder’s canvas was created to visualize, design, and develop business model. The idea was first variated by Rob Fitzpatrick to turn it into a startup canvas. Ash Maurya continued developing the model and in 2010 introduced the lean business canvas. This model also puts forward the way of entering business model empty spaces. The tool helps to develop business assumptions many times before actually building anything. (McCahill 2013.)

In 2012, Javier Muños from Delivery Happiness created the Culture Canvas which can help to model the startup culture of a startup company. Happy and strong culture inside a new company or startup is an important aspect for creating a business and working together. The Happy Startup canvas was created by combining the lean business canvas and culture canvas and it helps both with creating culture within the company and mapping company values and business (McCahill 2013.)

This Happy Startup canvas was one of the first tools to create the basis of the company values, story, purpose and vision. Later on, the problems, solutions, customers and value propositions created in this stage can be connected and iterated with the business and service design tools in the design process.

The Happy Startup canvas of MuotoMyrsky gave a basic understanding of the company’s customers, services and
Figure 24. Happy Startup Canvas of MuotoMyrsky based on Osterwalder, Maurya and Muñoz, 2012.
8.2 STAKEHOLDER MAP

A stakeholder map visualizes various groups in the service environment: customers, partners and other stakeholders. Collaboration between different groups can be assorted and analysed. (Stickdorn & Schneider 2011, 150—151.)

A stakeholder map becomes more important when the analysis is completed; how different groups work and interact with each other. Connections can be visually highlighted in a way that both pains and gains can be identified. A stakeholder map will draw attention to potential opportunities and value chains that help build up services. (Stickdorn & Schneider 2011, 150—151.)

The stakeholder map made for MuotoMyrsky shows potential customers but also an opportunity for customer acquisition through networks and entrepreneurship associations (Fig. 25.). Expertise of funding and financing can offer a major role in growing companies actively looking for a solution but lacking the budget. Different stakeholder groups are clustered with different colours to highlight the connection within different groups. Marketing and delivery channels are not visualised in this stakeholder map. The information is composed in last 3 years based on discussions with the Creve business specialist, the Salo and Turku entrepreneur society and online research of various businesses and funding instruments.

The research and analysis should pay attention to recognising the customers in the different groups, especially customers that are looking actively for a solution and can or have already acquired budget to purchase one. These customers can be evangelists for the services and the stories can be told for the customers that have a problem or a need. (Osterwalder, Pigneur, Bernarda & Smith 2014, 118—119.)
Figure 25. Stakeholder map of MuotoMyrsky.
8.3 CUSTOMER JOURNEY

The customer journey is a visual, rather simple map of the customer’s experience of the service. It gives a high-level overview of the service sequences with touchpoints. It should be simple but can also be utilized as guidance to identify the customer touchpoints. (Stickdorn & Schneider 2011, 158—159.)

The customer journey will give insight into the customer’s experience of the service or product. Mapping the journey of the way a customer feels about how they are served and how they can be even more delighted and surprised will give insights of the whole customer experience. (van der Pijl, Lokitz & Solomon 2016, 100.)

The customer journey can be presented and visualized with both formal and informal touchpoints. To make it more vivid, this can include photographs and illustrations and customer quotes and comments. The aim of personalising the customer journey is to recognise immersive user-focused experiences. It will assist with comparing several touchpoints applying the same visual guidance and brand appearance. The customer journey can also be used as a benchmark between the company’s own services and competitors’ services. (Stickdorn & Schneider 2011, 158—159.)

It is inevitable that customer journeys are not always totally linear and the customer can jump to other touchpoints for different reasons. It is important that everyone in the team and process understand how customers feel during the service, what is easy and where they struggle. The journey map gives advice and instruction for service improvements. (van der Pijl, Lokitz & Solomon 2016, 100.)

The customer journey can be analysed with an online safari and personas. An online safari tests a customer journey by using an online search to check how customers comment on similar services, for example on social media. Personas are imaginary customers that present certain typical customer characteristics. Testing with personas could involve some of team members slipping into customer personas and testing the customer journey. Experiences can be written down or presented
verbally for the other team members. (Design a Better Business 2018.) In this process, customer segmentation and personas are introduced in the next chapter.

The MuotoMyrsky customer journey (Fig. 26.) shows that the visual language needs to be more coherent throughout the service journey. The process of awareness and consideration of service need be developed more focused, considered and fluent to the customer to understand what they gain and how they can obtain funding or financing. During the service period there needs to be better communication with the customer so that the customer is aware of the progress on the project. The post-service and customer loyalty processes are lacking or need to be designed better.
Figure 26. Customer Journey of MuotoMyrsky.
Customer segmentation divides customers into groups of individuals that are similar in motivation, age, gender, interests and spending habits. Marketing and customer acquisition are different for different segments. Segmentation can also provide deeper understanding of how the services and products are accepted by different customers groups. Customer segmentation gives deeper and richer insight of customer profiles and gives guidelines for how to create customer personas. Both tools together reveal opportunities in services and experiences. (Searchsaleforce 2015).

One of the advantages of segmentation is finding specific areas and sections of the market, and therefore it can help with identifying existing and potential customers. It can also help with defining new services and products. Segmentation helps particularly with focusing on customers’ motivation and, on the other side, with applying new processes or technologies. In business-to-business (B2B) marketing it is important to identify the decision makers and procurement patterns. (Searchsaleforce 2015.)

The segmentation model of MuotoMyrsky was created on three axes. The vertical axis shows how much customer involvement there is in service design (Fig. 27.). The horizontal axis presents the technology orientation of the customer groups. The third axis shows the motivation of the customers for using new tools to improve their business and innovation processes. The data in the model is based on the experience of conducting service design projects, talking with potential customers and discussions with services design peers.

The customers groups are based on service design interest groups and companies encountered in different networking events or workshops during the thesis project. To improve the segmentation map, more comprehensive research would be useful. This could be completed by interviews, shadowing or online questionnaires.
Figure 27. Customer segmentation of MuotoMyrsky.
Personas are used to bring different angles and perspective into the service. It helps the team and partners to become familiar with the customer and give insights into their behavior, fears and interests. (Stickdorn & Schneider 2011, 178—179.) Personas supply reasoning for why customers need the service and how they can be easily guided through the service process (Searchsaleforce 2015.)

The personas represent real people that can be brought to life with stories and motivation; explaining what the persona enjoys and what his pressure points are (Stickdorn & Schneider 2011, 178—179).

The personas can be constructed by identifying their needs, positive trends, opportunities, negative trends, headaches and fears. It is desirable to give them names and a demographic background. The personas can also be amended during the process and as time passes. (Searchsaleforce 2015.)

Personas were created by using segmentation and creating four different fictional customer profiles. (Fig. 28.) These four personas represent various customer groups and give insight into their needs, motivation and how actively they are seeking service design and innovation processes. The advantage with the personas is to personalize the customers and to help understand their motivations, pains and gains.

Personas Maya Enthuasticker and Sam Explorer (Fig. 28.) represent private sector B2B customers, developers and decision makers, whose motivation is to discover and explore business growth and new business opportunities in products and services. Their motivation is to create and discover new ways of working and they might need an outsider’s views and resources. They are dynamic and used to quick decision making.

Sally Organizer and Tom Developer (Fig. 28.) represent public sector customers. In the public sector service changes it is necessary to use co-creation as the customer views might be a engaged. On the other hand, public sector customers are more aware of service design opportunities and have motivation for using the right tools. Service design co-creation with customers will also bring publicity with the new or improved service. Publicly funded projects include purchased services and outsourcing budget, but often only the preselected suppliers can apply, and the procurement processes without pre-selection are difficult and slow. The attitude to service process changes is slow, and processes are complicated and difficult to access.
Figure 28. MuotoMyrsky customer personas.

CUSTOMER PERSONAS

Maya Enthusiasticker
Growing startup entrepreneur needing more structure to the services. The company is a couple of years old and they have a lot of knowledge of innovation, but less structures. Need of quick prototyping and how to proceed with idea to product quicker and more efficient.

Sam Explorer
Growing SME company developer manager needing to expand or enhance new services. The company is also considering how to change the product oriented company to service company. Company strategy of roadmapping the company's future and product range. Need to work on to create more innovative and open company culture.

Sally Organizer
University or school project manager working on new ways to make the project working innovative. New tools and trainings are needed for education. Project needs a new boost on how to develop the ideas further and expand the network and ecosystem.

Tom Developer
City or public organization developer or project manager needing help to create new services or enhance old services. Need quick fixes in certain projects and in other projects just a visual view of a new service.
8.4 CUSTOMER PROFILE

The customer profile canvas is a tool that helps to understand customers’ insight of what they are trying to achieve by using the service. The customer profile is divided into three different areas: jobs, pains and gains. (Osterwalder, Pigneur, Bernarda & Smith 2014, 9.)

The customer jobs section gives insight into what problems customers are trying to solve and how their need to complete the jobs might be satisfied. Their jobs can be functional, social, personal/emotional or supporting jobs. Functional jobs perform or complete specific tasks they are given. Social jobs are a need of a customer to look good or gain social status or power. It can be a commitment to push their own professional agenda or status. Personal/emotional jobs can be positive feelings or seeking peace of mind. Supporting jobs are seen from three different viewpoints: buyer of value, co-creator of value or transferrer of value. (Osterwalder, Pigneur, Bernarda & Smith 2014, 12.)

While defining the job, it is crucial to understand that not all jobs are as important, but that there may also be insignificant or hidden jobs. Nevertheless, the importance of the job might vary in different customer journey touchpoints. (Osterwalder, Pigneur, Bernarda & Smith 2014, 13.)

Customer pains describe the pains the customers might suffer before, during or after trying to complete the job. There are three different types of pain: undesired outcomes, challenges or obstacles and risks. Undesired outcomes can be solutions or designs that do not work well. They can also be boring or that is difficult to understand, or the persona does not like the presented way of solving the jobs. Obstacles are things that prevent the customers from starting the job or they feel that the service slows them down. Risks can be an undesired outcome or solution. They also might not see the value of the service development or, during design phase, the starting point goal has vanished. (Osterwalder, Pigneur, Bernarda & Smith 2014, 14.)

Customer gains will focus on visualising the customers’ outcomes and benefits. Alongside the expected gains, other things may surprise the customer. The gains can be split in four categories: required gains, expected gains, desired gains and unexpected gains. (Osterwalder, Pigneur, Bernarda & Smith 2014, 16.)
CUSTOMER PROFILE

GAINS
Describe the outcomes customers want to achieve or the concrete benefits they are seeking.

CUSTOMER JOBS
Describe what customers are trying to get done in their lives.

PAINS
Describe bad outcomes, risks, and obstacles related to customer jobs seeking.

Figure 29. Muotomyrsky’s customer profile.
Required gains are agreed or basic expectations. Without these gains the solutions will not work. Expected gains will show the possible solution and expand the ideas or good looking design. Desired gains are something beyond the expectation and gains that customers are not able to specify at the outset. As an example, a physical product will be connected to be part of digital services. Unexpected gains can surprise and increase customer satisfaction. Gains might expand the service or business view and design a “wow” effect for a better and more fluent customer experience. (Osterwalder, Pigneur, Bernarda & Smith 2014, 16.)

The MuotoMyrsky customer profile was built by using all the various customer personas (Fig. 29.). This way it was possible to discover and combine different jobs, gains and pains in one target persona and find common indicators of all customer personas. Based on the four developed customer personas the jobs, pains and gains were identified. In Muoto-Myrsky’s customer profile the jobs demonstrate how the customer can build services and processes in another way and gain new skills. The customer reduces risks during the project while involving external resources and simultaneously gaining an outsider’s view. Customers are interested in gaining better insight into their own business. Bringing a multidisciplinary team to work together enables trust, better communication and collaboration. The customer will transfer the value by developing their own skills and a renewed perspective in the process.

The required gains for the customer is to visualise processes and services and to focus on revising the problem areas or introducing new ideas. The desired gains of saving time and money will not always be visible immediately and can only be achieved over a certain time period. The unexpected gains are how the team might develop and create new ideas. The enhancement of team spirit might come as surprise. The positive and concrete ideas that are easy to utilise and execute will bring an excellent experience.

Service design does not always introduce tangible results which can be frustrating and cause pain for the customer. Lack of understanding and fear of new processes might also bring frustration during the service. The lack of motivation and trust within the team working on the project can be a significant impediment to the success of the project. Pains associated with implementing the results and achieving them an immediate effect on business can occur when the process of implementation is slower than expected.

It is important to reveal the right solutions to the customer’s pains and explain and highlight the gains for the customer. Especially small and SME companies have lots of concerns about the valuable time spent.
8.5 BUSINESS MODEL CANVAS

Two types of business model canvas versions are used to create the business model and express how the service can created, built and expanded. The Business Model Canvas was initially created by Alexander Osterwalder and Yves Pigneur. The canvas helps to understand how to model the business model and strategy. (van der Pijl, Lokitz & Solomon 2016, 116.) The Lean Business Model Canvas was created by Ash Maurya and is an adaptation of the original canvas and optimised for a startup methodology (Business Model Competition 2018).

The Business Model Canvas gives an overview of the business and the value of the organization. Customer insights and value proposition can be made visible. It illustrates how and which channels are chosen and work for the customer. The canvas demonstrates the costs and revenue streams side by side. (van der Pijl, Lokitz & Solomon 2016, 116.) The overview provides the opportunity to zoom into details of each section of the canvas: Customer Segments, Value Propositions, Channels, Customer Relationships, Revenue Streams, Key Resources, Key Activities, Key Partnerships and Cost structure. (Osterwalder, Pigneur, Bernarda & Smith 2014, 16.) The book Value Proposition Design advises that the Business Model Canvas should be explored together with the Value Map and Customer Profile Canvases to improve the process with iteration cycles.

The Lean Business Model Canvas helps to create a fast business plan on one page. Long business plans are time-consuming to write and in the busy modern world investors or finance professionals have less time to read them. The 9 building blocks of the Lean Business Canvas can be created for simple or more complex businesses. The aim is to iterate the model but the first draft can be completed in only 20-30 minutes. It is advisable in bigger groups to let the individuals complete their own vision first and then combine and analyse the diverse proposals. It hinders the discussion and group dynamic of downsizing the solution. There needs to be space for open innovation atmosphere. (Leanstack 2018.)

Leanstack proposes that the differences between the models are: the original Business Model Canvas is more suitable for established products and services, whereas the Lean Business Model Canvas is more suitable for innovators with
new innovations and businesses created out of nothing. In the latter, the focus is on the challenge, problem solving and the customers, especially early adopters. This way the lean startup methodology will have more attention. The way of using and iterating the idea or innovation by using a template at different productization phases will assist in finding the best possible solution, the correct market and a way to scale the business. (Fig. 30.). (Leanstack 2018.)

Figure 30. Continuous Innovation framework (Leanstack 2018).
In creating the business model for MuotoMyrsky both canvas options were used. Together with the Happy Startup Canvas, customer personas and the value map canvas it was possible to visualise the challenges and opportunities of the productisation and design of service design consulting services.

The Business Model Canvas (Fig. 31.) highlights the importance of key partners, resources and actives. The customer relationship service sequence needs to be considered and it is important to understand how the cost of the actions will help with customer relationship management. There needs to be delegated time for maintaining both the partner and customer relationship.

The Lean Business Model Canvas (Fig. 32.) works nicely and jointly with the Happy Startup Canvas. They bring out the unique value of services and the unfair advantage and provide further advisable inspirations for how to design and tell the company stories and marketing. The customer relationship from the traditional business model canvas can be aligned with the key metrics. While key metrics are designed for MuotoMyrsky, it is advisable to consider what kind of key metrics the customer needs and gains. Key metrics should be created with a connection back to how customers’ results can be aligned as benefits and so that feedback can be personalised easily.

The advantage of a lean business model canvas is that the left side shows where the money is needed and the right side shows how the revenue models can be applied.

Using two different business model canvases, the traditional and the lean business canvas, gave a good overview of the whole business plan and actions. The author would even suggest creating a new business model canvas including all the upper left hand side boxes from both of the models. (Fig. 33). This way the problem solution and metrics could be combined with the key partners, actions and resources.
**Figure 31. MuotoMyrsky Business Model Canvas.**
**BUSINESS LEAN CANVAS**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
<th>Unique Value</th>
<th>Unfair Advantage</th>
<th>Customer Segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 3 problems</td>
<td>Tested tools to innovate working methods <strong>Prodacton™</strong> Consulting in person Training on service design Outlining the problems and solutions for each customer flexible</td>
<td><strong>Proposition</strong> Single, clear compelling message that states why you are different and worth paying attention</td>
<td><strong>Trademarked service product and test the ideas</strong></td>
<td><strong>Growing startup companies</strong> “Trademarked service product and test the ideas”</td>
</tr>
<tr>
<td>No or little understanding of innovative service design</td>
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<td></td>
<td></td>
<td><strong>Growing SME companies</strong></td>
</tr>
<tr>
<td>Good ideas but no way how to prototype and test the ideas</td>
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<td></td>
<td><strong>Public universities and schools</strong></td>
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<tr>
<td>No visible view of the service process steps</td>
<td></td>
<td></td>
<td></td>
<td><strong>Public city and service development</strong></td>
</tr>
</tbody>
</table>

- **Key Metrics** Key Activities you measure:
  - # project pro year
  - # revenue pro project
  - # revenue per year
  - # attending events and seminars
  - # people involved in the project

- **Cost Structure**
  - Customer Acquisition cost
  - Distribution cost
  - Hosting
  - People &c

- **Personal costs**
  - Computer and IT-cost
  - Office and events spaces cost
  - Bookkeeping cost
  - Tools / printed canvas costs
  - Travel and hosting costs
  - Outsourcing costs

- **Revenue Streams**
  - Revenue Model
  - Life time Value
  - Revenue
  - Gross Margin

- **Hourly based payments**
  - Projects based payments
  - Training payments
  - Workshop payments
  - **Prodacton™** licencing costs

- **Channels**
  - Web pages
  - Social media
  - Seminars and events
  - Direct marketing

- **Customer Segments**
  - Target Customers
  - Growing startup companies
  - Growing SME companies
  - Public universities and schools
  - Public city and service development
  - Public and private accelerators

*Figure 32. MuotoMyrsky Lean Business Model Canvas.*
fig33.png

Figure 33. Combined Business Model Canvas 2.0.
8.6 VALUE MAP

The value map is a tool that deepens the business model value proposition. The three sections offer a possibility to break down the value of products and services into pain relievers and gain creators. The section on the left front shows the list of all the products and services. Gain creators explain what the customer’s gains from the services are. Pain relievers show how the services help customers. The value map tool has a close relationship with the customer profile canvas. (Osterwalder, Pigneur, Bernarda & Smith 2014, 8.)

Product and service listings should be as simple as possible. They should be easy to choose and understand by the customers. The product or service assists the customer with bringing forward or completing their job or aim, whether they are functional, social or emotional. The offering can be a physical or tangible service, an intangible service, or digital or financial service. (Osterwalder, Pigneur, Bernarda & Smith 2014, 29.)

Pain relievers demonstrate how the products and services ease the customer pain. It also impresses what hinders the customer from completing their job or prevent them from doing it. It suggests how to eliminate barriers and concerns that are keeping customers from purchasing the product or service. Great value propositions are targeted at diminishing the pains of the customer and deepen to understand how to reduce the discomfort. (Osterwalder, Pigneur, Bernarda & Smith 2014, 31.)

Gain creators express how the products and services help customers gain value. They are the benefits that the customer expects and desires. There should be an additional value which surprises the customer. It is advisable to focus on the cornerstones of the products and services provided. The gains should be highlighted by the relevant benefits, like time and money, but likewise present the value of the social and process gains. (Osterwalder, Pigneur, Bernarda & Smith 2014, 33.)

The value map was used for two purposes, first to plan the current services and secondly to improve and innovate the
future service opportunities and growth. The value map creation is supported by the whole chain of service design tools and canvases used during the creation phase of the services.

The canvas (Fig. 34.) concentrates on the services which are possible today; consulting and training in person. The consulting service of mapping the service customer journey and blueprint delivers a visualised process map and analysis, which helps customers develop their business. The outsourcing service helps the customer find an extra resource to solve service problems. With the training service they can gain and achieve new skills to create and improve their services and business.

The improved value map canvas (Fig. 35.) focuses on the services in the future if it was possible to have unlimited resources and budget. The improved map emphasises the opportunities of new technologies in digitalization such as artificial intelligence. The pain could be alleviated by using voice or handwriting recognition which would benefit both the service provider and the customer in getting the results visualized more quickly. New technology can bring opportunity for immersion of the experience. The digital way of working will enhance the distribution of services and customers acquisition happen on a global scale.

It was justified to use the value map for two different purposes: the current status of the services and improved services to identify the ease of purchasing services and on how the future service offering could be developed and scaled.

The invent canvas (Fig. 35.) concentrates on the services which are possible today; consulting and training in person. The consulting service of mapping the service customer journey and blueprint delivers a visualised process map and analysis, which helps customers develop own business. The outsourcing service helps the customer to find an extra resource to solve service problems. With the training service they can gain and achieve new skills to create and improve their services and business, resources and budget.
Figure 34. The value map of MuotoMyrsky services.
Figure 35. The improved value map of MuotoMyrsky services.
9 DESIGN

Design management is part of MuotoMyrsky's strategy to create and develop the coherent and focused services. The tools used in workshops should inspire the participants and the visualized results can be used easily for the customers’ own purposes. Though MuotoMyrsky’s services are created more for businesses than for end consumers, the brand values and story support the business and services.

9.1 BRANDING, LOOK AND FEEL

A brand is a wide set of visual, written and unwritten ambience of the company, public organization or association. The visual elements such as name, logo and colours are upfront contact elements, but they should at the same time include the unwritten promises, quality and components of the brand, values and emotional and social expression. The brand creation process is a combination of design and marketing which can be easily recognized by the customer. The brand expresses the

Image 7. Inari cosmetics, 2018

Image 8. Saaren taika, 2018
company's own values and way of working, which is not always the intention to sell more products or services, but also extends and reinforces a brand's success. (Slade-Brooking 2016, 12.)

The visual communication system should attract the target customer and execute clear differentiation from competitors. The visual system should be used and applied consistently from first contact point to last touch point. The typography should use the semiotic language of the product or service. Consumer brands typically show their heritage or the feeling they want to give. (Slade-Brooking 2016, 42-47). As an example, if a cosmetics brand wants to offer purity and a new and clean impression, they will use clear typography and colours (Image 7.) and if the brand wants to express old-fashioned and heritage as an asset, they will use romantic typography and pastel colours. (Image 8.)

Colours are used for symbolic effect and to present emotional feelings. They can also be used as visual shortcuts. Some of the colours also have strong political connotations. Visual language also contains photography and comic styles used within the brand. One of the most important brand elements is the name of the brand, as it lays down the basis of the company's identity. The colours have their own intensity and contracts which need to be considered when choosing the brand colours. (Slade-Brooking 2016, 49-50).

The name gives the first expression of the company and its products and services. It should communicate effectively to the target audience and present the set of the values and it needs to look and sound good. (Slade-Brooking 2016, 50-52).

The name of the author's company is based on enthusiasm for storm and wind. A storm represents purity, the power and vivid way of a controlled and uncontrolled force of nature. It introduces the possibility of bringing new winds to stillness. On the other hand, the name has its roots in literary interests and points out a favorite play: Shakespeare's The Tempest. The first part 'muoto' (in English 'form') references design form. The form is the tidy form of a process or a finished product. This is the background of the name MuotoMyrsky, in English FormStorm. Typically design companies use very neutral colours and
many designers are enamored with simple black and white. The thought of using colours is based on differentiation and also on service design’s need to vary colours to visualize customer journeys or blueprints in order to differentiate and identify the customer’s service sequences, service periods or roles. The basic colours are green and different shades of grey, the secondary colors are rich yellow, orange and purple.

The typography needs to be clear and easy to read. There was a clear decision to use the sans serif font over the serif fonts. They are easier to read and typically the font family has several typefaces. They give an indication of different actions when providing the customer with visualized results. The font chosen was the Lato font family.

The photography style for MuotoMyrsky is powerful and uses metaphors of the complexity of service design. The background of the action typically uses brand colours where possible. The images include metaphors and humor.

The tone of voice is simple and understandable using common phrases that everyone can understand. It seeks to avoid any official and complicated way of expressing the content. The tone of voice should be respectful and give the customers the feeling of trust and that they can openly express their opinions and observations.
9.2 SERVICE CONCEPT SCENARIOS

Four different services were created and productized to be offered to customers. These services are Training, Tailored services, miniProdaction™ and Prodaction™.

Training about service design should give a brief overview of how everyone can apply service design to their own practices. It includes some theory and background of service design. With practical examples it is possible to understand how other businesses have benefited from using service design. With some practical tools the customer can start to use canvases to recognise how they can apply service design in their own business creation and development. A few key tools and canvases are given to the customers as physical posters and as basic digital tools.

Tailored services are created to suit the customer’s needs. Depending on the briefing, it can be a series of actions of service development, or it can be a certain sequence of service development, for example the first overview of the customer journey or first draft of the blueprint. It can also be a customised workshop.

Innovation services can be short, just 1-2 days, but they can also be provided over a longer period consisting of 4—6 workshops. Innovation services use a basic set of the tools and canvases that can be modified to meet the customer’s requirements.
9.3 CUSTOMER BLUEPRINT IN SERVICE DESIGN

Service blueprint is a detailed way to describe and visualise the customer journey from service awareness through to pre-service and the service period until the end of the service and customer loyalty actions. The visual sequence map of blueprint shows the customer touchpoints that the service front desk will provide. It also shows the back office operations and possible systems needed. The blueprint is not a stable document but rather should be a living document that is revised frequently. (Stickdorn & Schneider 2011, 204—205.)

The blueprint is a visualisation of activities that are presented in parallel actions of various customers' sequences. Typically the blueprint includes the customer actions and touchpoints, and service front desk and back office operations and systems. Additionally, it can contain physical evidence that the customer receives, an overview of the customer's emotional experience or the person, team or organization responsible for the particular service period. The blueprint can be used to test the service with the customer personas that have been created. (Curedale 2013 97, 243.)

The service blueprint allows quantitative prototyping and analysis of the critical service elements. The test can focus on the service time and response period, the service space or the digital user experience. It can be utilised as part of the project plan, by cutting the sequences into parts and making focused blueprints for the desired service periods. (Miettinen & Koivisto 2009, 17.)

In the blueprint of MuotoMyrsky services (Fig. 36.), focus should be put on the customer intention and goals. The blueprint is created to focus on MuotoMyrsky's touchpoints with the customer and on the ease of purchasing and using the service design. The supporting documentation both for marketing and instruction reflect building trust between the service provider and the customer. The service should be as easy as possible but the customer needs to recognise that the time the customer and team spend in co-creation events and workshops should aim for tangible and concrete results. The feedback and key metrics need to be built so they can serve as feedback to the customer on what their response and motivation has
been. The customer loyalty relationship program needs to be considered and designed. The service blueprint will work as a project management tool for actions to create the best customer experience.

The service blueprint for service design shows that it is difficult for a customer to purchase service design without any insight knowledge or personal experience of service design. There are several development needs especially in marketing example stories, briefing and documents provided for the customer and the participants in advance. The other interesting development touchpoint is to build the metrics on how the customers gain from service design in the long term.
Figure 36. Blueprint of MuotoMyrsky services.
**SERVICE BLUEPRINT**

<table>
<thead>
<tr>
<th>CUSTOMER TOUCPOINTS</th>
<th>BACK OFFICE</th>
<th>FRONT OFFICE</th>
<th>DEVELOPMENT</th>
<th>ROADMAP</th>
<th>POST SERVICE</th>
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<td><strong>PRE-SERVICE</strong></td>
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<td>Need of development</td>
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<td>services and products</td>
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<td><strong>SERVICE</strong></td>
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<td>Contact the service provider</td>
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<td>Explaining the service need</td>
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<td>Receiving the quote</td>
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<td>Corrections to the quote</td>
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<td>Project starts</td>
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<td><strong>WORKSHOPS</strong></td>
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<td>Customer insight</td>
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<td>Workshops</td>
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<td>Iteration workshop</td>
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<td>Receives the results of workshop</td>
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<tr>
<td>Iteration workshop, aim, timetable, hosting</td>
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<td>Sends the design proposal and roles</td>
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<td>Advice of prototyping methods</td>
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<td>Sends the plan for the prototyping</td>
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<td>Sends the feedback on prototyping</td>
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<td>Sends the deliverables and next steps</td>
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<td>Sends the invoice (sends the hours used)</td>
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<td><strong>ITERATION WORKSHOP</strong></td>
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<td>Receives the results of workshop</td>
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<tr>
<td><strong>DEVELOPMENT WORKSHOPS</strong></td>
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<td>Receives the results of workshop</td>
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<td>Iteration workshop, aim, timetable, hosting</td>
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<td><strong>TURNOVER</strong></td>
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<td>Receives the feedback</td>
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<td>Receives marketing hints and tips and messages</td>
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<td>Collect the workshop results and workshop on report</td>
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<td>Iteration workshop, aim, timetable, hosting</td>
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<td>Post service system</td>
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<td>Customer references and stories quotes on the web pages</td>
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**WORKSHOPS TOOLS**

- Templates ready
  - Workshops tools
    - basic
    - customized
  - Timetable, workshop, program invitation
  - Matrix of prototyping methods

**DESIGN PROPOSAL**

- Matrix of prototyping methods
  - Creating a prototyping plan
  - Creating a prototyping feedback
  - Creating deliverables and next steps

**DESIGN PROPOSAL SYSTEM**

- Invoice and bookkeeping system
  - Feedback and quality form system
  - Channels and systems decision
  - Success stories

**DEVELOPMENT OF THE SERVICES**

- Creation of feedback form that helps the customer
- How to design a customer loyalty program?
- How to make e-marketing without that it is disturbing but helps the customer

**DEVELOPMENT OF THE SERVICES**

- Timetable, workshop, program invitation
  - Creation of feedback form that helps the customer
  - How to design a customer loyalty program?
  - How to make e-marketing without that it is disturbing but helps the customer
10 PROTOTYPING

The preliminary innovation service, the Prodacton™ concept process and tools, was considered and created after the experience of the hackathons. Service design tools were explored to understand what kind of tool set could give a clear and painless experience of innovation productization. The prototyping phase will concentrate on the Prodacton™ service prototyping.

The tools were chosen by using the observation results from the hackathon, but also the lean start-up methodology. The idea behind the chosen tools and canvases was to understand the customer needs, customer journey, how to prototype and what the prototyping will cost in time, personal cost and physical materials. It also frames the internal and external resources needed.

Two prototyping phases were conducted. Quick prototyping was conducted at the business festival The Shift 2017 in Turku. The phase 2 prototyping was made together with the technology company Langh Tech Oy Ab.

10.1 QUICK PROTOTYPING

The Shift is a business festival in Turku concentrating on connecting traditional industries with new technologies and promoting sustainability. The Shift festival has been organized since 2016. The festival program consists of keynote speakers, workshops, meeting professionals, advisors and interesting startups and enterprises. The festival takes place typically for two days. (The Shift 2018.)

Creve is a startup incubator, accelerator and advisor for creative economy in Turku. Creve is owned by Humak University of Applied Sciences. They are able to provide support and advice from the early stage of starting a company through to
growth and internationalisation. They can also help with funding and financing, with concrete help for funding applications or connecting with investors. (Creve 2018.)

By attending the Creve incubator service, the author was asked to join the Creve team to introduce various new creative businesses at the Shift. It was possible to run a prototype of the Prodacton™ workshop at the venue. Four different workshops were run in two days (Image 9.). One workshop took approximately 45 minutes. People attended as individuals or as small groups. All together there were about 20 people.

All the attendees concentrated well on the process and were keen to understand how they could benefit from the process to bring their ideas to life. By combining analysis of the resources needed tool (Image 10.) with estimated cost, participants received advice as to whether it even makes sense to continue with their processes.

It was a surprise to see that the attendees were motivated to work with the tools, as the assumption was that during this kind of event people are not able to concentrate on a single task for very long. Even in the short period of time it was possible to create trust between myself and the attendees. The Prodacton™ process was initially made for a longer process of 4-6 workshops over 2-3 months, but the quick prototyping showed that there is demand for a shorter, 1-2 day miniProdacton™ service.

Attendees provided some interesting quotes during the workshop: “You should run this in our startup company, as we would get more people on board”, “I think I really should realize my idea, it seems to have more potential than I thought”, “The short period was okay as a wake up call, but actually I think in two days this would really give insight into how to create a product out of an idea or innovation”.


Image 10. Producton™ toolkit
10.2 PROTOTYPING PHASE 2

The second prototyping was completed for the company Langh Tech Oy Ab in Piikkiö. Lang Tech is a technology company whose mission is to find and design best solutions for clean air and seas for future generations. Their first generation product consists of scrubbers for sulphur oxide (SOx) removal for the shipping industry. The scrubbers use water treatment in a close loop and remove exhaust gases. There are two different services for scrubbers, production and installation, both for existing ships and for new ships and vessels. (Langh Tech 2018.)

The aim of the workshops was agreed with the CEO of Langh Tech, Laura Langh. The initial intention was to create the team out of internal staff together with the external suppliers, but as the topic was narrowed down to project management as a service, the team consisted of the marketing, design and procurement staff of Langh Tech.

It was agreed to have four workshops, in order to determine the different project management steps. The workshops were held from September to December 2017. The intention of using the Prodacton™ toolkit was the foundation for the workshops. However, it was necessary to amend the tools to fit the topic better. There was a greater demand to visualise the project management blueprint (Image 11.).

The workshops worked well and the motivation of the team was great. It was valuable to see how trust grew between the team members, even though the team had also worked together previously. Valuable information and insight of different staff roles passed between the team members. The project management processes were enhanced by identifying critical process development needs.

As a result of validating the toolset, there are some adjustments to be made to tailor the Prodacton™ process to be more suitable for the customer. Depending on service creation and development, the Prodacton™ service can be set as a base but the tailored tools will help the customer more.
Image 11. Workshop at Langh Tech
11 INNOVATION SERVICE PORTFOLIO DESIGN

Innovation service portfolio means in this case how to create service products that supportive to each other and the concept can be leveraged easily. Four different services were created for MuotoMyrsky, two of which concentrate on innovation services: the miniProdacton™ and Prodaction™ services.

11.1 CREATION OF INNOVATION SERVICE PRODUCTS

MiniProdacton™ is a 1-2 day workshop where a set of tools is used to develop the idea or innovation further in the phase where the customer is seeking ideas for how to prototype. The Prodaction™ toolkit was developed as the next step after a hackathon. Where hackathons are trying to find good ideas and innovations, Prodaction™ is the second step to progress the idea for productisation and prototyping.

Prodaction™ is a service design process to develop a product or service within the company by forming a temporary team formed of internal and/or external experts. During the process, time and value of product development is estimated and documented. Cost and time spent can be used for agile productisation and expanding the product and services.

In May 2017, MuotoMyrsky applied for, and was a granted, a trademark for the Prodaction™ service design process.

11.2 VISION

A company vision and mission statements are the motivation for the work. A future-oriented vision keeps heads up for constant change and guidance for future steps. A clear vision is an agreement to follow a certain path and it also communicates the vision and values for network partners or new employees while the company is growing.
This is also a check and close loop for using the Happy Startup Canvas. To create a vision statement, the canvas “5 Bold Steps Vision®” is used. The canvas was originally created by David Sibbet from Grove Consultants International. The vision canvas advises how to create a vision but also what kind of themes need to be shown and worked around. The five steps towards the vision are designed. With those steps a vision goal can be achieved. The vision statement works as a framework of inspiration and expresses the dreams of the future business. All the key elements for the vision are pictured in one canvas: the vision, the actions, opportunities, and challenges. (van der Pijl, Lokitz & Solomon 2016, 58.)

The 5 Bold Steps Vision Canvas® was used to create not only the vision but also the mission of MuotoMyrsky (Fig. 37.). The mission of MuotoMyrsky is to help innovatively and enthusiastically make better and more sustainable products and services. The vision of MuotoMyrsky is to create tools that help companies and organizations test their ideas quickly, sustainably and holistically with enthusiasm.

1. **The bold steps to meet the vision is to create**
2. **Easy service products with a great deal of productization**
3. **Active marketing**
4. **Growing network and partnering**
5. **Hiring enthusiastic people**
6. **Going digital**

Themes around the vision are making a recognizable brand, creating print and digital resources, enhancing customer processes, creating a network of partners and resources and creating a high quality measurement process.
Figure 37. Vision of MuotoMyrsky.

- **Theme**: Network resources and outsourcing
- **Theme**: Quality measurements
- **Theme**: Innovation as your daily companion
- **Theme**: Brand and slogan
- **Theme**: Mentors and ex-collages
- **Theme**: Finding the correct funding contacts
- **Theme**: Mentors and ex-collages
- **Supporter**: Hub Turku network
- **Supporter**: Salo network

- **Challenges**:
  - Lacking of network
  - Time and resources
  - Lacking of risk taking
  - Funding and finance
  - Lack of paying customers

- **5 Bold Steps**:
  1. Productisation
  2. Easy products
  3. Growing the network and partnering
  4. Hiring enthusiastic people
  5. Going digital

MuotoMyrsky helps companies to innovate, prototype and test ideas quickly with sustainable, enthusiastic and holistic ways.

Innovative, enthusiastic people to make better and more sustainable services and products.

Inspire and innovate the world easy and effective

Innovate to people with human touch
12 SUMMARY AND CONCLUSION

The ever-growing need for modern and sustainable innovation creates demand for tools for developing ideas fast to evaluate them. People are working both in real and virtual teams and they need tools and common rules to proceed with effective methods. Innovation and challenge creation will grow inside companies and organizations; an efficient toolkit for how to innovate ideas and how to develop these ideas into real innovation products is needed particularly for SME companies. The issue is currently quite topical, new ideas are needed to tackle these complex problems. New skills and mindsets are needed to accelerate ideas to a point where they can be tested and evaluated quickly for further development.

The challenges and problem framing with design thinking need to be recognised far more as a part of innovation and problem solving. The focus is to develop user or human centered empathy for the customer and understand their real problems. (Beckman 2015, 57.)

This thesis has been a long journey to implement design thinking into innovation processes. It has also been an eye-opener to the importance of human connection and temporary teams and organisations. The creation of trust between people is essential for the process of innovation. Service design tools can accelerate the innovation process if a group of people has motivation and the power to make decisions.

Answering the first research question: How hackathon processes can help and improve the innovation process? Yes, the hackathon can accelerate and improve the innovation process if it use wisely and as part of the process and the key resources, funding and people, are considered and in place. The answer is no, if the hackathon is used as single event apart from the whole process.

The hackathon process is fun and it can accelerate initial ideas and solutions on how to develop a new innovation. There were no figures and findings to be found on how a hackathon can be evaluated and whether it really brings any added value for the company. These kinds of metrics are presumably internal confidential information for many companies and there-
fore not available publicly. The challenge in hackathons is to find a process for how to continue with development and how the ideas can be crafted into the company’s innovation process, especially if the hackathons were executed with external partners and teams. There is a clear potential for hackathon processes to improve the innovation process but there must also be a clear path to continue from there. As a result and answer to these questions, MuotoMyrsky’s Prodacton™ service was developed to exchange and accelerate the best ideas found in hackathons into innovations.

Answering the second research question: How can company development be improved by using service design tools? Yes, service design tools along with selected lean start-up and business development tools are excellent means to create and develop a service design company. It points out the development needs and helps to understand future steps. It also gives the resilience of service needs. The challenge of developing “window shopping” for service design products is still an ongoing process and needs far more productisation and focus on customer needs and wants.

This thesis is a combination of service design toolkit creation and building up service design consulting services. The process of creating a service design business with the service design tools has brought a lot of insight into how ready customers are to accept the possibility of using service design. Though there is some awareness of service design, most customers do not recognize the value of it. It is seen as a “fun play” of tools but the advantages that visualization and iteration can provide are not acknowledged. There is also a great fear within persons in certain roles in the services. Though people are willing to develop, they feel criticism of their actions. Service design should be recognized as open management where everyone can see themselves as designers and creators.

While products and services should be easy to choose and purchase, it is not easy to develop these services to be as handy as possible. It is very difficult to make services ready to be picked up as if they were on a storage shelf. Successful service design services need a certain amount of explanation and open mindset also from the customer’s side.
13 DISCUSSION

The research and using service design processes has developed MuotoMyrsky's insight of customer wants and needs. It was possible to bring the theoretical framework to life during design process by using service design tools as a continuum of visualizing customers needs and as a basis for service offering.

A set of tools was used to create the company vision, values, stories, business model and services products. These tools were chosen to focus on creating a close loop of iteration and understanding the improvement gaps. Other tools could potentially have suited the process better, however, the tools used jointly completed each other. Service design tools help to see a bigger picture of business design. For more comprehensive results, there could have been more iterations during the process.

The business canvas or new extended business canvas need more iteration cycles to refine the service productization. It would be beneficial to add the real or expected figures to the business canvas both for a whole business and service by service. The service productisation is a work in process and the sharpening of the product focus will help the customer to understand the value of using service design in their own business, service and product design.

The most valuable part for the author is the customer profile and value map together with the business model canvas. It is clear that there is still a demand for continuous development and improvement. Based on the blueprint the concrete development areas can be defined. Going forward, the idea is to use the blueprint as a project plan. The vision map and steps to achieve the vision will give the development process a path and ensure that MuotoMyrsky, FormStorm, is constantly moving and breezing.

The two-year thesis process has been a great journey to better understand how to develop the company’s services and meet the needs and insights of focused customer groups.
14 REFERENCES


Stickdorn, M. & Schneider, J. (2011). This is service design thinking: Basics - tools - cases. Amsterdam: Bis Publishers.


Appendix I

Interview questions:

1. What is your background in Innovation processes?
2. In your experience, what are the best ways to collect new innovative ideas?
3. Have you got any experience of innovation camps or hackathons? What kind of experience do you have and what is your opinion of hackathon processes?
4. In your opinion, why do ideas for the innovations not proceed to a real product or service?
5. In your opinion, what kind of tools would SM companies need to develop innovation into a real product and/or service?
6. What kind of advice or experience do you have for how to create a process between the idea and the real product or service?
Appendix II.
Brand elements of MuotoMyrsky

Logo of MuotoMyrsky.

BRAND COLOURS

Green
PMS 562
C 45 M 22 Y 100 K 906BC94

Grey Light
K 20% #D0D0D04

Yellow
PMS 7466
C 5 M 22 Y 100 K 91E3717

Orange
PMS 716
C 3 M 36 Y 100 K #B77823

Purple
PMS 513
C 48 M 94 Y 5 K #95358D

Grey Dark
K 60% #5858585B

Grey Middle
K 60% #D0D0D04

Black
K 95% #404041

Grey Light
K 20% #D0D0D04

Grey Dark
K 60% #5858585B

Grey Middle
K 60% #D0D0D04

Black
K 95% #404041

TYPOGRAPHY

LATO - Font family

General

Regular

Emphasise

Thin

Bold

Black

LATO - Regular

ttf

LATO - Thin

ttf

LATO - Bold

ttf

LATO - Black

ttf

Brand colours of MuotoMyrsky.

Typography of MuotoMyrsky.