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Applying customer-dominant logic to conceptualize a digital rental service for a self-storage company

Salo, Ilari

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Applying customer-dominant logic to conceptualize a
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Ilari Salo 1501226
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Ilari Salo

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Digitalization of services is important for many industries world wide. The self-storage industry has not been in the forefront of development of its digitalized services. The development challenge was to identify the parts of the current service path of the commissioning company that were viewed as the most important ones by the clientele. The purpose of this thesis was then to design a viable new concept for a web-based self-storage rental service based on the insights gathered from the clientele and the staff of Pelican. It was decided during the design process the new service was to be designed first primarily for use on mobile devices.

The theoretical foundation for the thesis was based on the Customer-Dominant Logic, which highlights the primacy of the customer in the value formation process. The service provider's function as a supportive actor in the value creation process was the starting point for designing a new service that allows the user to adapt Pelican's digital offerings into their own context. Service design in digital context was also used as the basis for the process in order to make sure that the designed concept could also be launched using Pelican's current resources.

The concept was created using the design process by the Hasso-Platner institute. The model emphasizes the iterative nature of service design. The methods used in the understand and observe phases consisted of conceptual interviews, card deck exercises and observational methods. The standpoint was formed by using personas and customer journey mapping. Ideation was carried out in design workshops, where brainstorming and storyboards were used to create a design concept. The prototyping was carried out using an online prototyping tool. The designed concept was tested with the customers of Pelican prior to finalizing the design. The focus and scope of this thesis covers the entire design process excluding the launch of the new service.

The main insights gathered during the project were that the most important touchpoints to be created in digital form should help the customer to identify the right size for the storage unit, provide the customer with clear information about the pricing and informing the customer on how to access and find the chosen unit at the storage site.

The designed concept has been presented and approved by the commissioning company and the launch of the service has been planned for the second quarter of 2018. The concept designed has wide practical use for the Finnish operations of Pelican. Further research in Sweden and Denmark is recommended before the launch of the service in those markets. The designed service allows the customer to choose and rent a suitable storage space without restricting them to the opening hours of the customer service.

Keywords: Self-Storage, Customer-Dominant Logic, Service design, Service design in digital context

Ilari Salo

Digitaalisen pienvarasto vuokraus palvelun konseptointi pienvarasto yritykselle asiakaslogiikkaa hyödyntäen

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Palveluiden tuottaminen digitaalisessa muodossa on tärkeää useille toimialoille maailmanlaajuisesti. Pienvarasto ala ei tähän saakka ole johtanut kehitystä palveluiden digitalisoinnissa. Kehitystyön tarkoituksena oli tunnistaa tärkeimmät seikat toimeksiantajan nykyisessä palvelupolussa asiakkaan näkökulmasta. Opinnäytetyön tavoitteena oli suunnitella toimintakykyinen uusi palvelukonsepti digitaaliselle pienvarastonvuokraukselle hyödyntäen asiakkailta ja henkilökunnalta kerättyjä tietoja. Kehitystyön aikana uusi digitaalinen palvelu päätettiin ensisijaisesti suunnitella käytettäväksi mobiililaitteilla.

Opinnäytetyön teoreettisena lähtökohtana pidettiin asiakaskeskeistä liiketoimintalogiikkaa joka korostaa asiakkaan roolia palvelun arvon toteutumisessa. Palveluntarjoajan rooli arvon muodostumista tukevana toimijana oli perustava oletus uuden palvelun suunnittelussa, joka mahdollistaa arvon muodostumisen asiakkaan käyttäessä Pelicanin digitaalisia palveluja omassa kontekstissaan. Palvelumuotoilu digitaalisessa ympäristössä oli toinen lähtökohta tälle kehitysprojektille, jotta varmistettiin uuden palvelun toteutettavuus toimeksiantajan nykyisillä resursseilla.

Palvelu suunniteltiin Hasso-Platner instituutin palvelumuotoiluprosessia hyödyntäen. Valittu malli korostaa palvelumuotoilun iteratiivista luonnetta. Menetelmät joita käytettiin ymmärrys ja tarkkailu vaiheissa olivat yksilöhaastattelut, korttipakkatehtävä sekä havainnoivat harjoitukset. Katsantokulma muodostettiin käyttäen persoonia sekä palvelupolkuja. Ideointi tehtiin työpajoissa käyttäen aivoriihiä sekä tarinankerronnallisia metodeja. Palvelun prototyyppi luotiin käyttäen internetpohjaista prototyyppi työkalua. Suunniteltu palvelukonsepti testattiin asiakkaiden kanssa ennen viimeisiä muokkauksia. Opinnäytetyö kattaa koko palvelumuotoiluprosessin pois lukien uuden palvelun lanseerauksen.

Tärkeimmät havainnot jotka projektin aikana kerättiin olivat seuraavat: Uuden digitaalisen palvelun tulee auttaa asiakasta arvioimaan varaston oikea koko, antaa asiakkaalle selkeä kuva hinnoittelusta sekä neuvoa asiakasta kuinka varastotiloihin pääsee ja kuinka oma varasto löytyy varastokohteelta.

Muotoiltu uusi digitaalinen palvelukonsepti on esitelty toimeksiantajalle, joka on hyväksynyt kehitystyön tulokset. Uuden palvelun suunniteltu lanseeraus on 2018 toisella vuosineljänneksellä. Uusi palvelu tarjoaa useita etuja Pelicanin suomalaiselle liiketoiminnalle. Jotta uusi palvelu voitaisiin ottaa käyttöön sekä Ruotsissa että Tanskassa tulisi molemmissa maissa tehdä tarkentavaa tutkimusta, jotta palvelun toimivuus varmistettaisiin. Kehitetty palvelu antaa asiakkaalle työkalut oikean kokoisen varastotilan valintaan eikä sido asiakasta asiakaspalvelun aukioloaikoihin.

Avainsanat: Pienvarastointi, asiakaskeskeinen liiketoimintalogiikka, palvelumuotoilu, digitaalinen palvelumuotoilu

Table of contents

1	Introduction	7
1.1	Development project for Pelican Finland.....	9
1.2	The objective, purpose and approach of the thesis	11
1.3	The structure of the report	12
1.4	Key concepts of the thesis.....	13
2	Digital service development process from customer-dominant viewpoint	15
2.1	Customer dominant logic of service	15
2.1.1	Value formation	18
2.1.2	Customers reality and ecosystem	20
2.1.3	Customer logic	21
2.2	Design thinking	22
2.3	Service design.....	23
2.4	Iterative service design process	25
2.5	Service design in digital context	30
2.5.1	5 phases of digital content service development.....	31
2.5.2	Digital content development.....	32
2.5.3	Value proposition in digital services	33
2.6	Using design thinking to gather insights.....	34
2.7	Implications of customer dominant logic on research	35
2.7.1	Case study as a research design	36
3	Conceptualizing the new digital service	37
3.1	Understanding and observing with customers.....	37
3.2	Preliminary quantitative research with customers.....	37
3.3	Qualitative gathering of insights with customers.....	39
3.4	Forming the point of view with the staff of Pelican	49
3.5	Ideation work shop with the staff of Pelican.....	53
3.6	Prototyping the digital service.....	58
4	New digital self-storage rental service.....	63
4.1	The new concept created for mobile use.....	64
4.2	Development project compared to the chosen service design process.....	70
4.3	Presenting the concept to the commissioning company	72
5	Conclusions.....	73
5.1	Assessment of the thesis work	73
5.2	Future launch of the service	76
	References	77
	Electronic sources	79
	Illustrations	80

Figures 81
Tables 82
Appendixes 83

1 Introduction

Self-storage is a term which is used to describe storage facilities that are secure and offer do-it-yourself storage units for consumer and commercial customers. (FEDESSA 2017, 1.)

First self-storage operators began their businesses in the United States of America in the 1960's. Since then the industry has grown noticeably and it now accounts for almost 51 000 facilities in the US alone. (FEDESSA 2017, 2.)

First self-storage companies were founded in Europe in the beginning of the eighties. Currently there are in the region of 2700 self-storage facilities around Europe with over 7 million square meters of rentable storage space. Consumers use self-storages for many different reasons. The main reasons are social factors including, moving, marriage, divorce, birth of children etc. Businesses are turning to self-storage to store their archives or inventory and office equipment. In general the increase awareness toward the industry has also contributed to its growth. (FEDESSA 2017, 2.)

To provide an insight into the sizes of the self-storage industry in the world the following table shows the top eleven countries in terms of the number of rentable square meters. The countries in which the commissioner of this thesis Pelican Self Storage operates in are bolded in order to offer a point of reference to the rest of the industry.

Country	Population	Estimated number of facilities	Total current rentable sqm	sqm per person
	324 000 000			
US		51 000	247 807 000	0,848
Australia	23 850 000	1 300	4 050 000	0,170
UK	65 158 000	1077	3 493 000	0,054
France	64 711 000	340	930 000	0,014
Netherlands	16 898 000	284	849 000	0,050
Spain	46 041 000	313	640 000	0,014
Germany	81 277 000	170	463 000	0,006
Sweden	9 868 000	128	370 000	0,037
Denmark	5 695 000	71	176 000	0,031
Italy	59 860 000	46	163 000	0,003
Finland	5 530 000	59	130 000	0,023

Table 1: Self-storage markets in order of total rentable square meters (FEDESSA 2017, 3).

The industry in Finland remained relatively small for a long time when compared to elsewhere in continental Europe. This slow development was discussed with Regional Manager Markus Pentikäinen in the early stages of this thesis process. He identified the sparse density of the population in Finland as one of the reasons explaining this slow development. There has been enough space to build storage facilities in the proximity of the housing. As the rural areas are experiencing moving deficit the need for storage services in the urban areas has risen as people move to cities for work, education or better services. Regional manager Markus Pentikäinen also identified the high costs of housing combined with smaller apartments as one of the reasons behind the increase in demand of storage solutions.

Due to the reasons listed above the self-storage industry in Finland has experienced a noticeable growth both in turnover and in the amount of storage sites and rentable square meters. The development of the turnover of two largest operators in Finland is presented in the following table as well as the current amount of total square meters.

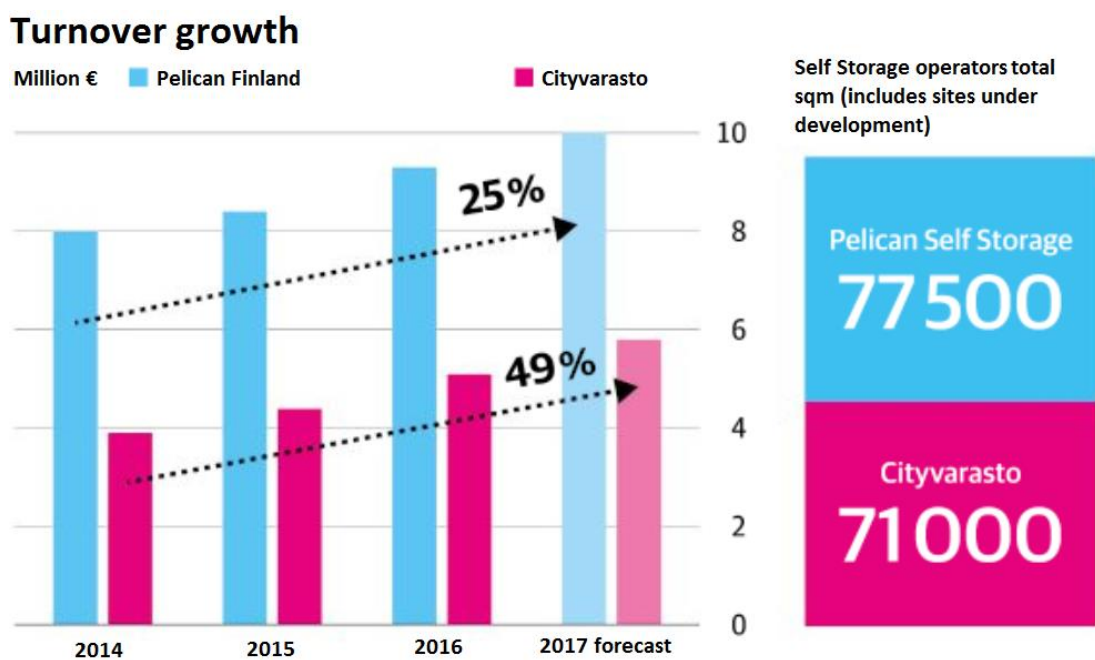


Figure 1: Turnover and sqm of Pelican Finland and Cityvarasto (Kauppalehti 2017).

The industry in Finland has been developing at a yearly pace of 10-20 % (turnover) for the past decade. Pelican Finland is expecting a turnover of € 10 million for the year 2017 and Cityvarasto will most likely reach € 5,8 million. Thanks to the many smaller operators in Finland the total turnover for the industry is expected to reach € 20 million. To put the sizes of self-storage industry in different countries into perspective it can be mentioned that one of the largest operators globally, the US based Public Storage reached revenue of \$ 2,46 billion in 2016. (Kauppalehti 2017.)

1.1 Development project for Pelican Finland

The service design project for this thesis is commissioned by a Danish self-storage operator Pelican Self Storage. The focus of the thesis is on the Finnish operations of the company, but the results of the development project will be utilized in all markets the company operates in.

Pelican Self Storage was founded in 2009 in Denmark by a real estate investment company Nordic Real Estate Partners (NREP). The initial investment capital for this project of NREP was received from M3 Capital Partners operating in London. After the launch the development has been fast in Denmark, Sweden and Finland. Currently Pelican operates a total of 34 self-storage sites in the before mentioned countries. (Pelican Self Storage 2017, 1.)

Pelican Self Storage Finland (Pelican) has operated in the Finnish self-storage industry since June 2010 when it launched its first site in Vallila Helsinki. The author of this thesis has been an employee of Pelican since May 2010 and has been involved with the launch of each of the new sites in Finland. At the time of this thesis project the author acted as a Senior Site Manager responsible for monitoring the operational performance of the sites as well as the quality of customer service. For this reason the project was carried out with close and immediate connection with the commissioning company. Daily interaction with many representatives of different levels of Pelican was possible. Further background information was easily accessible, if needed, via discussions with the country management of Pelican Finland. In some parts of this introductory section those discussions were used as a reference, when a written report could not be accessed from the internal company archives.

By the summer of 2017 Pelican had expanded its operations throughout the Helsinki metropolitan area and also to Turku. In the metropolitan area Pelican operates with 13 self-storage sites. 10 of those sites have a customer service and a store attached to the site. Staff is present at the stores during working hours. 3 of the sites are so called "satellites" where physical customer service is not present. In Turku Pelican operates with two sites, one satellite and one manned. (Pelican Self Storage 2017, 2.)

According to the Regional Manager Markus Pentikäinen Pelican has relied heavily on the monetary backing of the investors which has allowed high profile real-estate acquisitions in central high traffic areas. New or completely renovated storage facilities accompanied with strong branding have secured Pelicans visibility in the metropolitan area and in Turku (Pentikäinen 2016-2017).

The Finnish self-storage industry is dominated by the two largest operators; Pelican and Cityvarasto Oy. The two actors have thus far differentiated themselves from the competition mainly with the accessibility and the quality and appearance of the storage sites. Highly aggressive pricing and special campaigns have been the describing method of marketing by the two companies (Tolvanen 2017).

Traditionally in the Finnish self-storage industry the operators have aimed to make their facilities to function without any customer service personnel. This was often due to the fact that the entrepreneur was the only person working for the company at the time of their initial launch. Due to the lack of service personnel the touchpoints between the customer and the provider were kept to a minimum. Some operators have begun to develop the service toward a more customer centric approach. Pelican has been in the forefront of this development in Finland. The different operators within the industry aim to differentiate themselves by developing the accessibility of their service as well as the variety and quality of the supporting services and the core product (Pentikäinen 2016-2017).

Developing a digital rental service for self-storage operator from the viewpoint of customer-dominant logic (CDL) is the core of this thesis. CDL was chosen as it allows for the service provider to facilitate the value for the customer in their own context (Heinonen et al 2010, 532). The background for this project is the digital era combined with the customer-dominant logic of service. Digitalization of services is important as it allows the company to address the increasingly dynamic and complex customer interactions (Lenka et al 2016, 92). Therefore the value and importance of high-quality ICT-enabled offerings continuously rise as a ever increasing amount of the service encounters customers have with a service provider are digital. (Heinonen 2008, 2.)

Self-storage industry thus far has not been in the forefront of digital service development as the offered service itself has been viewed relatively one dimensional and analog. Traditionally the service provider has either rented or purchased a large building which it has then rented out in smaller units to its customers. The facility itself was often seen as the only service offered by the provider and the customers mostly rented the space out of sudden necessity. (Tepponen 2016-2017.)

The recent developments in consumers buying habits have finally provoked some operators to gradually start to venture into digitalized services, but the development has been slow and inconsistent. Finnish self-storage operator Cityvarasto received the innovation of the year award from the Federation of European Self Storage Associations (FEDESSA) in 2011 for launching the first webstore for storage rentals in 2011. This award winning rudimentary execution of an online store has not been further developed since then by the originator Cityva-

rasto or other companies in the industry. However as the people grow more accustomed to modern 24 hours per day accessibility of everything also the self-storage industry has to react accordingly. (Tepponen 2016-2017.)

Pelican wants to adapt a more customer-dominant organizational culture and hopes for the web and mobile services to be brought to the level where they can act as a supportive tool in realization of that goal (Tolvanen 2016).

The task commissioned by Pelican for this project was to conceptualize a digital storage rental platform. This thesis is an independent part of a larger development project of the company's digital offerings and presence.

1.2 The objective, purpose and approach of the thesis

Pelican aims to cultivate the whole organizational attitude towards a more customer centered holistic approach. Therefore the objective of this thesis is to collect insights from Pelicans customer base and the staff in a way that allows for concrete improvements on the company's digital business models. This thesis utilizes the viewpoint of service marketing and focuses especially on service cultivation and development in digital context. By doing this the results offer Pelican an understanding on how to influence the created value within the digital encounters with the customer. (Heinonen 2008, 8.)

The purpose of this thesis is to create viable suggestions for a new digital storage rental service based on the insights gathered from current and potential customers as well as the staff of Pelican. As the result a new concept for a digital self-storage rental service is created.

The focus and scope of this thesis covers the entire design process excluding the launching of the new service. Most emphasis is put on the early stages of the process in order to get to know and understand the customers of Pelican, and to reveal the most crucial insights from their perspective. The aim is to obtain a vast array of insights about the wants and needs of the customers and to communicate those insights to the team of Pelican involved in the design process. The later phases of the design process are used in order to transfer those insights into comprehensible form that can be easily communicated and preferably visualized. The later stages of the design process rely heavily on the results of the initial phase of gathering and communicating the insights. New concepts are then developed based on the collected insights and tested further. A new digital self-storage rental service will be introduced as a result of this process. The process used for this project and the resulting service will be introduced in detail in the later parts of this report.

As mentioned in the previous chapter the gathered insights are used to design new customer-centric concept for Pelican. The purpose is to utilize customer-dominant logic (CDL) in a design process for a new digital rental service. The reason CDL is used is that it is a perspective that focuses on customer related aspects (Heinonen & Strandvik 2015, 1). The insights are acquired from the customer base of Pelican and therefore the results might lack accuracy when used for other organizations. The new concept could be applicable for other organizations within the self-storage industry with appropriate modifications.

During this thesis project the importance of flexibility and 24 hour accessibility to storage rental services was discovered. This need can be met with the use digital tools and web based services as majority of the customer base for Pelican can reach digital services with their hand held devices and at home. This thesis develops a new service for Pelican which allows the customers to view, select, rent and access the storage facilities without contacting customer service personnel. The service design process leading to the new service and the new concept are introduced in detail in the following sections of this report.

Limitations

The scope of this project does not reach the development phase of the actual digital content for the service. This part of the project including coding and creation of the working version of the designed concept will be carried out by the company during Q2 of 2018. It is still important that the requirements for the launch are kept in mind during the design of the new digital rental service. The aspect of digital content development will be shortly discussed in the section 2.5.2 Digital content development.

1.3 The structure of the report

This first section of this report introduced the background of this thesis as well as the objectives and the purpose of it. The later part of this section presents the key concepts for this project as they are used throughout the thesis.

The second section of this report discusses the development process of a digital service from a customer-dominant viewpoint. Customer-dominant logic, which is chosen for the theoretical framework for the thesis, is presented in the second section with a short comparison to other prevalent business logics. The selection of CDL is also discussed in the section. Concepts of design thinking and service design are also introduced and their effects on this project are discussed. Different types of design processes are also introduced in order to identify the most suitable one for the development project of this thesis: Developing a digital rental service for self-storage operator from the viewpoint of customer-dominant logic.

The section then moves on to introduction of different types of design processes. This is done in order to determine which process would best support the task of creating a new digital service. Finally the most acute theoretical aspects of service design in digital context are considered in order to allow for justifiable development recommendations to be identified from the data gathered in the empirical phase.

After the theoretical part the third section moves on to explaining the development activities together with the results gained from them, in other words the chapter goes through the whole development process of this new service. The methods used for each phase of the chosen service design model are introduced here as well how those methods were used during this project.

Section four moves on to introduce the results of each phase of the design process. What was done and what conclusions were drawn are introduced here. The validation of each chosen method in regards to the output received from them is evaluated. Section four also introduces the new concept for the digital self-storage rental service created for Pelican. The process carried out during this design project is finally then compared to the chosen design model. Also the selection of that specific model is evaluated in hindsight.

In the fifth section of the report the thesis process is evaluated. Also the future launch of the created service and the next steps of the process that do not fall under the scope of this thesis are shortly discussed.

1.4 Key concepts of the thesis

In this chapter some of the most central concepts of this thesis work are presented in order to avoid possible misunderstanding as some of the concept might have several meanings to different readers, as they can be defined in many different ways. The concepts mentioned here are presented with more detail through out the report.

Self-storage

Self-storage is a term which is used for storage facilities that are secure and offer do-it-yourself storage units for consumer and commercial customers (FEDESSA 2017, 1).

Mobile storage rental platform

Web and mobile storage rental platform is a term used in this thesis to describe an ICT enabled service which allows for a customer to rent a storage space entirely digitally without any human touchpoints.

Nordic School

When the term Nordic School is used in this report it is perceived as the school of service marketing research which has its origin in the 1970s Nordic countries (Grönroos 2006, 318).

Design thinking

Design thinking as a term is one that might be described in thousands of different ways depending on who is providing the definition. Jon Kolko (2015, 68) defines design thinking as a set of principles consisting the following; empathy with users, a discipline for prototyping, and tolerance for failure. Razzouk together with Shute (2012, 330) on the other hand determine design thinking as: “An analytic and creative process that engages a person in opportunities to experiment, create and prototype models, gather feedback, and redesign.”

Service design & Service development

Service design and service development are term often used in this thesis. Service Design is referred in this report as being the activity where all the different components of a service are organized and planned in a way that improves the quality of that service, as well as the interaction between the customer and the provider. Service development, on the other hand, is referred to as the process of creating new services or developments to existing ones for the commissioner.

Design Process

Design process is often used for describing the process of designing traditional tangible products. In this report the term Design Process is used to depict a service design process, in other words the iterative process consisting four main steps of exploration, creation, reflection and implementation. (Stickdorn & Schneider 2010, 117.) There are several frame works describing the process of service design, many of which are introduced in the theoretical part of this report. For the purposes of this development project the design process of Hasso-Plattner institute was used.

Customer Dominant Logic

Customer dominant logic, which acts as a backbone for this development project, can shortly be described as a perspective of marketing and business where the primacy of the customer is the foundation for the premise. Adaptation of CDL requires an organization to shift its focus, from how to involve their customers into their processes to understanding how the company's offering should be developed, in order for the customers to add it into their ecosystem (Heinonen & Strandvik 2011, 472). Customer dominant logic of service is looked into with detail in the theoretical part of the report.

Touchpoint

Touchpoint is a buzzword often referred to in many of the current service design publications. In this thesis the term is used to describe any moment when human to human, human to machine or even machine to machine interactions happen during a service process (Stickdorn & Schneider 2010, 33). For this project the main challenge was to identify all the crucial moments of interaction in the current service experience, in order to replace those human to human moments as efficiently as possible with human to machine touchpoint, to develop the new service. Touchpoints of the developed service are speculated and introduced during the third and fourth section of this report.

2 Digital service development process from customer-dominant viewpoint

This chapter discusses the evolution of the perspective of business and marketing. The main focus is the move from service-dominant logic to customer-dominant logic. After this discussion the approach of design thinking will be introduced on a general level as well as different design processes together with the methods used during them. The theoretical concepts that are introduced here are selected to support the purpose of this thesis. The use of the selected methods is argued using literature from different authors in the chapters where they are introduced.

2.1 Customer dominant logic of service

Creation of value has been a central topic of discussion among the different schools of service marketing for the past decades. The focus from goods-dominant logic (GD) has been shifting toward service-dominant logic in the academic discussions. This dispute between the two logics has its roots in marketing literature starting from the 1980's with Grönroos (1982) and Normann (1984).

Service-dominant logic (S-D logic), first introduced by Vargo & Lusch (2004, 2006), shifts the focus away from the producer and the goods oriented view of marketing, prominent in the goods-dominant thinking. The focus is shifted toward the process of exchange rather than on the object being exchanged. Service-dominant logic suggests that services should be regarded as the application of specialized competences, for creation of value for the receiver, in a way that benefits both parties (Vargo & Lusch 2004, 2). The papers of Vargo & Lusch have since been actively discussed and commented by other authors such as Grönroos (2006, 2008) and Gummesson (2007) (Heinonen et al. 2010, 531-532). The development of the service dominant logic and its modification toward customer dominant logic is discussed in the following sections of this chapter.

The views of Vargo & Lusch were further discussed and developed by Grönroos (2006, 325) who applied the views of the Nordic School to the logic. Grönroos noted that Nordic School view of goods differs from the one presented by Vargo & Lusch. The authors (2004, 9) propose that goods are transmitters of service and merely act as distribution mechanisms for the service. The Nordic School view, on the other hand, sees that goods are merely one type of resource that transmits the values of services. The other types include; people, information, infrastructure and systems. The views of the Nordic school are more suitable for the purposes of this thesis as the core offering of Pelican itself is not a good at all. The service of Pelican is an empty space in a storage facility, which in itself has no value to the customer before he or she has a job that needs to be done, and than job can be done by using the services of Pelican.

Value co-creation has been identified as a central part of S-D logic as it has been stated that the provider of a service only facilitates the processes that enable the customer's value creation. In other words this view, especially popular among the Nordic school of service marketing, identifies the customers and service providers as co-creators of value. The main purpose of service was argued to be to support the customers' interaction with the providers' resources in a value-creating way. (Grönroos 2006, 324.) In other words the value is experienced by the customer during the use of the service in their own context.

One of the core paradigms of S-D logic is that the providers offer value propositions. And by interaction with the customers, the value is co-created and subjectively determined by the customers, in their own context. It is seen as the job of the company to communicate and explain the value proposition to the users, how it should be used and how it could be used in unison with other value propositions, to allow for the co-creation of value to emerge. (Gummerus, von Koskull, Magnusson & Skålen 2015, 139.)

The focus in S-D logic is argued to be too much on the interaction and production by the producer, rather than on the customers themselves. The customer is seen as a co-creator of value in a producer dominated process. Vargo & Lusch (2004, 11) conclude that the customer is fundamentally a resource used in the value creation rather than mere target. The underlying problem with this logic is that the producer is still guiding and steering the development of the new services, toward the direction of what that the customer would prefer to purchase. In other words the focus is still not truly on the customer but on the producer. This approach inevitably leads toward development of services that are actually producer oriented, as they do not promote the understanding of the underlying job that the customer needs to get done. Due to the lack of attention on the customer's world and having the main focus on what the producer is doing the service-dominant logic could be argued to remain a producer-dominant logic. (Heinonen et al. 2010 532-534.)

As discussed earlier, the focus on the customer is not achieved by the S-D logic, as the main interest lies with the production itself and the communication and interaction about that production with the customer. Heinonen et al. (2010, 532-534) note that due to this lack of understanding of the customers' logic, the efforts to co-create value or interact with the customers do not result as intended. The process should result into understanding of why the customers are using the service for. In order to be able to tap into the customer's world and be to be able to understand how the company and its offerings are intertwined with the customer's life, context, experiences and practices, different business logic is required. Customer-dominant logic of service could fill in that gap in the understanding. This paragraph describes the current situation at Pelican. Although the company wants to see itself as a customer centric operator all of the developments regarding the service are done without input from the customers.

Customer-dominant logic (C-D logic) is a marketing logic which highlights the primacy of the customer rather than the service provider, the interaction or the service itself. The researchers behind the C-D logic (Heinonen et al. 2010, 534), note that it is not a subset for the S-D logic but rather a different point of view. The customer orientation in C-D logic is shifted toward focusing on what the customers are using the services for in their own context to accomplish their goals. For this reason C-D logic is chosen as the viewpoint of this project as Pelican has used the S-D logic as its marketing logic through out its operation in Finland. The company has approached the development of its services by trying to create offerings it assumes the customers would prefer. The focus is shifted toward C-D logic for this thesis, as the customers are involved in the creation of the new service for the first time throughout the company's history.

C-D logic is used as the foundation and cornerstone for the empirical research done during this development project because it sets the customer at the center. C-D logic puts the attention on the logics that drive the customer toward the choices and different decisions instead of having the focus on the service provider's perspective. The key question in business decisions, in the viewpoint of customer-dominant logic, is how the service provider could become a part of their customer's lives instead of trying to identify different ways to make the customers a part of their own processes. (Heinonen & Strandvik 2015, 475-476.) In this thesis the answer to that question is searched with the use of different service design methods, which are discussed in detail in the section 3 of this report.

2.1.1 Value formation

The formation of value could be seen as the pivotal question separating the different business logics; G-D logic, S-D logic and C-D logic. As value is a subjective matter the producers cannot control the formation of it. In order to understand the formation of value in the customer's context the customer has to be involved in the process of developing the service. The customer's context plays a key role in determining how and from where the customer perceives value. The formation of value might also occur in an undeliberate passive process of which the customer might be unaware of. (Heinonen, Strandvik & Voima 2013, 107-108.)

As mentioned earlier a new perspective to marketing was introduced in 2010 by Heinonen et al. This was a logic where the customer's reality and ecosystem was set as the starting point for value formation rather than the company and its service process. The past experiences, current situation as well as the customer's context also have an affect on the way customers assess value. Value often emerges in the customer's day to day activities rather than at the point of exchange thus enabling the provider's visibility to the point of value experience. Customer's time frame that effects how one perceives value is broader than the providers' as it often is affected by the past, present and future. The aspects of past and future most often are out of the reach of the service provider thus making it impossible to fully control the experience of value gained from the usage of the service. The outcome of the service also affects the value perceived by the customer regardless of whether or not it was the outcome pre-determined by the provider. (Heinonen et al. 2010, 538-539; 2013, 108.) The challenges listed here require a way to create new services or develop old ones in a way that involves the customer's thru out the design process. In addition to this the development has to continue after the initial launch of the service, and the collection of feedback and user experiences should be continuous.

The essential features of value formation in customer-dominant logic are presented in the following table.

Value Formation	Explanation
Definition	Customer value formation is defined as customers' emerging behavioral and mental processes of interpreting, experiencing and integrating offerings in their everyday lives/businesses, with either positive or negative outcomes. Provider value formation is defined as the provider's evolving process of strategizing, designing and implementing offerings based on its capabilities and skills and interpretation of customer logic, with either positive or negative outcomes
Description	Value formation is used rather than value creation to stress the emerging characteristic of value-in-use in contrast to the notion value creation
Outcome (what)	Customer logic, tasks and needing (not needs) determine how the offering is experienced and forms value-in-use
Process (how)	Value is formed in two separate but related processes, one for customers and one for providers. The customer value formation process is driven by customer logic and activities and is influenced by the actions of other actors. The provider value formation process is driven by the provider's business logic and activities and is influenced by other actors' actions
Location (where)	Value-in-use always emerges for a customer in a certain context. In the customer's world, activities and experiences occur that are related and unrelated to a specific provider and may lead to value formation
Time (when)	Value-in-use evolves as a process that extends over an indefinite time, including favorable and unfavorable phases and elements. Value-in-use is interpreted and re-interpreted, and it is a relative evaluation at different points of time
Customer (who)	There are many types of customers, such as consumers, firms, organizations or other actors represented as individuals, groups or other units. Customers orchestrate value formation
Provider (who)	Providers may be firms, organizations, persons or other actors who provide offerings to customers

Table 2: Essential features of value formation (Heinonen & Strandvik 2015, 479)

The features listed in the table above were used as one of the guidelines when making the design plan for the service concept created during this thesis process.

2.1.2 Customers reality and ecosystem

Value could be argued to be the one of the vaguest and indefinable concept in service marketing and management. There have been several attempts to create a holistic conceptualization of value (Grönroos 2011; Grönroos and Ravald 2011; Heinonen et al. 2010; Helkkula et al. 2012; Voima et al. 2010) More recent development has shifted the focus toward a perspective that recognizes value within the context of customer's experiences and situations. This development has led to the situation where companies are forced to put their focus on being able to involve their offering into the lives of the customers (Grönroos & Voima 2012, 2.)

Service-Dominant logic describes value as value-in-use and considers it to be created in a dyadic process of co-creation with the customer. Customer-dominant logic however views the starting point for value formation not to lie within the service provider and its processes or even the interaction with the customer, but at the customer's reality and ecosystem. In customer-dominant logic the customer defines his or hers own ecosystem, instead of the provider suggesting it to him or her. (Heinonen et al. 2013, 107-108.)

Focus of providers should- and has been shifting more toward recognizing their own presence in the lives and businesses of their customers instead of paying too much attention on the visible interactions (Heinonen & Strandvik 2015, 482). In other words, pivotal part of the formation of value happens within the reality and ecosystem of the customer rather than accumulating in the isolated sphere of the service or the relationship between the provider and the customer. The understanding of the before mentioned shift in formation of value should encourage providers to identify their role and influence in the customers ecosystem. (Heinonen et al. 2013, 110.)

Value formation in the customer's world is affected by various related and unrelated activities and experiences. These activities and experiences form the ecosystem of the customer, which is a structure of random actors and elements within the customer's world that are relevant for a specific service. Customers ecosystem consist of many different unconnected actors; other service providers, other customers, other entities such as family and friends as well as the virtual and physical structures that are related to the usage of the service. For the service providers it is important to understand that in customer ecosystem it is the customer who defines the crucial components of a service. (Heinonen & Strandvik 2015 479-480.)

When planning research activities based on the customer-dominant logic there are several aspects to be taken into consideration. According to CDL the offering made by the provider of the service should reflect the experiences and activities of the customer. To be able to understand those drivers the research should cover the entirety of the customers world starting

from the core activities and experiences through related activities and experiences and finally to other activities and experiences.

As mentioned earlier the current situation at Pelican is that the organization is still struggles to achieve organizational culture that really emphasizes the importance of the customer in the value creation. The company develops the offerings they assume the customers might need according to what they can deliver with the current resources. In other words the business logic followed by Pelican is service-dominant rather than customer-dominant. The reluctance of developing the internal processes as well as the external touchpoints, between the company and the customer, Pelican will not be able to reach those customers that currently opt for the competing services not to mention the customers who still have no knowledge of the existence of the self-storage industry.

2.1.3 Customer logic

Customer logic is an important concept within the theory of CDL. Customer logic combines the personal characteristics which drive the individual's actions, reactions, preferences and decisions. Customer logic identifies the patterns in which the individuals' experiences, goals and activities are integrated. All customers can be stated to be informed by their own logic, in other words they are aware and act according to the rational of their own reality to a certain degree. Customer logic defines the patterns in which individuals live their lives and how they act in business settings. There are several different customer logics which differ from each other according how the individuals allocate their involvement, energy and focus among the different offerings in the marketplace. (Heinonen & Strandvik 2015, 477.)

Customer logic may change and can be influenced over time but the change happens slowly as the customer logic is tightly dependent on the customer experiences and the pattern of activities, tasks and goals all affected by the customers context. Customer logic can be identified and therefore it can be used in design and development of offering provisions. In order to be used for managerial purposes the individual customer logics have to be classified into usable generalized groups. (Heinonen & Strandvik 2015, 478.)

Customer Logic	Explanation
Definition	Customer logic is defined as customers' idiosyncratic reasoning of and their sense making about appropriate ways for achieving their goals and conducting their tasks
Description	An idiosyncratic logic that informs customers' behavior Customer logic is cognitive and affective and only partly explicit. Customer logic influences how customers choose among available offerings and how customers experience the value of different offerings

Table 3: Characteristics of customer logic (Heinonen & Strandvik 2015, 478).

Primacy of the customers and a holistic view of those customers are at the core of customer-dominant logic (Heinonen & Strandvik 2015, 473). These two aspects are also at the core of the concept of design thinking which will be briefly introduced in the next section followed by discussion on the service design process (Stickdorn 2010, 36).

2.2 Design thinking

The role of design has been pivotal in the innovation processes of product and service development. Over the past decade the focus has been shifted toward a concept of design thinking and behind the start of this shift was mainly two authors Tim Brown (2009) and Roger Martin (2009) There are several descriptions of design thinking and most of them vary a bit from each other but the fundamental core of the concept remains the same throughout the definitions. In the recent years the focus of design thinking as a concept has grasped the attention of business world as a way of breaking down the designers' human centric approach to problem identification followed by a fast prototyping of possible solutions. Or in other words design thinking is a concept that allows managers and business people to think like designer and vice versa (Mootee 2013, 29-30). Customers articulated as well as their latent needs are always on the focus of design thinking and therefore the understanding of the emotions, expectations and values behind their behavior is crucial. (Mootee 2013, 66, 69.)

Design thinking in the broader sense could be defined as the analytic and creative process used to generate new and innovative ideas to solve problems. The process allows the individual to experiment, create prototypes and service models in order to gather feedback to be

utilized in design and redesign (Razzouk & Shute 2012, 330). Design thinking has also been described as a method with tools enabling creative thinking and empathy which allow for transformation, innovation and new ways of managing business (Moreira, Tschimmel & Xavier 2014, 2).

Regardless of the used description of design thinking, the underlying reason it was chosen as one of the theoretical building blocks for this thesis is that it is an approach that has the potential and ability to lead to innovation and transformation of services. Conversations with Pelican management before the beginning of this development project underlined the company's ambitions to move outside the industry standards, in the development of internet and mobile services, as well as gaining a truly holistic understanding of their customers' lives and how their service is embedded in those lives.

Design thinking could also be described as dialogue-based and issue driven approach of iterative nature which aims toward continuous learning instead of stability or control. The process behind the journey toward new solutions is not a linear straight forward approach but rather a sequential procedure including constant invention, learning and experimentation. (Ojasalo, Koskelo & Nousiainen 2015, 200.) This process of idea generation and evaluation is looked into in more attention in the section 2.4.

2.3 Service design

In order to understand the process of designing a service the concept of service design (SD) has to be considered. Service design is the process required to design the overall customer experience a customer goes through when using a service. Service design also covers the design of the entire process and strategy required to produce that service. Moritz (2005) claims that service design is about the following topics; understanding the client, organization and market, development of ideas, translation of ideas into feasible solution and helping to implement those solutions.

The different aspects and entities covered by service design are so multiple that the following figure by Moritz (2005) is included here to offer an overview.

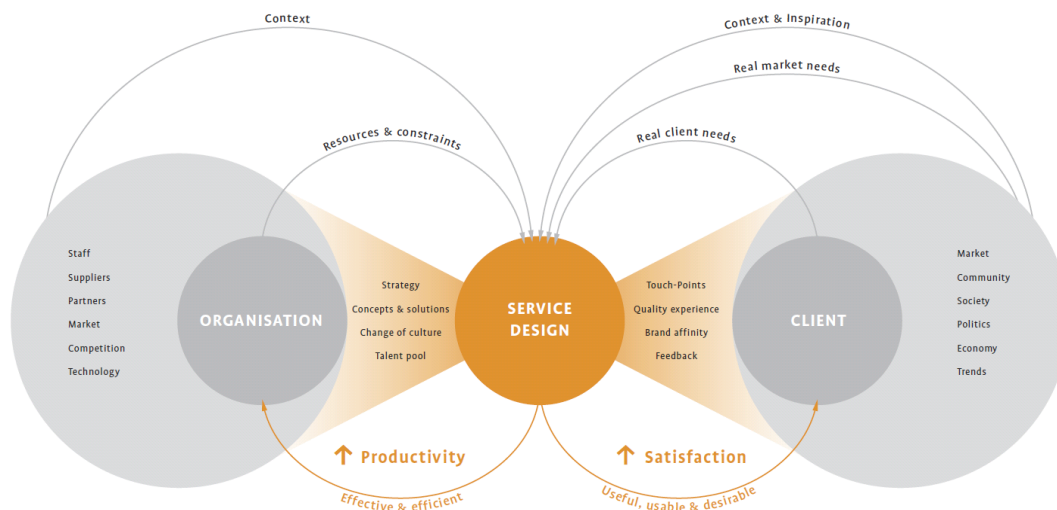


Figure 2: Service Design Overview Model (Moritz 2005, 152-153).

Koivisto (2007) states that using service design in the development of services creates better customer satisfaction, stronger control on the service being offered and growth in revenues. Well designed services have the potential of creating additional revenue, as the users are often willing to pay more from specialized and exceptionally well executed services. In the time of globalization the customers have access to ever widening range of services from different providers which leads to more educated and demanding users. For a company operating in ever more crowded markets, it is crucial to differentiate itself by innovating new service concepts or develop existing ones. (Koivisto 2007, 79.) To allow for comparison between the theory of service development and service design the main differences are presented in the following table. The table is translated from Finnish into English for the purposes of this thesis by its author.

Theory of service development	Service design
What went wrong?	What could go right?
Reactive	Proactive
Overt needs	Latent and overt needs
Segments	Personas
Organization driven	User driven, understanding the users context
Enhancing the internal activities and productivity	Enhancing the user experience
Questionnaires, interviews	Observation, interviews
Quantitative	Qualitative
No inspiration, statistically correct	Rich data, lot of inspiration
Customer involvement minimal	Customers involved throughout the process
Multidisciplinarity not emphasized	Multidisciplinary and interdisciplinary
Branding	Branded experience
	Visualizations and prototyping
	Early testing of ideas

Table 4: Comparison of theory of service development and service design (Koivisto 2007).

The following section moves on to discussing different service design processes finally presenting the one selected to carry out this thesis process.

2.4 Iterative service design process

The service design process as all design processes is not linear, but it is possible to outline the structure of the process (Stickdorn & Schneider 2010, 117). There are several different frames created in efforts to create that outline and there is no golden rule or guideline on how to choose which framework to follow on each service design process, and the first challenge for many design teams is to identify and plan the right process suitable for the task at hand (Stickdorn & Schneider 2010, 126). For this thesis work the author used methods from several different design models and the iterations between the phases were multiple.

Several models of the design process have been published in the domain of design thinking applied with innovation and business and many of them were used as reference for this project. The visualizations of selected few are presented next.

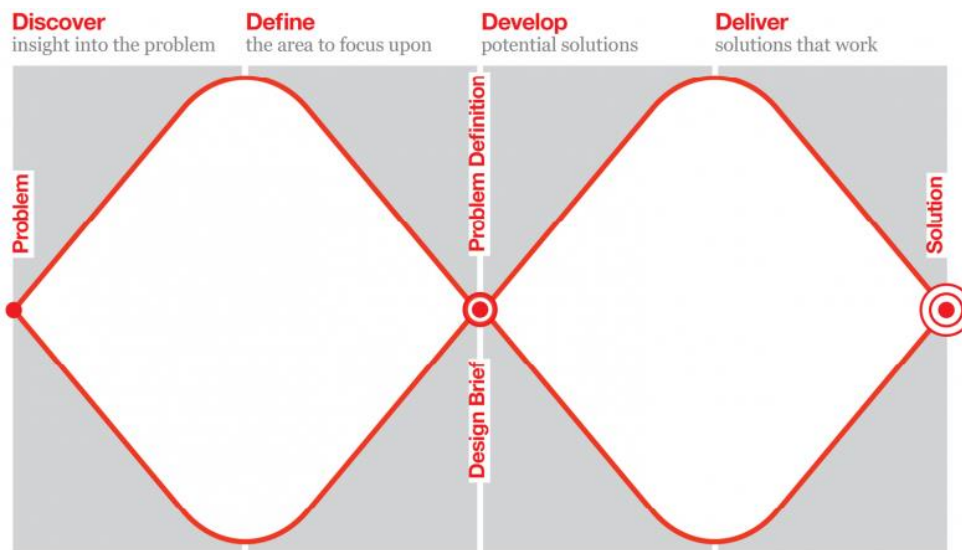


Figure 3: The Double Diamond model by the British Design Council 2005

The double diamond model, first introduced by the British design council in 2005 developed as a part of an in-house research project, is a simple way to graphically describe the design process. The model divides the process into four phases which are: discover, define, develop and deliver. The model aims to showcase the different modes of thinking that the designers should go through in each step as well as the tools suitable for each step. (Design Council 2015, 6.) For the author of this thesis the double diamond model represents the most basic design process model and therefore it has an effect on the project carried out for this thesis.

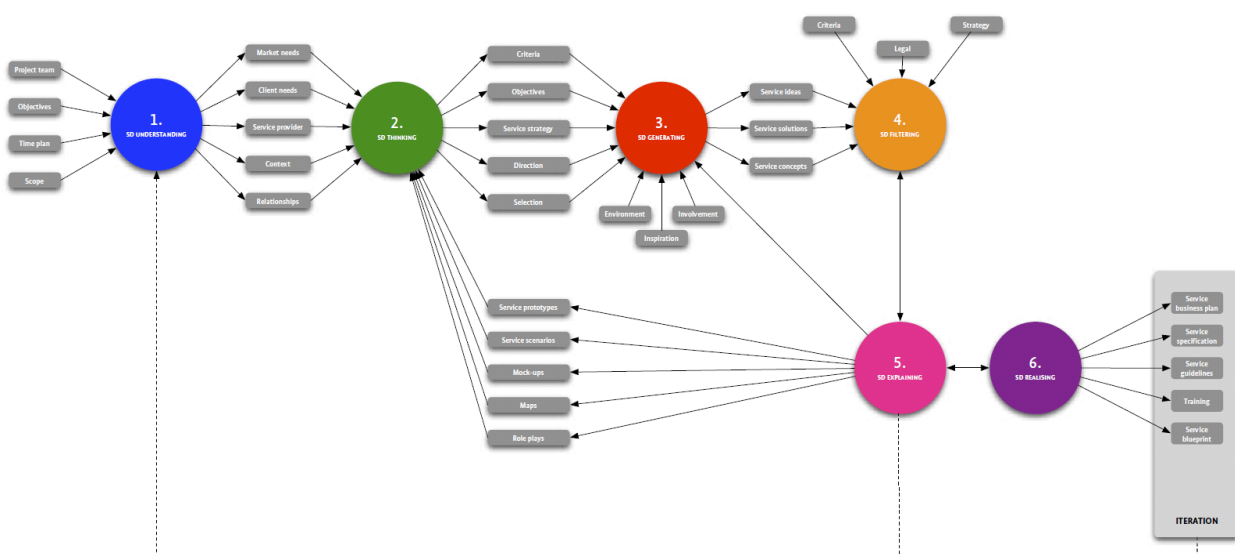


Figure 4: Service Design Process by Stefan Moritz (2005, 159).

Stefan Moritz (2005, 123,) divided the necessary tasks that needed to be undertaken into six different stages of the process of Service Design. Those phases are: SD understanding, SD thinking, SD generating, SD filtering, SD explaining and SD realising. Moritz argued that the need to identify the links connecting the different stages or service design was necessary because people involved in a service design task often come from different backgrounds. He referred to his model as the blueprint for Service Design (Moritz 2005, 154).

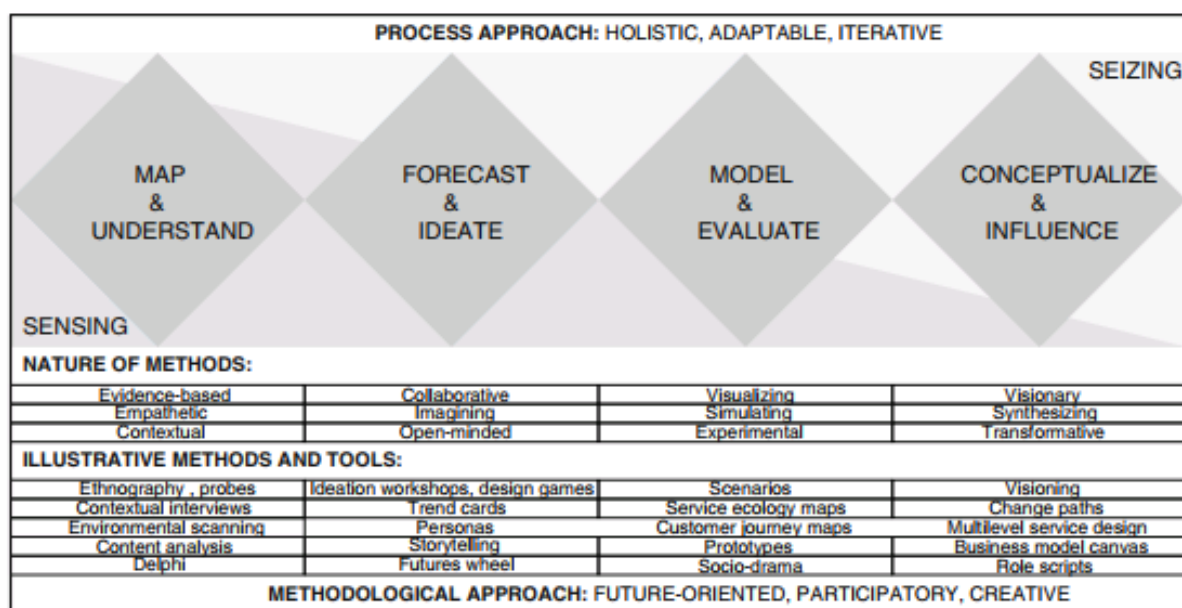


Figure 5: Design process model grounded on service design, Ojasalo et al. (2015, 204)

Future-oriented service innovation process by Ojasalo et al. (2015) follows the same basic iterative adaptable process flow as the double diamond. This version of the process is heavily grounded on futures thinking. The first phase of the process is called map & understand followed by forecast and ideate. The third phase consists of modeling & evaluation and finally the fourth phase concentrates on conceptualization & influencing. The authors acknowledge the fact that the tools and methods of each individual phase can be used in many of the phases. (Ojasalo et al 2015, 202-203) . For the purposes of this project many of the methods suggested by Ojasalo et al. were used during the development process.

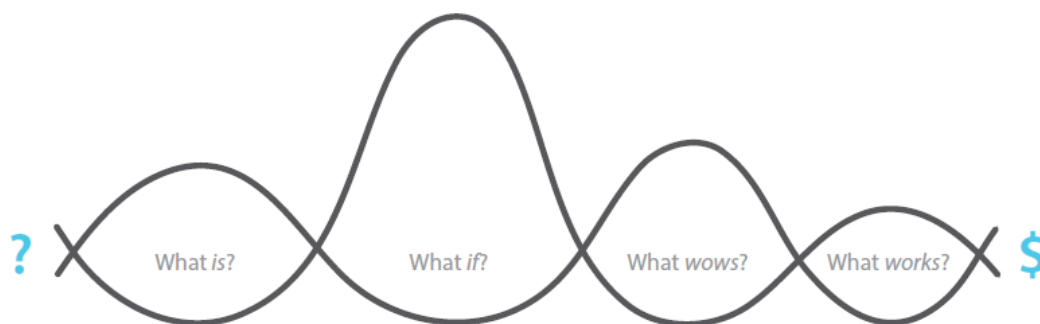


Figure 6: Design process by Liedtka & Ogilvie (2011, 31)

Ogilvie & Liedtka (2011) identified also four distinct phases in the process of service design. Rather than naming the phases according to the action taken in each they focused on the core questions of which the phases aim to answer and named them accordingly. What is? What if? What wows? What works? These are the four phases of the process moving from the understanding of the current reality toward the end of the process and release of a product or service to the marketplace. Liedtka and Ogilvie's model succeeds in visualizing the convergent and divergent nature of the phases of the process. At the beginning of each phase the design team aims to expand their understanding and knowledge of the field in question in order to gather as vast pool of ideas and possibilities as imaginable. In the convergent stage of each phase the generated concepts of the divergent phase are progressively narrowed down toward the most promising ones. (Liedtka & Ogilvie 2011, 31.) The model highlights the divergent and convergent phases which were also evident in the process gone thru for this project.

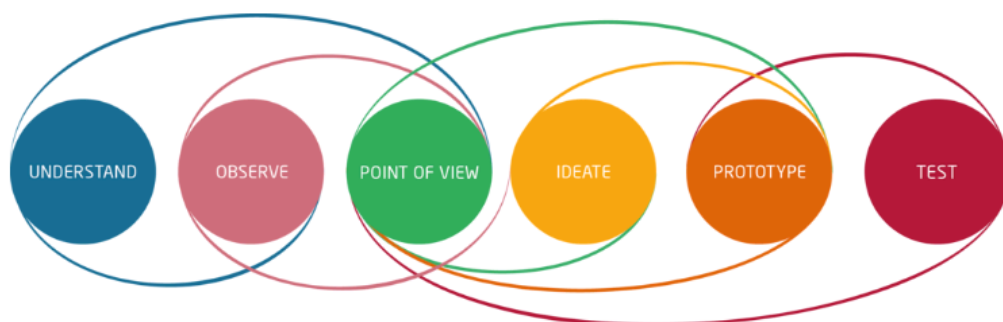


Figure 7: Design process model by Hasso-Plattner-Institut (2017)

The Hasso-Plattner Institut (2017) identifies altogether six steps in the design process workflow. Again as in the other ones the starting point for the process is to understand the problem space in the understand phase. In the second phase, observe, the design team acquires a view of the stakeholders which allows for the development of empathy. In the third phase,

called point of view, the gathered information will be collated and reviewed in order to re-frame the initial challenge. In the ideation phase solution suggestions are generated by the design team and by using the tools of convergence the ones to focus on are selected. In the prototyping phase actual concrete solutions are developed and these solutions are finally tested in the last phase to the selected target groups. Again at any phase the design thinker may take steps back in the process if necessary.

Due to the time and budget limitations the scope of this thesis will not cover the final phase of the design process which would be launch of the new service. The phases of prototyping and concept testing will be carried out. The larger scale development project to overhaul the web pages and other digital platforms used by Pelican runs independent simultaneously with this thesis. The results and the design for the new digital rental service will be used by Pelican in the later phases of this larger overall project. The scope of this thesis is shown in the following figure with the final stage of launch added by the author.

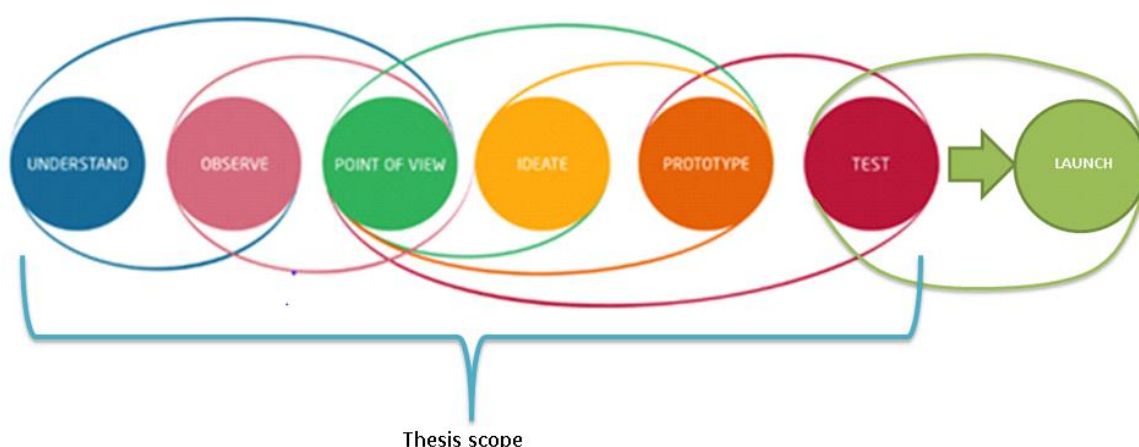


Figure 8: Scope of the thesis with the next phase of the digital service design process

As web based booking services and applications become more and more mundane the interpersonal experiences of the customers are often left to little attention. Service is a set of interactions between processes, technology and especially people. As organizations grow these interactions may often be industrialized and lack the ability to produce the human experience of the service might be compromised (Polaine et al 2013, 36). With this in mind the next part of the report will cover some of the specialized requirements that need to be taken into consideration when dealing with a new service development project in digital context.

Regardless of the number of the stages in the design process model that is used it should be kept in mind that the process is indeed iterative in nature and at any point the service designer should not hesitate to take a step back and repeat a stage if needed (Schneider &

Stickdorn 2010, 125). The iterative nature of the process is acknowledged in all of the process visualizations presented earlier but the model by the Hasso-Plattner-Institut (2017) emphasizes the possible repetitions of each phase.

As the scope of this thesis does not cover the actual creation and development work of the digital content there are special limitations that need to be kept in mind when creating the concept. This is important in order to maintain realism in the development of the concept and making sure that the final version for the new service is actually feasible and can be produced with the resources accessible for Pelican.

2.5 Service design in digital context

Development of digital services is often done in small creative teams combining the expertise from variety of different professional backgrounds. Development of a new digital service requires the combined effort of service design, information engineering, user experience analysis and interaction design as well as marketing and integrated service design. (Cheng-I et al. 2010, 128.) Due to the time and budget limitations of Pelican the scope of this development project is limited in the task of the service design component. Nevertheless it is important to introduce the different parties involved in digital content service development and the cooperation and synthesis between them to be able to produce a viable concept for Pelican.

The importance of the internet in the development of services has been evident for the past decades. The digital revolution has been a driving force behind significant changes in everyday life as well as in the consuming behavior in postindustrial societies. According to the World Bank (2015) approximately 85 % of individuals in Europe, Australia, Canada and the United States have access to the World Wide Web. (Siren & Grønberg Knudsen 2016, 1.)

Especially the rapid development of mobile services has made the Internet even more accessible for the consumers than ever before. The development of Digital Content Services (DCS) is at the forefront of modern service development landscape and the special requirements it presents to the management are presented in the following with special attention paid on the efforts required from the service design department. The emergence of the so called Semantic Web or the Web 3.0 allows for interpretation of the gathered information as meanings rather than just data. The Semantic web helps to link consumers in communities with shared interests which allows for more targeted services being designed for more specific groups. (Cheng-I et al. 2010, 128.)

There are several possible process models for digital service development projects such as the Delft Innovation Model by (Buijs, 2007) and the new product Development model (Ulrich &

Eppinger 2007). Digital Content Service Interdisciplinary Collaboration Development Model (DCSICD) by Cheng-I et al (2010) emphasizes the personal experiences and capabilities of each member in the development team and therefore it is most suiting from the viewpoint of design thinking for this project (Cheng-I et al. 2010, 128). The DCSICD model is briefly introduced in the following.

2.5.1 5 phases of digital content service development

In a typical digital content service development project there are five identifiable phases. Concept development phase is similar to the first phases of any design process as the behavior of the potential users are observed together with the market trends in order to identify possible problems which require a solution. The concept created for Pelican represents this phase within the DCSICD model. Solutions to the identified problems are morphed into the main content of the service as the project develops. Unlike in a standard design process the technologies related to the new potential service have to be tested in order to identify feasibility and possible restrictions. In this phase of technology development the interface design of the new service as well as the interaction appearance together with the data transmission criteria are established and prototyped. (Cheng-I et al. 2010, 143.)

The third phase of the DCSICD model, which is production, combines the efforts of the programming and the interactive interface design in order to place emphasis on the efficiency and the stability of the developed system. In the phase of evaluation and modification, a number of closed test are concluded, in order to identify possible system design errors. At this phase the efforts of the marketing team are also involved as possible market entry strategies are evaluated. Finally the new digital service is put online as a beta version in order to collect feedback from real users and also to attract market attention. The feedback gathered at this stage is used for modifications as the process begins its next loop much like in the iterative process of service design. (Cheng-I et al. 2010, 128.)

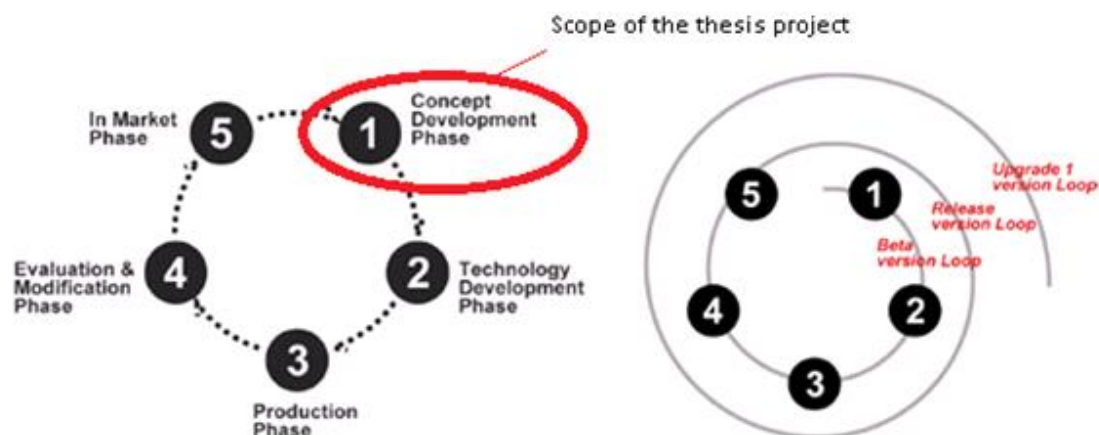


Figure 9: DCSICD basic model and the DCS development stages (Cheng-I et al 2010).

Figure 9 illustrates the single round of the DCSID model and the DCS development stages showcase the continuity of the process or the development loop. The same development process is gone through in several different loops prior and after the official release of the new service (Cheng-I et al 2010, 145). The scope of this thesis is limited to the concept development phase of the digital content development model.

2.5.2 Digital content development

As mentioned before the scope of this project does not reach the development phase of the digital content, it is important that the requirements for it are kept in mind during the design phase of the new rental service concept. The aspect of digital content development will therefore be now shortly discussed.

The process of creating a new digital content service is often a combination of three elements combined with marketing. The digital element of the process requires that the team members possess the skills to maneuver in the realm of digital technology. In addition they have to have thorough understanding of the features and the trends associated with the digital medium in order to utilize their knowledge in innovative and productive way. (Cheng-I et al. 2010, 144.)

Content element of the service itself is often referred to as knowledge. The digital service or “product” is something perceived as usable by the clients. From that perspective digital content of a service can be seen as a physical product because raw materials (knowledge and expertise) and labor are required to bring forth the potential benefits. The element of service is added in the form of service design as positive user experiences are required to transform the content into a service that is attractive to the market. For the development of the ser-

vice it is crucial that loyal customers are gained who can provide constructive feedback and eventually contribute to the next development loops of the DCS process. (Cheng-I et al. 2010, 145.)

The three core elements need to be supported by marketing efforts in order to ensure the services ability to compete in the market. Marketing strategies need to be in place to secure promotion and buzz for the service. The after sales supporting services together with the traditional customer service need to be planned from the viewpoint of the users and this is a part of the process where marketing people, who are capable of design thinking are important. (Cheng-I et al. 2010, 145.)

2.5.3 Value proposition in digital services

The digitalization boosted by the rapid development of the supplementing technologies has lead to reconstruction of several Industrial era business models. By doing so digital innovation can be closely associated with ne configurations of revenue streams and business logics (Nylén & Holmström 2015, 62). For the sake of further development the concept created during this project, the aspects to consider when creating coherent value propositions in digital products and services will be introduced shortly.

Customer segmentation is important as it allows for the company to analyze their customer base in a way that enables them to make decisions on how to communicate the offering of the digital portfolio to the different customer groups. A good example of this are the free application for hand held devices that allow for the user to only access a certain amount of the contents. More motivated groups of customers often emerge that are willing to start a paid account to get access to the additional services and content. (Nylén & Holmström 2015, 62.) In this development project this aspect will be taken into consideration, but as the main service of the company still is a tangible physical storage space the added payable features will be non existent or scarce at best during the actual launch of this service.

Second phase after having identified the customer segment is to decide on a strategy which defines how the digital offering of the company are differentiated and combined in bundles. To do this efficiently the company has to decide on the boundaries between the different user levels, in other words decide on the specific contents for each user group. (Nylén & Holmström 2015, 62.) For Pelican this could mean bundling the other services, such as packaging material deliveries, moving assistance, or digital cataloging of the stored goods provided for more premium user segments.

The third aspect to consider would be commissions of channel owners. Many of the companies operating in digital platforms who do not own their own delivery platform need to pay a fixed commission of their sales to the channel owners such as Google Play or the Apple store (Nylén & Holmström 2015, 63). For Pelican this aspect will not be an issue as the digital sales platform will be owned by them. The company should however keep in mind the possibilities of other companies operating in the supporting industries around self-storage selling their services through the digital platform of Pelican. These opportunities and further development options for the new service will be further discussed in the conclusions section of this report.

Value proposition, dealing with how value is created and captured in each digital product and service, is a key area to assess for firms that seek to achieve successful digital innovation management. The following part of the report will discuss the tools used for the empirical part of the design process which includes different types of ethnographical methods.

2.6 Using design thinking to gather insights

There are many effects of using design thinking as a basis for a design process on the insight gathering activities. Because of the iterative nature of design thinking the rounds of development activities with the customers are often numerous and revisited after each development loop or even during each step of the process (Kumar 2013, 9-10). The phase of ideation often brings forth insufficiencies in the original research and often the process is extended to obtain more accurate insights. In the later parts of the process when the customers are even more included in the process the insights gained from them should support the initial findings. (Ambrose & Harris 2010, 20.)

The results and suggestions presented in this thesis are most likely to be further developed after the insights gathered later on after the launch of the new service. Therefore the results are dynamic and subject to alterations. Key premise of design thinking is to understand the entirety of the customer's world in order to allow for them to integrate the new service as a part of their daily lives (Mootee 2013, 39). The research conducted for this thesis was qualitative in nature with small quantitative additions in the beginning of the process to convince Pelican about the importance and validity of the development of the new service. By using a limited sample size that presents the average possible user of the service qualitative methods were deployed in order to answer question like how and why. (Kumar 2013, 12.)

The traditional type of market research is quantitative and often requires large number of respondents. This type of research often results in statistically correct data. As a background information this often is useful but the lacks the ability to answer the questions of what are the reasons behind the results. For a design team to be able to produce a relevant, useful and actually needed service the underlying reasons behind the quantitative facts need to be re-

vealed (Polaine et al 2013, 39). For this reason quantitative market research methods were kept to a bare minimum during this development project.

The behaviors of people can sometimes be seemingly illogical. Qualitative research offers a tool to understand the emotions and situation that make people act and choose the way they do. Service thinking values people's needs and behavior and the motivations behind them. If attention is put solely on the statistics offered by the quantitative research methods the risk of missing crucial insight is likely to occur. By focusing on the reasons behind the statistics the designers can identify the underlying problems and start to develop solutions to them. (Polaine et al 2013, 40.)

2.7 Implications of customer dominant logic on research

In this section of the report the chosen research design for the empirical part of this project is presented and the reasons behind its selection are introduced. The following chapter will move on to report the actual gathering of insights as well as the development process of the new service concept.

When customer dominant logic is used as a framework for a project it affects the focal point of the research as well as the used methods. The focus of interest has shifted from how the consumers consume a service to how they live their lives. It is important to gain insights on the routines, activities and practices of the customers as it reflects how they normally behave in their own life context and ecosystem. The interests of the customer as well as their hopes and needs might be revealed by looking into the individual's personal activities and hobbies. By researching these elements it is possible to reveal what are the customers motivated by and how would they like to be involved in value formation. (Heinonen et al. 2013, 115.)

Customer's perspective and understanding of it are important. Providers of services have to understand how their customers use the service and how do they decide to use it in the first place. Understanding how the customers experience the providers input through the use of a service is often challenging but nevertheless important as it allows the provider to be involved on how the customers value-in-use. (Heinonen & Strandvik 2015, 478.)

Value is created within experiences and because of that focusing on only value creation happening within the interactions between the customer and the service provider is not wide enough of a scope. All of the experiences that the user receives from a service are not co-created with the provider; instead value is formed also in the context of the customer. Keeping this in mind the providers should know their customers beyond the co-creating activities. Attention has to be paid on the activities that the customers have with other individuals, service systems and companies. (Heinonen et al. 2010, 543.)

The traditional customer research has been grounded on studying how the users perceive an offering and what did they think about the service. Customer dominant logic promotes the type of research that would allow the service provider to discover potential unrealized value of their service. This could be achieved by studying the processes customers are involved in their own context and what types of physical and mental inputs would be needed to support those exciting processes. Starting point of service development or innovation should be on understanding the customer's activities in their own context and then supporting those activities instead of developing a product and a service and then trying to find an activity where that service might fit in. One of the ways of achieving that is to do more in-depth research. (Heinonen et al. 2010, 544-545.)

2.7.1 Case study as a research design

Case study is a research design where e.g. an individual, a group or a community is selected and after the selection treated as a one entity. In case study the selected entity, the case, is the basis of a thorough holistic in-depth investigation of the selected topics. In case study a certain entity or a few carefully selected cases are put under an intensive study (Kumar 2014, 155). For answering broad research questions, by offering thorough understanding of how a certain process develops within the context of a selected entity, case study is appropriate method (Swanborn 2010, 3). In a traditional sense case study does not result in any development actions or innovation but the results are used to create development ideas or solutions to a problem (Ojasalo et al. 2014, 37) and for this reason case study was deemed suitable for this thesis.

The techniques of data collection and analysis are flexible and open-ended in case studies. The research design is base upon the assumption that the selected case is a typical example within the group it has been selected from and therefore the results can provide insights into the entire group the case was selected from. For this reason the sampling techniques used in case study are often purposive, judgmental and information oriented. (Kumar 2014, 155.)

When exploring areas of which little is known or if a holistic understanding of a situation, phenomenon, episode or a group is required the case study is a useful research design. The Benefit of the case study is that the research itself can be much more detailed, thorough and time consuming then would be possible when studying large sample groups. At the same time it can be argued that it is harder to find ways to generalize the findings received from a case study (Kumar 2014, 155). This aspect is kept in mind later on when evaluating the usability of the developed service within different industries or even different operators within the market.

When the purpose of the conducted study is on understanding and extensive exploring as opposed to confirming and quantifying the case study is preferable design. The insights gathered with a case study offer an overview and understanding of how the selected sample experiences the process and the interactional dynamics of the studied activity. Coinciding with this advantage is the disadvantage that the results yielded with case studies cannot be generalized to populations outside cases that are similar than the one studied. (Kumar 2014, 155.)

Case study is possible to be conducted with only the use of single method which most commonly is in-depth interviewing. Other methods such as observations, focus groups, documentary sources and other artifacts are often used as supporting methods when conducting case studies (Hammersley & Atkinson 2007, 121).

3 Conceptualizing the new digital service

In this section the case study is presented. The actions carried out during the project are introduced together with the tools and methods used in each part of the design process in the following sections. The used tools and methods were gathered and combined from many different design processes to best match the types of insights required to fulfill the task commissioned. The customers of Pelican were an important part of the process as their input was used in the gathering of the insights as well as the concepts design and finally the concept testing.

3.1 Understanding and observing with customers

Data can be collected using two different types of methods. Secondary data is a type of data that already exists and it only needs to be extracted. If the needed information does not already exist then primary data needs to be collected (Kumar 2014, 171). The data and insights drawn from those will be gathered using primary methods of data collection.

The author of this thesis has access to the customer files and history as well as the current service processes of Pelican. As a result the insights created during this process will be combined with the secondary data already possessed by Pelican in the development phases of this project. Unfortunately the customer data and history are privileged information and therefore cannot be discussed in detail in this report.

3.2 Preliminary quantitative research with customers

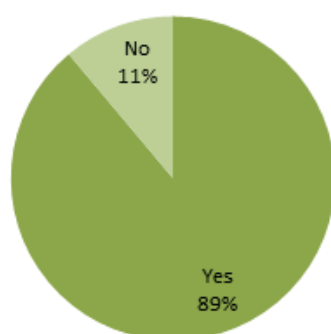
As organizational changes occur from time to time it also did with Pelican during this development project. A new country manager started with the company in Finland and therefore some of the aspects already agreed upon had to be re-confirmed from the head office in

Denmark. This process took five weeks during which the process was at a standstill. The Author of this thesis took the time to conduct a preliminary quantitative survey among the customers of Pelican Konala.

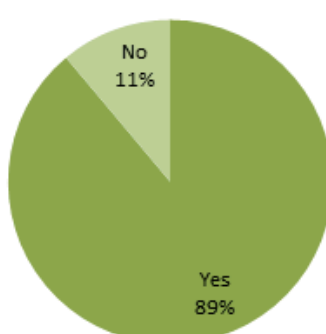
In order to showcase the need of this type of digital service to be developed a fast “tick the right option” type of short questionnaire was conducted for the customers who rented storage from the Konala site of Pelican. Over the period June and July 2017 124 new contracts were made at the site and 72 of those customers answered the survey. The survey form is presented as an appendix at the end of the report. The used questionnaires were in Finnish as it best suited the purposes of the commissioner for this project. The results of that questionnaire are presented in the following table translated into English.

Question	Yes	No	Total
1. Do you purchase goods or services by the use of mobile devices or computers?	64	8	72
2. Do you use web or mobile based rental services of spaces? E.g. Hotels.	64	8	72
3. Would you rent a self-storage through mobile or internet service if it was possible	55	17	72

Question 1



Question 2



Question 3

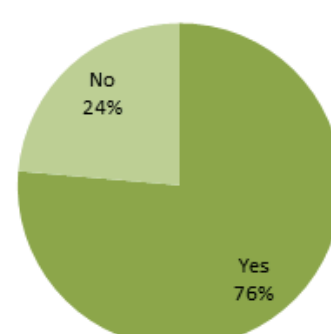


Table 5: The answers of the quantitative preliminary survey

As the purpose of the quantitative survey was to offer concrete incentive for Pelican to go through with this project the results were encouraging. Also for the same reason the results were merely translated into percentages. Out of the 72 recipients 55 stated that they would be willing and interested to use a digital self-storage rental service which correlates to a percentage of 76,3 % of the answers. After these results the project was continued as originally agreed.

3.3 Qualitative gathering of insights with customers

Even though at the heart of each service design process is the customer the process itself rarely starts from the customer. The first hurdle for a service designer is to identify whether or not the company or organization assigning the process actually is service oriented and prepared to undergo such a demanding co-creation process (Schneider & Stickdorn 2010, 125). Stickdorn & Schneider (2010) note:” It could be argued that much of a service designer’s role is in articulating the organizational problem from the perspective of the customer.”

Polaine, Lovlie and Reason (2013, 37) state that identification of the right problem from the point of view of the current and potential customers is crucial when determining the success of a service design process. In order for service designer to be able to do that determination one must know who the customers are in order to be able to give them what they need.

There are several different qualitative methods to use for gathering insights. Many of the methods are aimed at specific purposes and may not be as useful in others (Goodwin 2009, 54-55). The following table introduces some of the methods used to carry out qualitative research. The methods most suiting for the purposes of this project and therefore the ones chosen to be used are underlined in the table.

Method	Good For	Not Good for
Quantitative measurement of detailed tasks	Deriving detailed design principles, such as how big a touch target should be in certain circumstances	Understanding what to design or how it should behave
Surveys	Understanding market demographics	Understanding what to design and how it should behave
Focus groups	Quick feedback on viability of a product idea Reactions to aesthetics	Understanding behavior, understanding differences between individuals
Usability testing	Demonstrating that a problem exist	Understanding what to design and how it should behave
<u>Individual interviews</u>	<u>Understanding how individuals think</u>	Minimizing self-reporting error, getting behavioral detail
<u>Direct observation</u>	<u>Understanding how people behave in their actual contexts of use</u>	Interpreting behavior, understanding how people think
<u>Interview plus observation</u>	<u>Understanding how people behave in their actual contexts of use and why they behave as they do. Best for most circumstances.</u>	Understanding market demographics

Table 6: Comparison of research methods (Goodwin 2009, 57).

Three different research methods were used to discover insights from the customers' realities: one-on-one interviews, shadowing, contextual interviews. In addition to these a card

deck exercise accompanied the interviews. Each used method shall be introduced in the following chapters. The one-on-one interviews were carried in a contextual setting in order to save time. To do so the two methods were combined for the purposes of this project.

One of the most commonly used methods of collecting information from people is interviewing them. Interviewing can be defined many ways but essentially it is person to person interaction with a specific purpose in mind. It can be carried out either in person or using an intermediate and in one on one situation or in group settings. (Kumar 2014, 177.)

Polaine et al (2013, 50-51) argue that depth interviews are a productive way to generate insights about the behavior, perceptions and needs of an individual. Normally the structure of these interviews is relatively open and they are conducted in the context of the interviewee. In order to reveal the values, opinions, latent information the relevant issues are explored in depth with each individual. On contrast to questionnaires interviews offer the opportunity to query and verify the answers received in order to reach consensus on what actually was meant by the respondent. The authors also state that the interview should be kept as interactive as possible in order to support idea inspiration.

The selection of the sample for was not strictly limited. Person's ability to access and willingness to use the internet was the only criterion that was used as a excluding criteria. The sample of customers studied for this thesis consisted of current, former and potential customers of Pelican Self Storage. 60 % of the interviewees were current customers of Pelican and 40 % were in the group of potential customers. 60 % of the respondents were female and the average age was 45 years.

There were all together five one-on-one interviews conducted. Two of the interviews were conducted at the homes of the interviewees and three were carried out at the Konala site of Pelican. The shadowing exercise that accompanied the interviews was done by the use of the interviewees own equipment.

In the development and prototyping phase of the process five additional concept tests took place at Pelican's site at Konala in order to test the created service thus far. The participants were presented current prototype of the service at that time. They were asked to use it in order to identify the most desirable service path as well as evident short comings in the prototype at that point. These concept tests were followed by shadowing exercise at the site. These activities will be introduced in detail later in this section.

As the three interviews conducted at the Pelican sites were carried out at the customer service areas the use of video recordings was challenging to ensure the privacy of any other cus-

tomers. The video recording had to be blocked in some occasions, but the audio recording went on throughout the interview. The three in store interviews were pre-arranged with the customers. All of the interviewees who participated at the site interviews were given a voucher (valued 30 €) for the packaging materials sold at the site or to be used for the future storage room rents.

All of the interviews at the initial insight gathering phase started with an open ended “ice breaker” question used in order to build rapport with the interviewee. The question was in the form of: “could you tell me about your self”, but other supporting questions were listed if the original answer was short and few in words. Most of the respondents however gave a detailed introduction on them selves and offered information on their age, education, employment status, family, interests and hobbies and many other things. Many of the topics and information that rose from the initial question was later revisited if deemed related to the topic at hand by the interviewer.

After the first question the interview aimed to form a clear understanding on three main topics; interviewees’ views and experiences on rental services of any kind (emphasis on space rental, cabins, hotels, storage etc.), interviewees’ online buying habits and experiences, and finally the interviewees’ pre-existing knowledge on self-storage services. The interviews followed a free form and the interview situations resembled a free dialogue between two people. Only if the topic at hand got too far the interviewer referred to his interview body and steered the conversation back on track.

The Critical Incident Technique (CIT) was used as a part foundation for the interviews conducted for this study. The CIT is at its best when it is used to develop the operations of service companies or services in general. The interviewee is asked to describe any extremely good and bad service experience they have had. More important than the reasons for the experience being good or bad is to get a detailed description of what happened. This detailed description allows for the interviewer to later analyze what are valued key points of the service (Ojasalo et al 2014, 109). All of the interviews conducted for gathering insights included at least one of these descriptions of either a good or a bad dealing with renting or acquiring services either online or at the store. See Appendix 2 for the interview framework.

For the purposes of this project the Critical Incident Technique did not yield as concrete examples as the author expected. The experiences shared by the interviewees were mainly concerned about the on time delivery of the purchased items and the ease of returning them. The other aspect that surfaced was the fact that the item or service purchased met the expectations of the buyer and responded with how it was presented in the web store. However the exercise helped to build up the rapport between the interviewer and the respondents and

therefore the observational exercise carried on after the interviews produced possibly more detailed results and observations.

As mentioned earlier the five interviews were recorded on video. The information gathered from them was then collected on a table in order to allow simultaneous analysis. By having all of the information in written form in the same table also made the comparisons and identification of similarities easier as the information was presented in a much more tangible form.

Vas	Sukupuoli	Ikä	Asumismuoto	Samassa taloudessa asuu	Kuinka usein varaat tiloja kuten hotellit, netin kautta	Oletko vuokrannut esim. kalustettuja asuntoja	Mitä työkalua käytät eri palveluntarjoajista	Ostatko tuotteita tai palveluita internetin kautta	Mitä palveluntarjoajia (nettikauppoja) käytät useimmiten?	Oletko vuokrannut tai harkinut vuokraamaan varastoita	Minkälaisessa tilinssä olt tuoltin?
A	Nainen	29	Omistus, kerrostalo	Aviomies, 1 lapsi	Useita kertoja vuodessa. Anniolin, että 4-6 kertaa vuodessa	En	Netti, Google eritoten, Killroy	Kyllä, n. puolet ostoksistani	Zalando, Alibaba, XXL.fi	Pelican tuleva asiakas	Ostimme juuri uuden asunon ja vanha tulee luovutetaan ennen uuden vapautumista. Lisäksi teemme remontin ja asunne väijän käyn kalustetussa kaksiossa.
B	Nainen	31	Omistus, paritalo	Aviomies	Opintojen takia lähes viikottain	Kyllä	AirBnB, Booking.com, Mondo, Trivago	Kyllä, melko usein	Zalando, Sportamore, AirBnB	Pelican nykyinen asiakas	Otin varaston alkui muuton ajaksi, mutta päädyimme lopulta ottamaan pienen varaston pysyväksi ratkaisuksi vene sekä harraste tavaroiden säilytykseen
C	Mies	42	Omistus, paritalo	Vaimo + 2 lapsi-kästä lasta	Muutamman kerran vuodessa	Kyllä	Google	Kukausittain, työkaluohjelmat sekä vara-asiat aina.	Nettimoto, Nettiauto, Caliroots.com	Olen	Konkreettista tarvetta ei ole koskaan ollut, mutta nykyisen talon Rakennusprojekti suunnitellussa, myös tämän vaihtoedon hintoja kartoitettiin.
D	Mies	65	Omistus, OKT	Vaimo	Kukausittain	En	Mökkiriini (tarkistettiin myöhemmin, kyseessä lomarengas), google	Harvoin, haluan tukea alueen kivijalka tason liiketoimintaa	Ei tule nimeltä mistään kun tuo lomarengas	En	-
E	Nainen	58	Vuokra, kerrostalo	Aviomies+2 kissa	Työ liikkuu, viikottain	Kyllä	Google, Booking.com	Jotakin vastailta sekä lapsi- ja vanhempien tilauksia huonekaluja yms.	Zalando, Huonekalut tilataan mallilla.	Pelican nykyinen asiakas	Itäni oli NIEMI muuttopalvelujen varastossa. Luovun nyt Helsingin asunon ja muuton Polijamaalle lähemmäs työtäni. Varaston tavat nyt kunnes tiedän siirräkö nekin uuteen

Vas	Mitä kautta etsit tietoa saatavilla olevista palveluista?	Hahmotustehtävä. Kuinka monta % liian pienen tai suuren tilan olit valinnut.	Käytätkö internetpalveluiden ostoon mobiili laitetta vai tietokonetta?	varaston mobiili tai internet palvelun kautta?	Mitä seikat mielestäsi puoltaisivat varaston vuokrausta käyttäen digitaalista kanavaa?	Mitä taasen saattaisivat aiheuttaa hankaluuksia käyttäjälle?
A	Google on lähes aina ensimmäinen valintani kun lähdän etsimään tietoa ennallaan tutuista omista aiheista internetistä.	30 %tarpeettoman suuri	Mobiili, ei tietokonetta kotona	Kyllä	Tieto hankitaan joka tapauksessa käyttäen Googlea ja sieltä kautta edetään palveluntarjoajan sivuille. Jos olen jo valmiiksi nettisivuilla voin vuokrata varaston samalla mikäli se on mahdollista.	No tuosta tilan koko tehtävistä nyt tuli mieleen, että varaston tulee vuokrattua sitten turhan iso tila. Toivottavasti löydetään nyt sitten sopiva.
B	Asun hyvin lähellä CITYVARASTON Myyrmäen varastokohdetta eli menin suoraan heidän nettisivulle.	50 %tarpeettoman suuri	Mobiili, vanha pöytäkone ei käytössä	Kyllä, mieluummin kuin paikanpäällä.	Omat menot ovat vaihtelevat ja kolmivuorotyö aiheuttaa sen, että en usein ehdi hoitaa asioita ns. virka-aikana. En muutenkaan pidä siitä, että on sovitava tapaaminen tiettyyn aikaan, koen tilanteen painostavaksi.	Lienee hankalaa valita se oikean kokoinen tila. Varaston löytäminen osittain myös olla hankalaa. Ainakin Pelicanin kohteet lienevät kaikki yhtä suuria kuin tämä Konalan paikka.
C	Internetin hakukoneen kautta. Tartun yleensä hanakasti ensimmäisiin Googlen tarjoamiin "hitteihin"	20 %liian pieni	Mobiili ja PC n. puolet ja puolet	Kyllä	Olisi hyvä jos varaston saisi vuokrattua mihin aikaan tahansa oli sitten illta tai yö tai päivä. Omassa tilanteessani uskon, että mikäli varaston tarve ilmenee se on ylittävää, jolloin tarve voi olla todellakin akuutti.	Se, että osaa valita oikean kokoisvaraston. Myös tiloihin pääsy olisi syytä olla aika joustavaa ja oman varaston löytymisen muutenkin.
D	Kysymystä mukautettiin, sillä vastaaja ei ollut harkinut varaston vuokrausta. Mikäli tarve olisi ollut olisi hän etsinyt Googlasta	15 %liian suuri. Oikeastaan siis hyvä vastaus	Tietokone. Kämmekkäni ei edes pääse nettiin	Mikäli en	Itse suosisin paikanpäällä vuokrasopimuksen tekemistä. En myöskään halua ostaa " sikaa säkissä" vaan käyn itse mieluummin paikanpäällä. Varaan mökkiriini aina tunteja ennen vuokraajalta tai paikasta, jota minulle on suositeltu.	Hinta. Koneen kanssa ei voi neuvotella.
E	Netin kautta. Ensimmäisen kerran aikana tuli suositus vakuutusyhtiöltä jolla oli ilmeisesti yhteistyö palveluntarjoajan kanssa. Suraavalla kerralla etsin tietoa netistä.	25 %ylli. Perusteli sillä, että kokemuksesta tietää, että haluaa tilaan ylimääräistä tilaa joka helpottaa tavaroiden hakua tarvittaessa	Useimmiten mobiili. Työkoneella joskus myös PC	Kyllä vuokraisin	Helppous on varmasti se kaikkein paras täässä. Ei tarvitse sovitaa omia aikataulujaan asiakaspalvelun aukioalojen mukaiseksi.	No nämä on isoja kohteita ja käytännöt toiminta tavissa vaihtelee toimijoin. Myös varaston sijainti ja muut käytännön asiat ymmärtää selkeämmin kun on näin paikanpäällä

Figure 10: Insight table gathered from the five interviews

The interviews were conducted in Finnish as it was the native language of all of the interviewees as well as the organizational language of Pelican Finland. The insights gathered from the interviews into the insight excel table were translated into English later by the author of this thesis.

The sample size interviewed was arguably relatively limited, but was deemed sufficient for the purposes of this project by the author as well as the management of Pelican. Even with this limited sample group the insights gathered from the interviews started to repeat themselves and patterns between the answers were identifiable. As this service developed is Pelicans first attempt of digitalizing its services the interviews provided enough insights to start the next phases of the design process.

From the interviews the willingness and ability of Pelicans average customer to access and use the internet to purchase items or services was evident as the entire sample had used digital booking services to rent housing services such as hotels. Four of the five interviewees also stated that they use online stores to purchase clothing and household items on a regular basis. From this the conclusion was made that the average customer of Pelican would be able to access and use online rental services. When discussed with the country Manager Tolvanen this insight was also backed up by the internal invoicing data of Pelican as up to 76% of the customers receive their rent invoice in digital form.

The respondents were asked what tools they usually search for information about new services and products. Every one in the sample group stated the internet with its different search engines, especially Google, would be their first choice. The two people who were not active or former customers of Pelican were asked if they had thought about renting a storage space sometime in their past. Both replied positively and in those cases as well the information was searched from the internet. This information also produced more evidence of the viability of the planned service as the customers of Pelican find information about new services online.

The interviewees were asked in what types of situations they were using or planning to use storage services. In all of the cases the reason was related with moving houses. For example two interviewees were in a situation where the old apartment was sold before the new was finished. Only one of the respondents stated that the reason for one of the times she had used storage was sudden water damage. This low ratio of sudden needs for storage was surprising as based on the experiences of the staff of Pelican.

When discussing the results of the interviews with one of the Regional Managers, Markus Pentikäinen, he noted that the sample resembled the real situation rather accurately. Vast majority of the customers rent the unit for a move or renovation. Mr. Pentikäinen also informed that the actual amount of customers with force major situation is approximately 18 % which also corresponds with the results. The insights from this part of the interviews reinforced the notion that this type of digital service would be appreciated. Many times when a person is

organizing a move or renovation the time table is tight and digital 24 hours a day access to needed services would be beneficial.

During the almost eight years working for Pelican one difficulty with the service from the viewpoint of the customer has stood out especially. People's ability to vision the size of the storage space they need for their items. This was tested by asking the respondents to estimate the size of the storage unit they would need to store all of their household items. In the discussions with the Regional Managers of Pelican the rule of thumb used in the self-storage industry is that 10-15% of the sqm of the house or apartment is needed to store all the items. None of the respondents were accurate with their estimation. In fact the average of the answers yielded an estimation error of 28 % from the accurate size. This information was used later on during the workshop sessions with the staff of Pelican and in the prototyping of the concept.

At the end of the first interview respondent A was asked to show an example shopping event at an online vendor she often used. When asked to do so the respondent took out her cell phone. After enquiry she then stated that she nowadays mostly used her cell phone to browse the internet. After The first interview the question: "By which device do you mostly browse the internet and shop online with?" was added to the questionnaire body. Interviewee D stated that he only used computer for browsing the internet as his cell phone was an older model and was not able to connect to the internet. Three respondents stated that their number one tool for accessing the internet was their cell phone and respondent C said that he used cell phone and computer approximately the same amount. In other words out of the sample group 60% mainly uses the internet with their cell phones. In discussions with the Country Manager the results were affirmed as the internal statistics of Pelican had shown an increase in the share of mobile device entries on the web page in the recent years. The statistics of web page entries on August 2017 were 45 % computers, 45 % smartphones and 10 % tablets. This information was used in the later parts of the design process when smart phone was chosen as platform for the first prototypes of the service.

The following question asked weather or not the respondents would be willing to rent a storage unit using a digital rental service. All five answered positively. Only interviewee D stated that he would prefer to rent the storage at the site even if there was a clear digital option available. The respondents were then asked to give both negative and positive thoughts on the digital renting option. Three of the respondents immediately mentioned the fact that the need for storage often comes without a notice at any time of the day. Immediate rental option regardless of office hours would then be beneficial. Two of the respondents also mentioned that they do not like to pre arrange meetings with sales personnel as they feel pressured to make the purchase decision immediately. Respondents B and C also mentioned that

due to their own working schedules they found it difficult to arrange it so that they would be able to agree on a specific time.

The respondents were also asked what could be aspects that could be challenging with the digital renting option compared with visiting the customer service. The identification of the right size for the unit was mentioned by A B and C as the most challenging part. Respondent D also mentioned that with a digital service one cannot negotiate about the pricing which he thought was an important part of the rental process. The practicalities in the site were mentioned by everyone else but respondent D. How to find ones own unit and how to access the facilities were among the top concerns. The insights gathered in this part of the interviews were used later in the work shops with the staff of Pelican and in the prototyping of the concept.

There are a number of techniques and methods that can be used to stimulate more coherent and hidden information. These tools might be picture cards or drawing tasks for example (Ojasalo et al. 2014, 106). In order to support the conducted interviews a card deck exercise was given to the respondents where they were presented with a stack of 24 picture cards. The interviewees were then asked to select the five most significant and five most insignificant pieces of information in their opinion when renting a storage online. The participants were then asked to reason their selections. The card deck exercise ended the interview part and was then followed by a shadowing task which is introduced in the next chapter in detail. The cards used for the card-deck can be found in the Appendixes. The most important and unimportant aspects of the service according to the interviewees are resented in the following figure.



Illustration 1: Card deck exercise answers

The purpose of the card deck exercise was to gather insights on the aspects that the potential clientele experiences as important to be clearly presented and easily accessed when using the rental service. In the previous figure the card deck results for each of the interviewees are presented. The most important aspects are on the left side column and the least important are on the right. The most important factor according to the sample group was price which was the most important piece of information for three of the five interviewees. Respondent C chose price to be the second most important aspect and respondent E placed it as third.

The selection of the right sized unit was also on the top five for all the participants. Respondents C and E ranked it as the most important aspect whereas A and B placed it second. How to find one's own storage unit was selected by three respondents as well as the location of the storage facility. From the card deck exercise the conclusion was drawn that the aspects to focus on when prototyping the new concept would be the clear indication of price, selection of the right sized unit, the location of the unit within the facility as well as the location of the site.

The sample group also agreed on many of the most important aspects. Four of the respondents felt that they would not need information on loading equipment nor the pest control at the storage site when selecting the unit online. Three respondents mentioned that they would not be interested on how to insure their belongings. Respondents A, B and C felt that they would not need information on how to terminate the contract at this stage.

Observation and its different forms are an important research strategy for social studies and in particular in doing ethnographic research. The main purpose of observational methods is to allow the researcher to immerse one self into the realm and surroundings of the topic of study (Crouch & Pearce 2012, 92). Shadowing is one of the methods of observational research and it was selected as the most fitting for the purposes of this project.

Shadowing is a method used to spot problems in a service flow as they occur. By the use of shadowing the researcher has the opportunity to identify and report problematic incidents that might not even be recognized as such by the customer or staff member. In order to conduct shadowing the researcher must be able to spend time in the service environment to develop a holistic view of the whole service encounter. Shadowing allows for the researcher to witness interactions in real-time as the customers move through various groups of different touchpoints. Shadowing also offers an opportunity to identify those moments where the person interviewed might have said something but acts completely differently. (Stickdorn & Schneider 2010, 148-149.)

For this development project the shadowing was done in two different ways and in two separate parts of the design process. Shadowing that was done with the interviewees was recorded on video. The interviewees were asked to present their favorite online shopping environment or service provider and a simulated shopping experience was recorded. Special attention was paid on the fluency of the whole service journey beginning from the entry to the main page through to selection of the items or services all the way through check out. During this phase of the interviews the conductor of this development project only acted as a silent bystander in order to avoid disruption of the findings and the interviewees were asked to go through the online shopping activity as they normally would. After the simulated online shopping exercise the interviewees were asked to go through the same process again this time explaining what they were doing and what they might hope that was different in how the online store worked.

This exercise revealed aspects that the interviewees valued in an online shopping environment. The page has to be clear and navigation through different product or service categories has to be effortless and logical. The prices and the availability of the chosen product have to be clearly indicated. Also the checkout has to be structured clearly and payment options should be plentiful. The most irritating aspects seemed to be illogical and unclear structures or confusing navigation through different pages. After the purchase decision the time from the selection of the item through checkout and payment should be as short and precise as possible. These findings were also utilized in the prototyping of the concept later on in the process.

The insights gathered so far in the process were combined with the requirements of Pelican regarding the new digital service. Based on working experience of the author of this thesis and discussions with the regional managers the most important phase of the old service path of Pelican was the interaction with the staff at the site. The appreciation toward the quality of service provided by the staff is often praised by the clientele according to the Regional Manager Jarkko Tepponen. He often mentioned the large amount of positive customer feedback the management receives concerning the staff at the sites. The most prominent problem converting the personalized service offered by the staff of pelican would be to identify a way to replace the one on one interaction with the staff with correlating touchpoints within the new service. Actions taken to reach that goal without losing any of the informative steps of the old process will be introduced in the following section.

3.4 Forming the point of view with the staff of Pelican

At this point of the service design process there is usually already a cornucopia of insights gathered to be used for the development of the service. The challenge is to identify most efficient ways of visualizing the findings in order to make sense of the data discovered. In order to move toward forming the point of view for our process the insight discovered need to be presented in a visual form that allows for discussion (Polaine, Lovlie & Reason 2013, 73). In order to do so creation of personas was chosen as a way of visualizing the average customers of Pelican for the staff's work shop sessions.

Services are normally aimed at a large variety of different types of customers who have different jobs to get done. Companies face the task of reaching multitude of customers while simultaneously maintaining the ability to relate to them as individuals (Reason, Lovlie & Flu 2016, 162). Personas are fictional profiles created from the insights gathered with the use of the tools introduced earlier. A persona should be an average representation of a certain customer group to be kept in mind whilst moving forward in the service design process. The personas are a way for the design team to engage and interact whit the potential customers and they also offer a tool to identify the possible reactions of different customer groups to even the smallest of changes in the service. (Stickdorn & Schneider 2010, 178.)

The most prominent reason for the use of personas in the SD process is that it allows the design team to maintain their focus on the needs and wants or real people instead of fixating on demographics. Personas offer a real-world perception about the company and its service even though the personas themselves are fictional (Stickdorn & Schneider 2010, 178).

For the purposes of this development project the consumer customer segments in use by Pelican were used as the basis for the personas. The segments identified by the company are: urgent movers, planned movers, smart living and renovators (Tolvanen 2017). These over simplified versions of personas were deemed sufficient enough for the purposes of this study as their main usage was to act as a starting point for the creation of the customer journey maps. The customer segments were refined into personas by the author of this thesis based on the experiences acquired while working with the company. The personas approved by the Regional Managers are presented in the following figure.



Figure 11: Personas created for the staff work shops

The first work shop was held with the staff of Pelican at the company office in Vallila on 30.8.2017. Site managers and assistant site managers were summoned to the workshop and the team consisted of the most senior staff members in terms of years in the organization all the way to new recruits. The management level of the Finnish organization was chosen to be excluded from this first workshop as it was evident from the discussion with them that they were preoccupied with the possible financial and resource restrictions of the company.

Customer journey mapping

In order to support the next phases of the service design process customer journey maps were created based on the findings from the interviews and the initial shadowing exercise. The journey map created with the team would act as an introductory starting point when conducting work shops for the team of the employees of Pelican in the phase of ideation. Customer journey mapping was also done in order to familiarize the staff a bit with the different tools of service design. The buying process for the customer journey was based on the insight gathered from the interviews as well on the discussion with the staff during the exercise.

A customer Journey map is a visual representation of all the different steps a customer might experience during usage of a service. The customer journey map aims to empathically illustrate the customers experience through an experimental lens as he or she moves through the different touchpoints where interaction takes place. The emotional journey of the customer is often used in order to identify the emotions experienced by the customer during the service consumption in order to reveal the key elements of the service at hand. (Polaine, Lovlie & Reason 2013, 104) During the work shop it became clear that the staff members seemed to be empathic toward the customers and they seemed to be on the same page with each other as well regarding the emotional journey the customers go through when purchasing a service from Pelican.

The interaction points or touchpoints between the service and the user can be either on personal, face to face level, or virtual interactions. The next development of the journey map after the identification of the different touchpoints is to link the touchpoints to each other in order to create the full journey which allows the company to understand what their customers are feeling, thinking and doing at any point when they are interacting with them. The journey maps also allows for taking individual parts of the experience and understanding how they should be arranged together better to suit the needs of the users. (Polaine, Lovlie & Reason 2013, 105.) The first customer journey map underlined the notion that the staff of Pelican understands and knows the touch points of its current service which are appreciated by the customers. Also the parts of the current service flow that needed to be addressed or developed according to the staff were identified. The second journey map which the team created for the digital rental service offered many usable ideas into the following steps of the service design process.

The following illustration is the first customer journey map created by the staff members. The journey maps depict the customer journey of a customer using the current service of Pelican.



Illustration 2: Customer journey map for lifestyle persona

During the first workshop a journey map for the new digital service being developed was also done.



Illustration 3: “What should be the new digital customer journey?”

As the scope of this thesis only covered the design of the new concept and not the creation of the digital content for the service the staff members were advised to forget about the limitations the current CRM software sets. This way the following phase of ideation could be as divergent as possible.

The following part of the chosen design process by the Hasso-Plattner institute is the ideation. This is a part of the process where the numerous ideas are introduced in a divergent manner. Later on in the prototyping phase these numerous ideas are then synthesized into limited number of opportunities. This stage of the process is often the most iterative one. The exploration of as many mistakes as possible as early in the process as possible is encouraged. The idea of this is to make the possible mistakes as early as possible, before much money and other resources has been pored into nonfunctioning development directions. (Stickdorn & Schneider 2010, 130.)

3.5 Ideation work shop with the staff of Pelican

During this phase solutions were created for the identified problems with the newly learned insights kept in mind. Co-creativity has to be achieved between the all stakeholders groups involved with the development of the service, from the customers to the employees all the way to the management and other possible stakeholders. In order to create holistic new concepts all of the touchpoints identified in the earlier stages are to be kept in mind. (Stickdorn & Schneider 2010, 131.) The methods and tools that were used during this stage of the process are presented in the following sections.

The two journey maps created in the earlier work shop were used as a starting point for the ideation workshop held on 12.9.2017. The team for the second work shop consisted of mostly the same group of representatives from the staff. This time the team was strengthened by Regional Manager Jarkko Tepponen. This was done due to a request from Pelican to make sure that the emerging new service concept would be somewhat in line with the overall online strategy of the company as well with the interdependent project of renewing the company's web pages and overhaul of the company's presence in the social media.

Ideation techniques are used to inspire and encourage and structure group brainstorming sessions. Different type of idea generation techniques are used for different purposes, some may be deployed in order to relax the participants while other techniques are ideal for prompting the imagination of the group (Stickdorn & Schneider 2010, 180).

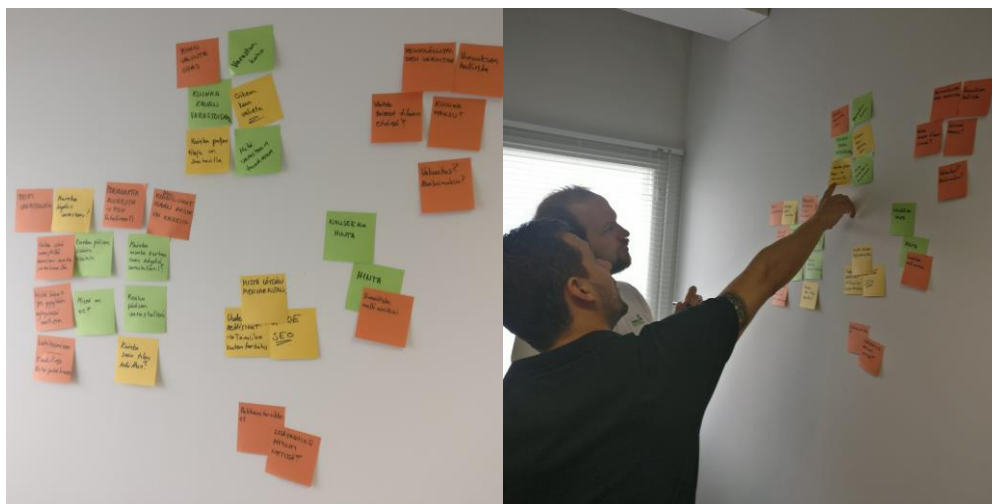


Illustration 4: Ideation workshop with the staff

During this work shop the facilitator did not have to struggle much with common problems related with ideation work shops such as peoples unwillingness to speak their mind, fear of saying the wrong thing or reluctance to disagree with a superior (Stickdorn & Schneider 2010, 195). This was due to the low organizational structure of Pelican Self Storage Finland and to the fact that most of the Site managers had been working with the Regional Manager for many years and therefore the group had a exceptionally good rapport amongst each other. However this posted other risks that the facilitator had to be aware of such as automatic group consensus without appropriate discussions based on arguments. The facilitator used a pre-drawn list of generalized questions in order to open up the conversation and steer them toward most prominent ideas without constraining the flow of the session. (Stickdorn & Schneider 2010, 196.)

Brainstorming session

Brainstorming as a method aims to generate a large number of ideas and this goal was reached during the work shop. The facilitator gave the group a task to write down most common questions and concerns they normally hear from the customers during the site tour. The team was also asked to add in questions they felt like the customers didn't normally ask, but would be important for the customer to know. The time for this task was limited to three minutes. After this the concerns and questions were clustered according to what question they related to. Then the topics were further estimated and finally put into order from most important to the least important under that cluster.

Finally the team ended up with the most important parts of the current face to face customer service process. Those aspects were deemed to be well translated into digital form for the

new online rental service in order for it to be successful. The topics and issues chosen were price, selection for the right unit, how to enter the premises and how to find own storage unit. When these topics that the staff chose were compared to the answers of the interviewees for the card deck exercise, similarities were evident. This portrayed the staff's ability to emphasize and understand their customers at least on a general level and gave confirmation about the validity of the chosen topics.

Forming the preliminary service concept

Service concept is the bigger picture of the new entity being created. The main focus when creating the concept should be on the larger scale flow of the service rather than on the specifics. To begin the development phase for the new mobile rental service the concept was first created before moving on to the specifics. (Tuulaniemi 2011, 189.) The scope of the thesis does not reach the phases of piloting or market entry. However the author of this thesis wanted to reach as specific and "ready to use" concept as possible. This was done in order for the new design to be effectively utilized as soon as the other related development projects would reach the stage that would allow for that.

The work shops with the staff members of Pelican closed with making a concept for the new service by creating a storyboard of the entire service path the customer goes through when using the developed service. The focus was not on finalizing the product but on creating a "red line" for the author to follow when moving on to the later steps of the design process.

Storyboard of the new service

Design scenarios help to make the new concept and prototypes of services more engaging by portraying them in a potential context. The use of design scenarios is hoped to encourage and facilitate the discussion about how the customers might experience the new service in the future and it also often used to keep the design process open and to remind about the user perspective. (Miettinen & Valtonen 2012, 50.)

Design scenarios can be presented in many different forms: plain text, storyboards or video. The data that has been gathered in the prior stages of the process is investigated from viewpoints of potential future service experience situations. Personas that have been created earlier are often used in the scenarios to allow for the different aspects or problems of the service to be viewed through many possible user types. (Stickdorn & Schneider 2010, 184.)

In order to avoid spending important resources and valuable time on ideas that won't work it is advised to draw even a simple five panel storyboard at the early stages of the ideation pro-

cess. This simple visualization allows the service design team to think through all the important touchpoints within the service concept (Polaine, Lovlie & Reason 2013, 96).

The storyboard is a tool used to describe an action or interaction between the customer and a service. This is a narrative method that describes by the use of images and captions the sequence of actions taking place in a service experience. The storyboard combines information about time, space, physical evidences and human interactions. The method can be used in any of the iterative phases of the SD process as a tool to imagine interactions and to design the context and the settings for the service. (Meroni & Sangiorgi 2011, 254.)

There are several different options on how a storyboard might be constructed but for this project the simple comic-strip format was used (Stickdorn & Schneider 2010, 181). The original storyboard created at the work shop contained the most important contextual details of the new service from the viewpoint of the staff based on the insight gathered earlier from the customers. The blank computer screen images used to create the storyboard with were used for the exercise as they had been pre printed by the facilitator and the tight time limit for the work shops did not allow for any time wasted. The staff members however were informed that the service being created would be designed first for mobile devices as it is already passed the computers in the number of visits at the company web site.

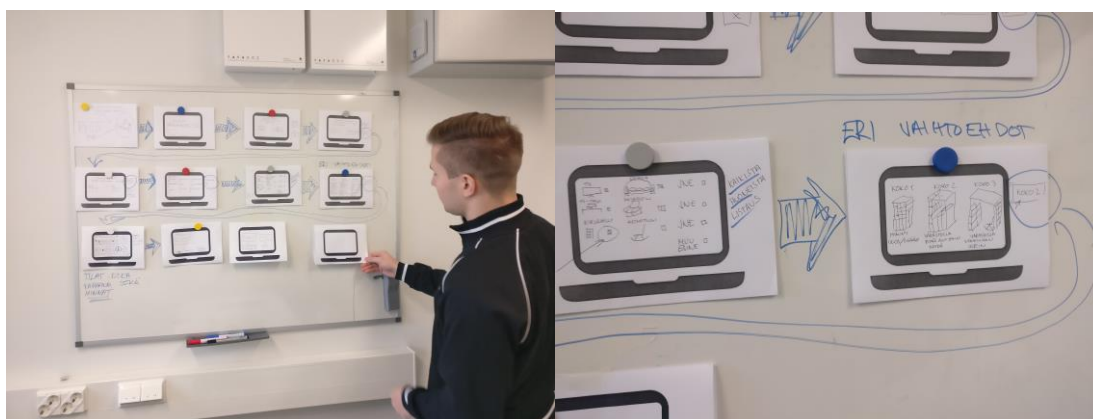


Illustration 5: Storyboard exercise with the staff

During the creation of the storyboard the staff had two topics they felt the customers were most interested during the site tours; price and the size of the unit. The staff also had pointed out that the customers often had no idea about the size required to store their goods. As the main reason for people renting storage spaces from Pelican is still necessity the price sensitivity might also be high on majority of the customers. The challenge according to the staff then is to find a solution for the customer within their budget limitations. As the idea about a

service that would help the customers to visualize the needed space was presented the team began to build the storyboard on that.

The service path the customers currently take forces them to visit the customer service within its opening times and the staff had noticed that this leads to customers being lost to competitor Cityvarasto and to other storage solutions such as parents garage e.g. This insight from the staff was appreciated by Regional Manager Tepponen who after the work shop recommended the new digital rental service to be moved up on the timeframe within the company's other digital development projects. Other important benefit recognized by the staff was that the new service would allow the customers to book a larger unit outside the opening hours of the customer service if the initial estimation was undersized. This often happens according to the Site Managers who also provide the on call service for the customers. The second most common call they reported to receive was a customer who's items did not fit into the selected unit.

These two topics were then used as the main points to focus on and the team came up with an idea of a tool that would allow for the customers to list their stored goods and the tool would then provide them with the correct unit size for the storage. Also the idea that the tool would then offer the customer options of different sizes and would visualize how the items could fit in each also came up during this exercise. Selection of the right size was chosen as one of the main areas of focus for the prototyping phase.

The work shop with the staff was a success in term of new perspectives and insights received for the continuation of the process. When the discussion turned on the execution of the later parts of the service path the staff became preoccupied with the current restrictions and limitations set by the current resources of the company. For example how the customers would get access to their unit as all of the free spaces are currently always locked. These concerns were taken into consideration by the author when entering to the concept testing phase.

As mentioned earlier the participation of the staff of Pelican officially ended after the ideation phase of the design process due to time and resource limitations of the company. However the author of this thesis had the change of using the insights and ideas of his colleagues also later on in the process during the prototyping phase of the process. This factor allowed the co-creation aspect important for service design to happen even if the official work shops did not reach further in the design process.

3.6 Prototyping the digital service

After the ideation phase it is time to put the ideas into test. At the prototyping part of the design process the ideas are further developed and different types of prototypes are created to be introduced for a small sample of customer or other target groups to get further feedback in order to refine them. This stage is also highly iterative in nature and often repeated several times in order to produce a service that meets the expectations of the potential customers and users. (Stickdorn & Schneider 2010, 132.)

At this stage of the service design process it is important to be able to create circumstances that are as close to reality as possible where the test subjects are presented with the developed services in order to stage believable user interaction (Stickdorn & Schneider 2010, 132). There are specific prototyping techniques that are used when developing services and the ones used during this project will be introduced in the following.

Service prototyping is extremely important tool for service design as it allows the design team to make sense of what they have already discovered and to prioritize their ideas. In some cases this might also allow the team to test the service prototype with potential customers as early in the development process as possible (Kimbell 2014, 156). Early prototyping allows for the possible errors and mistakes to be identified and improved upon before investing valuable resources and capital on the technology and environment needed to run the service. The importance of this stage of the process is crucial as sometimes even the smallest details might have enormous effect on the customer experience. (Polaine, Lovlie & Reason 2013, 138.)

As service might offer something totally new and unique to its future users it is important that when it is tested the target group is subjected something more than just verbal description of the service. Something real and tangible is required as people tend to become analytical and problem oriented when only asked to imagine a possible service. When people are subjected to a tangible prototype that contains the most important elements and touchpoints of the service they are more likely to react to the performance rather than the abstract concept. (Polaine, Lovlie & Reason 2013, 138.)

Doing different types of service prototypes techniques based on theatre such as roleplay help to incorporate and reveal emotionally important aspects of the interaction of with the different touchpoints. Prototypes allow the design team to gain deeper insights of the experience of the service than by merely observing or interviewing would. (Stickdorn & Schneider 2010, 190.) A discussion prototype is the most affordable option and it is similar to user insights interview. Some touchpoint mock ups should be used during this discussion on the planned customer journey. Prototypes that require participation the customer journey is often described

in a place where the actual customer experience would take place, the participant is subjected to tangibles touchpoints at physical locations as well as people who deliver the service. A simulation prototype is a combination of the first two with greater detail. The touchpoints that are used in simulation should already be more finished and the simulation should take place in the same environment as the service will in the future. Pilot is the most finished form of service prototype where the service is already delivered to the end user. Through the delivery of a nearly ready service the designers will get an understanding on what works and what doesn't work when trying to meet the need of real customers. A pilot prototype should be viewed as a beta service which sole purpose is to support iterative improvements. (Polaine, Lovlie & Reason 2013, 143.)

For the prototyping a web based platform called invision (<https://www.invisionapp.com/>) was used. The platform allows for fast prototyping of mobile applications and the project can be exported to ones mobile phone at any time during the project for immediate testing. Based on the initial interview and the workshop with the staff a first draft of the new service was prototyped by the author of this thesis. The original prototype was then subjected to concept testing by organizing a simulation with real customers in the real environment at Pelicans site at Konala.

There are multiple levels of detail that can be used with experience prototyping. They can range from cardboard mock ups to elaborate staged environments. The levels can be divided according to the level of realism; inexpensive semi structured discussion, a walkthrough participation, a more elaborate simulation and a full scale pilot. The budget that is required naturally grows with each level of increased detail. (Polaine, Lovlie & Reason 2013, 138.) As the later part of the new service process happens at the actual storage sites of Pelican the simulation could be arranged in a realistic fashion.

Five new potential customers were selected to test the prototype in the simulation exercise. The people who were selected had to fulfill two requirements. They had to be able and willing to use mobile based shopping platforms and services and they were not allowed to be current or former customers of Pelican. The later requirement was added because after the concept testing these same people were followed at storage site and a shadowing exercise was done. The purpose of the shadowing exercise was to identify the information that the customer should receive before coming to the storage for the first time. The findings of this task were used to develop the part of the new service that happens after the point of sales.

The five people selected for the concept testing and second shadowing exercise all lived in the metropolitan area of Helsinki. The average age of the attendees was 30. The group consisted of two women and three men. The exercises were done individually with each person

and not as a group exercise. Both the concept testing as well as the shadowing exercise was conducted at the Konala site of Pelican. The concept testing and the shadowing were done in two phases. Based on the observations of the two first attendees the mobile prototype was developed further and information on how to access the premises etc. was added.

As mentioned before the concept testing was carried out just before the shadowing exercises. The attendees were first presented with the prototype of the new mobile storage rent service. They were asked to comment and write down notes about their service experience. The comment papers are presented below.

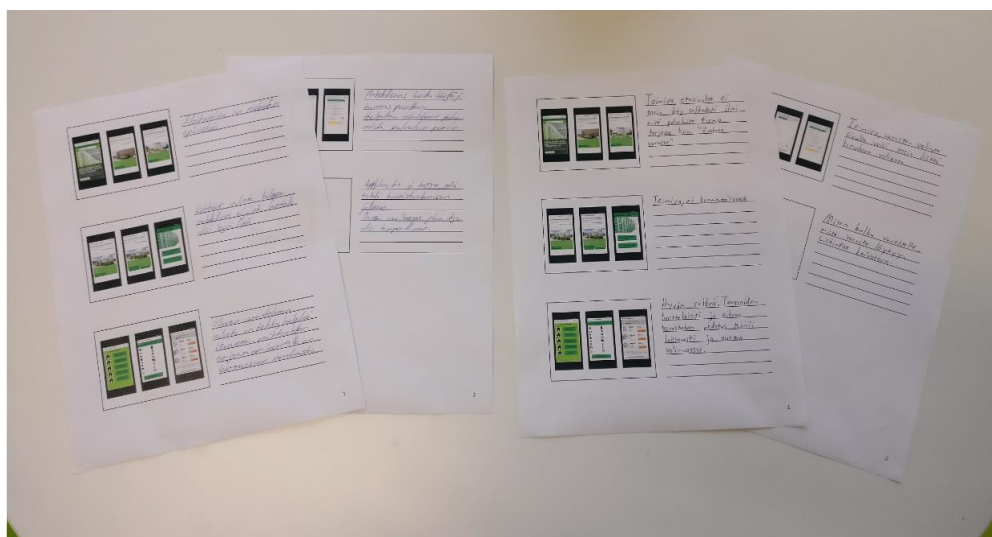


Figure 12: Comments from the first two concept tests

Based on the comments of the first two concept tests the prototype was further developed. Both of the test subjects commented that the end of the booking process leaves the user in an unclear state regarding what to do next. Changes were made and in the next development version the customer receives some further information on his phone and e-mail after making the contract. After these changes were done to the prototype the three remaining concept test as well as the shadowing exercises were carried out.

During the first concept test the first test customer noted that it would be a nice feature that the customer would be able to log in as returning customer after the initial contract had been made, meaning that the system would allow for the user to choose to create a log in password. This feature would then enable return customers to navigate the contract process faster without filling in the details again every time. This suggestion was presented to the other test subjects verbally and the idea received positive reception. This step was added to the finalize concept after conversations with the country management of Pelican Finland.

The second phase of the concept testing focused on sorting the problems that surfaced during the first two. Informative content was added in order to provide the user with information on how to access the storage site and locate ones unit within the facility. The comment forms from the final three concept test are presented in the figure below.

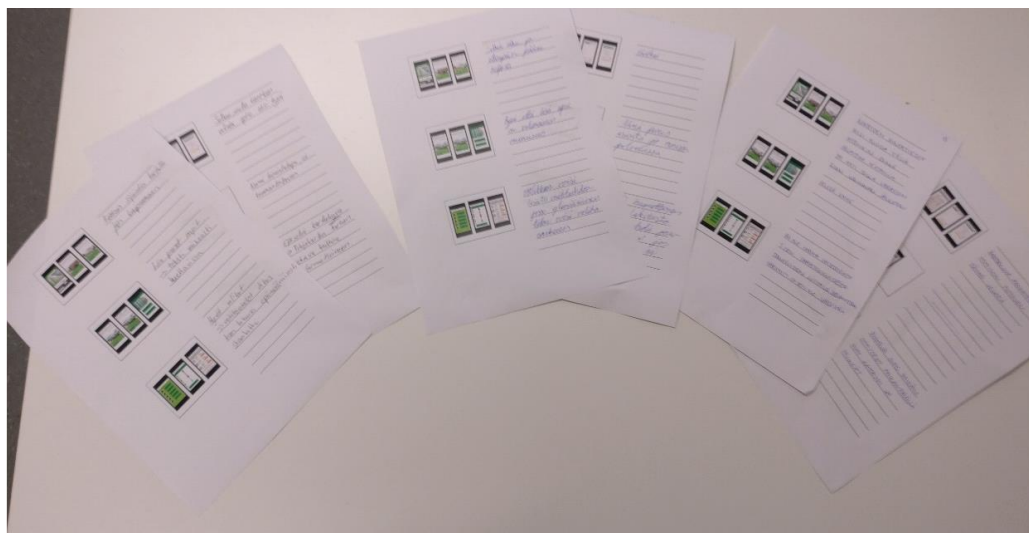


Figure 13: Second round of concept tests

The added information proved to be useful and the simple listing of aspects to consider combined with the map of the area as well as the floorplan with the selected unit proved to be simple enough but still effective. All of the participants of the final three shadowing exercises were able to enter the site as well as located their unit with the first attempt. Two of the participants still suggested an overhaul to be done for the information signage at the site as both of them struggled to exit the loading area and finding the correct gate which to use for exiting the premises. The locking of the storage unit raised questions as currently all of the units are locked. This aspect will be taken up later in this chapter as this issue was also considered with the management of Pelican. One of the participants mentioned that an interactive information screen could also be introduced to the loading areas with the floorplan and other information on how to operate within the facility. This insight was also mentioned in the conversations with the management team and was decided to be left out at the potential first face of the future launch of this service.

Many touchpoints were identified by all of the participants during the shadowing exercises. The most important informative aspects could easily be identified. The insights from the second shadowing exercise were gathered in the table below.

Vastaaja	Sukupuoli	Ikä	Kuinka pääsen sisään portista?	Mikä on kulkukoodini?	Missä kerroksessa varastoni on?	Mitä lastausaluetta minun kannattaa käyttää	Kuinka pääsen sisään rakennukseen?	Missä on oma varastoni?	Kuinka saan lukon auki?	Miten lukitsen tilan	Miten saan tavarakärryt lainaan	Miksi sisäänajoportilla ei ole koodilaitetta sisäpuolella	Sulkeutuvatko ovet ja portit itsestään	Missä on vessa
1	Mies	42	x	x	x	x	x	x	x	x				
2	Mies	36	x	x	x	x	x	x	x	x				x
3	Nainen	28					x	x			x			
4	Mies	18					x	x				x	x	
5	Nainen	25	x			x		x		x			x	

Table 7: Problems faced by the attendees during the shadowing exercise

The table is in Finnish as it was presented to the management of Pelican Finland in order to emphasize the most important informative aspect the customer requires before entering the storage facilities first time without staff assistance. The most problematic for the concept test subjects seemed to be the navigation at the site and the results shown in the table were used to convince the management about the need of updating the informative signage at the sites. These insights were used in the finalization of the prototype. The finalized concept is presented in chapter 4.

During the initial concept testing the prototype was also presented to the Regional Manager Tepponen and Country Manager Tolvanen. The two managers were pleased with the concept as they commented that it portrayed the most important aspects of the current face to face service experience. Tolvanen had a couple of wishes to be added to the service at this point. He requested a stage in the contract process where the customer could give a permission to use their contact details in future marketing efforts. He also viewed the suggested login in option to be useful for the returning customers as in the analog version of the service returning customers can also go through the contact signing process faster and with less effort from the staff.

To recap this part of the report in the following chapter the fulfillment of co-creation through out the whole process is discussed.

Co-creation

To evaluate the service design process up to this point the activities done were compare to the requirements of co-creation. Co-creation is a concept that implies that the use of the distributed resources of knowhow, tools, effort and expertise together with collaborative modes of delivery as well as the participation of users is crucial in order to device effective solutions. (Meroni & Sangiorgi 2011, 20.) Co-creation is a principle which can be done by utilizing any of the tools and methods of service design. Instead of being viewed only as an individual method co-creation should be seen as a mindset and attitude (Stickdorn & Schneider 2010, 198). The process carried out for this project can be stated to fulfill the traits of co-creation.

Besides customers the involvement and motivation of the employees are crucial aspects for the overall success of the project and for sustainable service implementation. The value of the employees understanding the new concept and that they support it is important. (Stickdorn & Schneider 2010, 134.) The participation of the selected interviewees as well as the activity of the site staff supported the realization of co-creation through out the process.

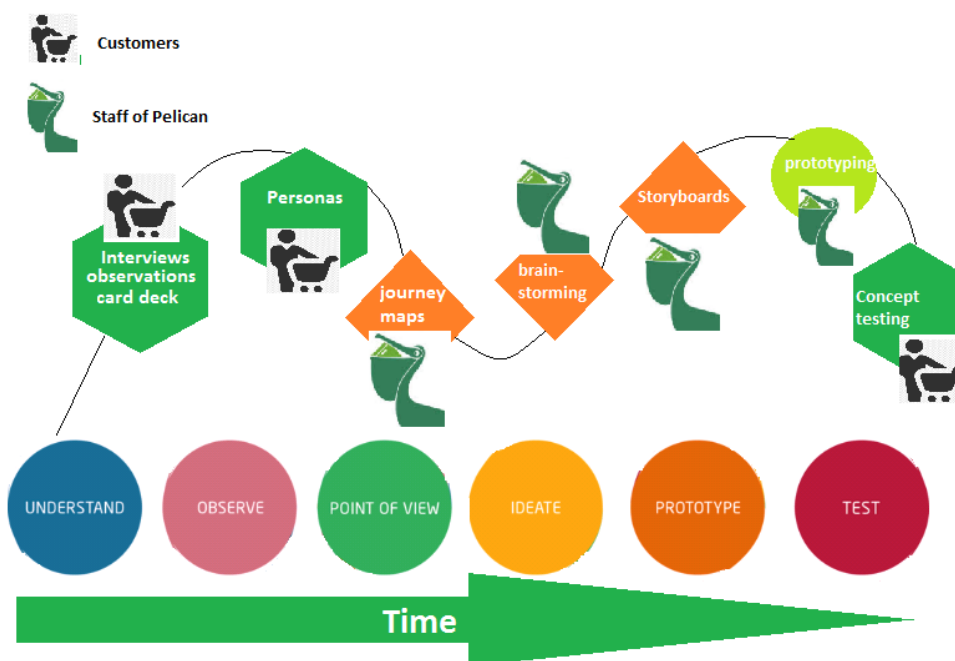


Figure 14: Design process overview

The figure above portrays the design process for this project. The participation of the clientele as well as the staff is presented with each method used in all of the steps of the design process.

4 New digital self-storage rental service

The purpose of this thesis was to create viable suggestions for a new digital storage rental service based on the insights gathered from current and potential customers as well as the staff of Pelican. As the result a new concept for a digital self-storage rental service was created. The created concept was designed for the use of mobile devices because majority of visits at Pelicans web pages are already done using these devices. In this chapter the results of the development process are presented in the form of the new mobile service. This chapter also evaluates the implementation of the chosen design process during this project.

The objectives of this thesis included:

- Collect insight from the customers and the Staff of Pelican
- To use the gathered insights in order to create concrete improvement suggestions on how to enhance the company's digital business models

The development project carried out for this thesis was the creation of the new mobile rental service for self-storage operator. Chapter 4.1 introduces the new service in phases that the customer goes through when using it.

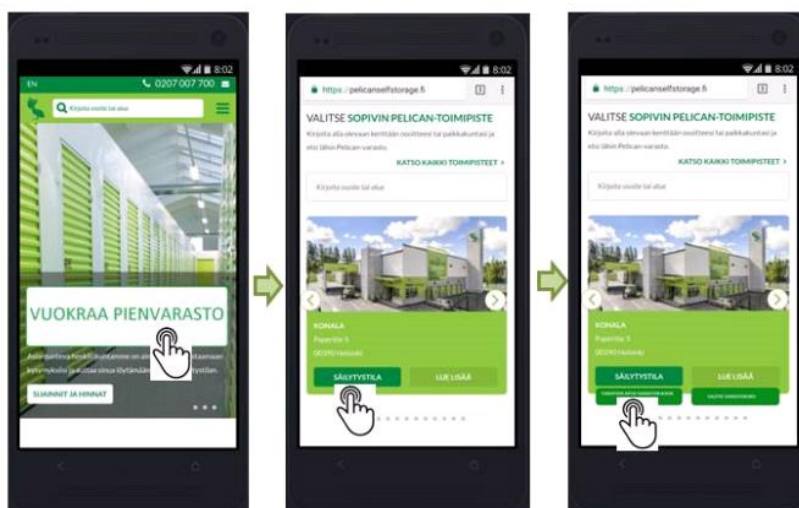
4.1 The new concept created for mobile use

The opening page of the mobile web page of Pelican underwent a small change as the staff mentioned during the work shops that many customers had reported that the front page was a bit unclear and that sometimes the user was unable to tell what service Pelican provided. This was an important insight from the staff as visit to the current pages of Pelican was not part of the interviews done with the customers. The Front page was equipped with a large clear button allowing the customer to move to renting a storage unit.



Figure 15: Minor adjustment to the starting screen

After pushing the rent a storage unit button the customer will then be moved to selecting the location of the storage site. After selecting the desired location the user will then be presented with two options. One option will allow them to move directly to the available unit size listing and the other would present the user with helpful options. The user can choose between selecting the size of the apartment or space that needs to be emptied or to list all the items to be stored.



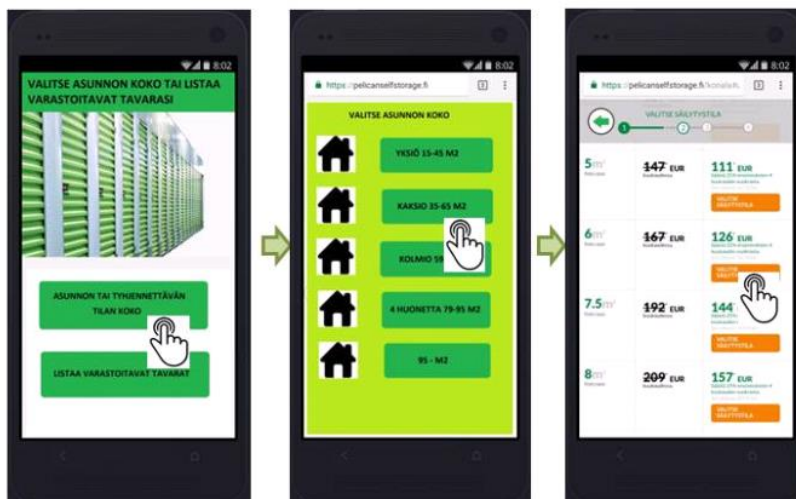


Figure 16: Service path for customer with some knowledge on the needed space

The option presented above was designed for a customer who might have used self-storage services before or who would be somewhat knowledgeable about the size required to store all of their items based on the size of the apartment or house where the goods would come from.

For users with no previous experience of self-storage or with no special awareness another option was created. The user might also choose to list all of the items they would be storing. The service would provide the user with a list of icons of furniture and other stuff often stored and they would simply be able to select the number of each item and after confirming the selection they would then be presented with three options of storage sizes. The smallest would be just large enough for the listed items, the second would have some extra space for items that might have been forgotten from the listing and the largest option would have approximately 35 % of extra space if the amount of stored goods might grow soon after the start of the storage period.

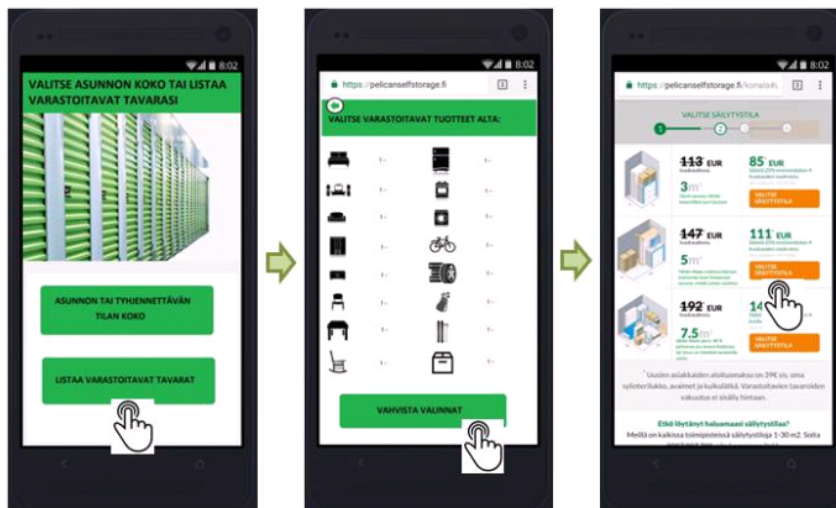
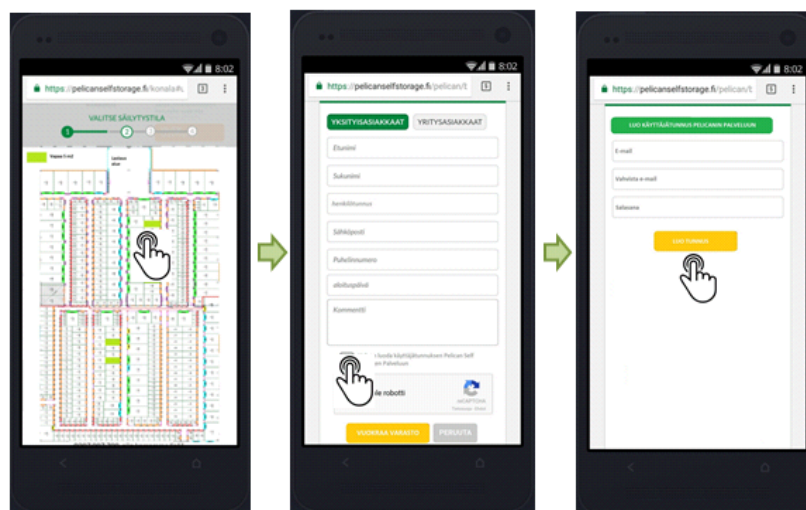


Figure 17: Option for customer who needs maximum amount of assistance

The customer is then able to choose the size category they deem to be sufficient from the three options given and will then be moved on to selecting the exact unit. They will be presented with a floor plan of the site portraying all of the available units of that size category. After the selection of the desired unit the customer will move to filing their details for the contract. After that the customer is presented with the contract details and will be given the option to view the contract in full as well as the terms and conditions of Pelican. The service requires the customer to tick the boxes stating that they have read and accept both the contract and the terms before moving on to the next phases of the process.



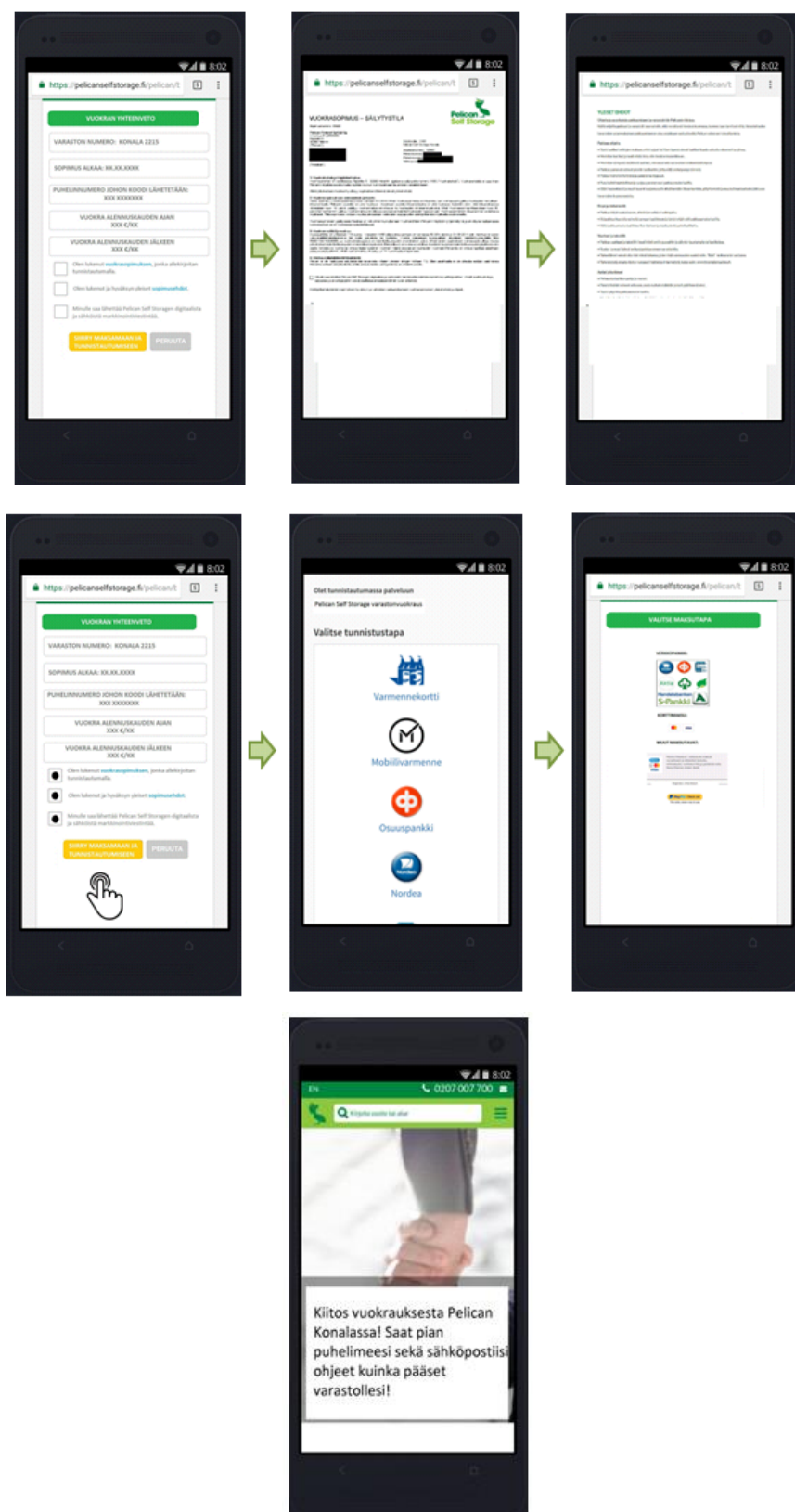


Figure 18: Selection of the desired unit followed by contract details

This step is followed by the identification of the customer. This will be done using either online banking credentials or other mobile identification service. The identification is followed by payment of the initial invoice which covers the first rental period and the possible additional fees. After the payment has been confirmed the customer will receive a confirmation about the successful transaction and an information notice regarding what will follow.

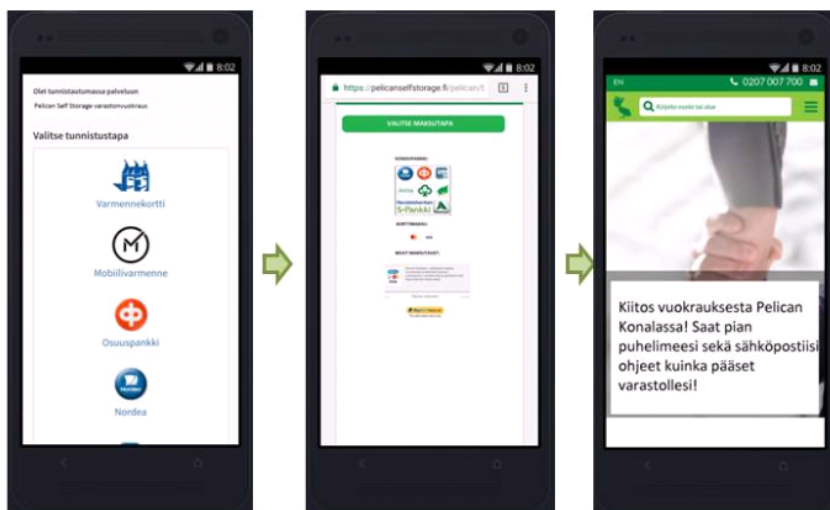


Figure 19: Finalizing the rental contract

During the concept testing and the shadowing exercise it was noted that some information regarding the usage of the storage should be presented to the customer before coming to the storage site for the first time. It was also noted that some of the information would be best to clearly indicate at the facility with signage etc. The customer would receive the initial information in their cellphone as well as e-mail. This info would contain instructions on how to enter the premises and how to find the chosen unit.

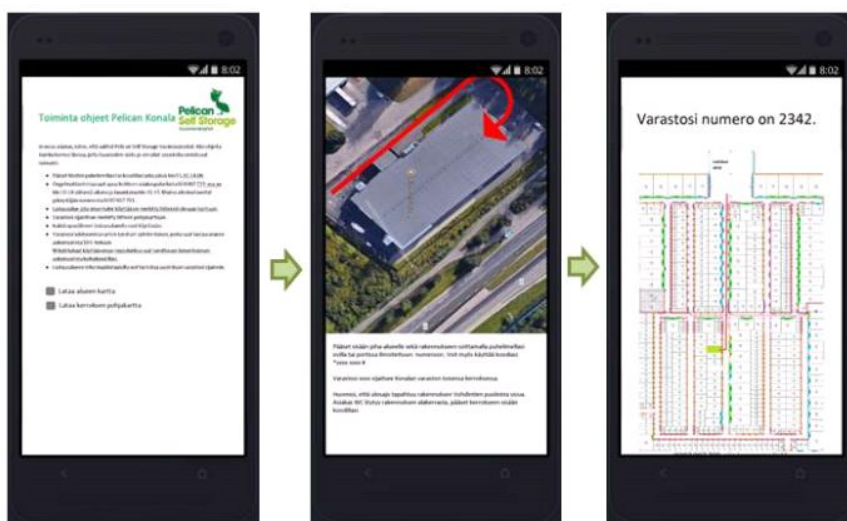


Figure 20: Information sent to the customer after the finalization of the contract

After these three informative additions were made to the concept the remaining concept tests as well as the shadowing exercises were carried out smoothly without major problems or inconveniences detected. The finalization of the concept ended at this point and the concept was presented to the management team of Pelican Finland. The feedback from the management team is recapped in the chapter 4.3. In the same chapter the main issues concerning the current resources and physical attributes that would have to be taken into consideration when launching this service are discussed.

4.2 Development project compared to the chosen service design process

The project carried out for this thesis was done following the structure of the service design process by the Hasso-Platner institute. The particular model was chosen as it highlights the iterative nature of the service design process. The iterations during the process were plentiful as the author was in constant contact with Pelican and this allowed for continuous feedback on each development done to be received from the staff as well as the clientele of the company. The chosen approach proved to work well for this particular project and most of the methods used in the different phases produced usable insights which were transferrable to useful development ideas. During the project the competences of a service designer possessed by the author were strengthened and especially the appreciation of the need for co-creation in the development of services grew. The illusion of knowing the clientele of Pelican fully was cleared as during the interviews some of the insight that surface were surprising. The following parts of this chapter will evaluate the success in each phase of the service design process.

Phases one and two: Understand & Observe

During the first phases of the design process the task was to acquire insights from the current and potential customers of Pelican. This was achieved by conducting individual interviews combined with observation exercise. The interviews were supported with card deck exercises. The activities carried out in the initial two phases of the project resulted in insights to be used in the following steps of the process. The task carried out during this part of the project fulfilled their purpose of setting the problem space and allowing for outward view and empathy to be developed toward the users of the service. (Hasso-Plattner Institut 2017.)

Phase three: Forming the point on view

The purpose of the convergent third phase is to collate and summarize the information gathered in the earlier stages of the process (Hasso-Plattner Institut 2017). This is done in order to reframe the discovered challenges in a more specific form. This part of the process was

carried out together with the staff of Pelican in the two work shops. In this phase the team was presented with personas created based on the customer categories and statistics from Pelican. By using the created personas combined with the insights from the previous stages the team created journey maps for the current service and for the digital service being designed. The purpose of this stage was fulfilled as the main problems and aspects to focus on during the following phase were identified.

Phase four: Ideate

Purpose of the divergent ideation phase is to create many possible solutions on the problems identified during the earlier phases (Hasso-Plattner Institut 2017). The team of the staff of Pelican created possible solutions in ideation work shop facilitated by the author of this thesis. The methods used during the work shop included brainstorming and storyboard. This part of the design process delivered the outcome it was supposed to. The team was able to generate a multitude of ideas and then refine them into a preliminary backbone for the concept that would be prototyped in the following phase by the author of this thesis.

Phases five and six: Prototype & Test

The purpose of the prototyping phase is to create concrete solutions based on the ideation (Hasso-Plattner Institut 2017). The Storyboard generated by the staff provided excellent base to start prototyping the new service concept. The prototyping was combined with concept testing. Based on the findings the prototype was further developed and subjected to second round of concept tests. This phase of the project highlighted the iterative nature of the service design process. During the concept testing with the customers or users an additional observational exercise of shadowing was carried out. The usage of different methods from different parts of the process proved useful as the shadowing exercise clearly indicated the parts of the prototype which did not provide the user with the sufficient information needed.

Before the creation of the final version of the prototype the development version was introduced to the management team of Pelican. The feedback guided the fine tuning of the concept toward a more realistic version which could be launched by the use of the company's current resources. The feedback from the management team of Pelican Finland is presented in the following chapter.

4.3 Presenting the concept to the commissioning company

After the final concept testing with the potential users the prototype was presented to the country management of Pelican Finland. The feedback was positive and encouraging for the most part, but some aspects were deemed to need more testing before the possible launch of the service.

The management team commented that the prototype was able to transfer the high quality of Pelicans customer service in a digital form. Originally the decision of not having a digital version for storage rental was strategic and Pelican wanted to differentiate it self by being the operator in the market who provides the customers with high quality storage facilities and personal face to face service. During the eight years of operation the digitalization of the storage rental service has proven to be very important especially in the Finnish market according to the country manager Tolvanen. The managers were also pleased that the created service concept allows for the customer to select the amount of assistance required based on their own prior experience on self-storage usage. The outlook and functionality of the concept also received praise.

The development project carried out for this thesis was an individual entity executed alongside of a larger scale overhauling process of Pelicans web site and presence in social media. The development of the web page is still continuing as this report is written and the current estimation is that the concept created during this thesis project will be launched for testing as a beta version during the Q2 of 2018. The timing was chosen by the management due to the fact that at that time a new self-storage site will be launched in Helsinki and the unit doors that are ordered for that location will be equipped with digital code locks which can be operated through the current access control system. This will then allow for even smoother service experience for the customer as they do not need to use the current manual locking system. One of the main concerns of the management team of Pelican Finland was how the locking of the units could be carried out with the current manual cylinder lock system. As it is the company policy in Pelican is that all of the units including the vacant ones are always locked for security reasons. The author of this thesis will continue to develop this service further after the thesis project to tackle this question of how to arrange the locking of the units in the facilities where digital code locks are not yet installed. Also the other physical changes at the sites that need to be done in order to allow for the launch of the digital service will be continued. These projects will include for example updating the site signage in a more thorough direction.

5 Conclusions

Digitalization of services has been crucial for many industries for the past decade. For this reason it can be stated that the topic for this thesis is current and relevant in nature. The self-storage industry as a whole has been slow to react for the change that digitalization will have on the whole service sector. Because of this Pelican could still be at the forefront of development in the industry when launching a new digital service developed from a customer centric viewpoint.

5.1 Assessment of the thesis work

The core of the thesis was to develop a concept for the commissioning company which would allow them to transfer their high quality customer service into a digital form. The designed concept was supposed to allow for the users of Pelicans service to access the rental service outside the service hours of the sites. This would allow for Pelican to be able to react to customers need at all the hours of the day. The designed concept is able to reach the goals set for it at the beginning of the project. The customer is able to help one self to estimate the size of the needed unit without consulting the service staff. They are also able to make their rental contract and receive entry to the facility and unit at any given time. From the company viewpoint the concept is able to portray the quality of Pelicans offerings. After the launch of the new service Pelican will be able to significantly lower the amount of missed customers as from the current statistics it can be seen that significant number of the prospects who are not reached within 24 hours of the enquiry will find another solution for their problem. Through co-creation with the customers as well as the staff of Pelican the design process resulted in a concept that shows understanding of the customers' world.

Possible benefits for customers of Pelican

Once the new developed concept will be launched the customers of Pelican will be able to rent a storage unit when ever needed, even outside office hours. The most beneficial aspect from the customer's viewpoint will most likely be the listing of stored items after which the system will calculate the size of the needed storage unit. The new service will be beneficial for old existing customers as well as they will be able to rent additional spaces without contacting the customer service should a need for extra space happen unexpectedly. In the future the concept might be developed into even more customer driven direction. This could be reached for example by adding a contract management option for customer so that they would be able to change their unit to smaller or larger when ever needed. This way the customer would always have the optimal size they need and unnecessary storage costs would be cut down to minimum.

Possible benefits for Pelican

The launch of the new service will benefit Pelican in many ways. The prevalent one is that sales will no longer be confined to office hours. The amount of prospect missed will most likely also drop. The main competitor Cityvarasto will also lose its advantage toward Pelican which its rudimentary web rental has given it before. This development would lead to added monetary value as the amount of new rentals would rise.

Pelican might also be able to structure its organization in a new more dynamic way which would allow for the staff to be released from the sales and customer service duties on-site. The staff has a lot of potential and competence in many different fields such as IT, marketing and rent control. If the launch of the service results in many of the contracts to be made online the working hours of the site staff could be reorganized in a way that would allow for the full potential, and know how to be utilized. According to the conversations with the Management team the aim of the company is not to cut down on the amount of staff, but the re-allocation of responsibilities is at the yearly agenda of the headquarters for the year 2018.

The image of Pelican Self Storage as an innovative company that is constantly looking for ways to improve their service and the customer experience would also most likely benefit from the launch of the new service.

Transferability of the design concept within the self-storage sectors and other industries

It can be argued that the sample group used to conduct the empirical part of the project was too limited. However it was deemed sufficient enough as the main goal of the project was to develop the concept to serve the Finnish Operations of Pelican. In order for the service to be transferred to Denmark and Sweden a similar co-creation task with the customers and the staff members of both of the countries would be advisable in order to discover any geographical differences among the clientele of Pelican. For example the willingness to use digital services might differ from country to country and even within regions.

The developed service concept was designed especially for mobiles and other hand held devices. The reason behind this decision was the fact that majority of site visits to Pelican's Finnish web page are done via mobile or tablet devices. The situation is different in Denmark says Country Manager Tolvanen. There according to the company internal data 62 % of web page visits are done with a computer. This would suggest that the service should be optimized also for computer based usage in Denmark alongside the mobile based service.

The service was designed according to the internal requirements of Pelican. So it is not transferable to other industry operators let alone other industries as is. Totally new design project should be carried out according to the resources and industry requirements. Also the customer base of that specific operator should again be involved in the development process in order to develop a service that truly highlights the dominance of customer in the value creation project. However it might be stated that the structure of the process used for this project proved to be highly functional and could therefore be applied in similar development task in other fields.

Originality

A service concept quite similar to the one created during this thesis could not be found during the project. As mentioned earlier the web based rental platform of the competing operator Cityvarasto does not offer much more than selection of a unit from a floorplan and payment option online. During the seven and a half years working in the industry the author has not come across a service like the one created for Pelican in any other country nor from any of the largest operators within the self-storage industry. The service concept developed during the thesis demonstrates deep understanding of the subject, customer-dominant logic of business, as well as portrays knowledge and ability to use the methods of service design in order to create a concept of a digital service.

Applicability

The insights gathered from the interviews and observational methods can be used in order to develop the service experience from the current service path of Pelican. The digital tools could be integrated in the traditional face to face rental by adding the space calculation application for the site personnel. This way the risk of choosing a unit that is of wrong size could be even further minimized. The staff members could be equipped with tablets in which they could add all of the items to be stored and this way the customer could also feel more at ease about the selection of the size category. The used service design tools and methods introduced to the Finnish management team of Pelican will be applied in later development projects as well. The staff will be able to be a part of the process of reassignment of responsibilities in work shops much like the ones held during this project. The insights gathered during this project were also distributed to the team responsible for the web page redesign project to be utilized in that endeavor.

5.2 Future launch of the service

The objectives that were set for the thesis were met as the goal was to create a viable concept for the digital rental service of self-storages. As mentioned before the scope of the thesis did not cover the launch of the new service which will be carried out after the related development projects are completed. Before the estimated launch in Q2 of 2018 there are aspects that need to be taken into consideration. Thus far the development project was carried out with the customers, staff and management of Pelican. In the next phases the third parties will be included such as the providers of the access control system, CMR provider as well as the contractor at the new site being built.

The features that need to be taken into consideration and developed next include: 1) Updating the access control system in a way that entry with a phone is possible, 2) Development of the linkage between the web pages and the digital rental service and the CRM software, 3) Redesigning the informative signage at the site, 4) searching for provider whose digital unit locks could be remotely accessed by the current access control software, 5) Replacing the current analog locks with digital ones in the old storage sites.

As this thesis only focused on the development of the digital service concept the physical touchpoints of the new service could be developed and designed using a process much like the one carried out here. With the participation of all the stakeholder groups the value created could be stated to be achieved by the use of co-creation.

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Conversations with the management of the commissioning company:

Pentikäinen: Pentikäinen Markus, 2016-2017 Conversations with the Regional Manager throughout the project. Written permission to use his name in the report as a reference

Tepponen: Tepponen Jarkko, 2016-2017 Conversations with the Regional Manager throughout the project. Written permission to use his name in the report as a reference

Tolvanen: Tolvanen Jussi, 2017 Conversations with the Country Manager throughout the project. Written permission to use his name in the report as a reference

Illustrations

Illustration 1: Card deck exercise answers	46
Illustration 2: Customer journey map for lifestyler persona	52
Illustration 3: “What should be the new digital customer journey?”	52
Illustration 4: Ideation workshop with the staff.....	54
Illustration 5: Storyboard exercise with the staff.....	56

Figures

Figure 1: Turnover and sqm of Pelican Finland and Cityvarasto (Kauppalehti 2017).	8
Figure 2: Service Design Overview Model (Moritz 2005, 152-153).	24
Figure 3: The Double Diamond model by the British Design Council 2005.....	26
Figure 4: Service Design Process by Stefan Moritz (2005, 159).	26
Figure 5: Design process model grounded on service design, Ojasalo et al. (2015, 204) ...	27
Figure 6: Design process by Liedtka & Ogilvie (2011, 31).....	28
Figure 7: Design process model by Hasso-Plattner-Institut (2017)	28
Figure 8: Scope of the thesis with the next phase of the digital service design process ...	29
Figure 9: DCSICD basic model and the DCS development stages (Cheng-I et al 2010).....	32
Figure 10: Insight table gathered from the five interviews	43
Figure 11: Personas created for the staff work shops	50
Figure 12: Comments from the first two concept tests	60
Figure 13: Second round of concept tests	61
Figure 14: Design process overview	63
Figure 15: Minor adjustment to the starting screen	65
Figure 16: Service path for customer with some knowledge on the needed space	66
Figure 17: Option for customer who needs maximum amount of assistance.....	67
Figure 18: Selection of the desired unit followed by contract details	68
Figure 19: Finalizing the rental contract	69
Figure 20: Information sent to the customer after the finalization of the contract.....	69

Tables

Table 1: Self-storage markets in order of total rentable square meters (FEDESSA 2017, 3). 7	7
Table 2: Essential features of value formation (Heinonen & Strandvik 2015, 479)	19
Table 3: Characteristics of customer logic (Heinonen & Strandvik 2015, 478).	22
Table 4: Comparison of theory of service development and service design (Koivisto 2007).25	25
Table 5: The answers of the quantitative preliminary survey	38
Table 6: Comparison of research methods (Goodwin 2009, 57).	40
Table 7: Problems faced by the attendees during the shadowing exercise	62

Appendixes

Appendix 1: Quantitative survey form	83
Appendix 2: Interview body (guide)	84
Appendix 3: Card-deck.....	86
Appendix 4: Customer Journey for original service	90
Appendix 5: Customer journey for digital rental service	91



Asiakaskysely

Sukupuoli: _____

Ikä: _____

	Kyllä	Ei
Ostatko palveluita internetin tai <u>mobili</u> sovellusten kautta?		
Käytätkö internet-pohjaisia vuokra palveluita, kuten hotellit tai autovuokraamot?		
Olisitko valmis vuokraamaan varaston internetin välityksellä		



Haastattelu: Pelican Web vuokraamo

Haastateltavan kotona pyri varmistamaan,
että kohteen tabletti tai
tietokone ovat helposti käytettävissä.

Haastattelun on tarkoitus edetä luontevana keskusteluna haastateltavan kanssa. Haastattelu runkoa on tarkoitus käyttää ainoastaan tukena ja muisti ohjeena, mikäli uusia spontaaneja suuntia keskustelussa syntyy anna tilanteen edetä loppuun ja palaa vasta tämän jälkeen rungon mukaiseen suunnitelmaan.

Tutkimuksen tausta:

Tämä haastattelu toteutetaan Pelican Self Storagen toimeksiantona ja sen tarkoituksena on tuottaa näkökulmia ja yleiskäsitys siitä mitä hyvä ja kattava internetpohjainen tilanvuokraus portaali pitää sisälleen. Haastattelu on osa Laurea Ammattikorkeakoulun MBA tutkinnon lopputyötä.

Käytä seuraavia kysymyksiä johtamaan tilannetta kohti neutraalia keskustelua kahden ihmisen välillä, koeta poistaa kaikki ns. virallisuuden tuntu, jotta haastateltava pystyy samaistumaan sinuun mahdollisimman hyvin toisena yksilönä tutkimusta tekevän tahon sijaan.

Jään rikkominen haastattelu tilanteen alussa: Näin alkuun kertoisitko itsestäsi?

- Nimi ja ikä
- Missä asuu ja mikä asumismuoto
- Perhe
- Työ

Kartoitetaan haastateltavan taustaa tilan vuokraus palvelujen suhteen ylipäätään:

- Kuinka usein majoituit hotelleissa tai vuokraat esimerkiksi mökin hiihtoloman tai kesäviikonlopun ajaksi?
- Oletko vuokrannut kalustettuja asuntoja?
- Kuinka yleensä suoritat tilan valinnan ja mitä keinoa käyttäen otat palvelun tarjoajaan yhteyttä?

Kartoitetaan haastateltavan ostotottumuksia ylipäätään sekä internetissä että mobiilissa:

Haastateltavan kotona pyydä henkilöä näyttämään kuinka normaalisti käyttää internetpohjaisia kauppa-
paikkoja,

Taltioi tilanne videolla mikäli mahdollista ja saat suostumuksen.

- Ostatko tuotteita tai palveluita internetin kautta?
- Minkälaisia palveluita ja tuotteita eritoten?
- Mitä palveluntarjoajia (nettikauppoja) käytät useimmiten?

- Kuvailisitko minulle jonkin negatiivisen tai positiivisen palvelukokemuksen, joka on tullut vastaan?

→ ei johdatella tilannetta väkisin koskemaan nettiostoja vaan mikä tahansa palvelutilanne käy. Mahdollisimman tarkka kuvaus:

- Mitä tapahtui?
- Kuka teki ja mitä?
- Missä?
- Milloin?
- Kuinka arvioisit tilanteen kokonaisuudessaan?
- Minkälaisen reaktion tämä sinussa aiheutti?

Kartoitetaan asiakkaan tuntemusta varastonvuokraus palveluista:

- Oletko vuokrannut tai harkinnut vuokraavasi varastotilaa?
- Minkälaisessa tilanteessa olit tuolloin?
- Mitä kautta etsit tietoa saatavilla olevista palveluista?

Tilan hahmotus: **Kotioloissa** pyydä haastateltavaa arvioimaan kuinka suureen tilaan hänen asuntonsa irtain saataisiin varastoitua, Pyydä kuvaamaan ajatuksen kulkua tilanteen edetessä.

Pelicanilla valmistelevä useita varastokoko vaihtoehtoja auki ja pyydä haastateltavaa valitsemaan omatoimisesti tavaroilleen juuri sopivan kokoinen tila.

Loppuun:

- Mikäli pienvarastonvuokrauksen voisi tehdä täysin netissä tai mobiilissa ilman asiakaspalvelijan läsnäoloa ja omaa läsnäoloa varastokohteella olisitko kiinnostunut? Mitkä seikat puoltavat ja mitkä taasen ovat vastaan palvelun käyttöä.

KORTTIPAKKATEHTÄVÄ

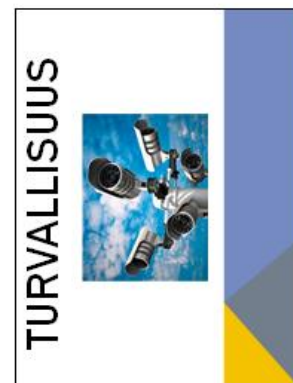
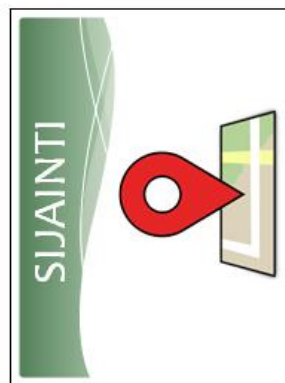
- Mitkä asioita olisivat tärkeimpiä saada tietää mobiiliin tai tietokoneen kautta tehtäväsä varastonvuokraus tilanteessa:

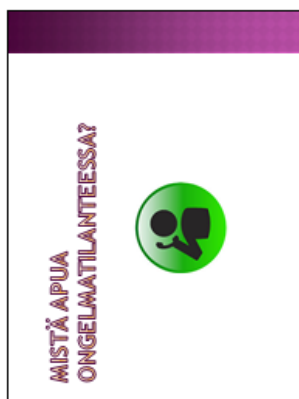
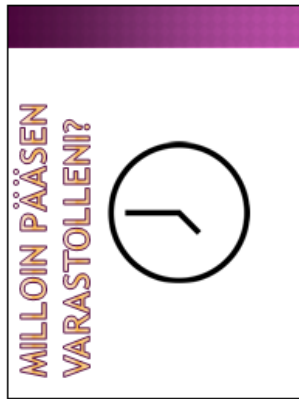
Valitse viisi tärkeintä ja viisi mielestäsi vähäpätöisintä seikkaa näistä korteista.

-Pyydä perustelemaan valinnat.

- Johdattele keskustelua jatkumaan mikäli tuntuu luonnolliselta. Muista, että voit palata aikaisempiin kohtiin mikäli havainnoinnin aikana on herännyt jatkokysymyksiä.

SIIRRY VARJOSTUS TEHTÄVÄÄN. Kuvaa videolla kuinka haastateltava käyttää jotakin vuokrauspalvelua tai nettikauppaa. Kiinnitä huomiota etenkin mikä olisi siirrännäinen Pelicanin uuteen konseptiin.





MIKÄ VAIKUTTA
TILAN HINTAAN?



KOSTEUDEN EHKÄISY JA
ILMANVAIHTO



PUUTTUIKO JOTAIN?
KIRJOITA ALLE:

• _____

• _____

• _____

• _____

PERÄKÄRRY LAINAAN



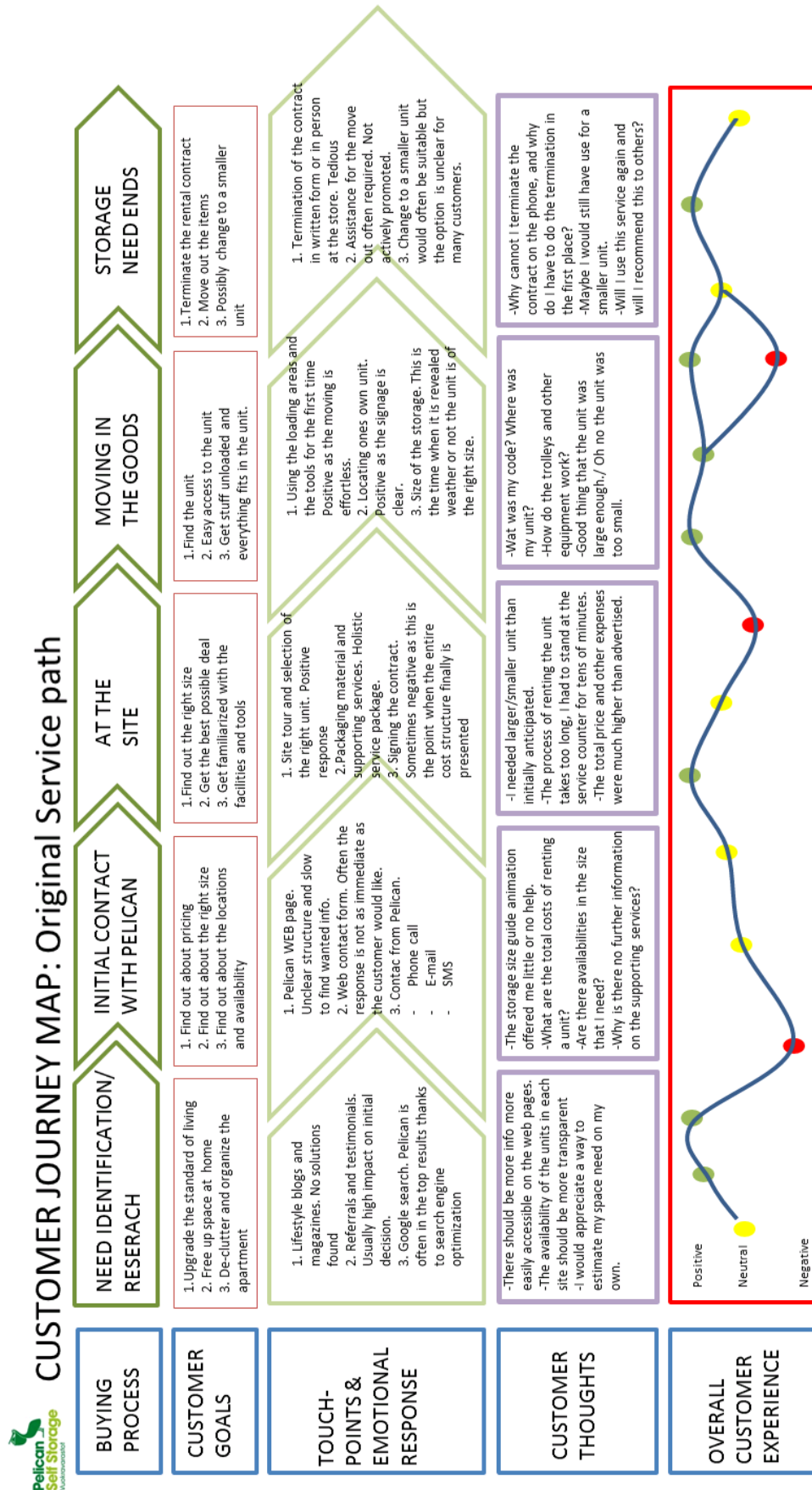
KUINKA PÄÄSEN ALUEELLE JA
RANKENKUSEEN SISÄÄN



KUINKA USEIN VARASTOLLA SAA
KÄYDÄ MAKSUTTA?

\$2 PER ENTRY »

Appendix 4: Customer Journey for original service



Appendix 5: Customer journey for digital rental service

