User experience study of B2B-sales automation – case Terveystalo

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Abstract

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Digitalization changes radically sales and purchase processes in B2B markets. Business buyers actively search information from digital sources, and make purchase decisions already before meeting sales representatives. In order to reach the B2B customers’ expectations, and to create value to them, the sales organisations must be able to provide purchase services and other elements in digital channels.

This thesis has been done as a part of the DIVA research project, which aims to develop new tested digital tools to support B2B marketing, sales and purchase processes in digital channels. One of the members of DIVA consortium, Terveystalo, already provides a wide selection of digital services for private customers, and aims to develop new digital tools also for their B2B customers. In this thesis project, Terveystalo wanted to experiment automating a small part of its B2B-sales service: promoting and giving information about occupational healthcare packages for micro businesses. The tool for that, Service Selector, was designed and build in this thesis project, using ZEF survey tools.

The main objective of this thesis was to study how the micro business customers experience being served by automated Service Selector, and what kind of effect does it have to the sales and the company image. In addition, we wanted to find out what are the digital B2B purchase services that micro business owners find useful. Terveystalo also wanted to increase the overall understanding about their customers. The target group of this study was micro business owners.

The research data was collected during 10.6 – 30.9.2016 from Service Selector click data and an online questionnaire, which was launched to the Service Selector users.Unfortunately, the response rate of the questionnaire was too low to reach generalizable results to the research questions. On the other hand, there were plenty of Service Selector users, of which 15% made an offer request to Terveystalo. The respondents of UX survey gave the Service Selector a grade 5,8 in a 1-7 scale. As conclusion, the respondents don’t seem to care whether they are served by a human or a machine. As long as the service is efficient, they get tailored products or services and enough information for decision, they are satisfied.

Even though the results of the UX study could not be considered reliable and generalizable, the thesis project was successful from Terveystalo’s point of view. The collected data about the customers helped the sales people in their work. Terveystalo wanted to continue using Service Selector after the four-month trial period, and planned taking into use similar tools in other product areas.

The most important outcome of this thesis project is, that even small investment in sales and purchase automatization can lead into satisfactory results.

Keywords
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Concepts / Abbreviations

AI  Artificial Intelligence, the intelligence exhibited by machines or Software.
B2B  Business to business, commerce transactions between businesses.
CI  Cognitive Intelligence is a specific field of application of advanced automation that aims to automate cognitively challenging tasks and entire processes conducted by humans.
CRM  Customer Relationship Management.
CX  Customer eXperience.
F2F  Face to face.
HCI  Human-computer interaction.
HHI  Human-human interaction.
HRI  Human-robot interaction.
Lean  Lean is a way of thinking and acting for an entire organization. The core idea of lean is to create more value for customers with fewer resources, fewer defects and no waste.
Micro Business  Company with no employees, only the entrepreneur. (Look also Solopreneur)
ML  Machine Learning; field of study that gives computers the ability to learn without being explicitly programmed.
MVP  Minimum Viable Product is a product which has just enough features to gather validated learning about the product.
Small Business  Company with 1-3 employees and the entrepreneur.
Solopreneur  An entrepreneur, who works alone, "solo," running their business single-handedly. (Look also Micro Business.)
UI  User Interface.
UX  User eXperience is about how a person feels about using a system.
1 Introduction

This thesis has been done as a part of the DIVA research project, which aims to develop new tested digital tools to support B2B marketing, sales and purchase processes in digital channels. DIVA-project is introduced in subchapter 1.1 of this report.

As part of DIVA-project, Haaga-Helia’s student group built a software robot pilot for a company in autumn 2015. This particular robot is a virtual sales agent, which operates in company’s website, and sells products which do not require customizing. DIVA robot helps customers in finding information about the product and persuades them to buy it. It asks questions and the customer chooses each answer from a predefined list. The dialog continues depending on the customer’s answers until the customer decides to quit or buy. The sales robot software is also provided with analytical capabilities, that can be used for optimizing the robot. (Aunimo, Alamäki 2016, Aunimo 2016)

This thesis continued the sales automation research in DIVA project with another partner company: Terveystalo, which is introduced in subchapter 1.2. Subchapters 1.3 – 1.5 represent the objects, scope and research questions of this research. The rest of the thesis report structure is explained in subchapter 1.6.

1.1 DIVA – Towards smart sales through creating value in business-to-business markets in digitalized world

DIVA-project¹ is a Tekes funded research project for producing information and tools for B2B sales marketing. Besides Haaga-Helia – the coordinator - the project involves the University of Eastern Finland and Turku University of Applied Sciences as well as companies VTT, G4S, Martela, TeliaSonera, and Terveystalo. Research co-operation is conducted with the Belgian Vlerick Business School.

Digitalization changes radically sales and purchase processes in B2B markets. Private consumers have learned to use webshops and the same services are expected to be available for business buyers, too. The whole logics in B2B markets is going through revolution. It is estimated that a business buyer has made 60% of purchase decision already before meeting the sales representative. Since the actual meeting between customer and vendor takes place significantly later in the sales process than before, it has become very

¹ http://www.divaresearch.fi/diva/
difficult for the vendor to create value together with the customer. Process is lead by the customer – not the vendor. Sales organisations should be able to produce value by adding elements online and in digital channels, says Pia Hautamäki, one of the project’s researchers.

DIVA-project will produce new scientific information about how a company can create value to B2B-customers in this era of radical change in buying habits. The research group possesses diverse know-how in sales, marketing, digitalization and communication. During the project, research data will be utilized for developing practical actions and solutions. Business partners will receive new, tested digital tools, which support business customers purchase process in digital channels. The project aims to help not only customer companies and the sales people but also the future sellers - that means developing sales management teaching in the participating universities.

1.2 Case company

Terveystalo is the largest healthcare service company in Finland with over 6,800 healthcare professionals, who offer versatile healthcare, occupational healthcare, medical and examination services in nearly 170 clinics around Finland. Customers include private individuals, companies and communities, insurance companies and the public sector. Terveystalo is the leading national producer of occupational healthcare services in Finland, providing occupational healthcare services for half a million Finnish people.  

Terveystalo has been strongly developing electronic services for customers. Already 60% of their appointment bookings is done online. Mobile application Oma Terveys 24/7 includes personal health data, lab results, prescriptions, vaccinations as well as reminders. A chat service, Doctor 24/7, enables getting in touch with a doctor around the clock, without waiting or booking in advance.

1.3 Objectives

Terveystalo already provides a wide selection of digital services for private customers. As a member of DIVA consortium, they aim to develop and test digital tools also for B2B sales. In this thesis project, Terveystalo wanted to experiment automatizing a small part of its B2B-sales service: promoting and giving information about occupational healthcare packages for micro businesses. The main objective of the experiment was to study how

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2 http://www.terveystalo.com/en
the customers experience being served by an automated Service Selector, and what kind of effect does it have to the sales and the company image. They also wanted to increase the overall understanding about their customers.

However, the previously developed DIVA-robot was not suitable for Terveystalo, therefore a new Service Selector was designed, developed and implemented during this project. Terveystalo chose ZEF survey tool as a new platform for the sales agent, because it already was in other use at Terveystalo. Terveystalo wrote the sales dialogs and the author built and tested the selector on ZEF survey tool. The Service Selector acted as a sales agent on Terveystalo's external web pages, and was available for anybody. The screen prints of Service Selector can be found from Appendix 2. For UX-research a questionnaire was designed and implemented to Webropol. The questionnaire is in Appendix 3.

Also other companies which are involved in DIVA-project are interested in study results about customer experience in B2B sales automatization. A sales robot would be able to i.e. serve customers 24/7, reduce telesales work and provide accurately all details of the products on demand.

1.4 Scope

The scope of this research was to study the UX of the Service Selector which was implemented during this project to sell two specific products to Terveystalo's micro business customers. Big companies and private customers were not included into this study. Increasing overall understanding about their customers was in Terveystalo’s scope.

The Service Selector was implemented using MVP (Minimum Viable Product) principles in order to learn fast, and it was not yet ready to actually sell the products – however it did generate sales lead in form of an offer request, which was automatically e-mailed to Terveystalo’s sales. We study the customers’ eagerness to buy the product, but it is not in the scope of this project to find out, if they actually made the purchase later on when the salesman contacted them.

This thesis project included designing and building the suitable entity which was tested. Terveystalo was responsible for the sales dialogs and ZEF provided the tool, on which the Service Selector was built. The author had no influence on these decisions. This thesis study aims also to add knowledge about what needs and wishes micro business customers have towards digital sales services.
1.5 Research questions

This study will attempt to answer the following research questions:

- What kind of customer experience does the Service Selector deliver to micro business owners?
- How does sales automation affect the company’s image?
- Can B2B-sales to micro business owners be automated in a satisfactory manner from customer’s point of view?
- How willing is the micro business owner to buy the product with the help of an automated Service Selector?
- What are the digital B2B purchase services that micro business owners find useful?

1.6 The structure of the thesis

The first chapter was an introduction to the study: subject, stakeholders Terveystalo and Diva-project, objectives, scope and stating research questions. Chapters 2-5 concentrate on building the theory base for the study, starting with software robotics in chapter 2. Chapter 3 discusses about B2B sales and digitalization. Lean principles are shortly presented in chapter 4, and chapter 5 introduces concepts User experience and Customer experience.

Empirical part of the thesis starts from chapter 6, which describes the research and analysis methodology and methods, explains the data collection and discusses the validity and reliability of the study. Implementing the Service Selector is also described in chapter 6. Results of this study are presented in chapters 7 and 8 – first the results of the collected Service Selector click data, and then the results from the UX survey. The results are mostly presented in figures and tables, to make them easily understandable.

The chapter 9 discusses and attempts to answer the 5 research questions that were set in the beginning of this thesis project. The last chapter 10 wraps up the study by first briefly summarizing the research findings, followed by recommendations for development and suggestions for further studies. At the end, there is consideration about the thesis project and the author’s own learning.
2 Software robotics

Robots have originally been developed for performing simple and burdensome duties which don’t demand any complicated logic thinking or decision making. They have replaced workers in factories, but they have not been a threat for white-collar workers – until now. It seems that robots are everywhere. They exist in physical form for example in lawn mowers as well as in invisible form performing numerous back office services.

2.1 What is a software robot?

A robot is a machine that imitates human behaviour. A software robot does not have a physical body - therefore it can’t do physical chores. Instead, it uses other software like a human would do and it interacts with humans in human-like ways i.e. in a form of natural language.

Willcocks et al. (2015) state about software robots:

They are calling it a robot because it's attempting to have all the characteristics of a virtual human. However, it is an infinitely scalable human being that can be instructed very quickly in order to carry out operational procedures at the speed of a machine which means the cost line can radically move down, therefore more work suddenly becomes absolutely within scope.  (Willcocks, Lacity & Craig 2015)

As a difference to ‘normal software’, which is designed to perform strictly pre-defined functions using pre-defined rules, a software robot is able to learn new tasks and generate new rules by observing and analysing data or patterns. Anyhow, compared to human workers, software robots need more explicit instructions. Robots don’t have common sense, intuition or creativity, they will only execute what they are configured to execute. Over the last few decades, software robots have become both the supporters of people cooperating with each other and cooperating agents on their own. As computer capacities have grown to enable development of machine learning, software robots can have been given more independent responsibilities. With independence comes responsibility: if we think about software robots steering cars or aeroplanes; they need to be usable, readable and primarily safe to end-users. (Lacity, Willcocks & Craig 2015a, Lampe et al. 2016, Willcocks, Lacity & Craig 2015, Norman 1994)

Software robots can also be called agents, and under that umbrella term exist several different unofficial categories. Nwana (1996) defines an agent as a component of software and/or hardware which is capable of acting exactly in order to accomplish tasks on behalf of its user.
Nwana (1996) identified seven types of agents:
- Collaborative agents
- Interface agents
- Mobile agents
- Information / Internet agents
- Reactive agents
- Hybrid agents
- Smart Agents

In addition to these, he states that there are some applications which combine agents from two or more of these categories, and he refers to these as heterogeneous agent systems. In 1996 those already existed even though they were relatively few. According to Nwana (1996), a software component that does not fall in one of the intersecting areas of figure 1 does not count as an agent.

![Figure 1. A Part View of an Agent Typology (Nwana 1996)](image)

In Jukka Myllyaho’s (2016) picture below (figure 2) different stages of robotics are represented as a spectrum. Advanced systems that fetch, combine and refine data into easily usable form, can be considered robotics. Virtual assistants are used for instance in phone and chat services and some of them understand several languages, even Finnish as iPhones Siri. According to Myllyaho (2016) The idea of today’s digital assistants is that users don’t need to leave their familiar applications like Messenger or Facebook, states Pullinen (2016). Instead the digital assistants are brought to these platforms and the user doesn’t know the difference if he’s interacting with a person or a robot. (Pullinen 2016) Cognitive IT is the highest stage of software robotics. System itself fetches, interprets and cumulates information. (Myllyaho 2016)
2.2 Turing’s test

Scientist Alan Turing developed a test originally in 1950 for examining if machines can think. Turing (1950) believed that by the end of the 19th century “the use of words and general educated opinion will have altered so much that one will be able to speak of machines thinking without expecting to be contradicted”. The Turing test examines the ability of a machine to communicate indistinguishably from an actual human. Turing (1950) describes the following kind of game:

Suppose that we have a person, a machine, and an interrogator. The interrogator is in a room separated from the other person and the machine. The object of the game is for the interrogator to determine which of the other two is the person, and which is the machine. The interrogator knows the other person and the machine by the labels ‘X’ and ‘Y’—but, at least at the beginning of the game, does not know which of the other person and the machine is ‘X’—and at the end of the game says either ‘X is the person and Y is the machine’ or ‘X is the machine and Y is the person’. The interrogator is allowed to put questions to the person and the machine of the following kind: “Will X please tell me whether X plays chess?” Whichever of the machine and the other person is X must answer questions that are addressed to X. The object of the machine is to try to cause the interrogator to mistakenly conclude that the machine is the other person; the object of the other person is to try to help the interrogator to correctly identify the machine. (Turing 1950)

An annual Turing test competition, the Lowbner Prize, has been organized since 1990 for textual chat programmes. By now, those most human-like, sophisticated algorithms have not succeeded to trick judges to believe that they are humans. There simply is too much
‘common sense’ information that human have, which would need to be translated into algorithms in order to make machines function convincingly with humans in social situations. (Frey, Osborne 2013, Oppy, Dowe 2016, Turing 1950)

2.3 Will robots take our jobs?

Efficient use of big data and IoT requires independent and learning software that can monitor their targets without help from humans. Historically, computerisation has meant changing explicit rule-based routine tasks into software. During last decade it has become possible to modify non-routine tasks into well-defined problems and create automatic solutions for performing them. Computers are for example able to recognize faces in pictures and interpret bad handwriting. The availability of big data and new efficient algorithms for detecting patterns enable a wide range of non-routine cognitive tasks becoming computerisable. In addition to scalability and efficiency, the benefit of computers is their absence of human biases. Computers don’t make hasty decisions, if they are hungry or tired, as humans sometimes do. (Frey, Osborne 2013)

Depending on the point of view, the development of software robot is either a threat or an opportunity. Researchers of McKinsey Global Institute (2013) estimate that sophisticated algorithms could substitute for approximately 140 million full-time knowledge workers worldwide. However, many of these occupations can’t be fully automatized. More likely the use of robots will free human labour from performing routine tasks to more creative duties. Also the savings brought by automatization may enable investments to companies’ research and development, and in conclusion new jobs are created. Even though, the trend is that robots increasingly take over cognitive tasks from human workers. (Frey, Osborne 2013, Fung 2014, MGI 2013)

The strength of humans over robots is social intelligence, which is important in a wide range of occupations, such as those involving negotiation, persuasion and caring. While robots can mimick some aspects of human social interaction, recognising natural human emotions and responding to them is still an unsolved problem. Even the simplest social tasks are difficult for robots, largely because there is much ‘common sense’ information possessed by humans, which is difficult to change into algorithms. Hence, occupations that include features like perception, manipulation, creativity or social intelligence are unlikely to be overtaken by robots during next decades. The likelihood of an occupation being automated can be described as a function of these tasks characteristics. As shown in figure 3, for example a dishwasher is more likely to be replaced with a robot than a PR-specialist. (Frey, Osborne 2013)
Frey & Osborne (2013) studied 702 occupations in US, and rated the probability of computerisation from 0 to 1, where 0 is least likely and 1 is the most likely. Let’s have a closer look at predictions about occupations related to B2B sales and marketing.

Sales and marketing occupations that were among the studied 702 occupations, are picked to the Table 1 which is attached as Appendix 1. The table shows that managerial-level sales and marketing jobs are not highly susceptible to computerisation; the probability figure is under 0,30. On the other hand, telemarketers, sales persons and sales agents are likely to lose their jobs to robots in near future. That seems a bit unlogic, taking into account that these occupations involve significant amount of perception and manipulation. But they do not necessarily require very high degree of social intelligence. And that is easier to comprehend, when we look at the big picture – Frey & Osborne (2013) predict that about 47% of total US employment will be replaced by robots.

### 2.4 Future of software robots

Lacity et al. (2015b) suggest that in the next few years, workgroups will consist of both humans and robots, and each will perform tasks that suit them best. The robots are good and fast in mining, sorting and combining data for humans to make judgements upon. This kind of work distribution is already in use, but in the future, the robots might not need as much pre-configuration or as much structured instuctions. A human worker could ask for help from a robot whenever fast data mining and processing is needed. Domingos (2015) believes that eventually we all have a personal learning artificial inelligence. That machine knows its user and is almost a perfect model of him. And it is learning and improving itself continuously. It becomes sort of a personal butler and digital assistant which takes care of paying bills and other routines. User can trust it because it is far better and faster
Gartner’s analysts Plummer et al. (2014) have predicted on 2014 that machines are going to have a more active role in enhancing human endeavors due to emerging digital business, and “digitalized things” will be in a meaningful role in making economic decisions for individuals. According to Gartner’s, machines will have human-like characteristics for developing more personalized relationship with human beings. Humans and machines will increasingly become equal co-workers. Gartner’s analysts suggest that we have reached a point where we feel comfortable allowing machines to participate in activities at a level formerly reserved for the brightest of us e.g. business innovations and medical examinations. (Plummer et al. 2014) Domingos (2015) states that machine learning will change the world in future decades maybe more than any other technics.
3 Digitalization and B2B sales challenges

In recent decades, the work of sales representatives has consisted of discovering customer's needs and selling them complex solutions - combinations of products and services. Customers previously didn’t know how to solve their own problems, even though they had a good understanding of them. (Adamson, Dixon & Toman 2012)

Nowadays, purchase process actually starts earlier than sales process. Customers search independently information from the internet about the products and services they are interested in. Companies without proper web pages and existence in social media loose potential customers. And when customers are ready to buy, they already know a lot about the products and have even chosen the suitable vendors. The buyers journey before contacting vendors is described in figure 4. Work of salesmen have changed from active sellers towards negotiators and service developers. Due to the fact, that customers use a lot of their time before contacting the salesman, they expect to be served fast and efficiently. There are almost none ‘cold calls’ anymore – of course, there are exceptions, depending on the product. (Aminoff, Rubanovitsch 2015)

![Figure 4. The buyer’s journey. (ZEF Academy )](image)

Professional buyers need help from salesmen to develop their business, therefore sales organization must make sure that buyers get easily and fast all the information they need.
Previously professional buyers met 3-4 salesmen face-to-face, nowadays they meet only one. (Aminoff, Rubanovitsch 2015)

3.1 What is special in B2B micro business sales?

The target group of this research are micro businesses, and especially the ones where the only employee is the entrepreneur self. The difficulty in micro business sales is that companies are many in number and they can be situated in remote areas, therefore selling to them face to face requires plenty of sales representatives. That becomes expensive for vendors, and rises the prices of products. Digitalization brings new opportunities to serve micro business customers cost-effectively, regardless of place and time. Online services are available to be used 24/7 and can be accessed anywhere.

3.2 ZEF tools

ZEF3 is a Finnish software company offering intelligent surveys for insightful sales and marketing. ZEF has created tools for sales representatives to gather data of the clients’ values and interests before actually meeting them. The 'Matchit' tool can be shaped as a quiz, survey, poll or selector which can be embedded in company’s web pages to generate sales leads or e-mailed directly to the potential customer. Answers are automatically gathered to database and the basic analysis can be done on ZEF platform or sent to Excel for more complexed handling.

Gathered information helps sales reps to prepare for customer meetings and make a suitable proposition. The effort that previously was used into sales speeches is now shifted into designing suitable questions for the survey. The tools can give also important information to the clients beforehand about the available products, and can be used for selecting a suitable product. The structure of the surveys and polls can be informative, humorous, gamelike or whatever is currently needed. Sales representatives can build ZEF surveys without any experience of software programming. However, if the basic settings and appearance need to be changed, some programming skills are required with CSS/JSON editor.

3 http://zef.fi/en/
3.3 Related research

Ari Alamäki, researcher in DIVA-project, has developed an indicator for B2B sales and marketing management. The indicator helps companies to review and understand the digitalization of sales from a broader perspective than just the use of new software. According to piloting experiences, this indicator also assists with the structuring and mapping of the development actions needed in effective digitalizing sales and marketing practices. The indicator includes 22 questions, and the total results show on what stage of digitalization the respondent’s company is: advanced, progressing or still in the initial stage. Use of the indicator is free for companies, and it can be used anonymously. The ultimate goal while developing this indicator was to help develop better sales practices in companies to meet the changing requirements of new and existing customers. (Alamäki 2016, DIVA-project 2016)

DIVA-researchers Heli Hallikainen and Tommi Laukkanen from University of Eastern Finland, Business School, sent a survey to over 35000 Finnish B2B decision makers in autumn 2015. As result total of 2358 responses were collected from B2B customers of the co-operating companies, the response rate being 8,5 %. The questions evaluated B2B customer’s value drivers, their behavior during purchase process and purchase related decision-making online in digital channels. Results show that 27 % of B2B customers had used digital services (e.g. websites, social media, mobile apps) during their last purchase experience with a company and out of these respondents 18,5 % made the purchase decision online. 15 % of these B2B customers also completed the purchase online. The study revealed that conventional digital tools for example websites, email, online payment systems and search engines still play a major role in B2B buying process. Social media, blogs, chats and photo/video content are less important to B2B customers. (DIVA-project 2016)

Results showed that search engine was the most popular digital tool before purchase decision among 18-65 years old answerers while older respondents rated email the most important. After purchase decision e-mail was the most important digital tool among all other age segments, but in age group 36-45 online payment system was ranked as most important.

Buyers with high educational level or high status in organization hierarchy are more likely to make the purchase decision online. Gender and age had no effect on online decision making. Besides sociodemographic factors, satisfaction with the B2B digital services positively impacts purchase decision-making online. (DIVA-project 2016)
Age and occupation are the two most important factors explaining mobile use of digital services among B2B customers. The older customer, the less probably he uses mobile devices for B2B digital services. Gender and education had no affect in mobile use.
(DIVA-project 2016)

Snyder and Hilal (2015) report about a research conducted in 2014 by Google and Millward Brown about what has changed in B2B marketing. Approximately 3000 B2B researchers were surveyed about their research and purchase habits as well as their use of digital media. Moreover, Google analyzed 13 months of clickstream data from Millward Brown Digital’s desktop panel.

Over the past few years there have been shifts in not only how B2B decisions are made, but also in who is responsible for the decisions. Snyder & Hilal (2015) state that nearly half of B2B decision makers are millennials – that means they are 18-34 years old. That generation uses internet, email and social media channels, and they don’t know what the world was before world wide web. Major findings of the study are listed below.

- Decision makers are younger, 46% in age group 18-34 years.
- While 64% of senior executives still make final sign offs, already 81% of other (lower level) employees have influence in purchase decisions.
- 71% of B2B researchers start their research with a generic search, and perform average amount of 12 searches before engaging on a specific brand.
- 49% of B2B researchers use mobile devices for searching products.
- 70% of B2B buyers watch videos throughout their path to purchase: half of them watch 30 minutes and 1/5 watch them over an hour.

As response to these findings, Snyder and Hilal (2015) suggest major changes to B2B marketing strategies. Companies should
- start marketing to millennials – take into account what kind of content and media channels they use
- aim marketing to also other employees, not only senior executives
- present and articulate clearly their value story to customers on their web pages, which are first seen as results for searches
- provide content-rich mobile experiences

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4 Note! In this context the term researcher means the business officer who plans and makes preparations before purchases
- provide videos about product features, how-to’s and professional reviews to Youtube and make them easy to find.

(Snyder, Hilal 2015)

Adamson, Dixon and Toman (2012) present a Corporate Executive Board study of more than 1400 B2B customers. The study findings claim that business customers completed nearly 60% of typical purchasing before even having a conversation with a supplier. Customers are often way ahead of the conventional salespeople who are trying to sell solutions to them. Adamson et al. (2012) suggest that vendors should start seeking out customers that are in need of change, and challenge them with provocative insights, and coach them on how to buy. The new “insight selling” strategy is replacing traditional “solution selling”. The differences of those two strategies are described in figure 5 below. Instead of representing a set of sales activities, as in traditional programs, the steps represent a set of buying activities along with recommended actions that will help salespeople guide the customer. (Adamson, Dixon & Toman 2012) This approach supports using digital sales tools that customers can use independently.

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<thead>
<tr>
<th>Solution Selling</th>
<th>Insight Selling</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What kind of company to target</strong></td>
<td>Organizations that have a clear vision and established demands</td>
</tr>
<tr>
<td><strong>What sort of initial information to gather</strong></td>
<td>What need is the customer seeking to address?</td>
</tr>
<tr>
<td><strong>When to engage</strong></td>
<td>After the customer has identified a problem the supplier can solve</td>
</tr>
<tr>
<td><strong>How to begin the conversation</strong></td>
<td>Ask questions about the customer’s need and look for a “hook” for your solution</td>
</tr>
<tr>
<td><strong>How to direct the flow of information</strong></td>
<td>Ask questions so that the customer can steer you through its purchasing process</td>
</tr>
</tbody>
</table>

Figure 5 Steps of Solution Selling and Insight Selling (Adamson, Dixon & Toman 2012)
3.4 Sales automation

Already in 1996 there has been preliminary ideas on a sales agent called Kasbah. Kasbah was meant to represent a web market place where Kasbah agents, acting on behalf of their owners, could search and filter the ads in order to find those that their users may be interested in, and then proceed to negotiate, buy or sell items. Nwama (1996) predicted that Kasbah-like agents may, in the future, replace brokers and middlemen. (Nwana 1996)

Android as a sales agent

Androids are physical robots that resemble humans and therefore can create a feeling of interacting with another person. Watanabe et al. (Watanabe, Ogawa & Ishiguro 2015) showed in their research that an android can be a successful salesperson. Even though online shopping has widely increased, there is still need for counter selling in stores. Customers are looking for social interaction with a salesperson and are willing to ask for subjective opinions before buying particular goods e.g. clothes. The study showed that an android served nearly twice as many customers as the actual human. The sales conversation scenario was divided in four parts. First the android built a social relationship with the customer by asking simple questions. In the second part the android provided a color consultation to the customer. Next the android recommended a sweater and when the customer tried it on, the android complimented the customer exaggeratedly. During the last part of the conversation the android repeatedly persuaded the customer to buy the sweater. The conversation was designed in a way that the customer felt bad if she gave a negative answer to the android.

Even though the interaction with the android is performed via touch display, and the answers were clearly chosen from a pre-planned list, the customers felt that they could get subjective opinions and accurate information from the android. Also the customers didn’t feel annoyed to communicate with the android. One aspect in favour of online shopping has been that people feel less annoyed than during counter selling that includes communication with salespeople. (Watanabe, Ogawa & Ishiguro 2015)
4 Lean principles

The term "lean" was first used to describe Toyota's business during the late 1980s by a research team headed by Jim Womack. Lean is a way of thinking and acting for an entire organization. The core idea of lean is to create more value for customers with fewer resources, fewer defects and no waste. Japanese word 'muda' means waste: any activity that consumes resources but creates no value. Value is defined in each case by the customer, but basically it means a capability provided to a customer at the right time at an appropriate price. Eliminating waste along entire value streams, leads to efficient and effective processes that require less human labour, less space, less capital, and less time to produce services or products at lower costs and with much fewer defects, compared with traditional business systems. (Womack, Jones 2003)

Lean startup is a methodology that encourages entrepreneurs to test their business ideas and products as hypothesis and rapid experimentations in the marketplace. The methodology was invented in 2008 by Eric Ries, who is an entrepreneur himself. The idea is to learn from process of rapid iterative product releases which generate fast customer feedback and their ideas for improvements. The learning process starts by building a "minimum viable product" (MVP), which has only the least possible features that are needed for early customers to use. Customer feedback is measured and utilized in building the next version of the product. This approach saves resources and guides the product development process to right direction in order to create real value for the customers. The process continues in fast loop form, repeating phases Build, Measure and Learn, as described in figure 6. The product becomes better after each circle, and by the time it is ready, it already has satisfied customers. Or – if the experiments show that the product is not good, the developing can be stopped early, before too much effort have been used. (Ries 2011)

![Figure 6. The Lean startup loop (Ries 2011)](image)
5 User experience (UX), Customer experience (CX) and digitalization

There are many definitions for both User Experience (UX) and Customer Experience (CX). Basically 'experience' is always subjective as nature. Each individual experience differently what they encounter. In conclusion, user experience is about how a person subjectively feels about using a product or a service (UX Community website 2016). Customer experience is more holistic, it covers the customer’s journey through several steps before and after buying the product journey (Bolton et al. 2014). CX consists not only of elements that the service provider can control, but also of elements outside of their control, such as the influence of other customers, or devices like smart phones that customer chose to use in various situations. It is difficult or even impossible to define its exact scope and scale (McColl-Kennedy et al. 2015).

Digital experience is becoming a large part of customer experience. Business customers are expecting to get same level of digital services as consumer brands like Amazon have. (Econsultancy 2016)

Econsultancy (2016) found out in their international survey for B2B senior leaders, that while most companies understand the importance of good customer experience, there are several obstacles to tackle:

- Business customers have consumer expectations. B2B companies are beginning to understand that they have to deal with the digital revolution of how customers find, research and purchase products. Nevertheless, only 16% dare to admit that they have achieved a CX that can equally compete with the best B2C experiences.
- B2B sets a low bar for customer experience strategy. A focus and reliance on strategy is a key difference between leaders in providing a great customer experience and their peers. While 58% of respondent companies believe that they have practical and visionary guidance for these initiatives, the reality is that most are lacking some of the fundamentals of an effective strategy.
- Top commerce goals are mismatched with customer priorities. Companies tend to concentrate on capabilities that are invisible to the end user, however vital they might be to the company. (Econsultancy 2016)

According to Gartner’s analysts (2014) renovating the customer experience is a digital priority. Customers have become more demanding about how they want to interact through technology. Businesses must keep up with the development of digital services and changes must be made constantly and rapidly. Services must be personalized and innovative. Gartner predicted in 2014 that half of all consumer goods product investments are
likely to be directed toward improving the customer experience. The fast evolution in techn-
ics demands flexibility and agility from business processes. They are called unstable or
asynchronous business processes. They may change their execution from moment to mo-
ment and dynamically adapt to changing priorities and requirements and the data they re-
ceive from digital sources. (Plummer et al. 2014)

Addressing customer experience in a meaningful way isn’t a short-term project. The com-
panies that have been most successful in undergoing digital ‘transformations’ report that
reducing internal barriers plays the strongest role in their success. (Econsultancy 2016)
Econsultancy (2016) report states:

For organizations today, the bar for customer engagement has been raised. It takes more to
win and retain loyal customers; standard, mass-segmentation driven content and experiences
are not enough. Customers are looking for high-quality, relevant content within tailored, contex-
tual experiences based on their available historical customer data and current buying journey
data.
6 Study of Terveystalo’s Service Selector

This chapter presents the research methodology and methods of the study. The aim is to explain and assess the data collection process. Chapter 6.1 introduces the research philosophy and approach. Chapter 6.2 provides a description on how the data was collected, and chapter 6.3 discusses the validity and reliability of the survey. Chapter 6.4 covers the analysis methods and tools that were used. Chapter 6.5 is about implementing the Service Selector tool.

6.1 Research method

The analytical approach of the study was quantitative and qualitative combined, although quantitative approach was dominant. Quantitative approach is descriptive, which means that the research project aims to provide systematic information about a phenomenon. The research was an exploratory case study by nature. The case consisted of developing and implementing a pilot product, the Service Selector, and studying its usage and user experience.

The research strategy was a survey. The survey was a mixture of closed and open questions, combining quantitative and qualitative methods. However, only 2 of the 18 questions were open-ended, therefore the weight of qualitative research was not very significant. Research builds upon existing theories, which are gathered from literature and previous studies. (Collis, Hussey 2003, pp. 55-79)

6.2 Data collection

The data was collected in two ways. ZEF survey tool automatically provided some click data from Service Selector users, for example start and end times, which questions were answered, what were the answers and what was the product the selector suggested. For user experience study the data collection method was a separate online questionnaire which was conducted using electronic survey tool Webropol. Online questionnaire was chosen, because it was the best way to reach all the users of Terveystalo’s Service Selector, which was the object of the survey. In addition, online survey is cost-efficient way to reach large amounts of respondents. The user experience questionnaire was launched after the user had answered all the questions in Terveystalo’s Service Selector or closed it at any point of usage. The Service Selector could be accessed from Terveystalo’s public web pages that are aimed to small and micro businesses. In order to increase the response rate, there was a lottery price, a Polar M400 heart rate monitor, as an incentive.
The questionnaire was open for almost four months: from 10th of June 2016 until 3rd of October 2016. A reminder was sent to the ones that had asked for an offer request of occupational health service package via the Service Selector, but hadn’t filled the questionnaire (Appendix 4). Also the author and thesis instructor advertised the study in their private networks, in order to get more answers (Appendix 5). Because the summer months were known to be quiet, it was important to keep the questionnaire open in September also.

The questionnaire (Appendix 3) was planned using as help Ari Alamäki’s study (2016) and user experience expert Jeff Sauro’s (Sauro a, Sauro b) articles about measuring user experience. As the research topic is about subjective perceptions and experiences, Likert scales were used. Likert scale is a bipolar scaling method that measures negative or positive attitude towards a statement. The scale can consist of 4-9 levels; below is an example of a 5-scale Likert scale.

1. Strongly disagree.
2. Somewhat disagree
3. Neither agree nor disagree
4. Somewhat agree
5. Strongly agree

There can be more options, also the neutral option in the middle can be left out in order to get more measurable outcomes. (Heikkilä 2008 p.53) In this study, 5-level Likert scales are used and option ‘I don’t know’ is added, because some respondents might have skipped the Service Selector before answering this survey.

The questions of the Webropol survey are divided into three sections. The first section consists of background questions about the respondent’s age and company. The second section inquires about the Service Selector. The questions in the third section concentrate on experiences and wishes about purchase process digitalization. There were also open questions in the survey, that require qualitative analysis. However, they were not mandatory, and not many answers were received.

### 6.3 Validity and reliability

The two aspects of credibility of the findings are validity and reliability. First, we’ll discuss about the validity of this study and after that, the reliability.

**Validity**

When we assess validity, we must ask: does the study actually measure what it is supposed to measure? "Research errors, such as faulty research procedures, poor samples
and inaccurate or misleading measurement, can undermine validity." (Ghauri, Grönhaug 2010, pp. 58-59)

Target group of this UX study were micro business owners, who used Terveystalo’s Service Selector during the research period of approximately four months. In Finland, the number of solopreneurs (including agriculture and forestry) in age group 15-64 was approx. 227 000 in 2014 (10,8% of all employed 2 105 000 in age group 15-64 in Finland.). (Tilastokeskus 2014) In theory, they all were potential Service Selector users.

The discussion about the validity and response rate of the UX questionnaire includes numbers of Service Selector users, which are confidential information. The whole discussion can be found from confidential appendix 11.

There were expected to be two types of Service Selector users:
1) Customers who end up making an offer request
2) Customers who randomly click the Service Selector.

Before the start of this study we estimated the numbers of both the user groups per half a year, and based on those estimations we decided to have a questionnaire and collect data quantitatively. In validity point of view, the target group was right, because the UX questionnaire was launched to exactly those people who had just recently used the Service Selector. During June and July, the usage numbers were much lower than we had estimated, but somewhat increased in the mid-August. However, we were too optimistic about the response rate to online questionnaire. We received 24 responses to the questionnaire. The response rate we reached, can be considered as normal for this kind of research. (See confidential appendix 11.) We recognized the risks, but the online questionnaire still seemed to be the best way for data collection. The assumption was, that most of the Service Selector users continue to the questionnaire, because there was a lottery prize, which was relatively good. The other option we considered, was to make phone interviews to users, but we were only able to have contact data for those, who had filled their information for an offer request in the Selector. Therefore, we thought that the questionnaire would provide more variation to the answers.

In conclusion, there are shortcomings in the validity of this research, due to small sample size of the UX study. On the other hand, the sample size of Service Selector click data was adequate for quantitative research.
Reliability

“Reliability is concerned with the findings of the research and is one aspect of the credibility of the findings. If a research finding can be repeated, it is reliable.” (Ghauri, Grönhaug 2010, p. 58)

The majority of the questions were closed-ended, which normally enables having generalizable results. Thus, there were also two open-ended questions, and 6 clarifying open fields, which gave respondents chance to express their thoughts freely. However, the questions, what ever type they are, are always formulated based on the researchers’ previous knowledge and hypothesis, so they can also be leading. The questionnaire was tested by two of the author’s colleagues, who work in IT, and it was read and accepted by Terveystalo. Anyhow, afterwards it seems, that the terms in questionnaire were not as clear as they should have been. For example the term ‘Internet’ was used to mean a traditional webshop. Also, it is not likely that the respondents could tell a difference between a sales robot and a webshop. Possibility to have misinterpreted the questions reduce the reliability of this study.

There were some questions in the survey with option to select 1-3 most important factors did not give enough information about the priorities of different options. Better way would have been to ask respondents to give the most valued feature 3 points, second 2 points and the third 1 point. That would have made the results more measurable and reliable.

ZEF product was used in this study, because Terveystalo already had a license. The author had no authority to that decision. However, the product couldn’t be tailored as much as Terveystalo had wanted. Therefore, the Service Selector was not the best example of sales automatization. That might have affected the respondents’ opinions of the subject.

ZEF provided raw data from each answerer as text- or csv-data, for own analysing with Excel. However, there were some differences in numbers between ZEF charts and raw data. In addition, the raw data doesn’t show what product the Selector recommended in about 40% of cases, and it is not sure whether the answerer actually has seen the result or not. Furthermore, the times in raw data were 3 hours ahead of Finnish time and they had to be converted manually.

The UX questions and answers were originally in Finnish. Their meanings can have slightly changed in translation, which was done by the author. This, and other above mentioned facts affect the reliability of this study, and need to be taken in concern when the results are interpreted.
6.4 Analysis methods and tools

The collected data was analysed using Webropol Professional Statistics tool and Excel application. The answers from UX questionnaire are presented without much interpretation; they are so few, that they couldn’t be properly analysed quantitatively. It would have been interesting to use correlations to examine how entrepreneurs age, geographical location and branch of the company affect to the answers, but because of the size of the sample, the correlations would not have given reliable results. Means were calculated from the data, when appropriate.

The click data from ZEF survey – Service Selector users – is analysed using quantitative methods. But the actual Service Selector’s questions were all independent, they had no correlation with each other.

6.5 Implementing the Service Selector

The original idea was to use the DIVA sales robot that had been built by Haaga-Helia’s students for another company during autumn 2016. This robot pilot was a virtual sales agent, which functioned in company’s web site and was based on dialog; the robot asked questions and the customer chose each answer from a predefined list. The dialog continued depending on the customer’s answers until the customer decides to quit or buy. The sales robot software was also provided with analytical capabilities, which could be used for optimizing the robot. (Aunimo, Alamäki 2016, Aunimo 2016)

The appearance and functionality of DIVA-robot was not suitable for Terveystalo. Therefore, a new tool had to be designed and implemented in short notice. Previously, Terveystalo had used surveys made by ZEF, for example Pneumokokkikysely. Therefore, using ZEF was a natural choice. The author got independently acquainted with the ZEF platform and products. The template Selector turned out to be the most suitable template for this purpose. Terveystalo designed the 7 questions and different answer texts for each response. Terveystalo was hoping to have an application exactly like the Pneumokokkikysely, but that was not possible to accomplish by using ZEF’s ready-made templates. Some tailoring could be done by editing CSS/JSON files, which included the application styles and configurations. All configurations were not possible to edit, that’s why the an-

5 (https://www.terveystalo.com/fi/Palvelut/Sairaanhoitajan-palvelut/Rokotukset/Pneumokokkikysely/)
swer texts had to be defined as questions and situated to the same column as the questions. Also, the template didn’t support complicated if-else conditions, so no variations to the dialog were built depending on previous answers. All users were asked the same questions, which were not dependant on each other. The Service Selector was not planned to actually sell the products – however after the last question, it provided the possibility to send an offer request which was automatically e-mailed to Terveystalo’s sales.

Service Selector was built by the author during couple of weeks in May, and implemented on the 10th of June on Terveystalo’s webpages. The trial period ended on the 30th of September, after which Terveystalo decided to continue using it. Screen prints of the Service Selector are attached as appendix 2.
7 The results of the Service Selector click data analysis

This chapter discusses about findings from quantitative ZEF click data. The data were analysed using Excel program. The results are shown in percentages only, because the amounts of respondents are confidential information. The percentages are presented without decimals, in order to maintain readability. For that reason, the percentages in tables or figures do not always add up to exactly 100 %.

ZEF tool provided analysis charts of Service Selector usage. The numbers from ZEF report can be found in confidential Appendix 5.

7.1 Times when the Service Selector was used

Figure 7 represents the time of day, when the Service Selector was used. The most popular time was between 8 and 16 (56%), next was 16-24 (35%) and the time between midnight and 8 in the morning was the least popular (9%)

![Figure 7. Service Selector usage: Time of day](image)

Next, in Figure 8, we can see how the Service Selector was used on different days of week. Tuesday and Wednesday have been the most popular days, and Saturday the least popular.
7.2 Service Selector answering percentages

The answering percentage of each Service Selector question is described in Figure 9 below. Question 2 was displayed only to those, who had answered NO to the first question “Does your company have hired employees?”. If answer was YES, the Selector didn’t ask more questions, but instead suggested switching over Terveystalo’s normal Offer Request page. In conclusion, all who continued answering questions after that, were solopreneurs. 3% have answered YES to question 1, and 4% have decided to quit answering at that point for other reasons. Thus, 93% of answerers have continued to question 2. There has been quite a significant drop after question 2: 79% have continued to question 3. From that point dropping out after next two questions has been steady - approximately 5% per question, and only 1% between questions 6 and 7. 63% of all answerers answered all 7 questions. And finally: 15% of all answerers have filled and sent the offer request that was integrated in Service Selector.
7.3 Overall time used in answering Service Selector questions

The overall answering time that was used in all 7 questions (without offer request) varied a lot among the answerers. The fastest respondent used only 19 seconds and the slowest over 2300 seconds. Because the variation was high, and there were only few values in both ends of the observation scale, calculating the mean value would not be sensible. Instead, better values are the mode: the value that appears most frequently, and the median: the middle number of measurements.

The mode of answering time was 46 seconds, and the median was 80 seconds. As shown in Figure 10 below, the majority of answerers (59%) got through all 7 questions in under 90 seconds. Taken into account, that the questions were simple, it is likely that those who needed more than 150 seconds, had some interruptions in the middle of answering.
Figure 10. Answering time to all 7 questions (without offer request)

7.4 Top results of Service Selector

The Service Selector calculated results and suggested a suitable product based on the answers. However, the ZEF tool didn’t provide information about all users’ results. The share of unknown results is coloured grey, and the two products are orange and blue in all figures. Figure 11 represents the top results of all users. Figure 12 shows the top results of all users, who answered all 7 questions. Figure 13 represents the top results of the users, who sent an offer request to Terveystalo.

Figure 11. Top results of all users
There is no big difference in results of these three user groups. The amount of different answers to each Service Selector question are presented in confidential Appendix 6. However, that is not relevant information for the scope of this study.

7.5 Sales lead funnel of Service Selector

A funnel picture is a traditional way to map the path a customer takes on a way to purchase. Funnels show how people move from becoming aware of a product to becoming interested in making a purchase. (Sauro 2015, p.88) The modified sales lead funnel in Figure 14 shows the path of customers starting from Terveystalo’s web page to making an offer request.
The Service Selector usage was measured during 10.6 – 30.9.2016. The link to Service Selector was on Terveystalo’s webpage for solopreneurs: https://www.terveystalo.com/fi/Tyeterveys/Miten-palvelemme/Pienyritykset-ja-yrittajat/Yrittaja/. During the same period, the usage of that web page was analysed with Google Analytics. Google Analytics is a tool for measuring and analysing the usage of web pages. Compared to numbers from Google Analytics (confidential Appendix 9) of the visitors on that webpage, 48% of them moved forward to the Service Selector. 6% of all the webpage visitors filled the offer request at the end of Service Selector.

Figure 14. Sales lead funnel through Service Selector
8 The results of the UX survey

This chapter represents the results of the user experience survey. The percentages are rounded and presented without decimals in order to maintain readability. For that reason, the percentages in tables or figures do not always add up to exactly 100%.

The UX survey questions were divided into three sections. The findings are explained in next three subchapters.

8.1 Background information of the respondents.

First section of UX questions consisted of background questions about the respondent and his company. These questions would have been more useful, if the survey had more respondents. The responses could have been used in correlations, revealing possible differences that can be derived from age group, geographical location and business branch. But now, the responses are plainly represented as they are.

**Age**

Table 2. Age distribution

<table>
<thead>
<tr>
<th>Age</th>
<th>Respondents (N=24)</th>
</tr>
</thead>
<tbody>
<tr>
<td>61-</td>
<td>1</td>
</tr>
<tr>
<td>45-60</td>
<td>14</td>
</tr>
<tr>
<td>30-44</td>
<td>8</td>
</tr>
<tr>
<td>18-29</td>
<td>1</td>
</tr>
</tbody>
</table>

**Location**

The respondents were asked their company’s postal code. The rough location was deduced using a map of postal code areas provided by Posti (Posti 2016). Half of the respondents lived in Helsinki area – however, Posti includes e.g. Porvoo and Järvenpää in Helsinki area. The second popular area was Turku. The rest of the companies were located evenly all over Finland. The respondent’s locations are displayed in Figure 15.
Figure 15. Location of the respondents’ companies (N=24)

Number of employees
This was a backup question to ensure that the respondents were business owners.

Table 3. Number of employees

<table>
<thead>
<tr>
<th>Number</th>
<th>Respondents (N=24)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>22</td>
<td>92%</td>
</tr>
<tr>
<td>2-4</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>5-19</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>20-49</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>50-</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Two of the respondents were not solopreneurs, but they had only 2-4 employees. Their answers were included to the results.

Business branch
The respondent’s businesses functioned in the branches shown in Figure 16. Branch classification is the Standard Industrial Classification TOL 2008 (Tilastokeskus 2008).
Device

Table 4. What device did you use?

<table>
<thead>
<tr>
<th>Device</th>
<th>Respondents (N=24)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile</td>
<td>4</td>
</tr>
<tr>
<td>Tablet</td>
<td>4</td>
</tr>
<tr>
<td>PC</td>
<td>16</td>
</tr>
</tbody>
</table>

Route to the Service Selector

Table 5. How did you end up to Terveystalo’s web page?

<table>
<thead>
<tr>
<th>Route to the Service Selector</th>
<th>Respondents (N=24)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directly</td>
<td>10</td>
</tr>
<tr>
<td>Search engine</td>
<td>6</td>
</tr>
<tr>
<td>Recommendation</td>
<td>4</td>
</tr>
<tr>
<td>I’m a customer</td>
<td>2</td>
</tr>
<tr>
<td>Advertisement</td>
<td>1</td>
</tr>
<tr>
<td>Other, how?</td>
<td>1</td>
</tr>
</tbody>
</table>

The respondant who chose option Other, how? was required to give a free form answer, which was “From Entrepreneurs’ web pages”.

8.2 Questions concerning Terveystalo’s Service Selector

Opinion of Service Selector

The respondents were asked to indicate their opinion of statements about Terveystalo’s Service Selector on a Likert scale, where 1 = Strongly disagree, 2 = Somewhat disagree, 3 = Neither agree nor disagree, 4 = Somewhat agree, 5 = Strongly agree and 0 = I don’t know. Figure 17 shows the mean of the responses for each topic.
Six statements reached the mean between 3.6 and 4.3. In other words the respondents somewhat agreed with following statements: Service Selector helped in choosing the product (4.3), Service Selector was pleasant to use (4.3), Service Selector positively impacted the image of Terveystalo (4.1), I wish there were more tools like this (4.0), The proposed product was right for me (3.7) and Service Selector provided enough information for decision (3.6). The respondents’ attitude was neutral towards the statement I’d preferred dealing with a human being (2.7), and they somewhat disagreed with the statement There were too many questions in Service Selector (2.0).

The I don’t know answers were removed before calculating the mean, but they can be seen in Figure 18, which represents the distribution of answers for each proposed statement.

Figure 17. Opinion of Service Selector, means (N=24)
While, due to the low number of respondants, the answers can’t be generizable, I’d still like to point out some observations from Figure 18 in following two paragraphs.

It is noteworthy, that the respondents used the option *Strongly disagree* only in statement *There were too many questions in Service Selector*. 9 respondents strongly disagreed with that statement, while 5 somewhat disagreed, and only 1 somewhat agreed. 8 respondents considered the number of questions appropriate, stating *Neither agree nor disagree*.

6 respondents (25%) answered *I don’t know* to the statement *The proposed product was right for me*. For all other statements, there were 1-2 such answers.

This indicates that those 6 respondents didn’t receive enough information about the products from Service Selector.

**Free form questions**

The respondents were asked two free form questions. The response rate to these was low. Five persons (21%) answered to the first question, which was: What information or features do you think was missing from the Service Selector?

Following answers were given.

- *I felt it was an offer request tool.*
- *More additional information about the reasons for the recommendations, it first gave one option 100%, and finally ended up in the 50-50 situation.*
- *Corporate rates.*
Two persons (8%) answered to the second question, which was: Do you think there was something unnecessary in the Service Selector?
Both respondents answered NO.

**Overall grade**
The respondents were asked to give the Service Selector an overall grade using a 7-point rating scale, where 1 is the worst and 7 is the best. Figure 19 shows that only grades 5-7 were given. The average grade was 5.8.

![Figure 19. Overall grade (N=24)](image)

In case some respondent had given grade 1-4, an explanation was asked. That may have had a positive effect to the grades. However, one free form comment was given at this point:

- I would have wanted to see price information.

**8.3 Questions concerning B2B digital services from purchase point of view**
The questions about digital services for business purchasers began by investigating the respondents' behavior in social media. The applications that the respondents use most are represented in Figure 20.
Figure 20. The most popular applications (N=24)

**Frequency of B2B purchases in internet**

All the respondents make purchases for their companies in internet. The majority buys from internet less than weekly; ten respondents (42%) tell they purchase in web only few times a year and 8 (33%) few times a month. Weekly internet purchases are done by 5 (21%) of respondents, and one (4%) makes purchases in web daily. The results are illustrated in Figure 21.

![Figure 21. Frequency of purchases in internet (N=24)](image)

**The most pleasant ways to purchase for company**

In the next question, the respondents were asked to choose 1-3 most pleasant ways to make purchases or order products or services for their companies. The three most pleasant ways were Internet, e-mail and F2F meeting with a sales representative. Sales robot and chat were the least popular – they both got two votes.
The respondents were asked to select from a list 1-3 favorite times to purchase for their company. The most preferred time was on weekdays, during office hours. The second was week nights. Third place was divided between early mornings on weekdays and daytime on weekends. One vote was given to weekend evenings. None of the respondents preferred doing purchases at night time. The maximum number of responses to this question would have been 72, but only 39 votes were given. That can mean, that the respondents typically have a certain favorite time for purchasing their company.

Figure 23. Favorite times to purchase for company (N=24). Each respondant was able to select 1-3 favorites, and altogether 39 selections where done.
Important features in B2B purchase process
The respondents were asked to select from a list 1-3 most important features that they value when they purchase for their companies. The number of selections was 54 (from maximum 72), which means that each of the 24 respondent chose 2,25 features. Thus, they didn’t consider any single option the only important one. The most respondents (18) considered important the possibility to compare prices in privacy. 13 respondents valued having tailored products or services, 12 wanted to have a possibility to make an order request or purchase at any time of day. 8 of the respondents valued efficiency and 3 of them hoped for interaction with a human being.

![Pie chart showing the most important features in B2B purchase process]

Figure 24. Important features when making purchases for companies (N=24). Each respondent was able to select 1-3 features, and altogether 54 selections where done.

Evaluation of digital B2B services
The respondents were asked to rate the following services offered by vendor companies in a situation where they are making purchases for their businesses. Evaluation was done on a Likert scale, where 1 = Totally unnecessary, 2 = Somewhat unnecessary, 3 = Neither necessary nor unnecessary, 4 = Somewhat necessary, 5 = Very necessary and 0 = I don’t know.

Figure 25 shows the mean of the responses for each topic.
The *I don’t know answers* were removed before calculating the mean, but they can be seen in Figure 26.

Two services were evaluated very necessary (4.8). They were *Possibility to leave an offer request on webpage* and *Customer service phone number is easy to find on webpage*. Four services were considered somewhat necessary, their mean values were between 3.5 and 4.3. Those four were *Web shop* (4.3), *Current phone service waiting times are visible on webpage* (4.3), *Interactive content on webpage (not only pictures and text)* (3.7), and *Registered customers are served in extranet* (3.7). The remaining 5 services on list were considered not necessary nor unnecessary: *Chat function on webpage* (3.4), *Existence in common social media (LinkedIn, Facebook, Twitter)* (3.4), *Automatic service selector or sales robot on webpage* (3.4), *Customer discussion group for sharing experiences and advice* (3.2), and *Videos on webpages / Youtube* (3.0).

Figure 26 represents the distribution of answers for each proposed statement. This figure shows well that there are not many negative - *Somewhat unnecessary or Totally unnecessary*. 
sary - opinions about digital services. Nevertheless, the most selected option for 4 services was *Not necessary nor unnecessary* – which means that they are indifferent for these respondents. Those 4 services are: *Interactive content on webpage (not only pictures and text)*, *Existence in common social media (LinkedIn, Facebook, Twitter)*, *Customer discussion group for sharing experiences and advice* and *Videos on webpages / Youtube*.

![Figure 26. Necessity of services offered by vendor companies, all answers (N=24)](image)

**Other digital purchase services**

In the last question, the respondents were asked if there existed some other, yet unmentioned digital services they wished the vendors would offer in order to ease purchasing? If the answer was yes, the respondents were asked to tell what kind of service they wished for. From three options, *Yes, No and I don’t know*, half of the respondents answered *No*, and the other half *I don’t know*. 
9 Discussion and analysis

This chapter discusses about the results of the Thesis. Firstly, they are considered from the research point of view. Secondly, we'll have a glance at the usefulness and working life relevance of this study. At the end, there are suggestions for development and further studies and evaluation of the thesis process and my own learning.

Four research questions were set in the beginning of this study. Those questions will be answered in the following chapter by combining the survey and click data results with the theory. However, due to the unfortunate fact, that the UX survey participation was low, and the sample size was only 24, the following conclusions are not generalizable, and they should be treated with caution.

This whole study was about the customer experience of the Service Selector. The first research question goes straight to the point:

**Q1. What kind of customer experience does the Service Selector deliver to micro business owners?**

Customer experience is a subjective feeling about not only the elements that the service provider can control, but also the elements outside of their control. In other words, CX is a holistic feeling. To find an answer to this research question, The Single Ease Question was applied. That is typically used in usability tests to find out how difficult the users find the tasks (Sauro b). The idea is to use a seven-point rating scale, and in case the answer is less than 5, to ask an explanation. The question was: *Give an overall grade to the Service Selector.* The overall grade given to the Service Selector was good, 5,8 on a scale 1-7.

The majority of UX-survey’s respondents agreed on some level that the Service Selector was pleasant to use, and wished there were more tools like that. The amount of questions was considered not to be too high and according to the respondents there was nothing unnecessary in Service Selector. On the other hand, the respondents wished to have more information about the products, prices and the reasons for recommending each product, especially when the tool had ended up to 50-50 situation.

Those results combined with the fact that some amount of offer requests was received after it’s usage, together indicate that the micro business owners were satisfied with the Service Selector. However, the Service Selector was also considered simply as a tool for offer request.
The second research question was:

**Q2. How does sales automation affect the company’s image?**

The respondents were specifically asked if they agree with the statement *Service Selector positively impacted the image of Terveystalo.* The mean of answers was 4,1 (maximum 5,0). 7 respondents answered they *Strongly agree* and 11 *Somewhat agree.* None of the respondents disagreed in any level. 5 respondents chose *Neither agree nor disagree* and 1 *I don’t know.*

In conclusion, in this case study, the automated Service Selector is considered to have impacted positively Terveystalo’s image.

The third question examines solopreneurs opinions about automatized sales and purchase processes:

**Q3. Can B2B-sales to micro business owners be automated in a satisfactory manner from customer’s point of view?**

In order to be able to answer this question, we should evaluate what makes a service satisfactory from customer’s point of view. According to Garner’s analysts (Plummer et al. 2014), customers have become more demanding about how they want to interact through technology. Services must be personalized and innovative.

In UX questionnaire there were questions about the respondents' preferences in purchasing times and habits. The responses of those questions help us in making conclusion whether the solopreneurs can be served by an automated sales tool in a way that is satisfactory from their point of view.

Let’s rephrase the research question into a proposition: **B2B-sales to micro business owners can be automated in a satisfactory manner from customer’s point of view.**

Next, we’ll discuss about the pros and cons that can be found from the results from both click data and UX survey.

**Findings from the study, that are in favor of the proposition**

Respondents of UX study preferred purchasing firstly during office hours, and secondly on week nights. The observations from Service Selector usage supported that. 56% of Service Selector usage occurred between 08 and 16. Still, 35% of usage occurred in the evening (16-24) and 9% at night (00-08). Likewise, while the Service Selector was mostly used on weekdays, still 22% of usage occurred on weekends. Thus, slightly over the half of Service Selector users could have been served by salespeople during office hours, one
third during the evening shift, and the rest might have been left out of service, if they had sought for it during night and weekends. Concerning service times, the Service Selector can be considered to have improved the customer satisfaction. Though, the same level of service can be provided by an ordinary webshop.

Now, let’s have a look at the opinion questions from the UX survey that were represented in Figure 16 earlier. Simplified, if the mean is over 3, the respondents agreed with the statement, and if the mean is under 3 they disagree with it. The following statements best answer to our research question, and they all got mean over 3:

- Service Selector helped in choosing the product.
- The proposed product was right to me.
- Service Selector provided enough information for decision.

The statement I’d preferred dealing with a human being got a mean under 3, which means the respondents did not prefer dealing with a human being.

The conclusion from these opinion questions is, that the 24 respondents found the use of Service Selector satisfactory.

**Findings from the study, that are against the proposition**

Internet was chosen the most pleasant ways to purchase for company (Figure 21), followed by e-mail, F2F meeting with a sales representative and Phone. The least pleasant options where Sales robot on company web page and Chat with a person on company web page. However, we don’t know what the respondents actually have meant, when they have chosen internet; did they mean web shop or for example a service selector like the one they just used. Also, we can consider it likely, that the respondents don’t have enough information nor experience about what a sales robot actually is. That can partly explain the results.

Unfortunately, we can’t make reasonable conclusions about the above mentioned purchasing preferences. Anyhow, while the respondents have preferred internet, it can’t be ignored that other, non-automized options like e-mail, F2F meetings and phone were very popular.

**Findings from the study, that include both pros and cons**

Last of the considerations originates from the UX study question, in which the respondents were asked to select important features when making business purchases. The most valued feature was Comparing prices in privacy, and the least valued was Interaction with a human being. That supports our proposition. But then, second valued feature is having Tailored products or services, which is a challenging feature for automatized sales. Third
feature was *Possibility to make an order request or purchase at any time of day*, and fourth was *Efficiency*.

So, this mainly supported our proposition, but left a strong doubt about how well can services and products be tailored if sales are automated by using e.g. a sales robot.

When the respondents were specifically asked about the necessity of Automatic service selector or sales robot on webpage, the mean of answers (3,4) was closest to the option that it was neither necessary nor unnecessary.

**Q3 Conclusion**: It seems, that this small sample of micro business owners were quite satisfied with the automated Service Selector, and didn’t specifically prefer dealing with a human being. It appears, that while they were satisfied with the Service Selector, they didn’t consider it as a sales robot, and didn’t prefer dealing with one. In fact, when specifically asked, the respondents considered the existence of an automatic service selector or a sales robot indifferent.

The sample of 24 don’t represent all solopreneurs, and the conclusion is not generalizable. But, according to these contradictory answers, the conclusion is: the respondents don’t care whether they are served by a human or a machine, as long as the service is efficient, they get tailored products or services and enough information for decision, they are satisfied.

The fourth research question probes into actual success of selling with the help of automation.

**Q4. How willing is the micro business owner to buy the product with the help of an automated Service Selector?**

It is impossible to answer this question based on research material. We don’t have the view to actual sales numbers. The closest we have, is the amount of leads (offer requests) that were generated from the Service Selector. 6% of visitors of Terveystalo’s web page for sopopreneurs (https://www.terveystalo.com/fi/Tyoterveys/Miten-palvelemme/Pienyritykset-ja-yrittajat/Yrittaja/) left their contact information after using the Service Selector.

The fifth and last research question originates from the study about Company’s Degree of Digitalization in Sales and Marketing (Alamäki 2016). The aim for this question on this study was to find out how necessary the micro business purchasers find the digital services that vendors use.

**Q5. What are the digital B2B purchase services that micro business owners find useful?**
Because of the small number of respondents, we can’t make any generalizable conclusions from the answers. Anyhow, the 24 respondents answered followingly.

The means counted from the respondents answers showed that two basic but relevant services were valued very necessary:

- Possibility to leave an offer request on webpage
- Customer service phone number is easy to find on webpage.

In category of somewhat necessary can be found services:

- Web shop
- Current phone service waiting times are visible on webpage
- Interactive content on webpage (not only pictures and text
- Registered customers are served in extranet.

Following digital services were considered quite indifferent (neither necessary nor unnecessary):

- Chat function on webpage
- Existence in common social media (LinkedIn, Facebook, Twitter)
- Automatic service selector or sales robot on webpage
- Customer discussion group for sharing experiences and advice and Videos on webpages / Youtube.

The mean counted from the respondents answers didn’t rate any digital service unnecessary. Also, the respondents didn’t name any other digital services that they wished to have in addition to the above mentioned.
10 Conclusions

This chapter summarizes shortly the most important outcomes of the research. It gives also recommendations for development of the Service Selector and suggestions for further studies. At the end of this chapter is evaluation of the thesis process and own learning.

10.1 Summary of the research outcomes

As mentioned before, the research results can’t be generalized because of the low response rate. Nevertheless, here is a short summary of the findings:

- Micro business owners were satisfied with the Service Selector. However, the Service Selector was also considered simply as a tool for offer request.
- Service Selector had a positive impact to Terveystalo’s image.
- Solopreneurs wish to have tailored products or services and enough information for decision-making. Moreover, it is not important, whether they are served by a human or a machine, as long as the service is efficient.
- Solopreneurs don’t seem to have great expectations to digital B2B purchase services. They primarily wished to be able to leave an offer request on company’s web page and to find easily the customer service phone number on web page. On the other hand, the existence of an automatic service selector or sales robot was considered indifferent.

Although the research results were kind of a disappointment because of the low number of respondents to the UX questionnaire, there are other benefits that were achieved during this thesis work. Terveystalo was satisfied with the Service Selector and wanted to continue using it after the four-month trial. The Service Selector had provided useful information of the customers who made an offer request. The received information helped sales people to prepare accordingly before contacting the customer. Also, the number of leads gathered from Service Selector was good. Terveystalo considers taking same kind of tools in use also in other product areas.

Considering that the Service Selector was done as a MVP (Minimum Viable Product), and it was designed and built fast and in fact - as a side product of this thesis, the results were surprisingly good and it was welcomed by the actual users. This study shows, that even a small investment in sales automatization can lead into satisfactory results.
10.2 Recommendations for further development of the Service Selector

There were some downsides that were encountered about the Service Selector during this Thesis work, such as the usability of the mobile version. It is not guiding the user to continue, quite the opposite, it encourages the user to check the results before answering all the questions. It is recommendable to test the functionality and appearance of the selector in all the different browsers, including tablets and mobile phones. Also, offer request part in the end of the Service Selector can easily be ignored accidentally, that should be somehow emphasized.

The ZEF survey tool does not support very complicated condition-based question structure. But the surveys can be tailored, if the designer has web programming skills. The dialog could be designed more ‘human like’, and the next question could be dependant of the previous answer. In the current implementation, the questions are always the same, regardless of the previously given answers.

The respondents of the UX study wished to have more information about the products, and some explanations about the reasons why the selector chose to recommend those particular products for them. Also, they wished to see the prices of the products. It would be even better, if the customers could actually purchase the products and services with the help of the Service Selector. Apparently these two products that were chosen to this first experiment, were not ideal for that, but possibly there are some other products, that could be easily purchased online.

The Service Selector could be accessed only from a certain webpage, and it was not advertised anywhere else. In future, the service selectors or sales robots could be in more active use. Maybe there could be a virtual robot welcoming and assisting the customer as soon as he enters Terveystalo’s web pages.

10.3 Suggestions for further studies

Unfortunately, this research didn’t reach enough respondents to get reliable and generalizable results to the research questions. Hence, further studies can be made about the same subject. It would be interesting to study the UX of a more robot-like sales agent, which had complicated dialogs and offered also the possibility to perform the actual purchase. In order to get more answers from real users, the questions about UX should be integrated to the sales agent, among other questions. But there is a dilemma of not disturbing sales, and still getting answers to UX-questions.
10.4 Evaluation of the thesis process and own learning

My background is in software development, and I was curious about software robotics – what is it, and how is it different from ordinary software. I was looking for a thesis subject from that area, and was introduced to Diva-project.

In addition to software robotics, this thesis process has taught me basics about B2B sales and purchasing, and digitalization possibilities in that area. Also, building the Service Selector using ZEF tools was a fascinating experience. Co-operation with Terveystalo went smoothly. Terveystalo was a good, reliable and very efficient partner in this project – they knew what they wanted, made quick decisions, and provided the necessary information always in time.

The project schedule was reasonable and there were no big setbacks. The low answering percentage of the UX questionnaire was an identified risk, that came true. We did all we could to improve it, but in the end, there was no other choice than to accept it.
References


Sauro, J. 2015, Customer Analytics For Dummies, John Wiley & Sons.


## Appendices

**Appendix 1. Table 1.**

### Probability of computerisation; sales and marketing occupations

<table>
<thead>
<tr>
<th>Rank</th>
<th>Probability</th>
<th>Occupation</th>
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<tr>
<td>14.</td>
<td>0.0041</td>
<td>Sales Engineers</td>
</tr>
<tr>
<td>59.</td>
<td>0.013</td>
<td>Sales Managers</td>
</tr>
<tr>
<td>61.</td>
<td>0.014</td>
<td>Marketing Managers</td>
</tr>
<tr>
<td>74.</td>
<td>0.016</td>
<td>Securities, Commodities and Financial Services Sales Agents</td>
</tr>
<tr>
<td>111.</td>
<td>0.03</td>
<td>Purchasing Managers</td>
</tr>
<tr>
<td>124.</td>
<td>0.039</td>
<td>Advertising and Promotions Managers</td>
</tr>
<tr>
<td>156.</td>
<td>0.075</td>
<td>First-Line Supervisors of Non-Retail Sales Workers</td>
</tr>
<tr>
<td>157.</td>
<td>0.076</td>
<td>First-Line Supervisors of Personal Service Workers</td>
</tr>
<tr>
<td>158.</td>
<td>0.08</td>
<td>Compliance Officers</td>
</tr>
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<td>228.</td>
<td>0.25</td>
<td>Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products</td>
</tr>
<tr>
<td>233.</td>
<td>0.28</td>
<td>First-Line Supervisors of Retail Sales Workers</td>
</tr>
<tr>
<td>237.</td>
<td>0.29</td>
<td>Wholesale and Retail Buyers, Except Farm Products</td>
</tr>
<tr>
<td>312.</td>
<td>0.54</td>
<td>Advertising Sales Agents</td>
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<tr>
<td>315.</td>
<td>0.55</td>
<td>Customer Service Representatives</td>
</tr>
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<td>0.61</td>
<td>Market Research Analysts and Marketing Specialists</td>
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<td>Purchasing Agents, Except Wholesale, Retail and Farm Products</td>
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<td>0.85</td>
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<td>Real Estate Sales Agents</td>
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<td>Retail Salespersons</td>
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<td>702.</td>
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<td>Telemarketers</td>
</tr>
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</table>

(Frey, Osborne 2013)
Appendix 2. Service Selector of Occupational Healthcare Package for Small Companies; screen prints

https://www.terveystalo.com/fi/Tyoterveys/Miten-palvelemme/Pienyritykset-ja-yrittajat/

Olipa sitten kyse sairaudesta tai tapaturmasta, on tärkeää päästä nopeasti hyvään hoitoon. Yhtenäinen hoitotila säästää aikaa ja tekevää tärkeän työn kustannuksia.


Henkilökohdien yhteyksien tueksi tarjoamme myös edistyskelliset asiointia helpottavat sähköiset palvelut.

Tutustu tarkemmin siihen, mitä voimme tehdä sinun, yrityksesi ja työntekijoidesi hyväksi:

Jos olet yksinyritys, jatka tämä.

Jos sinulla palkattuja työntekijöitä, jatka tämä.

Tutustu usein kysytyihin kysymyksiin.

Suujuvat palvelumme ovat saatavilla ympäri Suomen 170 toimipalkeissa 70 paikkakunnalla.

https://www.terveystalo.com/fi/Tyoterveys/Miten-palvelemme/Pienyritykset-ja-yrittajat/Yrittaja/
Palveluvalitsin / Service Selector


1. Onko sinulla palkattuja työntekijöitä?

Kyllä

Ei

Tervetuloa valitsemaan yrityksellesi sopivaa Terveystalon palvelupakettia!

Vastaa vasemman palstan kysymyksiin.

Oikealla palstalla näet sinulle vastaustesi perusteella suositteleamme vaihtoehdot

SELAA TULOKSIA


1. Onko sinulla palkattuja työntekijöitä?

Kyllä

Ei

Tervetuloa valitsemaan yrityksellesi sopivaa Terveystalon palvelupakettia!

Vastaa kysymyksiin, niin näet suositteleamme vaihtoehdot.

Terveystalo on mukana digitaalisista ostamista tutkivassa TEKESin DIIVA-hankkeessa. Voit antaa meille palautetta tämän valitsimen lopusta löytyvän linkin kautta ja osallistua samalla Polar M400 sykemittarin arvontaan.

SELAA TULOKSIA
Tarjouspyyntöön – link goes to Terveystalo’s offer request page:

**PYYDÄ TARJOUS TYÖTERVEYDESTÄ TÄYTÄMÄLLÄ TARJOUSPYYNTÖLOMAKE, OTAMME SINUUN YHTYEYTÄ KAHDEN PÄIVÄN KULUESSA!**

Yrityksen tiedot

*Yrityksen nimi:*

*Y-tunnus:*

Postiosoite:
Yrittäjän palvelupaketit

1. Onko sinulla palkattuja työntekijöitä?
   - Kyllä
   - Ei

2. Tuotatko palveluitasi aliuhankintana (edellytetäänkö esim. tilaajavastuun täyttymistä)?
   - Kyllä
   - Ei

Yrittäjän Terveys-paketti

Yrittäjän Työterveys-paketti

Yrittäjän palvelupaketit

2. Tuotatko palveluitasi aliuhankintana (edellytetäänkö esim. tilaajavastuun täyttymistä)?
   - Kyllä
   - Ei

Suosittelemme sinulle Yrittäjän Työterveys-pakettia. Palveluun sisältyvät lakisääteiset työterveyspalvelut, jotka ovat edellyksenä tilaajavastuun täyttymiselle.

3. Sisältyykö työösi paljon fyysistä rasitusta tai altistumista esim. kemikaaleilla. melulle tai

Yrittäjän Terveys-paketti
Yrittäjän palvelupaketit

2. Tuotatko palveluitasi alihankintana (edellytetäänkö esim. tilaajavastuun täyttymistä)?
- Kyllä
- Ei

Suosittelemme sinulle Yrittäjän Terveys-paketti.

3. Sisältyykö työhösi paljon fyysistä rasitusta tai altistumista esim. kemikaaleilla, melulle tai muille ulkoisille ärsykkeille?
- Kyllä


4. Onko sinulla
3. Sisätyykkö työhösi paljon fyysistä rasittusta tai altistumista esim. kemikaaleilla, melulle tai muille ulkoisille ärsykkeille?

- Kyllä
- Ei

Suosittelemme sinulle Yrittäjän Terveys-pakettia. Palvelu soveltuu sinulle, jos haluat seurata itse omaa terveyttäsi ja hankka palveluita oman tarvehankintasi mukaisesti.

4. Onko sinulla sairaskuluvakuutusta?

Suosittelemme Yrittäjän Työterveys-pakettia.

5. Kumpi palvelutapa vastaa paremmin tarpeitas?

- Yhteistyö sinulle nimettyjen työterveyden ammatihenkilöiden kanssa
- ...
Yrittäjän palvelupaketit

4. Onko sinulla sairaskuluvakutusta?

- Kyllä
- Ei

Suosittelemme Yrittäjän Terveys-pakettia.

5. Kumpi palvelutapa vastaa paremmin tarpeita?

- Yhteistyö sinulle nimettyjen työntekijöiden kanssa
- Haluat käyttää terveyspalveluita joustavasti oman tarveharkinnan mukaan

Suosittelemme Yrittäjän Työterveys-pakettia. Sinua ja yritystäsi tukee nimetty työntekijä, joka pitää säännöllisesti yhteyttä työkykyysi ja työskentelyolosuhteisi tarpeet huomioiden.
5. Kumpi palvelutapa vastaa paremmin tarpeitasi?

Yhteistyö sinulle nimettyjen työterveyden ammatilihenkilöiden kanssa

Haluat käyttää terveyspalveluita joustavasti oman tarveharkinnan mukaan


6. Kumpi väättää kuvaa terveydentilaasi?

Minua kiinnostaa kokonaisvaltainen terveydenhuolto, myös ennaltaehkäisevää.

Käyn lääkäriäsi silloin kun tarvetta ilmenee.

Suosittelemme sinulle Yrittäjän Työterveys-pakettia. Työterveyspalvelumme painottavat ennaltaehkäiseviä toimintamalleja ja ohjaavat sinua niiden käytössä.
6. Kumpi väättämä kuvaa terveydentilaasi?

Minua kiinnostaa kokonaisvaltainen terveydestä huolehtiminen, myös ennaltaehkäisyväestä.

Käyn lääkäriissä silloin kun tarvetta ilmenee.


7. Oletko kiinnostunut liittämiään terveyspalveluusi myös hampaaiden hoidon?

Kyllä

Ei

Pyydä tarjous
Pyydä tarjous työterveydestä täyttämällä alla oleva tarjouspyyntölämike, ja painamalla LÄHETÄ. Otamme sinuun yhteyttä kahden päivän kulussa!

Yrityksen nimi
Kirjoita vastauuksiisi tään...
### Yrittäjän palvelupaketit

<table>
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<th>Postitoimipaikka</th>
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<td>Olen yrittäjä, minulla ei ole paikattuja työntekijöitä.</td>
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<td>Kirjoita vastauksesi tähän...</td>
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<tr>
<td></td>
<td>Toimipaikkojen lukumäärä</td>
</tr>
<tr>
<td></td>
<td>Kirjoita vastauksesi tähän...</td>
</tr>
<tr>
<td></td>
<td>Yrityksen toimiala</td>
</tr>
<tr>
<td></td>
<td>Kirjoita vastauksesi tähän...</td>
</tr>
<tr>
<td></td>
<td>Asiakkaan toivomat työterveys/toimipaikkojen sijainnit (kaupunki / kaupunginoso). Akuutteissa</td>
</tr>
</tbody>
</table>

---

### Yrittäjän Terveys-paketti

100%

### Yrittäjän Työterveys-paketti

17%

---

### Yrittäjän palvelupaketit

<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kirjoita vastauksesi tähän...</td>
</tr>
<tr>
<td>Yhteys henkilön nimi</td>
</tr>
<tr>
<td>Tittel</td>
</tr>
<tr>
<td>Puhelinnumero</td>
</tr>
<tr>
<td>Sahkoposti</td>
</tr>
<tr>
<td>Lisätietoja</td>
</tr>
</tbody>
</table>

17%
Yrittäjän palvelupaketit

Lisätietoja
Kirjoita vastauksesi tähän...

LÄHETÄ

Muistithän lähettää tarjouspyynnön painamalla Lähetä nappia!

Voita sykmittari!

www.webropolsurveys.com/S/AC81DDA2D2AF72D1.par

Yrittäjän Terveys-paketti

100%

Yrittäjän Työterveys-paketti

17%

Pushed from right upper corner
Save your answers

Closed from X on left upper corner
Appendix 3. User experience study questionnaire (Webropol sheet)

Tämä kysely on suunnattu Terveystalon työterveyspalvelun palveluvalitsinta käyttäjille.

Haluatko tehdä kyselyyn loputta osoittaudun arvoon ja osallistua Polar M400 syöttöön? Kyselyyn toimii kääntötekniikan avulla anonymina, eli yhteysitaustat yhdenvertaisuutta auttavat vastauksiin.

Taustatiedot

1. Ikä *
   - 18-29
   - 30-44
   - 45-60
   - 61 tai väh.

2. Yritykseesi toimipaikan postinumero *
   Postinumero

3. Montako työntekijää yrityksessä on yhteensä? *
   - Yksi
   - 2-4
   - 5-19
   - 20-49
   - 50 tai enemmän

4. Mikä on yrityksesi toimiala? *
   ---Valitse listasta yrityksesi toimiala----

Terveystalon palveluvalitsin


<table>
<thead>
<tr>
<th>Palveluvalitsin auttoi tuotteen valinnassa</th>
<th>Olen täysin samaa mieltä</th>
<th>Olen jokin verran samaa mieltä</th>
<th>Ei sammata</th>
<th>Olen verran eri mieltä</th>
<th>Olen täysin eri mieltä</th>
<th>En osaa sanoa</th>
</tr>
</thead>
</table>
Palveluvalitsin tarjosi riittävästi tietoa päätöksentekoa varten
Palveluvalitsimen käyttö oli miellyttävää
Palveluvalitsin vaikutti positiivisesti mielikuvaani Terveystalosta
Toivoin, että vastaavia valineita olisi enemmän
Olisin mieluummin asioinut ihmisen kanssa
Palveluvalitsimessa oli liikaa kysymyksiä
Palveluvalitsimen ehdottama tuote oli minulle sopiva

6. Milloin laitteella käytit Terveystalon palveluvalitsinta? *
   - Asetti keittiöön
   - Tabletti
   - Tietokone

7. Mitä keuutta päällystit Terveystalon sivuille? *
   - Hakukoneen keuutta
   - Minulle suostuttiin sitä
   - Olen asiakas
   - Matkojen keuutta
   - Tulin suoraan verkkosivulle
   - Muu (muuta, missä?)

8. Mita tietoja tai ominaisuuksia olisit kannattavat lisää palveluvalitsimeen?

   

9. Oliko palveluvalitsimessä mielestääsi jetain turhaa?

   

10. Anna palveluvalitsimelle arvosana esteikolle 1-7 (1 on huono ja 7 paraa) *
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
11. Jos vastasit edelliseen kysymykseen arvosanailla 1–4, voisitko kertoa, miksi.

Yrityksetsi hankinnat

12. Mitä näistä sovelluksista käytät eniten?
   - Facebook
   - LinkedIn
   - Twitter
   - Sähköposti
   - Jouk muu. ____________________________
   - Mika? ____________________________

13. Miten usein teet yrityksetsi hankintoja internetissä? *
   - En iloin
   - Päivittäin
   - Viikoittain
   - Muutaman kerran kuussa
   - Muutaman kerran vuodessa

14. Valitse alla olevasta listasta 1–3 sinulle mieluisinta tapaa tehdä ostoksia tai tilauksia yrityksessäsi varten. *
   - Myyjältä tai edustajalta henkilökohtaisessa tapaamisessa
   - Puhelinmita
   - Netistä
   - Sähköpostilla
   - Kaupan sivuilta toimivan chatin avulla, jossa keskustelukumppanina on ihminen
   - Kaupan sivuilta toimivan myyntirobotin avulla
   - Jotenkin muuten, miten? ____________________________

15. Valitse alla olevasta listasta 1–3 sinulle mieluisinta ajankohtaa, jolloin haluaisit tehdä yrityksetsi hankintoja? *
   - Arkkipäiväisin alkaisin amulla
   - Arkkipäivissä virka-aikaisen
   - Arkki-aikaisin
   - Viikonloppuna päivällä
16. Valitse alla olevasta listasta 1-3 sinulle tärkeintä seikkaa, kun teet hankintoja yrityksellesi *

☐ Tehokkuus
☐ Vuorovaikutus ihmisen kanssa
☐ Tietojen vartaloon omassa rauhassa
☐ Nahdolisuus tehdä tarjouspyynnöt tai hankinta niihin vuorokaudenaikaan tahansa
☐ Tuotteen räätälöinti omiin tarpeisiin
☐ Jokin muu, mikä?

17. Miten arvostat seuraavia yritysten tarjoamia palveluita tilanteessa, jossa olet tekemässä hankintoja yrityksellesi? *

<table>
<thead>
<tr>
<th>Erittäin tarpeellinen</th>
<th>Melko tarpeellinen</th>
<th>Ei tarpeellinen eikä tarpeeton</th>
<th>Melko tarpeeton</th>
<th>Täysin tarpeeton</th>
<th>En esassa sanoa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yrityksen verkkosivuilla voi jättää tarjouspyynnön</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Yritys löytyy tärkeimmistä sosiaalista mediasta (LinkedIn, Facebook, Twitter)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Yrityksellä on verkkokauppa</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Yrityksellä on asiakkaiden käyttöön keskusteluryhmä kokernusten ja neuvon jaksamiseen</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Yrityksen sivuilla on interaktiivista sisältöä (ei vain kuvia ja tekstiä)</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Yrityksen sivuilla on chat-toiminto</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Yrityksen sivuilla on automaattinen palveluvalmis tai myyntirobotti</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Yritys palvelaa rekisteröityneitä asiakkaitaan suljetulla verkkosivulla (ekstranet)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Yrityksen asiakaspalvelun puhelinnumero on helposti löydettävissä nettisivuilla</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
</tr>
<tr>
<td>Yrityksen asiakaspalvelupuhelin asiakaspalvelupuhelinien jonotustilanne näkyy netissä</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
</tr>
<tr>
<td>Yritys julkaisee videoita sivuillaan tai esim. Youtubessa</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>


73
Kyllä
Ei
En osaa sanoa

Kiitos vastauksistasi! Mikäli haluat osallistua myös Polar M400 sykemittarin arvontaan, anna yhteystiedot arvontaa varten.


Etunimi
Sukunimi
Matkapuhelin
Sähköposti
Subject: Terveystalon palveluvalitsimeen liittyvä tutkimus

Hei!

Terveystalo on mukana digitaalista ostamista tutkivassa Tekesin DIVA-hankkeessa. Teen hankkeessa opinnäytetyötäni Haaga-Helian YAMK-tutkintoon ja kerään sitä varten tietoa yritysten suhtautumisesta myynnin automatisointiin, sekä käyttäjien kokemuksia Palveluvalitsimesta, jota olette käyneet kokeilemassa Terveystalon Yrittäjä-sivuilla.

Oheisen linkin kyselyyn vastaamalla voitte antaa DIVA-hankkeelle arvokasta tietoa digitaalisten yrittäjäpalveluiden kehittämiseen, sekä osallistua Polar M400 sykemittarin arvontaan.

http://www.webropolsurveys.com/S/AC81DDA2D2AF72D1.par

Kiitos ajastanne ja aurinkoista syksyä!

Ystävällisin terveisin
Outi Alarakkola
Student of Information Systems Management
Haaga-Helia ammattikorkeakoulu
Appendix 5. Request for participating in the survey

Published in Facebook on 3. and 22. September 2016.

Help!

Yrittäjän tulisi ennen 3.10.2016
1) kokeilla Terveystalon sivuilta löytyvää palveluvalitsinta
2) käytön päätteeksi vastata kyselyyn, jonka vastaajien kesken arvotaan Polar M400 sykkemittari.

Terveystalon sivut, joilta löytyy sinisellä tekstillä korostettu linkki palveluvalitsimeen:
https://www.terveystalo.com/…/Pienyritykset-ja-yr…/Yrittaja/

(Jos et muistanut klikata kyselylinkiä palveluvalitsimen päätteeksi, linkki löyty täästä:
http://www.webropolsurveys.com/S/AC81DDA2D2AF72D1.par)

Iso kiitos ajastanne ja aurinkoista syksyä!

Published in Twitter on 2. September 2016

@divaresearch on mukana tutkimassa yrittäjän digitaalista ostokemusta, kysely yrittäjälle täällä: https://storage.googleapis.com/apps.myzef.com/resources/terveys-talo/cn5vqq/index.html ...

Divaresearch @divaresearch
Digitalization transforms b-to-b buying. We research how!#HaagaHelia- aAMK#TurunAMK#VTTFinland#UEF#Vlerick#Tekes#DIGIA#G4SFinland#Martela#Teli- asonera#Terveystalo
Appendix 6. Service Selector usage report for Terveystalo (Confidential)
Appendix 7. Service Selector, top results (Confidential)
Appendix 8. Service Selector, example screens of mobile application

Terveystuloa valitsemaan yrityksellesi sopivaa Terveystalon palvelupakettia!
Vastaa kysymyksiin, niin näet sinulle vastaustesi perusteella suositelemammme vaihtoehdot

1. Onko sinulla palkattuja työntekijöitä?
   - Kyllä
   - Ei

2. Tuotatko palveluitasi alihankintana (edellytetään esim. tilaajavastuun täyttymistä)?
   - Kyllä
   - Ei

Suositelemme sinulle Yrittäjän Terveys-paketin.
Yrittäjän palvelupaketti

Yrittäjän Terveys -paketti

0%

Yrittäjän Työterveys -paketti

KYSYMYS

Prydä tarjous
Prydä tarjous työterveydestä täyttämällä alla oleva tarjouspyyntöömme, ja painamalla LÄHETÄ. Otamme sinun yhteyttä kahden päivän kuluttua!

Yrityksen nimi
Kirjoita vastauksesi tähän...

Y-tunnus
Kirjoita vastauksesi tähän...

Postiosoite
Kirjoita vastauksesi tähän...

Postinumero

TULOKSET
Appendix 9. Analytics of Terveystalo’s webpage usage (Confidential)
Appendix 10. Sales lead funnel of Service Selector (Confidential)
Appendix 11. Consideration of answering percentage of UX questionnaire (Confidential)