

LAPPEENRANTA UNIVERSITY OF TECHNOLOGY
School of Business and Management
Master's Degree Programme in Supply Management

Otto Eskelinen

Value creation through the e-Sourcing solution

Supervisor: Professor Jukka Hallikas

Examiner: Post-Doctoral Researcher Mika Immonen

ABSTRACT

Author: Otto Eskelinen
Title: Value creation through the e-Sourcing solution
Faculty: School of Business and Management
Master's programme: Supply Management
Year: 2017
Master's Thesis: Lappeenranta University of Technology
77 pages, 8 figures, 3 tables, 2 appendices
Examiners: 1. Professor Jukka Hallikas
2. Post-Doctoral Researcher Mika Immonen
Keywords: e-Sourcing, e-Procurement, business model, digitalization

The aim of the study is to examine how Company X creates value for its customers through its e-Sourcing solution. In addition, the study is exploring how Company X's value proposition meet customers' needs. While Company X's value creation process is closely tied to its entire business model, the study is also examining potential business model development to enhance the value creation process. Digitalization has allowed more effective electronic competitive tendering process through which the companies can gain significant benefits for the whole procurement process. The process of electronic competitive tendering is a critical section of the procurement process. However, often companies are not paying sufficient attention to it due to lack of understanding of the value it would bring. Previous research has not provided comprehensive and specific answers to the following questions: how and why the utilization of new technologies is enhancing the procurement process. This study provides evidence that the electronic competitive tendering as part of the whole procurement process can bring several benefits to companies. These benefits are, for example, savings in time and money through more effective competitive tendering process and more controlled and transparent procurement process. In addition, the utilization of the electronic tools prevents errors through more specific process planning and enhances the overall quality of the whole procurement process.

TIIVISTELMÄ

Tekijä:	Otto Eskelinen
Otsikko:	Arvon luominen sähköisen kilpailutusjärjestelmän kautta
Tiedekunta:	Kauppakorkeakoulu
Maisteriohjelma:	Hankintojen johtaminen
Vuosi:	2017
Pro Gradu –tutkielma:	Lappeenrannan teknillinen yliopisto 77 sivua, 8 kuviota, 3 taulukkoa, 2 liitettä
Tarkastajat:	1. Professori Jukka Hallikas 2. Tutkijatohtori Mika Immonen
Avainsanat:	Sähköinen kilpailutus, sähköiset hankinnat, liiketoimintamalli, digitalisaatio

Tutkimuksen päällimmäisenä tavoitteena on selvittää kuinka Yritys X luo asiakkailleen arvoa tarjoamiensa sähköisten kilpailutustyökalujen kautta. Sen lisäksi, tutkimus selvittää kuinka Yritys X:n arvolutupaukset kohtaavat asiakkaiden tarpeet. Yritys X:n arvontuontiprosessin ollessa tiiviisti sidoksissa sen koko liiketoimintamalliin, selvittää tutkimus edellä mainittujen tulosten perusteella myös liiketoimintamallin mahdollisia kehityskohtia arvontuontiprosessin tehostamiseksi. Digitalisaatio on mahdollistanut tehokkaan sähköisen hankintojen kilpailuttamisen, jonka kautta yrityksen on mahdollista saavuttaa merkittäviä hyötyjä koko hankintaprosessiinsa. Sähköinen hankintojen kilpailuttaminen on kriittinen osa koko hankintaprosessia. Usein sille ei kuitenkaan anneta sen vaativaa huomiota, eivätkä monet yritykset ole ymmärtäneet sen luomaa arvoa. Aikaisempi tutkimus ei ole kovinkaan laajasti tuonut vastauksia kysymyksiin: kuinka ja miksi teknologioiden hyödyntäminen tehostaa hankintaprosessia. Tämä tutkimus osoittaa, että sähköinen hankintojen kilpailuttaminen osana hankintaprosessia tuo merkittäviä hyötyjä, kuten ajan ja rahan säästöt tehokkaamman kilpailutusprosessin kautta sekä hankintaprosessin läpinäkyvyys ja helpottunut kontrollointi sähköisiä työkaluja hyödynnettäessä. Näiden lisäksi sähköinen hankintojen kilpailutus ehkäisee virheitä tarkemmin suunnitellun prosessin kautta ja tehostaa kokonaisvaltaisesti hankintaprosessia.

ACKNOWLEDGEMENTS

I would like to thank the Lappeenranta University of Technology and all my fellow students for the past five years. The whole experience was great by all odds. The past five years were filled with hard work and plenty of fun moments. The writing process of this thesis was very interesting and educational, however, it was rather tough sometimes. I would like to express my deepest gratitude to my Supervisor Jukka Hallikas, who gave me superior academic guidance and offered great ideas for the thesis. Moreover, I would like to thank all the interviewees for giving their precious time for this thesis.

Helsinki 1.9.2017

Otto Eskelinen

TABLE OF CONTENTS

1	Introduction	1
1.1	Objectives, methods and research problems	3
1.2	Scope of the study and theoretical framework	4
1.3	Literature review	6
1.4	Structure of the thesis.....	8
1.5	Key concepts	9
2	Digitalization of the procurement process	11
2.1	Procurement and e-Procurement	12
2.2	Sourcing	15
2.3	e-Sourcing	18
2.3.1	e-Sourcing tools	19
2.3.2	e-Tendering.....	21
2.3.3	e-Auctions	22
2.3.4	Benefits of e-Sourcing.....	23
2.3.5	Challenges of e-Sourcing.....	27
3	Business model	29
3.1	The concept and the evolution of business model	29
3.2	Value creation.....	31
3.3	Operation organizing	33
3.4	Customer relationship management.....	35
3.5	Financial management	38
3.6	Value creation in e-Business	39
4	Methodology	42
4.1	Research process.....	42
4.2	Methods and data collecting.....	43
4.3	Reliability and validity	45
5	Value creation through the business model of Company X	47
5.1	Value creation.....	47
5.2	Operation organizing	49
5.3	Customer relationship management.....	51

5.4	Financial management	53
6	Customers' experiences of the e-Sourcing solution.....	54
6.1	Initialization process	54
6.2	Support services	55
6.3	Utilization	56
6.4	Utilization benefits	59
6.5	Utilization challenges	62
6.6	Suppliers' feedback	64
7	Analysis and findings of the empirical results	66
7.1	Value creation process of Company X	66
7.2	Customers' needs and the value propositions of Company X.....	68
7.3	Business model development.....	69
8	Conclusions	71
8.1	Answers to the research problems	71
8.2	Limitations and future research suggestions	76

APPENDICES

Appendix 1. Semi structured e-Sourcing solution related interview questions for the customers

Appendix 2. Semi structured Business Model related interview questions for Company X

LIST OF FIGURES

Figure 1. Procurement process

Figure 2. Theoretical framework

Figure 3. Procurement function

Figure 4. Sourcing and procurement process

Figure 5. Business Model Canvas

Figure 6. Customer's buying process

Figure 7. Value creation in e-Business

Figure 8. Research process

LIST OF TABLES

Table 1. Savings from e-Auction events

Table 2. How Company X's value proposition meets customers' needs

Table 3. e-Sourcing solution and business model related challenges

1 Introduction

During the recent era of digitalization companies have started investing in to e-Business technologies to improve their overall performance (Devaraj, Krajewski & Wei 2007). The e-Business technologies have transformed the supply chain practices with various potential benefits, such as lower transaction costs, reduced purchasing prices and better customer service (Kauppi, Brandon-Jones, Ronchi & Raaij 2013). However, according to Devaraj et al. (2007) there is only limited academic research on why and how the e-Business technologies can create performance gains for companies' supply chain practices. Consequently, further research is warranted to establish the true benefits of e-Business technologies.

e-Procurement and its subsection, e-Sourcing are essential sections of the supply chain which greatly affects for the whole performance of the supply chain (Sanders 2007). The advent of e-Sourcing solutions has brought various benefits for the enterprises including enhanced accessibility to global markets, decreased negotiation cycle times (Ericson & Edsinger 2003), reduced purchasing prices and more transparent and controlled sourcing processes (Kauppi et al 2013). The better a company can understand and identify all the possible benefits of e-Sourcing, the better it can exploit these web-based solutions in its own business. By understanding all the potential advantages of these e-Solutions, a company is able gain benefits which it has not previously noticed or it has not taken into account.

It is evident that the majority of companies are utilizing an advanced e-Tools in their procurement processes, which are integrated to their ERP-systems (Enterprise Resource Planning). Companies especially utilize these tools during buying and invoicing procedures which occur at the end of the procurement process. However, the competitive tendering process which is executed through the e-Sourcing solutions is often forgotten. e-Sourcing is a critical part of the procurement process, where significant savings in money and other related benefits can be gained (Poirier & Bauer 2000). Large amount of companies which business model is extensively based on purchasing raw materials, goods and / or services are executing their

tendering process in inefficient and old fashioned way. Consequently, numerous companies are losing time, effectiveness and money instead of gaining competitive advantage that efficient e-Sourcing solutions could offer. When a company is executing its tendering process, it sends the tenders to the potential suppliers via email. Through this old-fashioned and inefficient process, the sourcing process has very limited transparency while the company has no information on how the tendering process is proceeding. Moreover, the company has no confirmation whether the tender reached the potential suppliers via email or not. After the company has received the suppliers' responses for the tender via email, the answers are often in varying forms. For the buyers, it takes considerably amount of time to modify the suppliers' tenders to a comparable form.

On the markets, there are various companies who offer e-Sourcing solution services. The service providers are different sizes and their bundle of services differs from each other. Generally, the larger service providers offer wider bundle of services which contain e-Tools for the whole procurement process. Alternatively, the smaller service providers are more focused on the area of e-Sourcing. In addition, their value proposition may be substantially different. According to Osterwalder (2004), the value proposition is the heart of the business model and it is the reason a customer chooses which products and / or services they want to acquire and use. In addition, the value propositions are solving the customer's problems by satisfying their needs (ibid). In generally speaking, the smaller service providers are more customer oriented compared to the larger ones. A company should carefully consider what kind of e-Sourcing solution they require. It is common that companies acquire e-Business tools to gain more effective processes. However, during the time the utilization level of the tools may decrease or they can be left completely unused because they do not bring enough benefits or they are too complicated to use. Therefore, the usability, accessibility and flexibility are essential features when acquiring an efficient e-Sourcing solution. It is essential that the value which is created through the e-Sourcing solution and through related activities, such as support services, meet the customer's needs comprehensively.

1.1 Objectives, methods and research problems

The main objective of the study is to examine the value creation process through the e-Sourcing solution of Company X. The study aims to explore how the Company X can create value for its customers more efficiently and comprehensively. It clarifies how the value is created, what factors are needed for creating the value and where the created value is from. In addition, while the result of the value creation process is the value proposition, the study examines how the Company X's value proposition meet the customer needs. Therefore, the study clarifies the most essential value bringing factors and strives to find out possible development areas in the e-Sourcing solution. Moreover, the business model of the Company X is strictly related around the e-Sourcing solution. While all the sections of the business model have significant consequences in the whole value creation process, the possible development areas of the whole business model are also examined.

The qualitative research method is used in this study. The theoretical parts of the study are mainly based on scientific articles in electronic databases and literature that is related to the subject. The empirical data of the study is collected through five case studies which contain two points of view, the Company X's view and views of its four customers. The methodology of the study is presented more comprehensively in chapter 4.

Main research problem:

What kind of value the e-Sourcing solution is creating for the customers and where the value is originates from?

In this study, the main research problem explores the value creation process of Company X. While there are numerous factors that are creating value through the e-Sourcing solution for Company X's customers, it is essential to examine the most essential ones. In addition, the main research problem explores the other related value creation factors, such as customer service issues and after sales actions.

These factors are strictly related to the whole customer experience, hence, they are critical factors to take into account.

Sub problems:

How Company X's value propositions meet the customers' needs

The first sub problem explores how the customers are experiencing the utilization of the Company X's e-Sourcing solution. The purpose is to examine how important the use of the modern electronic tools is as a part of a procurement process. It explores what are the needs of using the e-Sourcing solution experienced by the whole procurement unit. Moreover, it clarifies has the company X's e-Sourcing solution brought the expected value, such as better control of information and suppliers or time and cost savings. Moreover, it explores is the e-Sourcing solution easy to use or do customers face some problematics when utilizing the solution.

Business model development findings

The second sub problem examines possible development findings concerning the e-Sourcing solution and other sections of the business model. The other sections are taken into consideration because all the activities inside the Company X's business model are strictly related to the e-Sourcing solution which is the core of the Company X's business model.

1.2 Scope of the study and theoretical framework

This study explores the companies who are utilizing Company X's e-Sourcing solution in private sector. The area of public procurement is not considered in this study. However, the public procurement and the procurement and sourcing in private sectors have similar features. Therefore, some theoretical issues from the

area of public procurement are reflected in this study in order to achieve more extensive and accurate results. The Company X is offering various e-Sourcing tools, however, the study focuses to e-Tending and e-Auction tools.

The main focus is on the e-Sourcing. However, the e-Sourcing is a subsection of the procurement process, hence, the study is considering the whole procurement process in some extent to bring better understanding of the phenomenon. Figure 1 represents how the whole procurement process is proceeding. The section of e-Sourcing is highlighted with orange frame. In addition, the supplier sourcing is framed with dashed line because it is closely related section to e-Sourcing while the e-Sourcing solution can contain automated supplier registering attribute.

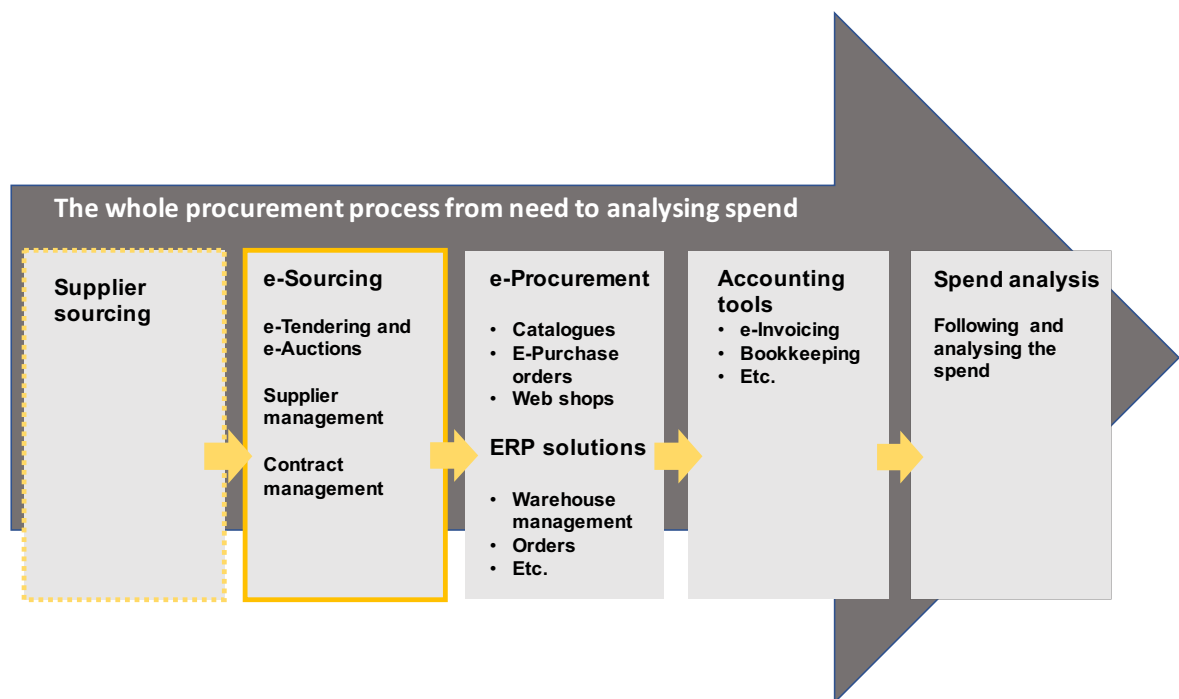


Figure 1. Procurement process

The theoretical framework of the study is presented below (Figure 2). It describes the most important themes of the study and how they are connected together as the arrows are showing. e-Sourcing solution which is the main value proposition of Company X is the centre of the business model. The value creation process which is one of the business model activities is connected to Company X's business

model. Customers need are located underneath the value creation process. The next square presents how the value propositions meet the customers' needs. The last stage illustrates the business model development findings which are found through the analysed results.

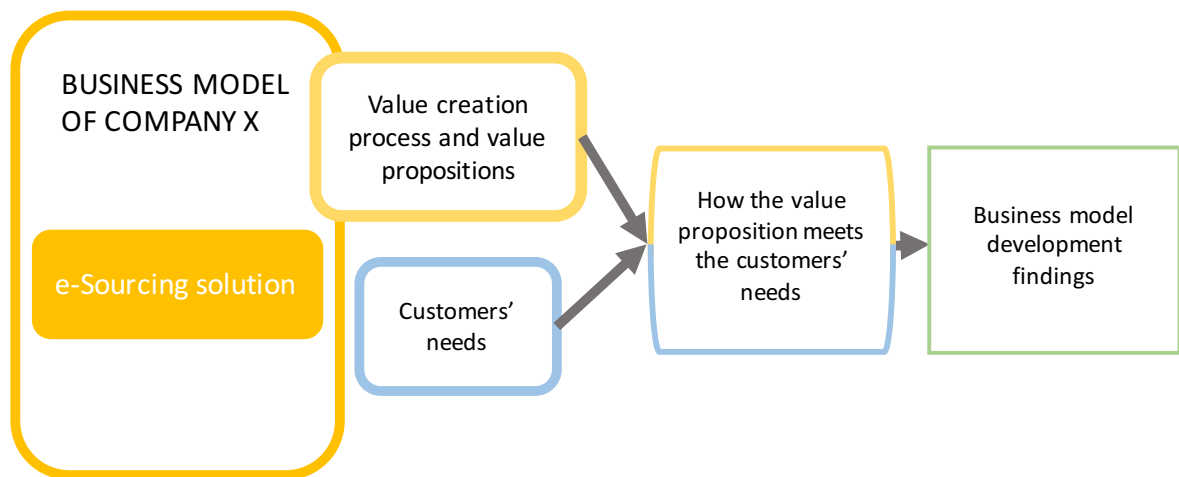


Figure 2. Theoretical framework

1.3 Literature review

Rai, Patnayakuni and Seth (2006), MacCarthy, Blome, Olhager and Zhao (2016) and Devaraj et al. (2007) have researched how the digitalization and adoption of new technologies have changed and developed the processes inside the supply chain containing the procurement process. According to them, the new technologies have brought various significant benefits and gained the performance of the whole supply chain process.

Tassabehji and Moorhouse (2008) have researched how the role of the procurement is changing. Their research contains also the issues brought by technology improvements, such as how the advent of e-Procurement has automated the paper-based routine tasks. This enables more time for procurement professionals to focus on supply management, supplier relationships, value adding

activities and advanced planning. (ibid) Bartezzaghi and Ronchi (2005) have researched the sourcing process and divided it into stages. Su and Gargeya (2012) and Gottfredson, Puryear and Phillips (2005) are focused on the strategic side of the sourcing process. Strategic sourcing contains the phases of executing the highly significant sourcing decisions (Carr & Pearson 2002).

As a result of the digitalization and improved technology, the sections of e-Procurement and e-Sourcing are appeared. However, it is noticeable that the public procurement (including the electronic procurement and sourcing) is extensively researched area when compared to private sectors. In addition, the e-Procurement is also widely researched. However, a crucial section in the whole procurement process, the e-Sourcing is remarkably less researched field. Especially, the section of competitive tendering (e-Tendering) is lacking in research. Majority of the research in this field focuses on e-Procurement as a whole, while there is only a few specific researches concerning the e-Sourcing itself. In addition, Rai et al. (2006) and Devaraj et al. (2007) state that there is only limited amount of academic research on why and how the e-Business technologies can create performance gains for company's supply chain and procurement processes. Therefore, there is a remarkable research gap and this study is delving deeper into that field.

Kauppi et al. (2013), Smart (2010), Caniato, Longoni and Moretto, (2012) and Presutti (2003) have extensively researched the area of e-Procurement. They have brought out the benefits created by e-Procurement tools and have explored the implementation process of it. Majority of this research includes issues concerning the e-Sourcing, however, the scholars have handled these issues as a part of the e-Procurement. Nevertheless, there are also researches and articles that are concerning particularly the e-Sourcing.

Hannon (2001; 2003; 2005) has separated the e-Sourcing from the e-Procurement while he extensively presents the benefits brought by e-Sourcing. Hannon (2001) divines that the e-Sourcing would be the next software boom and he states that the "powerful next-generation software promises to streamline the sourcing process". This Hannon's (2001) comment hold the true while Kauppi et al. (2013), Aneela

(2009), Engelbrecht-Wiggans and Katok (2006) and Bartezzaghi and Ronchi (2005) have pointed out several e-Sourcing's benefits in theirs' researches. In addition, these researches explores the barriers and challenges of e-Sourcing. Sabbaghian (2009) who is the CEO of Bravo Solution states that the e-Sourcing is a key in effective procurement.

Business model is extensively researched area. It has been researched by several scholars, such as Zott and Amit (2007), Zott and Amit (2010), McGrath (2010) and Johnson, Christensen and Kagermann (2008). Scholars have formed several various concepts of the business model while the scholars have also shared the business model into divergent parts. For example, Amit and Zott (2001), Magretta (2002), Shafer, Smith and Linder (2005) have formed distinct conceptions from the business model. Osterwalder (2004) has brought scholars' different concepts of the business model together and formed a coherent ensemble of the business model, called Business Model Canvas. Amit and Zott (2001) have researched how 59 globally acting companies who have e-Business Models are creating value. All the researches are emphasizing the importance of the value creation process and value proposition.

1.4 Structure of the thesis

The study starts with an introduction that is concerning supply chain improvement issues through the digitalization in generally speaking. In addition, it editorialises how large amount of companies are executing their e-Sourcing actions and brings out some of the benefits that effective utilization of e-Sourcing tools could bring to companies. Moreover, the first chapter defines the research problems, delimitations, theoretical framework, background and key concepts of the study.

The study contains two theoretical chapters (2 & 3) and four empirical chapters (4,5, 6 & 7) which are including the methodology of the study. The first theoretical chapter considers how the procurement process is digitalized during the time. However, the main focus is on e-Sourcing which is the core of this study. The second theoretical

chapter presents what is the business model, what kind of sections it includes and what are the functions of those sections in order to create value. It presents the business model through Osterwalder's (2004) Business Model Canvas.

After the theoretical parts, the study proceeds to the empirical sections. The first empirical chapter clarifies how the Company X creates value through its whole business model. The second chapter in the empirical section clarifies what are the Company X's customers' needs of utilizing the e-Sourcing solution. The last empirical chapter analyses the empirical results and it presents how the value proposition of the Company X is meeting the needs of the customers. The final chapter of the thesis is the conclusions. It is synthesising the theoretical and empirical results of the study and answers the research problems. In addition, it contains the suggestions for future research.

1.5 Key concepts

The supply chain management related concepts are often used interchangeable in the research papers. This section clarifies how the concepts are used in this study.

Business model defines the structure of company's business and its value creation system. It describes how the company is working and how it earns revenues by selling and buying products and services. In addition, it is a description of the company's partner network, structure and financial capital. (Osterwalder, Pigneur & Tucci 2005)

Procurement is the process of buying materials and services for a company. The procurement process contains all the activities which are necessary to acquire needed products and services. (Tassabehji & Moorhouse 2008)

e-Procurement (Electronic procurement) can be described as the automation of an organisation's procurement processes by using web-based applications in B2B environment. e-Procurement refers to the purchase of products and / or services for organisations. (Nawi, Roslan, Salleh, Zulhumadi & Harun 2016).

Sourcing is one of the B2B environment components related to supply chain operations and procurement process. It is the process before buying the products and / or services while It is an interface among buying company and its suppliers. (Singh & Benyoucef 2011)

e-Sourcing (electronic sourcing) refers to the utilization of Internet-based applications and decision supporting tools that mitigate collaborative and competitive interactions between buyers and suppliers through the online negotiations, such as in e-Auctions and other related tools. (Engelbrecht-Wiggans & Katok 2006)

e-Tendering (electronic tendering) the process where a firm sends the request of information and prices to the potential suppliers and receives the suppliers' responses by using an e-Tendering tool that e-Sourcing solution contains (De Boer, Harink & Heijboer 2002).

e-Auction (electronic auction) is an auction event that takes place in online. It is a price based negotiation tool in e-Sourcing solution. It gives suppliers the opportunity to bid against each other concerning the price reduction and the winner is the lowest bidder while other criteria can be taken into account also. (Smart 2010) There are multiple various e-auction variations, such as reverse English e-auction (the most common), reverse Dutch e-auction and reverse Japanese e-auction.

2 Digitalization of the procurement process

Business process digitalization can be described as an organization-wide information system that is based on technological foundation of the Internet. During the last few decades, the rapid development of the information technology and the Internet have deeply impacted on every aspect of the organisations. (Li, Merenda & Venkatachalam 2009) The majority of the companies, including SMEs, have adopted business process digitalization as a tool to gain their operational and market efficiency (Johnston, Wade & McClean 2007). Consequently, most of the companies are utilizing these benefits brought by digitalization in their supply chain and purchasing processes. Through the new technologies, companies have linked their procurement process across organizations to create efficiencies and gain competitive advantage. The purpose of investment in e-Business technologies is to create converging integration of entities inside the supply chain. That lead to sharing of timely and accurate information and better coordination of activities between the entities in the business. (Devaraj et al. 2007) Consequently, the digital platforms play an essential role in managing procurement activities and partnerships which generate performance gains for companies (Rai et al. 2006).

e-Supply chains can be described as a supply chains where the members of it are integrated / connected by the Internet technologies at application, technical and business management levels (Caputo, Cucchiella, Fratocchi, Pelagagge & Scacchia 2004). Technology has become as a key component of every innovation that is related to supply chain (Sambasivan, Mohamed & Nandan 2009).

Significant part of the running costs in any business are tied up in procurement process. The managers are always looking for help to reduce costs in this function. Generating a 100 million revenue of new sales might be an excellent accomplishment, however, generating that same amount of savings in procurement has much greater impacts on earnings. In the whole procurement process, the sourcing process is an essential sector where a company can gain a significant savings. (Poirier & Bauer 2000) Through the digitalization, the procurement and sourcing processes are reformed from old fashioned communication channels, such

as faxes and phones with new e-Business technologies and systems (Hawking, Stein, Wyld & Foster 2004). e-Business technologies have transformed the networks of supply chains with several benefits, such as lower transaction costs, reduced purchasing prices and better customer service (Kauppi et al. 2013).

2.1 Procurement and e-Procurement

Supply chain management (SCM) contains all the approaches that are used to effectively integrate the supply-side participants of a company's value chain, so that services / products are delivered to the consumers to the right location, at the right time, in the right quantities and at optimal cost (Quesada, González, Mueller & Mueller 2010). One of the processes in the SCM is the procurement process. Concisely described, the procurement means a process of buying goods and services for a company. More comprehensively defined, the procurement process contains all the activities which are necessary to acquire needed products and services. (Tassabehji & Moorhouse 2008) Essentially, procurement comprise trading between two or more businesses and it is a significant element of business operations where a clear strategy is indispensable (Harrigan, Boyd, Ramsey, Ibbotson & Bright 2008). Furthermore, the dominant goal of the overall trading process is efficiency (Aldin, Brehmer & Johansson 2004). Procurement is a complicated process that has both, indirect and direct functions. The distinction between the direct and indirect functions is that the direct procurement signifies purchasing of materials and / or services with high volume which directly facilitate the production of the end-products. In turn, the indirect procurement signifies the purchasing of the supporting materials and services which are indispensable to enable the end-products production. (Harrigan et al. 2008)

Basically, the procurement process is generally similar, despite of what is the object of the purchase. However, in various processes, it is possible to utilize various procedures and technologies. (Tunca & Wu 2009) Depending on the scholars, the procurement process can be interpreted in several ways. For example, Harrigan et al. (2008) state that the procurement process can comprise the entire operation

containing a firm's requisition, warehousing, transportation and in-bound receiving process. In this study the description of the procurement process is based on Van Weele's (2009) procurement process model (Figure 3). The procurement process is proceeding from left to right. This model schematically elucidates the main activities within the procurement function. In this model, the procurement function covers expressly activities aimed at:

- Determining the specifications of the purchasing (in terms of required quantities and quality) of the materials and services that needed to be acquired.
- Selecting of the best possible supplier and developing routines and procedures to be able to do this.
- Preparing and conducting negotiations with the selected supplier to generate an agreement and to write up the contract that is legal.
- Executing the order with the selected supplier or to develop effective purchase handling and order routines.
- Controlling and monitoring of the order to secure the supply (**expediting**)
- Evaluation and follow-up (keep supplier and product files up-to-date, settling claims, supplier ranking and supplier rating). (ibid)

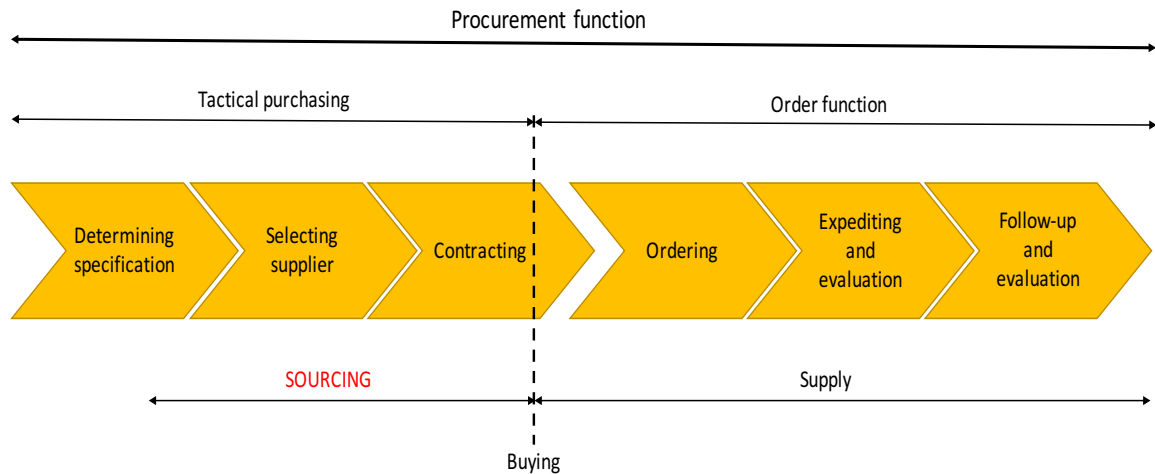


Figure 3. Procurement function (Adopted from Van Weele 2009)

Increased use of Internet technologies has caused that the e-Procurement has replaced the traditional procurement in several countries and it is continuously receiving more and more attention in industries and government agencies (Parida & Sophonthummapharn 2010). e-Procurement has become one of the most essential elements of the whole supply chain (Toktaş-Palut, Baylav, Teoman & Altunbey 2014). Gunasekaran and Ngai (2008) state that a company's supply chain cannot be successfully integrated without the adoption of e-Procurement systems. The term of e-Procurement refers to the procurement process integration, which contains operations, such as ordering, negotiation, post-purchase review and receipt (Croom & Brandon-Jones 2007). Toktaş-Palut et al. (2014) define e-Procurement as a system that utilizes Internet-based services and technologies to streamline and automate an organization's processes from requisition to payment. Wu, Zsidisin and Ross (2007) define that the e-Procurement is "use of information technology to facilitate business to business purchase transaction for a materials and services". e-Procurement solution allows managing both, day by day and strategic activities (Caniato, Golini, Luzzini and Ronchi 2010). e-Procurement system can provide significant improvements in the entire procurement process. It lowers the costs of the purchases, provides superior coordination between buyer and supplier, increases the process efficiency, expedites transaction times (Parida

& Sophonthummapharn 2010) and brings strategic benefits (Sambasivan et al. 2009).

2.2 Sourcing

Sourcing is one of the B2B environment components related to supply chain operations while it is the interface among buying company and its suppliers. In terms of priority, sourcing is an essential driver for bottom line improvement in organisations. (Scott, Lundgren & Thompson 2011) A range of materials needed by a company for operation, production, office operation and supporting activities are commonly the main items of sourcing. These items are for example, raw materials, subassemblies, semi-finished components, spare parts, tools, office stationary and various services. The sourcing is a crucial decision for a company because it not only derives the cost, reliability and quality of the product and responsiveness to consumer but it is also one of the significant components of the company's overhead cost. (Singh & Benyoucef 2011)

Theoretically, the strategic sourcing is related to the classical question of corporate management: make or buy (Williamson 2008). Strategic sourcing can be defined as the process planning, executing, controlling and evaluating highly remarkable sourcing decisions in effort to meet a company's long range goals and plans (Carr & Pearson 2002). The increasing competition level in global markets, the dynamic environment of supply chain, corresponding changes in company's purchasing function and the uncertainty of worldwide business environment indicate that sourcing should has a remarkable role in a company's strategic decision-making process. Consequently, strategic sourcing is an essential component in global supply chain management (Su & Gargeya 2012). Strategic sourcing integrates company's different functions, such as purchasing, engineering, logistic, operations and marketing (Gottfredson et al. 2005). Strategic sourcing contains integration and coordination of a company's different functions to the company's strategic decision-making level. Strategic sourcing observes the continuously changing conditions of business, particularly the trends of supply that are developing in the marketplace,

construe the meaning of these trends and offers precious information to a company's strategic decision-making process. (Su & Gargeya 2012) Paulraj and Chen (2007), Dobrzykowski, Tran and Tarafdar (2010) and Chen, Paulraj and Lado (2004) have researched variety industries and the researches have demonstrated that a company's ability to sustain or obtain competitiveness should be intensified by developing an exquisite sourcing function that is integrated into the company's strategic decision making process.

Bartezzaghi and Ronchi (2005) have divided sourcing process into five main stages: requirement definition, supplier scouting, suppliers' qualification, request for bid and negotiation and selection. Choudhary (2007) is adding the contracting stage to the sourcing process. According to Scott et al. (2001) the last part of sourcing process is the supplier management over the period of time. The sourcing process stages are represented in detailed way below:

- **Requirement definition:** The buyer defines and analyses company's purchases and identifies the requirements of the procurement. A company can utilize consulting services for spending analyses and possible improvement opportunities while the electronic tools can be utilized in this stage also. (Bartezzaghi and Ronchi 2005)
- **Supplier scouting:** The buyer identifies and searches potential suppliers for every purchase category. For supporting this stage, buyers can acquire information and contacts for potential suppliers according to categories of purchases or public catalogues describing the needed products. Also a request for information (RFI) is an available service. Through the RFI a buyer can require the potential supplier to give particular information concerning, for example, its number of employees, turnover, product description and different certifications. (Singh & Benyoucef 2011)
- **Suppliers qualification:** In this stage, the suppliers are identified and evaluated through the particular factors. To support this activity, buyers can utilize operators who provide vendor-rating systems that are based on

suppliers' past contracts or certification companies who certify potential suppliers. (Bartezzaghi and Ronchi 2005)

- **Tendering:** The buyer requires quotations or proposals from potential suppliers concerning the identified requirements. Most of the buyers provide request for quotation (RFQ) to ask from potential suppliers to provide price quotations concerning the contract specification or proposals which includes searched product's or service's technical details. (Bartezzaghi & Ronchi 2005) Tindsley and Stephenson (2008) state that the tendering process has been an undertaken part of the whole procurement process for several years.
- **Negotiation and selection:** The process of negotiation takes its place while the buyer chooses the most potential supplier. The negotiation process might takes its place through the interaction of RFQ (Engelbrecht-Wiggans & Katok 2006) or according to Presutti (2003), the process can proceed to an auction model where the buyer continues the negotiation with the most potential suppliers by utilizing e-Auction tool. For a company, it is crucial to ensure that the upcoming contract will be made with qualified supplier who is indeed able to fulfil the contract. Making a contract with an unqualified supplier can result in significant costs for the buyer. (Wan & Beil 2009)
- **Contracting:** In this stage the buyer makes a contract with the selected supplier. The contract must contain all the relevant information, such as starting and closing dates, pay and delivery terms and delivery times. (Choudhary 2007)
- **Supplier management over the period of time:** This process can be short, for example, one-time purchase, such as a factory buys a new generator. It also can be a longer period, such as a component supplier who provides daily used core materials for and electronics manufacturer for several years. (Scott et al. 2001)

2.3 e-Sourcing

e-Sourcing refers to the identifying process of new supplier for a particular category of purchasing requirements by using web-based technology (De Boer et al. 2002). e-Sourcing can be described as a set of collaborative web-based tools that enable procurement professionals to source products and services online (Nasim 2009). During the emerge of the of the Internet and growth of the ICT, e-Sourcing has become an essential tool in a company's procurement process. e-Sourcing is offering possibilities for cost savings and increasing efficiency for companies. (Singh & Benyoucef 2011) e-Sourcing refers to the use of Internet based applications and decision supporting tools that mitigate collaborative and competitive interactions between buyers and suppliers through the online negotiations in e-Auction events and other related tools (Engelbrecht-Wiggans & Katok 2006). Companies are inviting their suppliers to participate in their e-Sourcing events in order to seek lower prices of services and goods, quicker purchasing cycle and broaden strategic sourcing to a wider range of services and goods. Furthermore, companies are striving to abridge the process of ordering and fulfilment cycles, identify and negotiate with an extensive range of qualified suppliers and decrease the administrative and sourcing engagement costs. (Teich, Wallenius, Wallenius & Zaitsev 2006)

It is evident that the scholars are using e-Sourcing and e-Procurement as interchangeable terms. Bartezzaghi and Ronchi (2005) have divided e-Sourcing process into stages and Kim and Shunk (2004) have shared e-Procurement processes into sections while they are presented together in figure 4. The idea of the terms is related in supply management, however, the terms have different meanings (Singh & Benyoucef 2011).

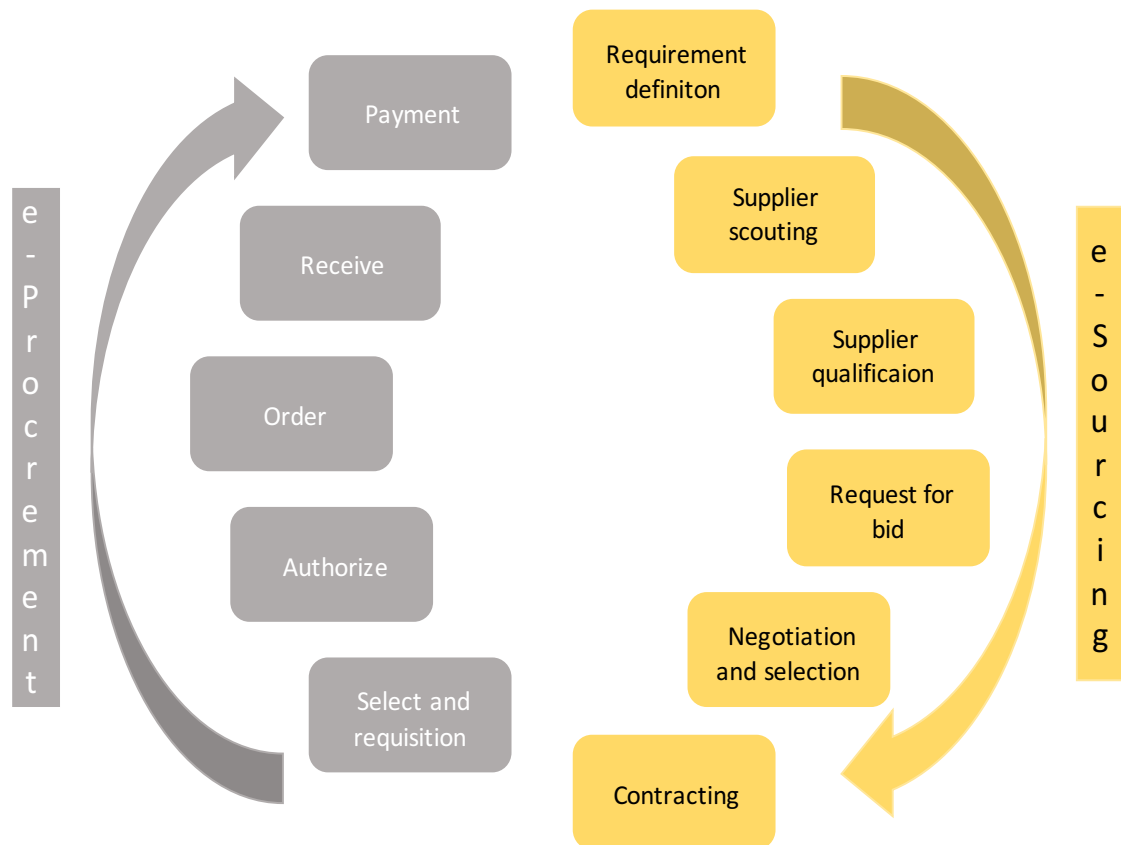


Figure 4. e-Sourcing and e-Procurement processes (adopted from Bartezzaghi & Ronchi 2005; Kim & Shunk 2004)

2.3.1 e-Sourcing tools

In generally speaking, the web-based sourcing tools could streamline inefficient procurement process by replacing the manual, paper-based, bureaucratic and administrative elements in traditional purchasing processes and systems (Bartezzaghi & Ronchi 2004). e-Sourcing tools are supporting the buying company's sourcing processes from supplier prequalification to construction of a comprehensive e-Tender including product and / or service specification and to final negotiation and supplier selection (Presutti 2003). The most common e-Sourcing tools are e-Tendering (RFQ, RFP, RFI), reverse and forward e-Auction and the use of supplier database (Kauppi et al. 2013). Moreover, there are e-Sourcing tools for helping the buyer to evaluate received tenders which may contain significant

amount of specific information while they can be thousands of pages long. Lastly, there are contract management tool that reminds buyers when completed contracts are due for renewal. Systems may cover all the mentioned tools while other are more specific. (Vail 2005)

The e-Tools that can be used for improving the whole procurement processes can be software based when the software is a solid product that needs to be installed in the customer's computers (Mital, Pani & Ramesh 2014). The major disadvantages in this kind of software packaged models are the high implementation and upfront costs (Choudhary 2007). In addition, the software is costly and difficult to maintain and upgrade. High costs, long lead times, deployment delays and complex planning sessions are causing that the companies are moving or are moved to Software as a Service (SaaS) based systems concerning the whole supply chain. (Mital et al. 2014) Consequently, the continuous increasing Internet bandwidth and quickly changing needs of effective business with the partners in the procurement process is leading companies to adopt information systems infrastructures which are more flexible and cost effective (Dubey & Wagle 2007). SaaS is a subscription based model where the particular software is hosted in the cloud by the service provider and its' customers are able to access to the service via Internet. Therefore, the customer does not control or manage the underlying cloud infrastructure containing servers, network, storage and operating systems. One of the advantages in SaaS is the thin client technology when all the data reside on the server of the service provider while the client side needs only an interface application, such as the browser. (Mital et al. 2014) According to Fan, Kumar and Whinston (2009) the SaaS model enables also the SMEs to acquire tools for electronic purchasing processes because SaaS is much more inexpensive than the software packaged model.

This study is concerning e-Sourcing system that is provided as SaaS based service. Hence, it is essential to represent more benefits that SaaS based e-Sourcing systems could bring to the users. Sääksjärvi, Lassila and Nordström (2005) have collected various benefits from several researches and collected them together. The following benefits are customer benefits:

- SaaS allows the customer to focus more in its core competencies.
- The implementation time of the system is remarkably shorter with SaaS.
- SaaS makes it less costly and easier to get access to required technical expertise.
- SaaS makes the access to the software possible independently of time and location.
- SaaS enables easier version management for the customer (no technology obsolescence and free upgrades).
- SaaS advances the available options of customization of the application to the customer.
- SaaS expands the available potential application selection to the customer.
- With SaaS, the customer is able get access to a superior IT infrastructure regarding security, scalability and reliability. (ibid)

2.3.2 e-Tendering

e-Tendering is the process where a company sends the request of information and prices to the potential suppliers and receives the suppliers' responses through the particular e-Sourcing tool (De Boer et al. 2002). The e-Tendering process begins after the buying company has identified the purchasing needs. Based on the identified needs the buying company constructs a comprehensive request for proposal containing specific information of the needed products and / or services and other related information, such as pay terms, delivery times and supplier information. (Presutti 2003) The actual negotiation begins when the buyer sends the request to the suppliers (Du 2009). After that, suppliers respond to the request via the e-Tendering solution inside the determined time frame. Thereafter, the buying company evaluates the received suppliers' responses and select the most potential supplier. (Presutti 2003) According to Smart (2010), e-Tendering tool is an assortment of applications which supports the buyers of analysing the markets and suppliers while it includes supplier rating and scoring systems, search tools, tender analysis tools and evaluation techniques. In addition, e-Tendering process allows

the buying company to evaluate not only the price, but lead time, quality, supplier reputation, contract terms and incumbent switching costs (Wein & Beil 2001). The e-Tendering tool is designed to improve decision-making process of the buyers (Smart 2010).

2.3.3 e-Auctions

e-Auctions are a part of an e-Sourcing toolkits (Engelbrecht-Wiggans & Katok 2006). Reverse e-Auctions are similar compared to the traditional competitive bidding, but suppliers are competing online, in real-time. The term “reverse” accentuates that the competitive bidding between the suppliers of the buying company drives prices down. As opposed to, in forward e-Auction, for example, in e-Bay auctions the buyers are driving prices up. (Hur, Mabert & Hartley 2007) Through the reverse e-Auction a buying company is able to acquire goods and / or services at the lowest possible price or combination of the lowest prices. The suppliers are bidding against each others by decreasing the price and the winner is the lowest bidder while other criteria can be taken into account also. (Smart 2010) The duration of the actual reverse e-Auction process is normally 30 minutes or less (Hartley, Lane & Duplaga 2006). Conditions and terms of the particular reverse e-Auction are specified by the buying company (Smart 2010). Reverse e-Auctions can save time, reduce purchasing prices, streamline the process of bidding and enable supplier from anywhere around the world to compete for a buying company’s business (Hartley et al. 2006).

Companies have successfully utilized reverse e-Auctions to source production materials, indirect materials, support services, one-time purchases and commodity type items (Hartley et al. 2006). The use of reverse e-Auctions might save considerable amount of buyer’s money by lowering the prices (Engelbrecht-Wiggans & Katok 2006). However, they have faced considerable amount of critic, such as they could inflict damage to long-term buyer-supplier relations by limiting collaboration, underestimating the total costs related using the suppliers with lower purchase prices and switching to suppliers who are not competent (Hartley et al.

2006). However, Hannon (2005) is emphasizing that if the reverse e-Auctions have a negative impact to supplier relationships or if the result is another related failure, it is buyer's fault, not the technology or model itself. The reverse e-Auctions should not proceed to that point if the right research is made, suppliers are qualified carefully and users of the tool are well-trained. Over time, people have accused the tool as the reason for supplier displeasure or any failed event. However, this should not be an excuse at all. Like in any negotiation, proper research and planning is the best way to avoid any undesirable outcome. (ibid) Although, the reverse e-Auction is not an appropriate tool for every purchase, however, reverse e-Auction can be an effective tool if the risks are assessed carefully and the tool is used judiciously (Kaufmann & Carter 2004).

2.3.4 Benefits of e-Sourcing

Johnson and Klassen (2005) are emphasizing that the e-sourcing technologies should not replace the strategic sourcing activities. On the contrary, they should represent a single dimension of an overall sourcing strategy of the corporate. Moreover, e-sourcing technologies should make processes, such as data mining and analysing more visible and easier to execute. e-Sourcing technologies should help to automatize the processes when strategic sourcing can focus more on creating and managing successful supplier relationships. (ibid) e-Sourcing provide several benefits for buyers and suppliers (Bartezzaghi & Ronchi 2005). For the buyers, the most recognized benefits are increasing process efficiency and the reduction of the purchase prices (Ericson & Edsinger 2003; Hannon 2003; Nasim 2009; Bartezzaghi & Ronchi 2005; Engelbrecht-Wiggans & Katok 2006). In a reverse e-Auction process, the purchase price reduction is mainly the result of the possibility to receive much more bids than in the past. In a reverse e-Auction process the specifications of the goods and / or services are precisely defined before the auction process. This is concerning the particularly critical and technically complicated products also and this enables the price to go as low as possible independently from technical criticalities. Even though, the strict specification definition before the reverse e-Auction event might take more time compared to the

traditional negotiation process, such time is superbly balanced by the efficiency that is achieved in the actual negotiation process. (Bartezzaghi & Ronchi 2005)

According to Kalakota and Robinson (2001), the benefits from increased process efficiency are related to the faster cycle times, lower purchasing costs, closer integration of procurement function, better organized information reporting and reduced unauthorized or maverick buying. Benefits from e-Sourcing effectiveness contain increased control of the entire supply chain, higher-quality decisions of purchasing in organizations and proactive data management (ibid). The increased efficiency in the overall sourcing process is a remarkable benefit, even its measurement is often quite difficult (Bartezzaghi & Ronchi 2005).

Caniato et al. (2012) have shared benefits from e-Sourcing into two categories: process benefits and organizational benefits. Process benefits contain a higher organizational structure efficiency, particularly in the reduction of levels and size of the procurement department and of the number of functional areas that are included in the procurement process (ibid). This leads to more flexible, faster and agile purchasing process while the costs are lower (Garrido & San José 2008). Other cost savings resulted from the benefits are generated by the reduction of administrative and transaction cost (Eadie, Perera, Heaney & Carlisle 2007). Finally, e-Sourcing brings efficiency in terms of productivity and procurement process accuracy and quality (Garrido & San José 2008; Harrigan et al. 2008). Organizational benefits related to e-Sourcing include transparency in the supplier relationship, increased control of the spending, reduction in maverick buying, supply base rationalization and decentralization of procurement activities (Caniato et al. 2010).

According to Bartezzaghi and Ronchi (2005), the buyer is able to collect several bids in a few minutes during the reverse e-Auction event, which would require even several days when using traditional process such as phone calls for asking the prices at each level. The process efficiency is even more apparent for high frequency purchases when the product specifications are clear and the buyer manages the reverse e-Auction event uniquely. In terms of time reduction, such efficiency allows the buyer to include more value-added activities to sourcing

process, such as supplier scouting, market analysis, collaboration with the technical department and vendor rating. (ibid)

e-Sourcing offers transparency and auditability for the procurement process (Nasim 2009). e-Sourcing enables the decreasing of supply risk related to the particular purchasing category. At the end of the e-Tendering process, a company has evaluated all the suppliers in rank order. If problems occur concerning selected supplier, such as deliver failures or quality issues, the company is able to identify new back-up suppliers quickly. (De Boer et al. 2002) Moreover, e-Sourcing forces the buyer to think the issues related to the sourcing process very rigorously which leads to increasing process discipline and improves the strategic thinking skills of the procurement department (Hannon 2005).

Through the e-Sourcing solution a company can achieve remarkably improved accessibility to global supply markets. For companies, it is easier to negotiate sourceable categories across all geographic regions with these e-Sourcing tools. Companies in Europe and North America have increased their interest of identifying potential suppliers from low-cost or emerging markets in Latin America and Asia. This leads to more aggressive competition in e-Sourcing events as more low-cost suppliers are involved. (Ericson & Edsinger 2003) In order to gain the most out of the e-Sourcing solution, the staff need to be trained well to use the different functions of the solutions (Nasim 2009). In addition, the e-Sourcing tools should be utilized diversely in order to gain the possible benefits. Several companies are missing out of its full benefits when they are focusing solely on e-Auction tool or e-Tendering tool. (Vail 2005)

e-Tendering tool offers several benefits itself. It provides improved, quick and secure access to the private tender information that is stored in the system. A buyer can download suppliers' electronically submitted tenders in a suitable form for an evaluation purposes without the process of re-entering the data. The whole process is considerably distinct when all the information of each tender is at the same place. (Kajewski & Weippert 2004) e-Tendering process is more cost effective and more time-saving can be gained compared to the traditional paper-based method. In

addition, e-Tendering has implications for reduced copying, printing and courier costs and the chances of miscommunications are reduced. (Tindsley & Stephenson 2008) Consequently, these benefits are streamlining the whole process (Kajewski & Weippert 2004).

More extensive competitive tendering through e-Tendering and e-Auctions provide higher market efficiency where information equality exists while it pushes partnerships towards more perfect market conditions. By this way, it is possible to utilize contingent market situations that lead to benefit for both sides, buyers and suppliers. Consequently, e-Sourcing does not provide business developments only to the buyer side, it brings some positive aspects for the suppliers also. (Bartezzaghi & Ronchi 2005) The e-Auctioning process provides more transparency in the supplier selection comparing the traditional negotiation process. In addition, the e-Auctions have clear rules while they are well structured. (Engelbrecht-Wiggans & Katok 2006) Even the online reverse e-Auction events are held anonymously, the suppliers are able to see that there are other bidders too. In addition, this might also help the suppliers in benchmarking their bids and contract conditions with competitors. However, Jap (2002) argues that the visibility of company's own prices to the competitors can reduce their negotiation power. In addition, time reductions in the negotiation process has a highly positive effect for the supplier's operation efficiency. Lastly, the quicker e-Auction processes allow suppliers to negotiate with more customers in a shorter time than before while this provides new business opportunities also. (Bartezzaghi & Ronchi 2005)

On the past research, there are several examples of savings that the use of e-Auctions has brought to companies. These savings are presented in the Table 1.

Table 1. Savings from e-Auction events

REFERENCE	COMPANY / SAMPLING	SAVINGS
Presutti (2003)	General Electric (GE)	20% (2001)
Engelbrecht-Wiggans & Katok (2006)	The U.S General Services administration	12-48% (2000)
Vail (2005)	Multinational drug company	19% (2005)
Hannon (2003)	Aventis	15-27% (2002-2003)
De Boer et al. (2002)	Data from 200 e-Auctions	15-20%

2.3.5 Challenges of e-Sourcing

The most common risk factors of why companies are not adopting e-Sourcing solutions are commonly risks which are related to technologies, such as how the system will be integrated with other IT systems. Companies may have concerns about the system control and security mechanisms in order to secure safe usage of the system. (Davila, Gupta & Palmer 2003) The adoption of e-Sourcing system can be related to organizational and cultural barriers. The required changes of the internal processes and in corporate culture may cause user resistance. (Walker & Harland 2006) There is also concerns of are the suppliers willing to use older methods rather than e-Tendering or other related tools (Toktaş-Palut et al. 2014). The economical barriers are related to required implementation stage of the system that contain high investments, such as cost for the integration of the systems, consulting fees, business process re-engineering and costs for the procedure rationalization (Caniato et al. 2012). The high implementation and usage costs can be a barrier for the SMEs to adopt e-Sourcing systems (Vaaland, & Heide 2007). One critical aspect in e-Sourcing that is causing challenges, is the definition of strict and clear specifications before the e-Auction event. The traditional habit of not formulate strict and clear specification or finalising them during the negotiation process cannot happen when using the e-Auction solution. (Bartezzaghi & Ronchi 2005)

Moreover, companies are concerned if the e-Tools have debilitating effect to the buyer-supplier relationships (Davila et al. 2003). According to Bartezzaghi and Ronchi (2005), it is apparent that suppliers do not like e-Sourcing tools, particularly reverse e-Auctions, as they restrict their contractual power. The main critical points are associated to quality reduction, termination of consolidated relationships and the excessive reductions in prices. As long as the quality issue is concerned, suppliers allege that the auction process focuses thoroughly to reduction of prices and it does not consider other relevant factors to the description of the contract, such as service level and quality issues. In order to keep prices down, it cause the reduction of quality provided by supplier while it can cause reduce of the supplier margins which lead to decreased capability to invest in new developments and improvements. (ibid) Consequently, this can cause lack of supplier participation in reverse e-Auction events (Vail 2005). This is a determined risk in the auction process, however, if the previous steps of the sourcing process, such as supplier qualification are carried out meticulously and correctly, the quality is not a problem. The higher the exactness of supplier scouting and qualification process is, and the more precisely the defining of the specifications of the purchase and preparation for the bidding event are done while the right set of suppliers are selected for the bidding event, the lower the quality problem risk is. (Bartezzaghi & Ronchi 2005)

3 Business model

This chapter clarifies the extensive definition, elements and development of the business model. Firstly, the concept of the business model is defined and divided into elements. The business model elements are presented in the figure 5. Thereafter, the elements of the business model are presented in detail way. The final section examines the value creation in electronic business model.

3.1 The concept and the evolution of business model

There are multiple different concepts related to business model, which differ widely from each other (Osterwalder 2004). Every company possess a business model even if the company's management is not aware of what kind of business model they have (Magretta 2002). Since the mid-1990's, the literature that includes scientific journals, books and articles concerning the business model have increased rapidly through the growth of the Internet. However, there is still not a generally accepted conception of the business model. (Zott, Amit & Massa 2011) The most remarkable reasons for the increased research of the business model have been the interest to "bottom-of-the-pyramid" issues, fast growth of the emerging markets (Thompson & MacMillan 2010; Seelos & Mair 2007) and the expanding organizations and industries dependent on post-industrial technologies (Zott, Amit & Massa 2011). According to McGrath (2010), the companies have started to pay more attention to the business model because it enables companies to understand, create and implement their strategies in new ways.

Depending on the scholars the business model is interpreted in several ways. The business model is considered as a tool for a company or a model that includes different concepts. (Osterwalder 2004; Osterwalder, Pigneur & Tucci 2005) Magretta (2002) describes the business model as a so-called "story" that explains how the company is operating. According to Timmers (1998), the business model is a company's architecture for the information, service and product flows. Business model is also a description of the potential benefits for the various business actors

and description of the revenue sources (ibid). According to Shafer et al. (2005), the definition of the business model must obey two principles. Firstly, the definition must be simple enough to be easily understood, remembered and communicated forward. Secondly, the definition must unite all the previous studies on this research area. (ibid) According to above-mentioned principles, Osterwalder (2004) defines that plainly, the business model is a description of how a company earns revenues by selling and buying products and services. The description of the business model of the Shafer et al. (2005) is that the business model is a presentation of a company's strategic choices and underlying core logic for capturing and creating value in its value network. By taking visions of the several scholars into account, Osterwalder et al. (2005) are describing that the business model is a conceptual tool that contains a group of elements and relations between them with the objectives to exemplify the business logic of a certain company. Business model allows to describe individual company's revenue logic while it also illustrates the value that a company creates to its customer segments. In addition, business model is a description of a company's financial capital, structure and partner network while all of these concepts are related with value creating, supply chain and marketing. (ibid) The purpose of the business model is to create value for all the parties that business model contains (Zott & Amit 2010).

The concepts of the business model and strategy are often mixed among each other and they are used interchangeably. However, the business model is not the same than a strategy. The business model is a description of how the sections of the business are fitted together. (Magretta 2002) It explains how the business actions consist a so-called system (Osterwader et al. 2005). In turn, the strategy is connected by two critical dimensions: competition and practical implementation (Magretta 2002; Osterwaled et al. 2005). Through the strategy a company aims to create and increase more long-term value, which bottom is created in the business model (Chesbrough & Rosenbloom 2002). Therefore, the business model and a strategy are linked together when the company is creating its strategy from the basis of the business model (Magretta 2002).

Osterwalder (2004) has aggregated several researcher's visions of business model and formulated the Business Model Canvas (Figure 5) from these visions. The

Business Model Canvas is divided into four parts. The base of the model is financial management and the core function is the value creation. Operation organizing and customer relationship management are formed around above-mentioned functions. Divided into smaller parts, the model is containing ten sections: value proposition, product and services, key activities, key resources, key partners, customer relationships, customer segments, channels, cost structure and revenue streams. (ibid) This model is used as a basis for analysing the company X's business model.

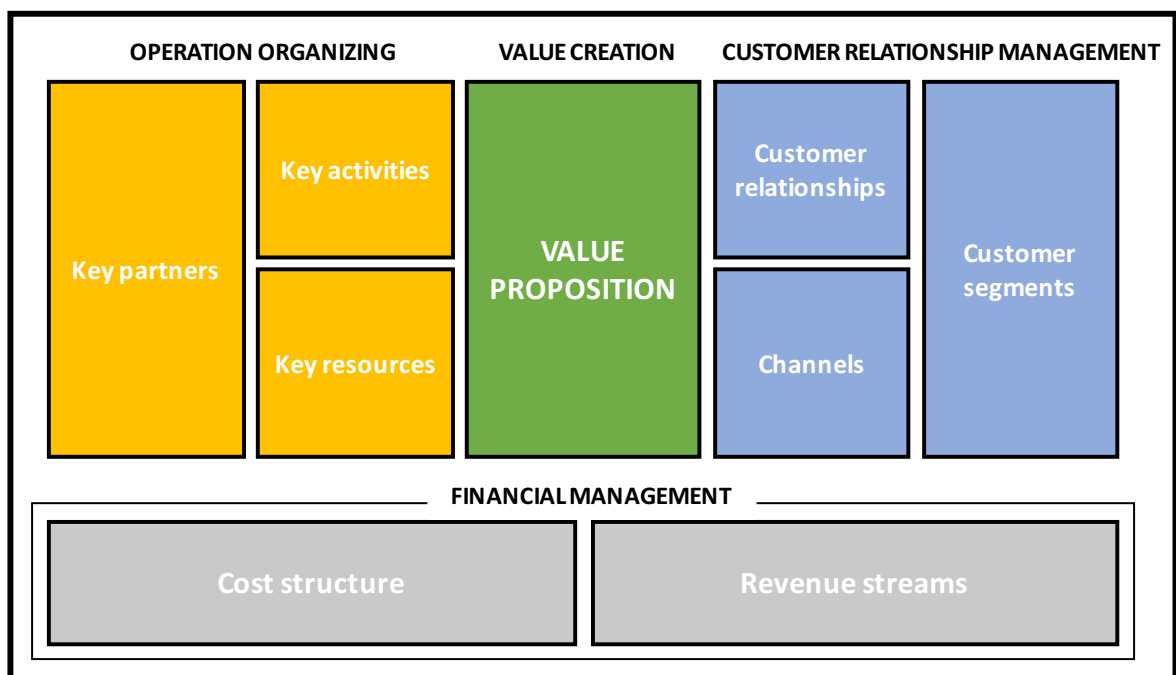


Figure 5. Business Model Canvas (Osterwalder 2004)

3.2 Value creation

Through the business model it is possible to create value by enhancing customers' willingness to pay or by decreasing partners' and suppliers' opportunity costs, for example, through more efficient transactions. Therefore, a company is creating value for its end-customers and partners, such as suppliers and other exchange partners. (Zott & Amitt 2007) The value proposition signifies that, how the aspects of the value, such as products, services and other company's operations which are producing value are offered to meet the customer needs (Kambil, Ginsberg & Bloch

1996). The value proposition is the reason why a customer chooses a particular company whose products and services they want to acquire and use. The value propositions are solving the customers' problems by satisfying the needs of the customers. Each value proposition consists of combination of a products and / or services, which are formed to take into account the needs of the particular customer segment. The value propositions can be innovative and offer something completely new or they can be something already existing with the addition of value-added features or functions. Therefore, the value proposition is a combination of benefits that the company is offering to their customers. (Osterwalder 2004) Johnson et al. (2008) emphasizes that the value propositions are operating in the core of the business model and they can be considered as the sharpest top and most important factors of the business model. Therefore, the value propositions are in undisputed position to achieve competitive advantage (Rintamäki, Kuusela & Mitronen 2007).

The value propositions can be quantitative, such as price and speed of service. In addition, they can be qualitative, such as customer experience or design. (Osterwalder & Pigneur 2010) One of the most common ways to create customer value and differentiate from the competitors, is to offer similar value proposition than a competitor but at a lower price. However, offering a lower price creates problems in the other sectors of the business model, while it is not always a possible scenario. (Osterwalder 2004) The total value that is generated through the business model is the function through which the company eventually differentiate itself from the competitors (Zott & Amit 2007). Through the products and services which the company is offering, it determines how it creates the value for its customers. Traditionally, the companies have aspired to locate themselves in a central position in the value chain. Consequently, then they are able to create value-generating services and products, and to target them to the desired market and customer segments. Through the globalization, companies are forced to develop their selection / assortment to stand out from the mass and achieve competitiveness. The content of the products and services must not remain static. Therefore, a company needs to evolve with the markets and differentiate from the mass while it also needs to be able to respond the needs of the future. (Osterwalder 2004)

3.3 Operation organizing

Various scholars are emphasizing different factors in the value creation process. According to the scholars, the value is created by the company, customers or a joint effect between them. However, the recent studies are emphasizing that the most efficient way to create value is to take account all these factors. Particularly, the customers' role in the value creation process has emerged as the main driver. (Byrne & McCarthy 2014) According to Vargo and Lusch (2004; 2008), the customer plays the primary role by demanding and creating of their own value. The role of the company is to make those value propositions that support the value creation processes for the customer (ibid). However, Grönroos (2011) notifies that, the companies are able to affect straight to the value creation process with their own actions by taking into consideration that the customer is eventually responsible for creating and forming the value. The co-operation in the value creation process is crucial, because it allows the company to have better understanding of the customer's perspective. Consequently, the company is able to develop its most crucial value creation processes in order to identify customer needs and desires better. (Payne, Storbacka & Frow 2008)

A company needs key resources to create and offer value proposition, reach markets, create and maintain customer relationships and earn revenues (Osterwalder & Pigneur 2010). The key resources can be tangible, intangible, human and financial (Osterwalder 2004; Osterwalder & Pigneur 2010). The key resources can be leased or owned by the company or they can be acquired from the key partners (Osterwalder & Pigneur 2010). The tangible resources include plants, buildings, machines, vehicles and systems. The category of intangible resources has gained its importance through the last decades. It contains copyrights, patents, brands, reputation, partnerships and proprietary knowledge. The human resources are the resources which the company needs to create value through the tangible and intangible resources. (Osterwalder 2004) Every company has human resources, however, people are exceedingly important in particular business models. For example, human resources are indispensable in creative and knowledge intensive industries. (Osterwalder & Pigneur 2010) Vargo and Lush

(2004) emphasizes the continuous development of the resources while the companies cannot think that the resources are an enduring entirety.

Company's key activities include the most crucial actions that a company must implement in order to operate successfully. Just like the key resources, the key activities are necessary to create and offer value proposition, maintain and create customer relationships, reach markets and earn revenues. Key activities are different depending of type of the business model. (Osterwalder & Pigneur 2010) Each key activity is accomplished by an actor, that can be the company or one of its partners. Key activities can be distinguished to primary activities and support activities. The primary activities are activities that are involved in creation, marketing and delivering value proposition. Support activities form the basis of the primary activities and allow them to be executed. Support activities contain the company's human resources, infrastructure, procurement and technology development. (Osterwalder 2004)

The key partnerships of the company forms the network that contains partners and suppliers which make the business model work. Partnerships have become a cornerstone of several business models while companies are forming partnerships for various reasons. Companies create partnerships to acquire sources, reduce risks and optimize their business model. (Osterwalder & Pigneur 2010) In addition, partnership networks can be seen as the resources of the company. Consequently, the company is able to develop its value creation ability through the partnership networks by expanding and developing their own knowledge and expertise. In general, alliances and partnerships have become a crucial component for companies to implement their strategies successfully. (Osterwalder 2004) On the supply side, the partnership networks increase the selection of complementary goods. Whereas, on the demand side, the number of customers can increase through the partnership networks. (Chesbrough & Rosenbloom 2002) According to Shafer et al. (2005), the successful value capture nor value creation occurs within a value network that is extending the company's own resources while the value cannot be created just by executed the company's own actions. Chesbrough and Rosenbloom (2002) are emphasizing that the positive alignment with the value

network is essential, because poor align with the value network may dismantle the potential value. Consequently, nowadays the business model of the company must contain strong and extensive value network in order to create competitive advantage (Vargo & Lusch 2008).

3.4 Customer relationship management

All the interactions between a company and its customers are affecting to the strength of the relationship that a company forms with its customers (Osterwalder 2004). A company must carefully chooses what kind of customer relationships it wants to establish with each customer. Some of the customer relationships are remarkably more profitable than the others. (Ryals 2002) Each customer relationship includes costs. Therefore, it is essential to recognize the most profitable customer relationships. The profits that are earned through the customer relationships are the lifeblood of all businesses. (Osterwalder 2004) The revenues can be achieved by acquiring new customers, developing the profitability of existing customers or by extending the durability of existing customer relationships (Grant & Schleisinger 1995). For a company, it is essential to analyse the data that is collected from the customers. Thus, a company is able to distinguish the customer relationships that are significant for the company's business when compared to the maintenance costs of the customers. (Ryals 2002)

A company must identify the target customers and divide them into different customer segments. Through the efficient customer segmentation, a company is able to target the invested resources to the key customers, to whose the value proposition is most significant. (Chen & Popovich 2003) In order to satisfy customers' needs more efficiently, a company needs to classify them into separated segments, for example, with common behaviour or common needs. A business model can contain one or several small or large customer segments. A company must make cognizant decision about which segments to ignore and which segments to serve. This is essential because a company is not able to create the required value for each customer segments concurrently. In addition, once the segmentation

is done, the business model can be accurately design around a strong understanding of particular customer needs. (Osterwalder & Pigneur 2010) Communication technology, such as Internet and social media allows a company to reach customer segments with common needs despite of their geographical location (Griffiths & Howard 2008). By using web-based data collection tools, it is possible to collect information regarding customer behaviour in the company's online services. By utilizing the collected information, it is easier for the company to identify customer needs, to segment them and align a proper value proposition for them. (Osterwalder 2004)

Distribution channels are consisting the connection between a company's target customers and its value propositions. They characterize how a company gets in touch with the customers. Distribution channels allow a company to deliver value for its customers, either indirectly through intermediaries, such as brokers, suppliers or resellers or directly, for example, over a website or through a sales force. (Osterwalder 2004) The distribution channels are consisted of distribution, communication and sales channels (Osterwalder & Pigneur 2010). Through the mentioned channels, a company can interact between its partners and customers. The purpose of the distribution channel is to get the right amount of right services or products available at the right place, to the right people, at the right time. (Osterwalder 2004) Distribution channels are touch points for the customers. Consequently, they are playing an important role in the whole customer experience. (Osterwalder & Pigneur 2010)

Osterwalder (2004) has divided the entire customer's buying process into four stages (Figure 6). The stages are awareness, evaluation, purchase and after sales. Customer buying cycle reflects all the possible points of contact between a customer and a company in the context of the acquiring, possession and disposal of the service or product (Ibid). Firstly, the company must obtain the customers aware of its services and / or products and to help customers to see how company's own offering differs from the competitors (Piccoli, Spalding & Ives 2001). The ways to execute this are, for example, promotions, advertising, partnerships and public relations. On the second stage, a customer has identified a particular company that

likely is able to offer solutions to his needs or problems. Moreover, the customer wants to learn more about the company, its operating methods and the bundle of services and products it offers. At this stage, it is crucial to provide all the necessary information for the customer to assist him in the evaluation process. This information contains specific information about the company, its value propositions, references and availability of the products. (Osterwalder 2004) Information and communication technology helps companies to improve reach and richness of the information that they offer for the customers. Based on this information, the customer decides does he want to select this company to fulfil his needs. (Piccoli et al. 2001) On the third stage, the customer acquires the product and / or service. This stage contains negotiation, decision, agreement, order and tracking, invoicing, payment and fulfilment. The last stage is the after sales services. This phase is essential because it has great potential to create loyal customer relationships. After sales services have an enormously affection to a satisfaction of the customer by helping him to profit from the value proposition and by guiding him if problems occur. After sales services contain, for example, implementation, maintenance, training, troubleshooting, monitoring and reverse logistics. (Osterwalder 2004)

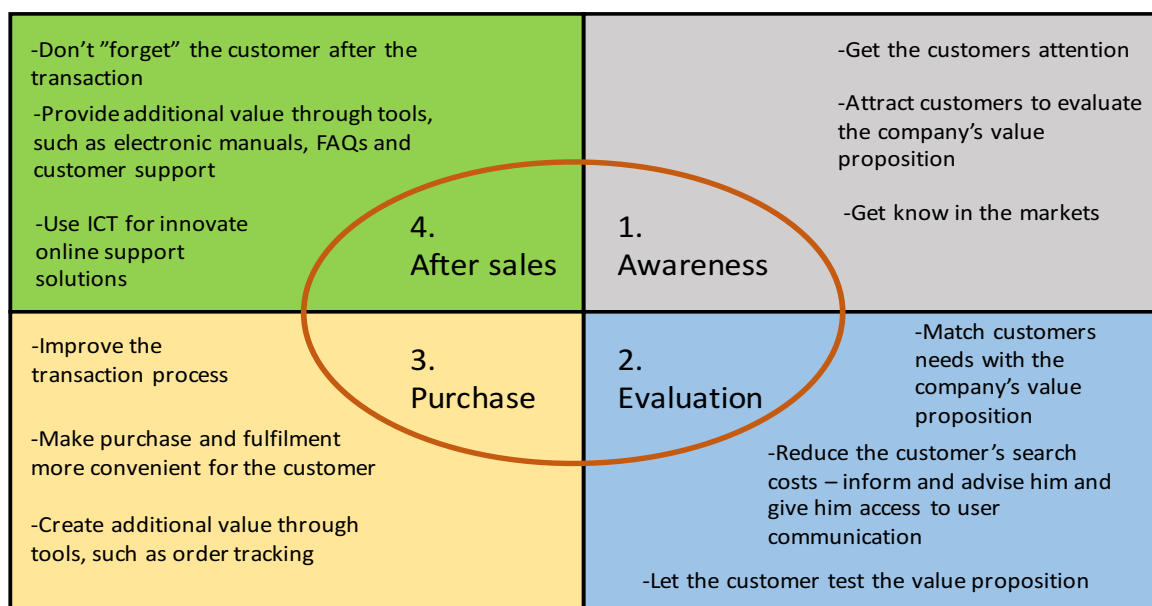


Figure 6. Customer's buying process (Osterwalder 2004)

3.5 Financial management

Cost structure of a company consists of the sum of the company's assets, direct and indirect costs and economies of scale. The cost structure will be principally driven by the cost of the key resources that are required by the business model. (Johnson et al. 2008) The cost structure measures all the costs that incurs to the company when it is creating, marketing and delivering value to its customers. It sets a so-called price tag for all those elements which are creating costs for the company. These elements are resources, assets, operations, exchanges and creating and maintaining of partner relationships. For a company, it is essential to focus on its core activities and competencies and outsource non-core activities and competencies. By focusing on core functions, a company have a great potential for remarkable cost savings in the value creation process. (Osterwalder 2004)

Company's revenue streams describe the ability of a company to translate the value it offers to its customers into incoming revenue streams (Johnson et al 2008). The incoming revenue streams that a company can capture from its value creating processes are crucial for its long-term survival. A company can have one or many different streams of revenue while each of them can have one or many different pricing mechanisms. (Osterwalder 2004) Pricing mechanisms can be predefined prices that are based on static variables. These fixed prices are, for example, list prices, customer segment dependent prices, volume dependent prices and product feature dependent prices. Another pricing mechanism is a dynamic pricing when the market conditions affect to the pricing. These are, for example, negotiate based, real-time market based and auction based prices. The business model can contain two different kind of revenue streams. They can consist of a single customer payments or continual revenues from ongoing payments to either provide post-purchase customer support or deliver a value proposition to customers. (Osterwalder & Pigneur 2010)

3.6 Value creation in e-Business

Amit and Zott (2001) have examined in their research how 59 globally acting companies who have an electronic business model are creating value. Based on this research, they have collected together the most essential sources of value creation in e-business (Figure 7). The model consists of the four major value drivers, which have an interconnection among each other. The major value drivers are efficiency, novelty, lock-in and complementarities. (ibid)

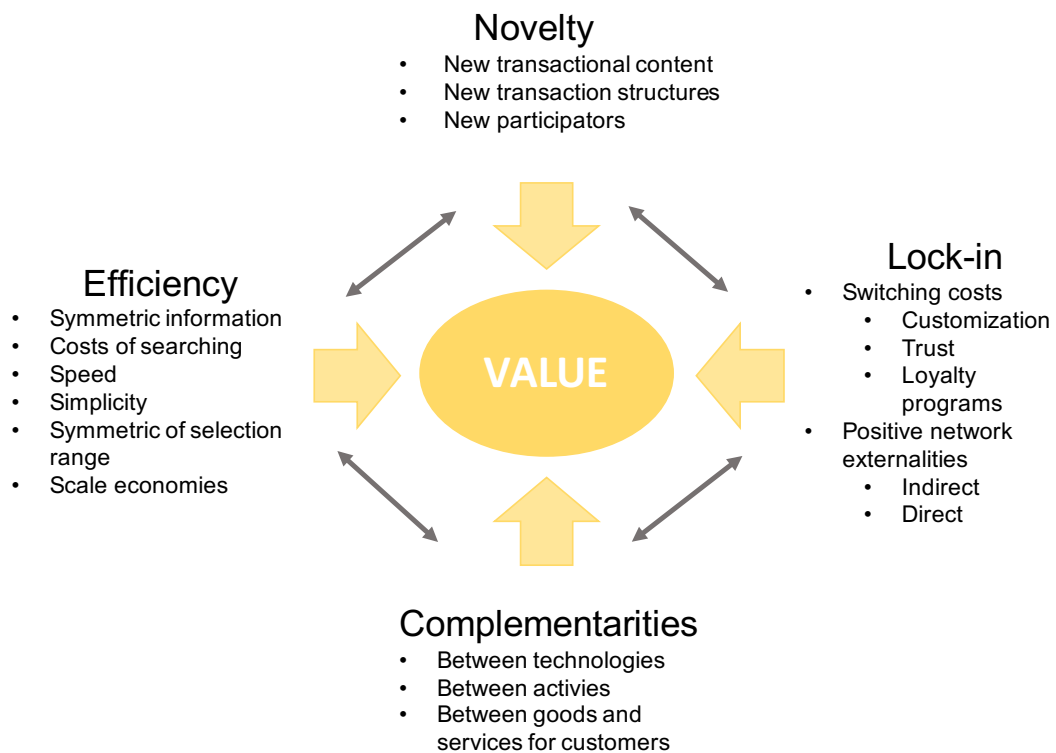


Figure 7. Value creation in e-Business (Amit & Zott 2001)

The efficiency of transactions is one of the most essential value creation drivers in e-Business. The lower the costs of the one transaction are, the more efficient the transaction is. Through the Internet, a company is able to offer more updated and more comprehensive information, which reduce information asymmetries between a company and its customer. Quick and updated information makes the transaction events easier and more comfortable. (Amit & Zott 2001) Moreover, the improved

information can decrease customer's bargaining and search costs (Lucking-Reiley & Spulber 2001). By utilizing the inexpensive interconnectivity of electronic markets, e-Businesses can improve transaction efficiency by enabling more informed and faster decision making. Through the efficient transactions in electronic business model, it is possible to speed up the transaction process, simplify the transactions, reduce distribution costs and streamline the supply chain. (Amit & Zott 2001)

Innovations have been one of the most essential ways to create value for a long time while their significance have been mentioned in the academic literature in the first half of 20th century (Amit & Zott 2001). The more a company's business model is focused on innovations and creating new, the more efficient the business model is (Zott & Amit 2007). With completely new innovations or with a combination of existing innovations, a company can stand out from the crowd and create new value for the customers (Nunes & Johnson 2002). Companies should strive to develop new and innovative ways to make customers lives as easy as possible (Osterwalder 2004). Creating of new products and / or services, new production methods, new distribution methods and new marketing methods are the traditional sources of creating value through innovations. However, nowadays e-Business enables companies to do business in new and innovative ways, that is, the new structure of transactions. For example, eBay was the first enterprise who introduced C2C auctions in a large scale. (Amit & Zott 2001)

The potential of creating value in an e-Business is greatly determined by is the company able to motivate to engage the customer to repeat the transaction that he have executed once. By locking-in the customer, the transaction volume tends to increase. For the company, it is also essential to aspire to lock-in its strategic partners who have incentives to improve and maintain their associations. Consequently, that may result to customers' increased willingness to pay and lower opportunity costs of the companies. The complementary service and product offerings and efficiency features may serve to attract and retain partners and customers. The better the relative benefits offered to these parties are, the higher are their incentives to join or stick with the networks that is established by the e-Business. (Amit & Zott 2001) According to Rintamäki et al. (2007), the value

propositions should be rather created through intangible benefits, such as improved customer experience and better service quality and monetary-based value propositions should not play such a large role. Consequently, a company should strive to create value proposition without charging of them, such as free customer service and free product returns (Osterwalder 2004).

Complementarities mean that a having of a bundle of products and / or services together provides more total value than having each of them separately. Complementarities are enhancing the value of the core products or services. With unique and supplementary combination of products and services it is possible to achieve value that is difficult to mimic. Complementary goods can be, for example, after sales services, such as free customer service on the website from where a customer can ask advices. In addition, they can be products or services which are provided by a company's partner firms, however, they are often related to the core transaction. (Amit & Zott 2001) Nowadays, the website of a company could be described as an information channel between a company and a customer rather than a distribution channel. Through the website, the purpose is not just to buy or use company's products or services. On the contrary, the website should offer information concerning products and services and real-time customer service and after sales services. (Osterwalder 2004)

4 Methodology

The second chapter presented how the procurement process is changed during the era of digitalization and ended out to a specific description of e-Sourcing and its sectors. In turn, the third chapter presented the business model that was shared to parts according the Canvas Model. In this chapter, the study proceeds to empirical section. Before the empirical results and analysis are illustrated, the process, methods and data collection of the study are presented. In addition, this chapter considers reliability and validity of the study.

4.1 Research process

A research is a creative, goal-oriented and organized process that contains the familiarization with the theme, sketching the plans, execution of the research report and results (Hirsjärvi, Remes & Sarjavaara 2009). The research process is commonly following the particular stages: selection of the research problem, research questions derived from the research problem, selection of the researched objects, selection of data collecting and analysing methods, execution of research and collecting the data, analysing the data and at lastly the reporting the results of the research. (Kananen 2013) The research process is presented in Figure 8.

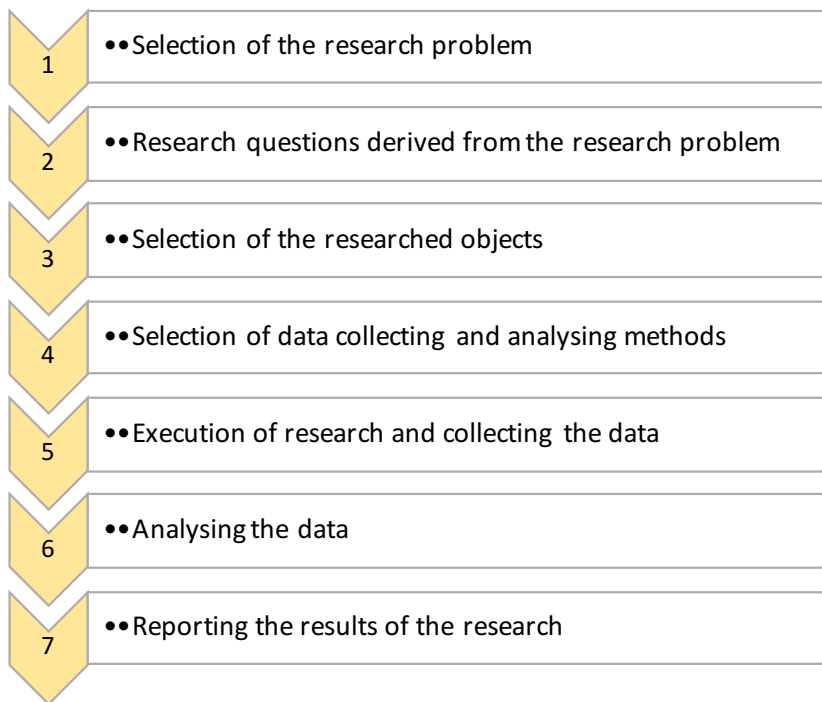


Figure 8. Research process (Kananen 2013)

The process of the this study proceeded principally as presented in Figure 8. However, some of the stages intertwined together and the main and sub research problems were slightly changed during the process in order to achieve more distinct results. Eskola and Suoranta (1998) state it is rather common during the research process that the layout of the research questions or the research plan needed to be particularized.

4.2 Methods and data collecting

The qualitative research method is used in this study. This research method is suitable when one is interested in causations of events and detailed phenomena instead of general events (Metsämuuronen 2003). In addition, it is an appropriate method when the research cannot be executed as an experiment nor in the circumstance where the variables or factors which has affection to the results cannot be controlled (Metsämuuronen 2007). The aspiration of the qualitative research is to get as close as possible of the reality of researched phenomenon by capturing

the perspectives of the researched objects and by targeting the interest to reality and to the description of it. (Hirsjärvi et al. 2009)

The case study is chosen as a research method because the literature review indicates that there is considerable amount of issues to explore in the area of e-Sourcing. Case study is one of the most frequently used method for data collection in qualitative research. Case study is a research method that examines a single case or a few deliberately selected cases. The case can be for example, a firm or a specific department, process or a function of it. (Koskinen, Alasuutari & Peltonen 2005) A case study can be delineated as empirical research that studies people or a contemporary event in a particular environment, by using multiple and various means of collecting the data (Yin 1983). According to Yin (2003), a case study is an empirical inquiry that “investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident”.

The empirical data of the study is collected through the semi-structured interviews. When the research is striving to examine answers to the questions, such as how, why and what, the semi-structured interviews are exceedingly applicable method. In addition, the method is highly applicable when the questions of the interviews are open-ended or if the order of them need to be changed during the process. Moreover, the method allows open conversation and interaction between the interviewee and the interviewer. Utilization of the method permits to receive more comprehensive, significant and depth answers for the research. It may also lead to conversation concerning the related issues which bring more comprehensive understanding of the topic and the phenomenon. (Saunders, Lewis & Thornhill 2009) Semi-structured interview is based on the predetermined subject. However, the questions are not formed or laid out predefined manner as in a structured interview, which makes the interview form freer (Hirsjärvi & Hurme 1985).

The study contains interviews from two standpoints, Company X's and customers' views. The interviewees were the CEO of the Company X and four of its customers. The customers are companies who are currently using Company X's e-Sourcing

solution. Two of the companies are SMEs and two of them are large enterprises. SMEs and large enterprises have different kind of needs of using the e-Sourcing solution, hence, two of them are selected in the both categories. All the interviewed persons from the companies are the main users of the Company X's e-Sourcing solution. Consequently, they have the most extensive knowledge concerning the solution inside their company.

All the interviews were accomplished by semi-structured interview method. They were carried out face-to-face and recorded in the customers' offices. Durations of the interviews were approximately 30 – 45 minutes. All the interviews were transcribed in order to gain all the possible information. The data from the interviews were firstly analysed separately. Afterwards the results were collected together to form the empirical results.

In this study, the semi-structured interviews allowed to gain comprehensive but very specific answers. This kind of answers were essential to achieve best possible results. The interview questions were constructed to be based to the theory of the study for both interviewed parties, Company X and its Customers. The interview questions for the CEO of the Company X was formed as Business Model Canvas. The questions for the customers were constructed together with the Company X to cover all the possible issues.

4.3 Reliability and validity

When estimating the trustworthiness of the research, the whole research process is needed to take into consideration (Eskola & Suoranta 2008). Several ways can be used estimating the trustworthiness of the research, however, reliability and validity are the most common methods. Reliability refers to repeatability of the research. In turn, validity means the research method's ability to measure the particular factors in the research. For example, are the interview question understandable enough. (Hirsjärvi, remes & Sarjavaara 2007) In addition, validity measures is the collected data enough to draw the necessary conclusions (Golafshani 2003). Reliability and

validity presents of how realistic the study itself is by describing the object of it and the logic of the results of the study (Eskola & Suoranta 2008). These two concepts are most commonly used in quantitative research, however, they need to be judged in qualitative research also (Hirsjärvi et al. 2007).

The reliability of the research can be improved with specific description of the whole research process that is shared to phases. It should contain the descriptions durations, distractions and misunderstandings of the interviewing events also. (Hirsjärvi et. al 2007) This study examines the e-Sourcing solution of the particular company and the needs of its customers. Consequently, the majority of the results cannot be generalized. However, the study contains also more generally presented results concerning the field of e-Sourcing. Moreover, the study presents the current situation of the Company X and its interviewed customers. While the business model of the Company X is continually developing and its customers' user experience is gaining concerning the e-Sourcing solution, the results of the study are not repeatable.

The qualitative research is criticized because the number of samplings are usually quite small. This leads to a subjective results which cannot be generalised. (Soy 1997) In order to improve the validity of this study, the interviewed companies were selected from various industries and they are different sizes. Two of them can be categorized to SMEs while the other two are large enterprises. In addition, during the interviewing process, the questions that the interviewee has not understood are clarified for him.

5 Value creation through the business model of Company X

This chapter explains how the Company X creates value and where the value is created from. In addition, it describes how the other sections of the Company X's business model are combined to the value creation process.

5.1 Value creation

Company X strives to bring the highest quality procedures for the entire purchasing unit concerning the sourcing process and its information management. They aspire to offer tools which are developed together with the customers to help buyers in their everyday work and to help them to gain transparent and efficient processes, price reductions and savings in time in inexpensive manner. According to past experience the customers have gained remarkable price reductions, cost savings and savings in time by utilizing Company X's e-Tendering and e-Auction tools.

The implementation process of the e-Sourcing solution is very quick and easy. The e-Sourcing system is offered as a SaaS when the implementation costs are low and the implementation process is fast and efficient which is a crucial especially for the SMEs. Nevertheless, when the system is provided as a SaaS, it brings various benefits for small and large companies. Through the SaaS based model the buyers or the suppliers do not have to install anything on their computers that is eliminating potential extra work for customer's IT department. Without larger integration processes, the implementation process of the Company X's e-Sourcing solution can be executed in one day. A customer is able to use the solution immediately after they have made the decision to adopt it. Moreover, the visage of the solution can be personalized according to customers' corporate image. One to SaaS and flexibility related value creation aspect is, if the Company X's customer is requiring a new attribute within the system, it can be effectuated rather quickly. Consequently, Company X is continually doing software development with the customers and

listening their feedback. All the software development is executed in the house by proficient programmers.

One of the most essential aspects of how the Company X provides value for its customers through the e-Sourcing solution are its usability, accessibility, reliability and flexibility. The utilization of the e-Sourcing solution does not require extensive training. A customer is able to tender out all kind of projects, such as products, raw-materials or services. The projects are easy to control and manage while the solution offers transparency for both parties. A buyer is able to follow the suppliers' progress status during the process which abolishes any uncertainty from the process. In addition, during the e-Auction process the suppliers can see that there are competitors participating in the event. Moreover, the e-sourcing solution contains a comprehensive and efficient comparison tool. Through the tools the companies can have clear reports, summaries and versatile price analysis of the particular projects. Furthermore, all the sourcing project data is stored in one centralized place to the solution accessed by the authorized sourcing team members. This data allows customers to utilize and copy past projects. Consequently, these features provide the customers remarkably savings in time.

Company X is offering domestic, comprehensive and quick in house helpdesk services. In addition, each customer has an individual contact person in case problems occur at any stage of the process. Moreover, they contact to the customers regularly in purpose to after sales actions and to survey their current situations. For the Company X, the after sales actions are one of the key factors to create value and loyal customer relationships. In the past 36 months, during the office hours, the service level of the Company X's helpdesk has been 100%. Superior support and helpdesk services are one of the most significant value propositions which the company X is providing to their customers. In addition, they continually strive to develop these services. Company X offers proficient chargeable consultant services for all the sectors their e-Sourcing solution covers. Customers can utilize the consultation in the particular steps of the whole competitive tendering process or the consults can execute the process independently. For the new

customers, Company X offers a free training in the beginning that duration is approximately two hours.

Company X's value creation process has changed during the time and it continuously being updated with new features and other developments. Initially company X offered only the e-Auction tool as the focus was on the facilitation of the pricing negotiation and price reductions. At present, they also offer e-Tendering, Supplier Management and Contract Management tools. Their current focus is more on the comprehensive information management without forgetting the most valuable value propositions, the benefits which e-Sourcing tools bring to the customers. Moreover, nowadays the Company X offers more education, such as seminars and free webinars for its customers. Consequently, Company X's value creation process has changed a lot during the time.

5.2 Operation organizing

Company X employs less than 10 people, its main product is the e-Sourcing solution and therefore, its business model is relatively simplistic. The highly skilful sales, support, consult and programming personnel is Company X's most valuable resource. Consultants have extensive experience especially in the buying sector. Therefore, they have a comprehensive understanding of the daily needs of the buyers and the whole procurement process. The Company X is striving to increase the responsibility areas of the personnel based on the skills of the employee. Especially, the software programmers are an essential resource while the Company X's value propositions are brought to the customers through the solution in large extent. The programmers are educating themselves continuously to stay at the top. In addition, the latest technologies are utilized in software development and in the solution in order to offer the best possible customer experience.

Company X has identified that they need to establish more domestic and international partnerships in order to increase their local and international market share. Therefore, Company X has started to evaluate and establish new possible

partnerships in both, private and public sectors. In the public sector, partners are essential since the procurement projects contain considerable amount of law-related issues. In the private sector, especially larger customers are more and more inquiring total set of services, such as e-Procurement and e-Sourcing solutions as a bundle. Therefore, Company X has recognised that being able to offer more comprehensive service packages jointly or as a subcontractor with a larger partner, is very important. Through partnerships it is also possible for Company X to get access to new international markets and gain new sales channels.

The overall purpose of partnerships is to expand the scope of services and broaden the business locally but also in other markets where Company X's services are not offered yet. Company X's goal is to expand the operations and services more to a global direction through partnering and to find new sales channels through them. In addition, partnering enables development of new innovative services or bundle of existing services from which both parties may achieve significant benefits. Through partnering with other service providers, Company X can create value for its current customers through more comprehensive bundle of services. Additionally, the partners are able to offer more comprehensive set of services to their customers. Partnering also allows accessing new international markets efficiently. Usually the partners who are located in another country have already existing customer base which facilitates the process of offering new joint services to them. Company X emphasizes that they are a desirable partner because they have a great desire to develop. However, in order to develop its value creation ability continuously and reduce the risks which appears when they broaden their business in the new markets, Company X should acquire more key partners and sales channels.

Company X is very aware of the competitive situation in its business field. There are several large and globally acting competitors on the private sector. Especially large enterprises are utilizing the solutions that the larger service providers offer. Usually, they have used them such a long period while they are integrated to their other systems, hence, it is rather hard to sell the new solution for them. Company X strives to stand out from larger service providers with its value propositions, such as usability, accessibility, flexibility, inexpensiveness and superior support services. On

the public sector, there is more local competition, however, the Company X is more focused on the private sector. It is astonishing that in this digitalized business world, in the year 2017, the major competitor for the Company X still seems to be the old working habits, such as emails. This is concerning particularly the SMEs. There are large number of potential customers in the sector of SMEs, however, the ingrained old-fashioned working habits are a significant barrier to acquire new customers from that sector.

On the international markets, there are several reminiscent companies who are approximately same size and offer similar services than Company X. For example, in Poland and in Great Britain, there is several operators who are providing e-Sourcing solutions. In addition, the consultants who are offering tendering projects for the companies are also noteworthy competitors. This kind of services are available everywhere in the markets, which is challenging Company X in its intent to broaden its business more to the other countries.

5.3 Customer relationship management

The process of acquisition new customers is executed by effective sales work via phone, events, Internet and by using electronic tools, such as google analytics which allows to follow when some potential new customers have visited on Company X's homepage. Moreover, the new partner networks allow the increase of the customer base. However, the selling of the solution is the bottleneck of the whole business model of the Company X.

Customers are segmented into three categories: SMEs, large enterprises and public sector customers. SMEs and large enterprises are separated to categories based on their turnover. The company prioritises the most essential and most profitable customer relationships and strives to keep them as satisfied as possible. SMEs are paying less for the services, hence, the amount of extra work concerning them should be as low as possible in order to gain efficient business model. Of course,

SMEs are needed to keep as satisfied as possible also, however, the resources are limited.

Customers are commitment by offering high quality tools which provide value for the customers. The more the e-Sourcing tools the customer is utilizing, the more benefits they are gained and more adhered the customer is. Company X is hosting free seminars for existing customers in order to educate them for using the software mode efficiently. However, Company X emphasizes that they should offer more this kind of educational content for its customers. By offering more webinars and other related events, it would create more value. Some of the customers have not attained the full benefits from the solution because of the uncertainty issues. This way they could receive more ideas on how to gain more efficient tendering process and what kind of products and services they can tender out.

Company X is striving to create loyal and long customer relationships by brining as much value for the customers as possible. While the Company X is rather small company, they are emphasizing that every contact with the current customers are essential in order to keep the corporate image in wanted level or even rise it up with superior customer service. Moreover, the customers (buyer-side) and their customers (supplier-side) have given plenty of good feedback concerning the support services. According to them, they really appreciate that they achieve the support quickly and comprehensively enough while they need to contact to the support service only once to figure out the issue.

Company X is striving to rise its availableness by marketing itself via several channels, such as banner and email advertising, in their industry based events and publications and through the partnerships. They emphasizes that their partners are very essential and efficient marketing channel while they are able to advertise the solution to their existed and new potential customers. However, the marketing actions are not yet in the wanted level while they are an essential area to develop.

5.4 Financial management

Customers are paying monthly based prices. The pricing is based to number of used tools and number of users. Other revenues are, for example, the consulting fees and personalization of the tools for the customer.

Salaries are definitely the highest cost. The other costs are formed from outsourced activities, such as bookkeeping, outsourced graphic artists and the extra programmers which are needed time to time. Other related costs are, for example, maintaining the software, acquiring of server capacity, office rent and other running costs. Company X emphasizes that it is essential to avoid the unnecessary costs while they are striving to keep the cost structure as simple as possible.

6 Customers' experiences of the e-Sourcing solution

This chapter clarifies how the customers of the Company X are experiencing the utilization of the e-Sourcing solution. The experiences are shared to various sections starting from the deployment process and ending to the suppliers' feedback.

6.1 Initialization process

All the companies started to use the e-Sourcing solution through the active and successful sales work. Two of the procurement managers have used the particular e-Sourcing solution in their previous positions in another firms with plenty of positive experiences. Despite of the past positive experiences, the companies did not order the e-Sourcing solution independently, rather it needed to sell to them again. Nevertheless, the selection of the service provider was quite easy for the companies.

For all the companies, especially to the SMEs, the uppermost positive factors to adopt the solution, were domesticity and usability of the solution. Related to the SMEs, the companies are rather small when it would have been very challenging and expensive to adopt an e-Sourcing solution from a large service provider that is located to another country. In addition, the implementation, planning and consulting costs would have been too expensive for a small company. Moreover, the whole implementation process can take years with larger provider before a customer is able to fully utilize the new system. Companies emphasize that the implementation process of Company X's e-Sourcing solution was quick, effective and easy. Both of the large companies bought the visage personalization service when the software was customized according to their corporate image. On the eyes of the suppliers, this increase the corporate image concerning the purchasing process when the utilized tool appears more proficient.

6.2 Support services

All the interviewed companies have previous poor experiences of using the services of large providers in various business fields. In addition of the slow and expensive implementation process, the helpdesk and other related support and information services of large service providers are much harder to reach and utilize while they are essential factors. For example, the fields of e-Procurement and e-Sourcing are rather complicated. Hence, there is no such a software that would be so easy to use or there would not be any problems at some point. Therefore, quick and comprehensive help is needed and highly valued. All the companies experience that they definitely achieve the support very quickly and comprehensively while they appreciate that the customers are taken care of.

Both large companies have utilized the consultation services in their competitive tendering processes, particularly, in their first few projects. The other large company have utilized consultation on all their reverse e-Auction events while the other one has not used the e-Auction tools yet.

Concerning the training in the beginning, only one of the companies, the other SME, state that the training is not comprehensive enough and the duration is too short. Furthermore, the SME states that the one training session is not enough when the learning is happening step by step. Tendering process contains several stages while they experience that they need more education for the each stage of the tendering process. Especially, they would need more education on the stage of analysing and comparing the tenders. They experience that through a more comprehensive education they would gain more out of the system and would be able to utilize the system for the whole process more efficiently. For example, if they fail at some stage on the process they are not able to utilize the analysing tools as easily and efficiently as supposed. Nevertheless, they experience they get enough support from the contact person and helpdesk. However, if the training would have been more comprehensive at the starting point, the utilization of the system would have been quicker and more effective. They estimate that the duration of the training should be approximately ten hours.

The other three companies experience that the training in the beginning and its duration are definitely comprehensive enough. Even though, the training contains lots of information, they state that all the processed stages are understandable while they are able to utilize the system after the training. Furthermore, if uncertainty occurs after the training, it is easy to call to the contact person or the helpdesk when the problem will be solved quickly. According to the companies the current duration of the training is enough. However, the other large company states that the sufficiency of the training depends on the particular user and his skills. While some of the users are able to utilize the system with less training, some of the users may need more time and training. Nevertheless, in their case, the training is enough for the basics, while more skilful users can support the others if problems occur.

6.3 Utilization

The industries of the interviewed companies differ remarkably from each other. The industries contain various and comprehensive health care services, restaurant, food and beverage services and construction services. Consequently, the Company X's flexible e-Sourcing solution is suitable to tender out all kinds of products and services in various industries.

Both SMEs and the other large company are using only the e-Tendering tool while the other large company uses both, the e-Tendering and e-Auction tools. However, the companies which are not currently using the e-Auction tool are planned to utilize it in the near future. They also state that the e-Auction would be suitable for the items which they are commonly purchasing. The other SME has executed one manual based auction process in the past. In this case the suppliers came to their office while the auction process was executed through the Japanese reverse auction style. In this process the suppliers were located in separated rooms while the company asked their prices in turns. This takes lots of time from both parties while it would be more effective to execute through the e-Auction tool.

All the companies realized the benefits which the utilization of e-Auction tool would bring to the process. For the SMEs, the main reason why they have not utilized the e-Auction tool yet, is that they have not had projects with high enough volumes. Concerning all the companies who are not currently using the e-Auction tool, it points out that they are a little hesitant of using it because it is something new in their business fields. The large company who is currently using the e-Auction tool states that they need the consultation services when they execute reverse e-Auction cases. Moreover, the other companies who will utilize that tool in the near future, would use the consultation services in order to gain a successful e-Auction process.

According to all the companies, the usage level of the e-Sourcing solution has increased over the time. In the past, companies have had some tools in distinct business areas which have been left out of utilization for several reasons, such as they were difficult to use. At first, the companies utilize the e-Sourcing solution only in large-scale purchasing projects or constantly repetitive projects. All the companies state that the usage level has increased through the gained experience. The more extensively they have learned to utilize the solution, the more the usage level is increased. Nevertheless, three of the companies have not gained the full benefits out from the e-Sourcing solution yet. However, it is because of themselves. They are striving to adopt the e-Sourcing solution as a part of their everyday working habits. In turn, the other SME has gained the full benefits out from the solution. All their possible purchasing cases have been tendered out through the solution. In addition, through the solution, they are striving to dispose the old and expensive suppliers which were formed through the nepotism when they were a family business in the past.

According to all the companies, the Company X's e-Sourcing solutions is suitable to tender out direct and indirect projects. Both SMEs and one large company are currently tendering out purchases from both categories through the e-Sourcing solution. The other large company is tendering out only their indirect purchases through the solution while they have tendered out only one direct purchasing project. Albeit, they state that it would be suitable for both categories, however, in their direct purchasing projects the purchase specifications and plans are changing during the

process. The planning stage is the bottleneck of their procurement process while the plans are usually unfinished for several reasons when the sourcing stage begins. Consequently, they cannot give the particular specifications for the suppliers which is an essential phase of the e-Sourcing process. However, they state that this is just a designated industrial and company based problem.

Concerning to tender out services, such as cleaning and security services, the large companies have executed comprehensive cases with excellent results and without any problems. The other large company noticed that there are significant differences in the prices of the services while they tendered out a comprehensive cleaning service case via e-Tendering tool and gain a remarkable cost savings compared to previous cleaning service contract. The companies state that it is essential to define the specifications carefully in order to gain successful and efficient tendering process. It all depends on how the specifications of the wanted services are defined while the tool enables wide enough functions for the service specifications.

The other SME has tendered out some service cases with excellent results while the other SME on has not executed any service related tendering processes through the e-Sourcing solution yet. The company is not sure if the tool would bring any benefits or if it is suitable to tender out services, particularly services which have various sectors. For example, they would not use the e-Tendering process for auditing services. They emphasize the essentialness of comparing the experiential factors of the services which would be rather difficult to measure through the e-Sourcing solution. After all, a project where they could utilize the e-Tendering process in the service related cases, is the pre-qualification process containing specifications and other related information for the service where they qualify the most potential suppliers. However, they would execute the rest of the process in more traditional ways. Nevertheless, they admit that after the usage experience is gained more, there may be some services which they could tender out by using the whole e-Tendering process. However, they should contain only simple factors to compare, such as pricing per hour.

6.4 Utilization benefits

All the companies have gained savings in money by utilizing the e-Sourcing solution. In other words, they have gotten the objects of the purchase at lower price or better terms. In addition, concerning the constantly repetitive purchases, they have gained at least the best possible market price. None of the companies have not measured the exact number of savings in money. However, they have executed individual and different sized procurement cases which value have been between couple of thousands to over 0 million euros while the savings have been even 30%. A mutual reason for the price reductions is that the utilization of the e-Sourcing solution has increased the number of the suppliers and it has “awaken” the old suppliers which have led to increased competition between the suppliers. In addition, through the increased supplier base, the companies have found new and more cost-effective suppliers to deal with. For example, for several years the other SME has bought weekly acquired items from the same supplier without tendering it out. In addition, the price of the items is varying weekly. Consequently, in this case the supplier was able to set the price as the way they want. Currently, they are tendering it out through the e-Sourcing solution with more suppliers. At first, they received price reductions while now they achieve the best possible market price every time.

Considering the whole tendering process, all the companies are saving time compared the old process. However, there is a stage where the other large company is experiencing that it takes more time than the older way to execute it. This stage is the aggregation of the tender. The company states it may take two or three times longer to aggregate a new tender with the particular e-Sourcing solution if compared the older way. However, they state that it is not a considerable issue when the whole process is still quicker and more efficient than the older one. The longer time for aggregation of the tender is used because they need to define the specifications and other related issues more precisely than before. Besides, that is a beneficial issue when the specifications and the whole process is planned meticulously. The possible errors and negative surprises are prevented during the process. In addition, all the companies state that the e-Sourcing solution positively forces them to definite

specifications of the purchased objects more carefully and plan the whole process more precisely, which is only a beneficial issue.

According to all the companies, the major savings in time are gained in the extensive projects where can be hundreds or even thousands of items. Albeit, in this kind of cases, the definition stage may take more time than the older way, the significant time savings are gained in the stage of comparing the received tenders. One of the most beneficial experience for all the companies is the comparability feature offered by the e-Tendering tool. It contains extensive and versatile analysing tools for comparing suppliers' answers, prices and other related information. Furthermore, at the aggregation stage, the specified items are easy to enter to the e-Tendering tool by using its' Excel integrated functions while the answers are received in same format. When the suppliers' responds are at the same format, the tenders can be analysed easily, comprehensively and quickly by using the analysing function. It is a significant benefit that companies do not have to edit the suppliers' responds to a comparable form themselves and after that analyse the prices and other related information manually.

The other SME states that, in the past when they attend to purchase specific goods, all the suppliers send their prices and specifications via email in their own catalogues which were in different kind of formats and shapes. Because of the character of the business where the company is operating, the prices and specifications differentiate remarkably from each other while the manual-based process for comparing the prices and other related information took too long. By using e-Tendering tool, the company is able to make the tenders as the way they want the suppliers' responds. Currently, when they receive the suppliers' responds for the particular tender, they get the prices and specifications in already comparable form. In addition, they can utilize information analysis and price analysis that the e-Tendering tool contains. Consequently, this have saved a lot of time, especially, in the projects containing hundreds or even thousands of items. Currently, they are able to execute more tenders than before. That is leading to cost and price reductions or at least they achieve the best available market price every time.

All the companies are experiencing that the reproducibility of the tendering process is a significant benefit. The tendering process is remarkably faster to execute when the e-Tendering tool allows to copy previous tenders and use their layouts for the next tendering process also. Companies have always the same company presentation and questions concerning supplier information and other related issues that can be copied from the previous tender to the new tender. There are also regular purchases when the layout of the previous tender can be utilized completely which lead to remarkable time savings.

Moreover, the e-Tendering tool offers a transparency attribute where a buyer is able to follow if the suppliers have already seen the tender, answered the tender, or if they have not even logged in yet. According to the companies, this bring facilitation for the tendering process because the company is able to follow what are the current progress statuses of the suppliers. If one supplier has not responded the tender when the deadline is approaching, it is easy to detect from the system and send them a reminder. By executing the process in older way, such as via email, the company is lacking the knowledge whether the supplier has even received the tender or not, while this create uncertainty for the whole process. One of the SMEs states that they frequently have tenders where the response time is only two days. This attribute is highly helpful in these tightly timetabled projects while it abolishes the uncertainty when the process is easier to manage. Moreover, the other SME points out that it is very beneficial if the suppliers have questions concerning the particular issue or part of the tender. A supplier can express the question through the solution and the company is also able to share that expressed question and its answer to the other participants too.

All the companies experience that it is very beneficial when all the entered and received information concerning the separated tenders and suppliers are automatically stored in the system. The whole procurement unit can view and utilize all the executed tenders, their content, suppliers' responds and buyers' notes. Consequently, none of this information is not stored only to personal computers when colleagues would not be able to utilize it. This feature is very beneficial in the cases of personnel reshuffle, sick leaves and holidays when the colleagues can

easily see what is the situation of the particular tenders. The other large company states that even they have a common disk drive where the labourers should store the information intended to be shared, the labourers store some of the information only in their own disk drives. This leads to information interruption and lack of efficiency in the processes. Now all the tenders related information is stored in the system which obviate the mentioned problem. Two of the companies have some regularly repeatable purchasing projects, however, they execute them only every two or three years. While this is such a long period it would be rather hard to find the stored information of the previous executed projects and utilize it. The information could be stored somewhere on the papers or somewhere in someone's computer. Now all that information is easy to find just in a few seconds, moreover, the companies are able to copy and modify the previous tender with the same suppliers or add more new suppliers if needed.

6.5 Utilization challenges

Even though all the companies experience that the system is very easy to use, the other large company is still hoping that some development can be done to make the solution simpler, agiler and easier to adjust. However, they are still hoping that it will not be more complicated. Nevertheless, they experience the particular software is significantly easier to use than their previous one which contained all the possible attributes. On the contrary, the current software contains only all the needed attributes and just a few attributes which they do not need while they can be even hidden.

The large companies state that there are specific functions in the tools that are causing some concerns when they are constructing the tender. These concerns are emerging particularly in the tenders where the number of purchased items are high, such as thousands of items. In these cases, the companies have uncertainty concerning the pricing grid function. If this function is constructed incorrectly, the companies are not able to utilize the price and information comparison function as easily as intended.

The different stages in the e-Sourcing solution are containing some instructions, however, companies are emphasizing that they need more instructions, especially, if problems occur. Two of the companies are suggesting that there could be “the most asked questions section”. This section could include instructions, such as how to build a tender step by step and instructions to most common problems. If something goes wrong, then the user would be able to utilize these instructions instead of getting contacted to the helpdesk or contact person. In addition, this would save customers’ and Company X’s time. This section could be located inside the tool when all the users can utilize it if needed.

The other SME states that their suppliers have had some minor problems after they have responded the tender inside the system. For example, if the tender contains questions, such as field for free commenting or possible extra attachments and if the suppliers leave them empty, the system reports that there are unanswered questions. At this stage, the suppliers have had uncertainty is the tender filled correctly and is it stored in the system if they leave some questions empty.

The suppliers are able to enter questions inside the system concerning a particular tender or details in it. The other SME states that when the suppliers have entered a question, the system does not send a notification that there is a new question. This causes more work for the buyer during the tendering process when they need to monitor from the solution if the suppliers have entered any questions. Moreover, they state that in various cases during aggregating of the tender they need comments for the tender from other departments inside the house before they publish it for the suppliers. Currently, the company is able to download the particular tender only in a PDF-format. Consequently, they would like to have an attribute that allows to download the tender in another format. Then they would be able to upload it in the company’s cloud computing while the other departments would be able to comment it and see each other’s comments in real time.

Only the other large company is facing internal resistance of using of the e-Sourcing solution. The other companies are not facing and kind of internal resistance, rather, the attitude has been very positive. The one company has faced the internal

resistance because some parts of the working community find the solution unsuitable and challenging for their business field. Particularly, their concerns are the lack of personal affection with the suppliers and the challenges on the items specification process. The internal resistance is faced especially on the production department. The procurement department has succeeded to abolish the resistance by gaining excellent results, such as savings in money. Even the procurement department has gained some success, the resistance is still rather deep and compendious. However, the resistance is continuously decreasing with the gained results.

6.6 Suppliers' feedback

None of the companies have not faced any resistance from the suppliers concerning the use of the e-Tendering tool. Companies have not received negative feedback of using the tool while the attitude of the suppliers has been rather positive. Even the companies have asked the feedback concerning the solution, it has been quite positive. Companies state that there have been some single suppliers who may have needed some help for uploading their answers to the system. However, the number of these cases is minimal. The reason has been more the lack of skills of the supplier than the solution features. For example, one supplier of the other large company has given positive feedback concerning the usability of the tool. This case contained over 10 000 lines of items. The supplier experienced that the prices and other related information were very easy to enter to the system while they also gained savings in time compared to the manual-based process. According to the other SME, their suppliers have adopted the e-based tendering process quickly as a part of their working routines and they are in a rhythm of the buyer. For example, the SME is executing one regularly repeatable tender on every Tuesday on an exact time. If the tender is not published on that exact time, the suppliers call to the company for asking why they are not able to see it and what is the situation of it. The other large company states that their suppliers have been quite surprised when they started to use the e-Sourcing solution, however, they have had a positive attitude for it. In their business field, the use of e-Sourcing tool is quite a new element

and the suppliers are not so used to it yet. Concerning the usage of e-Auctions, they have received some negative toned feedback. However, the feedback is concerning more to that the suppliers were not prepared good enough for the quick and intensive e-Auction event. This is happening because the e-Auctions are a new element and the suppliers are lacking of the past experience of them. The company emphasizes that the preparation of the suppliers is up to themselves and with a good strategy and preparation they are able to attend to the e-Auctions events successfully. This kind of feedback is usually form the losers of the event and the winners are excited while they have not faced any problems.

7 Analysis and findings of the empirical results

This chapter analyses and summarises the empirical results. Each theme of the study is analysed separately.

7.1 Value creation process of Company X

Empirical study shows it is evident that Company X is striving to create value for its customers very comprehensively through its business model. The major value proposition is the e-Sourcing solution itself. The solution creates value for the customers during the whole sourcing process. Through the SaaS based service model the value can be created especially on the customer's initialization process. SaaS allows that the initialization process contains only minimal costs for the customers and they are able to utilize to solution almost immediately. By utilizing the solution, the customers are able to gain more efficient sourcing process. The utilization of the solution brings value for the customer in various ways, such as transparency of the process and savings in time and money. In addition, it abolishes buyers' uncertainty concerning the sourcing process and it enables better controlling.

Company X aspires to offer as comprehensive and as easy to use solution as possible. Even the e-Sourcing solution received almost only positive feedback for its usability it also faced some critique concerning it. However, the usability is related to the number of the different functions. Large enterprises need more functions while SMEs are able to satisfy their needs with less functions. In addition, the usability is related to the IT skills of the particular user. Some users possess rather wide IT skills once other users need much more practice. However, one of the strengths and purposes of the Company X's e-Sourcing solution is to offer reliable, flexible and efficient but easy to use solution.

Value does not create itself, rather the efficient value creation is happening through the whole business model. Company X is effectively utilizing its resources in order to bring value for the customers. The employees of Company X are the most critical resource for creating the value. They are highly skilful while they own a broad knowledge concerning the sourcing and the whole procurement process. Especially, the programmers are important. They have created the platform of the solution and they enable the continuous development that is executed together with the customers.

Company X's helpdesk and supporting services are exceedingly encompassing. According to past experiences, the customers have given the best feedback of the quick and comprehensive helpdesk services. For example, several sourcing processes are executed in prompt schedule. If problems occur during the e-Sourcing process, it is essential that the customers reach the support quickly. Thereby they are able to keep the focus on their core business. If the helpdesk service would be outsourced to some cheap labour country, such as in India, it would take days to reach the needed help. This is a common problem when dealing with larger service providers.

Company X emphasized the essentialness of value creation through the key partners. Through the partnerships, the Company X and its partners are able to offer more extensive bundle of services or completely new innovative services for the customers. This issue could be critical when Company X is striving to acquire more large corporations to their customers. Frequently, the larger corporations are looking for more comprehensive bundle of services where the sourcing, analysing and buying functions are integrated together. Through the co-operation, Company X and its partners are able to satisfy mentioned needs of the customers. Consequently, the resources and other related functions that are supporting the value creation process are utilized convincingly.

7.2 Customers' needs and the value propositions of Company X

When comparing the Company X's and customers' responses, it is evident that Company X's value propositions meet the customers' needs comprehensively. Customers have emphasized that the deployment process of the SaaS based solution was quick and easy. They have gained savings in time and money by utilizing the solution while it abolishes the uncertainty of the process and enables easier management. The only value proposition that the customers did not mention was the reliability of the e-Sourcing solution. Reliability refers that the solution is always available to use while there are no interruptions on servers. In addition, all the entered data will be always stored to the system. The value propositions of Company X and customers' experiences and needs are collected to the Table 2.

Table 2. How Company X's value proposition meets customers' needs

Value propositions of Company X	Customers' experiences
Usability	X
Accessibility	X
Flexibility	X
Transparency	X
Copying attribute	X
Reliability	
Price reductions	X
Cost reductions	X
Time savings	X
Superior helpdesk	X
Consulting	X
SaaS related value	X
Inexpensiveness	X
Software developing together with the customers	X
Stored project data	X
Comparison, report and analysing attributes	X

Several companies are acquiring different e-Business systems. Over the time the utilization level of the systems can decrease or the systems can be left completely untapped. This can be an outcome of several reasons, such as companies do not experience that the tools would bring enough benefits when they are not worth to use. In addition, they can be too complicated to use and the process efficiency might even decrease. Companies might perceive that the older manual-based process is quicker and more efficient. However, according to the interviewed companies, their usage level is increased over the time. Moreover, their goal is to utilize the solution more and more all the time. This is advocating that e-Sourcing solution is satisfying their needs while it brings the wanted benefits for them concerning the whole e-Sourcing process.

7.3 Business model development

A few business model development issues were found through the empirical research. According the companies the whole user experience concerning the solution was highly positive. However, a few specific development issues were found. Especially, the uncertainty with the pricing grid function is an essential finding because the function has an important role in order to gain successful e-Tendering process. In addition, two of the companies stated that they would need more instructions integrated inside the system which would support their individual work while these instructions could save their and Company X's time in long run.

One supporting related founding is concerning the training in the beginning. Even just one of the companies stated it is not comprehensive enough, however, according to their experience the recent model is not even nearly as encompassing as they would need. For example, they experienced that the duration should be five times longer and the process should be shared to stages.

Company X is utilizing their resources very effectively, however, the sales and marketing actions are the bottlenecks of the Company X's business model. These are critical factors while they are an essential area to develop. In order to gain more

successful and competitive business model, they need to form new key partnerships which allow more efficient acquiring of new customers. In addition, they need to reinforce their own selling process and focus their actions more on efficient marketing in order to gain availability in the markets.

The most essential e-Sourcing solution and business model related challenges and development findings are collected in Table 3. The left side of the table presents the challenges concerning the e-Sourcing solution while the right side presents the challenges in other business model sections.

Table 3. e-Sourcing solution and business model related challenges

Customers' challenges concerning the e-Sourcing solution	Customers who have faced the problem	Other business model related challenges
More instructions on each step	All	More key partners
Pricing grid attribute challenges	Both large companies	Sales effectiveness and resources
Training in the beginning is not comprehensive enough	One SME	Marketing effectiveness and resources
No email notification when question expressed by supplier	One SME	
Internal resistance	One large company	
The tender can be downloaded just in PDF	One SME	
Minor supplier uncertainty after they have responded the tender	One SME	

8 Conclusions

This chapter presents the conclusions of the study and provide answers to the research problems which were presented in the chapter 1.1. The answers are based on the synthetisation of the empirical results and theoretical findings. In addition, it contains the limitations of the study and proposes directions for future research.

8.1 Answers to the research problems

What kind of value the e-Sourcing solution is creating for the customers and where the value is originates from?

Value proposition is the core and the most important factor of the business model (Johnson et al. 2008). It is the reason why a customer chooses a particular company whose products and services they want to use in order to satisfy their needs (Osterwalder 2004). The results of the study showed that the Company X is creating value for its customers through the e-Sourcing solution through various ways. The solution is SaaS based which makes the implementation process quick and easy. It takes minimum amount of customer's time. That time is the training in the beginning which duration is a couple of hours. Consequently, a customer is able to utilize the solution almost immediately. In addition, according to Sääksjärvi et al. (2005), SaaS brings value for the customer in various ways. SaaS makes the access to the software possible independently of time and location, it expands the potential application selection, it offers options for customization for the customers, it is less costly and the customers can focus more on its core competencies (ibid).

Company X is creating value through the e-Sourcing solution by offering a solution that is reliable, easy to use but very flexible and versatile. As a result of the versatility and flexibility characteristics of the solution, a customer is able to tender out variety of projects, such as projects containing raw-materials, products and services. All these attributes are a result of continual program development work by the proficient

programmers. In addition, Company X is continuously developing its e-Sourcing solution together with the customers by listening their feedback and development desires. Byrne and McCarthy (2014) state that the customer's role has emerged as a main driver in the value creation process. According to Payne et al. (2008), the cooperation with the customers in the value creation process is crucial while it allows the company to gain better understanding of the customer's perspective. Consequently, by listening the needs of the customers, Company X is able to develop the most critical value propositions and satisfy the needs of the customers more and more better.

The solution enables the buyers to follow the suppliers' progress status and behaviour in the system. Buyers are able to follow whether the suppliers have logged in, browsing the tender or whether they have respond to the tender already. If a supplier has not responded when the deadline is approaching, a buyer can easily remind the supplier using the solution. These attributes allow easier process management and abolish uncertainty from the whole process. Hannon (2005) states that the utilization of e-Sourcing tools is forcing buyers to define the product and / or service specifications in more precise detail. This leads to increasing process discipline and improves the strategic thinking skills of the procurement department (ibid). This can be considered as a value proposition as companies are planning their sourcing process more precisely which leads to a decrease in possible errors during the process.

Financial savings contributed to e-Sourcing is frequently mentioned value proposition in the past research, such as Engelbrecht-Wiggans and Katok (2006) and Kauppi et al (2013). Companies can gain financial benefits through reduced purchasing prices which is a result of increased supplier base and increased competition amongst the suppliers. In addition, companies can gain time savings through more efficient processes. The most remarkable savings in time can be gained by utilizing the tender analysing feature that is included in the solution. Moreover, all the entered data is stored in the system and therefore it enables to copy and re-use the information from the past tenders.

Osterwalder (2004) states that each value proposition consists of a combination of products and / or services which are formed to take into a consideration the needs of the specific customer segments. Based on the results of the study, it is evident that Company X is extensively utilizing all the available activities and resources to successfully create value for its customers. The core of the Company X's business model is the e-Sourcing solution and the value proposition that is created through the solution. However, the supporting services are directly related to that value proposition. Consequently, they offer their value proposition as a combination of products and services which create value for the customers more extensively. Rintamäki et al. (2007) emphasises that the value propositions should be created through intangible benefits, such as better service quality and improved customer experience while the monetary-based value propositions should play less significant role. Company X strives to offer the best possible customer experience through the easy to use, reliable and flexible e-Sourcing solution while they have added the superior customer service into that bundle. The Company X is gaining significant competitive advantage by offering this kind of combination of value propositions. The competitive advantage of Company X is evident when comparing the services with larger service providers whose e-Solutions may be much more complicated to use and their helpdesk services are not as comprehensive, quick and customer-oriented. Consequently, through all the mentioned value propositions of Company X, the efficiency of the whole procurement process increases which leads to cost reductions and improved customer satisfaction.

How Company X's value propositions meet the customers' needs

Based on the empirical results, as presented in Table 2 it is evident that Company X's value propositions are meeting the customers' needs extensively. This can be assumed to be a consequence of continuous development actions together with the customers. In addition, Company X is offering complementary services which form a unique bundle of value propositions. Amit and Zott (2001) emphasizes that offering of a bundle of products and / or services is essential especially in e-Business environment. Through unique and supplementary combination of services and / or

products, a company can achieve a value that is difficult to mimic. It stood out that customers of Company X are appreciating the comprehensive and quick support services that is attached to the core value proposition.

It is quite common that companies are acquiring various e-Business systems to increase their process efficiency. However, the usage level of the systems can decrease through time because the systems do not bring enough value. Based on the interviews given by the companies, the usage level of the solution has increased over time. In addition, all the interviewed companies are striving to adopt the e-Sourcing solution as a part of their everyday working habits. Consequently, it can be argued that the bundle of value propositions which Company X offers satisfies the customers' needs successfully. In addition, through this unique bundle of value propositions, Company X is gaining significant competitive advantage over larger service providers.

Only a few value propositions which were mentioned in the past research were not mentioned by the interviewed companies. Firstly, Sääksjärvi et al. (2005) adduced a concept of increased reliability that is associated with the SaaS based solution. Secondly, one time saving aspect associated with the e-Auction tool was not mentioned by the interviewed companies but it stood out from the past research. While Bartezzaghi and Ronchi (2005) state that the e-Auction events might save considerable amount of time compared to traditional process. The e-Auction tool allows a buyer to collect several bids in few minutes, whereas in a traditional process a buyer needs to call each supplier on every price level.

Business model development findings

As the empirical results shows, it can be stated that Company X's business model is quite efficient as all the possible tangible and intangible key resources and key activities are utilized effectively to create value for all the participants in their business model. Shafer et al. (2005) state that successful value creation nor value capture occurs within a value network that is expanding the company's own

resources while the value cannot be created just by executing the company's own actions. Company X's value network currently contains a few key partners. Through them the Company X is expanding its value creation ability and offering more comprehensive bundle of services. However, in order to achieve more efficient business model, expand business internationally and to create value more efficiently, the Company X should acquire more key partners or further deepen the relationships with the current ones. Moreover, through the key partners, Company X would be able to develop their resources more efficiently. Vargo and Lush (2004) emphasize the need for ongoing resource development as companies cannot consider resources as an enduring entity. Through partnerships the Company X would be able to create more innovative value propositions. The more a business model of a company is focused on innovations and creating new, the more effective their business model becomes (Zott & Amit 2007).

A few development issues concerning the e-Sourcing solution were found. However, these findings are strictly related to IT-skills of a particular user. The most essential findings were related to pricing grid function. Companies were experiencing some difficulties in utilizing this function correctly, especially, on the tenders which contain hundreds or even thousands of items. In addition, two of the companies stated that they would need more instructions integrated inside the system concerning each step of the tender aggregation. Moreover, one of the companies was criticising that the training at the beginning is not comprehensive enough. Therefore, by adding more specific instructions to the system, Company X could satisfy customers' needs better, save their and the customers' time in long run while the training in the beginning would not require changes when there is more instructions inside the system.

Only one considerable bottleneck of the Company X's business model was found which are the sales and marketing actions and resources. These are critical barriers achieving functional and successful business model. Piccoli et al. (2001) state that companies must make sure their customers are aware of their products and / or services and to help potential customers to see how company's own value propositions differ from the competitors. Company X should market their services

more actively to ensure that all the potential customers are aware of Company X and of services they can offer. However, Company X is continually investing in development in these areas. For example, through the key-partners, its visibility for the potential customers is continuously increasing.

8.2 Limitations and future research suggestions

The study explored how four of the Company X's customers are experiencing the usage of the solution and what their needs are. Consequently, the results cannot be generalized to the whole customer base. However, the interviewed companies operate in various industries with varying business models and therefore, it can be argued that the results may have some degree of generalizability and validity.

The past research highlighted the lack of understanding of how and why the e-Business technologies can create performance gains for companies' supply chain practices. Especially, the area of e-Sourcing is not comprehensively researched area as, for example, the area of e-Procurement. As a part of the whole procurement process, the e-Sourcing is rather underrated section as companies have not understood how much value the effective utilization of e-Sourcing tools would provide to them. Consequently, future research is needed on why and how the utilization of e-Sourcing tools bring value for the companies. In addition, more research is required to establish the reasons for the phenomenon if a company is experiencing that the e-Sourcing tools would not bring value for them and their area of industry.

This study was limited to explore only e-Tendering and e-Auction tools. However, the e-Sourcing solution of Company X contains two more tools: supplier management and contract management tools. Especially, the usefulness of the contract management tool for the procurement contracts is an essential area of research. Various companies do not have separated procedures to manage the procurement related contracts and other business contracts which leads to emerging inefficiency in the procurement process.

The utilization of e-Auctions can bring significant price reductions for companies. However, only one of the interviewed companies was utilizing the e-Auction tool. In addition, the e-Auction tools are not widely used in many countries. The potential reason for this is that the e-Auctions are still a relatively new e-Business tool and companies are not familiar and accustomed to use it. On the other hand, the auctions are widely used in C2C environment. For example, eBay is highly popular auction-based website where people constantly bid against each other. Consequently, it would be essential to explore the reasons of why the companies are shun of utilizing that beneficial tool in B2B environment.

References

Amit, R. & Zott, C. (2001). Value Creation in E-business. *Strategic Management Journal*, 22, (6-7), 493-520.

Aldin, N., Brehmer, P. O., & Johansson, A. (2004). Business development with electronic commerce: refinement and repositioning. *Business Process Management Journal*, 10(1), 44-62.

Aneela, S. (2009). Effective e-sourcing, *Supply Management*, 14(4), 40.

Bartezzaghi, E., & Ronchi, S. (2004). A portfolio approach in the e-purchasing of materials. *Journal of Purchasing and Supply Management*, 10(3), 117-126.

Bartezzaghi, E., & Ronchi, S. (2005). E-sourcing in a buyer-operator-seller perspective: benefits and criticalities. *Production Planning & Control*, 16(4), 405-412.

Byrne, N & McCarthy, O. (2014). Value proposition preferences of credit union members and patronage activity. *International Journal of Bank Marketing*, 32(6), 567 – 589.

Caniato, F., Golini, R., Luzzini, D., & Ronchi, S. (2010). Towards full integration: eProcurement implementation stages. *Benchmarking: An International Journal*, 17(4), 491-515.

Caniato, F., Longoni, A., & Moretto, A. (2012). Effective eProcurement implementation process. *Production Planning & Control*, 23(12), 935-949.

Caputo, A. C., Cucchiella, F., Fratocchi, L., Pelagagge, P. M., & Scacchia, F. (2004). Analysis and evaluation of e-supply chain performances. *Industrial Management & Data Systems*, 104(7), 546-557.

Carr, A. S., & Pearson, J. N. (2002). The impact of purchasing and supplier involvement on strategic purchasing and its impact on firm's performance. *International Journal of Operations & Production Management*, 22(9), 1032-1053.

Chen, I. & Popovich, K. (2003). Understanding customer relationship management (CRM): People, process and technology. *Business Process Management Journal*, 9(5), 672-688.

Chen, I. J., Paulraj, A., & Lado, A. A. (2004). Strategic purchasing, supply management, and firm performance. *Journal of operations management*, 22(5), 505-523.

Chesbrough, H. & Rosenbloom, R. (2002). The Role of the Business Model in Capturing Value from Innovation: Evidence from Xerox Corporation's Technology Spin-off Companies. *Oxford Journals, Industrial and Corporate Change*, 11(3), 529-555.

Choudhary, V. (2007). Comparison of software quality under perpetual licensing and software as a service. *Journal of Management Information Systems*, 24(2), 141-165.

Croom, S., & Brandon-Jones, A. (2007). Impact of e-procurement: experiences from implementation in the UK public sector. *Journal of Purchasing and Supply Management*, 13(4), 294-303.

Davila, A., Gupta, M., & Palmer, R. (2003). Moving procurement systems to the internet:: The adoption and use of e-procurement technology models. *European management journal*, 21(1), 11-23.

De Boer, L., Harink, J., & Heijboer, G. (2002). A conceptual model for assessing the impact of electronic procurement. *European Journal of Purchasing & Supply Management*, 8(1), 25-33.

Devaraj, S., Krajewski, L., & Wei, J. C. (2007). Impact of eBusiness technologies on operational performance: the role of production information integration in the supply chain. *Journal of Operations Management*, 25(6), 1199-1216.

Dobrzykowski, D. D., Tran, O., & Tarafdar, M. (2010). Value co-creation and resource based perspectives for strategic sourcing. *Strategic Outsourcing: An International Journal*, 3(2), 106-127.

Du, T. C. (2009). Building an automatic e-tendering system on the Semantic Web. *Decision Support Systems*, 47(1), 13-21.

Dubey, A., & Wagle, D. (2007). Delivering software as a service. *The McKinsey Quarterly*, 6(7), 1-12.

Eadie, R., Perera, S., Heaney, G., & Carlisle, J. (2007). Drivers and barriers to public sector e-procurement within Northern Ireland's construction industry. *Journal of Information Technology in Construction*, 12, 103-120.

Engelbrecht-Wiggans, R., & Katok, E. (2006). E-sourcing in procurement: Theory and behavior in reverse auctions with noncompetitive contracts. *Management Science*, 52(4), 581-596.

Ericson, C. & Edsinger, A. (2003). A Global Look at e-Sourcing. *Supply chain management review*. 7(6), 13-14.

Eskola, J. & Suoranta, J. (1998). *Johdatus laadulliseen tutkimukseen*. Tampere: Vastapaino.

Eskola, J. & Suoranta, J. 2008. *Johdatus laadulliseen tutkimukseen*. 8. painos. Tampere: Vastapaino

Fan, M., Kumar, S., & Whinston, A. B. (2009). Short-term and long-term competition between providers of shrink-wrap software and software as a service. *European Journal of Operational Research*, 196(2), 661-671.

Garrido, M. J., Gutiérrez, A., & San José, R. (2008). Organizational and economic consequences of business e-procurement intensity. *Technovation*, 28(9), 615-629.

Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The qualitative report*, 8(4), 597-606.

Gottfredson, M., Puryear, R., & Phillips, S. (2005). Strategic sourcing: from periphery to the core. *Harvard business review*, 83(2), 132-9.

Grant, A. & Schlesinger, L. (1995). Realize Your Customers' Full Profit Potential. *Harvard Business Review*, 73(5), 59-72.

Grönroos, C. (2011). Value co-creation in service logic: A critical analysis. *Marketing theory*, 11(3), 279-301.

Hannon, D. (2001) E-procurement strategies: E-sourcing 101 prepping for the next software explosion, 130(18), 1-3.

Hannon, D. (2003) Purchasing survey shows e-sourcing adoption stalls. *Purchasing*, 132(12), 49-51.

Hannon, D. (2005). More discipline from e-sourcing. *Purchasing*, 134(4), 22-23.

Hartley, J. L., Lane, M. D., & Duplaga, E. A. (2006). Exploring the barriers to the adoption of e-auctions for sourcing. *International Journal of operations & production management*, 26(2), 202-221.

Hirsjärvi, S. & Hurme, H. (1985) *Teemahaastattelu*. Helsinki: Gaudeamus

Hirsjärvi, S., Remes, P. & Sajavaara, P. (2007). Tutki ja kirjoita. 13. painos. Helsinki: Tammi.

Hirsjärvi, S., Remes, P. & Sajavaara, P. (2009). Tutki ja kirjoita. 15. uud. p. Helsinki: Tammi.

Hur, D., Mabert, V. A., & Hartley, J. L. (2007). Getting the most out of reverse e-auction investment. *Omega, The International Journal of Management Science*, 35(4), 403-416.

Griffiths, G. H. & Howard, A. (2008). Balancing Clicks and Bricks – Strategies for Multichannel Retailers. *Journal of Global Business Issues*, 2(1), 69-75.

Gunasekaran, A., & Ngai, E. W. (2008). Adoption of e-procurement in Hong Kong: an empirical research. *International Journal of Production Economics*, 113(1), 159-175.

Harrigan, P. O., Boyd, M. M., Ramsey, E., Ibbotson, P., & Bright, M. (2008). The development of e-procurement within the ICT manufacturing industry in Ireland. *Management Decision*, 46(3), 481-500.

Hawking, P., Stein, A., Wyld, D. C., & Foster, S. (2004). E-procurement: is the ugly duckling actually a swan down under?. *Asia Pacific Journal of Marketing and Logistics*, 16(1), 3-26.

Jap, S. D. (2002). Online reverse auctions: Issues, themes, and prospects for the future. *Journal of the Academy of Marketing Science*, 30(4), 506-525.

Johnson M. W., Christensen C. C. & Kagermann, H. (2008). Reinventing your business model. *Harvard Business Review*, 86(12), 50–59.

Johnson, P.F., Klassen, R. (2005). E-Procurement. *MIT Sloan Management Review*, 46(2), 7-10.

Johnston, D. A., Wade, M., & McClean, R. (2007). Does e-business matter to SMEs? A comparison of the financial impacts of internet business solutions on European and North American SMEs. *Journal of Small Business Management*, 45(3), 354-361.

Kajewski, S. L., & Weippert, A. (2004). e-Tendering: Benefits, challenges and recommendations for practice.

Kalakota, R., Robinson, M. (2001) *e-Business 2.0 – Roadmap for Success*. Upper Saddle River, Pearson.

Kambil, A., Ginsberg, A. & Bloch, M. (1996). Re-Inventing Value Propositions. *Information Systems Working Paper Series*, 96(21), 1-33.

Kananen, J. (2013). Case-tutkimus opinnäytetyönä. Jyväskylän ammattikorkeakoulun julkaisuja -sarja. Tähtijulkaisut, Jyväskylä.

Kaufmann, L., & Carter, C. R. (2004). Deciding on the mode of negotiation: to auction or not to auction electronically. *Journal of Supply Chain Management*, 40(1), 15-26.

Kauppi, K., Brandon-Jones, A., Ronchi, S., & van Raaij, E. M. (2013). Tools without skills: Exploring the moderating effect of absorptive capacity on the relationship between e-purchasing tools and category performance. *International Journal of Operations & Production Management*, 33(7), 828-857.

Kim, J. I., & Shunk, D. L. (2004). Matching indirect procurement process with different B2B e-procurement systems. *Computers in Industry*, 53(2), 153-164.

Koskinen, I., Alasuutari, P. & Peltonen, T. (2005). *Laadulliset menetelmät kauppatieteissä*. Tampere: Vastapaino.

Li, J., Merenda, M., & Venkatachalam, A. R. (2009). Business process digitalization and new product development: an empirical study of small and medium-sized manufacturers. *International Journal of E- Business Research*, 5(1), 49.

Lucking-Reiley, D. & Spulber, D.F. (2001). Business-to-Business Electronic Commerce. *Journal of Economic Perspectives*, 15(1), 55-68.

Nawi, M. N. M., Roslan, S., Salleh, N. A., Zulhumadi, F., & Harun, A. N. (2016). The Benefits and Challenges of E-procurement Implementation: A Case Study of Malaysian Company. *International Journal of Economics and Financial Issues*, 6(7), 329-332.

MacCarthy, B. L., Blome, C., Olhager, J. & Zhao, X. (2016). Supply chain evolution–theory, concepts and science. *International Journal of Operations & Production Management*, 36(12), 1696-1718.

Magretta, J. (2002). Why Business Model Matter. *Harvard Business Review*, 80(5), 86-92.

McGrath, R.G. (2010). Business Models: A Discovery Driven Approach. *Long Range Planning*, 43(2-3), 247-261.

Metsämuuronen, J. (2003). *Laadullisen tutkimuksen perusteet*. 2nd Edition. Jyväskylä: Gummerus kirjapaino Oy.

Metsämuuronen, J. (2007) *Tutkimuksen tekemisen perusteet ihmistieteissä*. Vaajakoski. Gummerus.

Mital, M., Pani, A., & Ramesh, R. (2014). Determinants of choice of semantic web based Software as a Service: An integrative framework in the context of e-procurement and ERP. *Computers in Industry*, 65(5), 821-827.

Nasim, A. (2009). Effective e-sourcing. *Supply Management*. 14(4), 40.

Nunes, P. & Johnson, B. (2002). *Stimulating Consumer Demand Through Meaningful Innovation*. Accenture Institute for Strategic Change. Research Report.

Osterwalder, A. (2004). *The business model ontology – a proposition in a design approach*. University of Lausanne.

Osterwalder, A. & Pigneur, Y. (2010). *Business Model Generation*. New Jersey: John Wiley & Sons.

Osterwalder, A., Pigneur, Y. & Tucci, C. (2005). Clarifying business models: origins, present and future of the concept. *Communications of the Association for Information Systems*, 16, 1-25.

Parida, V., & Sophonthummapharn, K. (2010). The effect of benefits and risks on e-procurement implementation: an exploratory study of Swedish and Indian firms. *International Journal of Information and Communication Technology*, 2(3), 186-201.

Paulraj, A., & Chen, I. J. (2007). Environmental uncertainty and strategic supply management: a resource dependence perspective and performance implications. *Journal of Supply Chain Management*, 43(3), 29-42.

Payne, A. F., Storbacka, K. & Frow, P. (2008). Managing the co-creation of value. *Journal of the Academy of Marketing Science*, 36(1), 83–96

Piccoli, G., Bonnie, R. & Ives, B. (2001). A Framework for Improving Customer Service through Information Technology. *Cornell Hospitality Quarterly*, 42(3). 38-45.

Poirier, C. C., & Bauer, M. J. (2000). *E-supply chain: using the Internet to revolutionize your business: how market leaders focus their entire organization on driving value to customers*. Berrett-Koehler Publishers.

Presutti, W. D. (2003). Supply management and e-procurement: creating value added in the supply chain. *Industrial marketing management*, 32(3), 219-226.

Quesada, G., González, M. E., Mueller, J., & Mueller, R. (2010). Impact of e-procurement on procurement practices and performance. *Benchmarking: An International Journal*, 17(4), 516-538.

Rai, A., Patnayakuni, R., & Seth, N. (2006). Firm performance impacts of digitally enabled supply chain integration capabilities. *MIS quarterly*, 225-246.

Rintamäki, T., Kuusela, H. & Mitronen, L. (2007). Identifying competitive customer value propositions in retailing. *Managing Service Quality: An International Journal*. 17(6), 621 – 634.

Ryals, L. (2002). Are your customers worth more than money? *Journal of Retailing and Consumer Services*, 9(5), 241-251.

Sabbaghian, N. (2009). E-sourcing: the key to effective procurement. *Supply Chain Europe*, 18(6), 14-15.

Sambasivan, M., Abidin Mohamed, Z., & Nandan, T. (2009). Performance measures and metrics for e-supply chains. *Journal of enterprise information management*, 22(3), 346-360.

Sanders, N. R. (2007). An empirical study of the impact of e-business technologies on organizational collaboration and performance. *Journal of Operations Management*, 25(6), 1332-1347.

Saunders, M., Lewis, P., & Thornhill, A. (2009). Understanding research philosophies and approaches. *Research methods for business students*, (4), 106-135.

Scott, C., Lundgren, H., Thompson P. (2011) *Guide to Supply Chain Management*. Heidelberg, Springer.

Seelos, C., & Mair, J. (2007). Profitable business models and market creation in the context of deep poverty: A strategic view. *The academy of management perspectives*, 21(4), 49-63.

Shafer S., Smith, J. & Linder, J. (2005). The power of business models. *Business Horizon*, 48(3), 199-207.

Singh, R. K., & Benyoucef, L. (2011). A fuzzy TOPSIS based approach for e-sourcing. *Engineering Applications of Artificial Intelligence*, 24(3), 437-448

Smart, A. (2010). Exploring the business case for e-procurement. *International Journal of Physical Distribution & Logistics Management*, 40(3), 181-201.

Soy, S. K. (1997). The case study as a research method. University of Texas at Austin. [www-document]. [Retrieved August 2, 2017] Available <https://www.ischool.utexas.edu/~ssoy/usesusers/l391d1b.htm>

Su, J., & Gargeya, V. B. (2012). Strategic sourcing, sourcing capability and firm performance in the US textile and apparel industry. *Strategic Outsourcing: An International Journal*, 5(2), 145-165.

Sääksjärvi, M., Lassila, A., & Nordström, H. (2005). Evaluating the software as a service business model: From CPU time-sharing to online innovation sharing. In *IADIS international conference e-society*, 177-186.

Tassabehji, R., & Moorhouse, A. (2008). The changing role of procurement: Developing professional effectiveness. *Journal of Purchasing and Supply Management*, 14(1), 55-68.

Teich, J. E., Wallenius, H., Wallenius, J., & Zaitsev, A. (2006). A multi-attribute e-auction mechanism for procurement: Theoretical foundations. *European Journal of Operational Research*, 175(1), 90-100.

Thompson, J. D., & MacMillan, I. C. (2010). Business models: Creating new markets and societal wealth. *Long Range Planning*, 43(2), 291-307.

Timmers, P. (1998). Business models for electronic markets. *European Commission, Directorate-General*, 8(2), 3-8.

Tindsley, G., & Stephenson, P. (2008). E-tendering process within construction: a UK perspective. *Tsinghua Science & Technology*, (13), 273-278.

Toktaş-Palut, P., Baylav, E., Teoman, S., & Altunbey, M. (2014). The impact of barriers and benefits of e-procurement on its adoption decision: An empirical analysis. *International Journal of Production Economics*, (158), 77-90.

Tunca, T. I., & Wu, Q. (2009). Multiple sourcing and procurement process selection with bidding events. *Management Science*, 55(5), 763-780.

Vaaland, T. I., & Heide, M. (2007). Can the SME survive the supply chain challenges? *Supply chain management: an International Journal*, 12(1), 20-31.

Vail, S. (2005). The tender connection. *Supply Management*, 10(15), 20-23.

Van Weele, A. J. (2009). *Purchasing and supply chain management: Analysis, strategy, planning and practice*. Cengage Learning EMEA.

Vargo, S.L. & Lusch, R.F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, 68(1), 1-17.

Vargo, S.L. & Lusch, R.F. (2008). Service-dominant logic: continuing the evolution. *Journal of the Academy of Marketing Science*, 36(1), 1-10.

Walker, H., & Harland, C. (2008). E-procurement in the United Nations: influences, issues and impact. *International Journal of Operations & Production Management*, 28(9), 831-857.

Wan, Z., & Beil, D.R. (2009). RFQ auctions with supplier qualification screening. *Operations research*. 57(4), 934-949.

Wein, L. M., & Beil, D. R. (2001). An inverse-optimization-based auction mechanism to support a multi-attribute RFQ Process.

Wu, F., Zsidisin, G., & Ross, A. (2007). Antecedents and outcomes of e-procurement adoption: an integrative model. *IEEE Transactions on Engineering Management*, 54(3), 576-587.

Zott, C. & Amit, R. (2007). Business Model Design and the Performance of Entrepreneurial Firms. *Organizational Science*, 18(2), 181-199.

Zott, C. & Amit, R. (2010). Business Model Design: An Activity System Perspective. *Lone Range Planning*, 43(2-3), 216-226.

Zott, C., Amit, R. & Massa, L. (2011). The Business Model: Recent Developments, and Future Research. *Journal of Management*, 37(4), 1019-1042.

Yin, R. (1983) Case research. Design and methods. *Applied Social Research Methods series*, Vol. 5. London, Sage

Yin, R. (2003) Case study research: design and methods. 3rd edition. Applied social research methods series, Vol. 5. Thousand Oaks: CA, Sage publications.

Appendix 1.

Semi structured e-Sourcing solution related interview questions for the customers

YLEISET

- Kuinka kauan olette käyttäneet ohjelmistoa
- Miksi kyseinen ohjelma aikanaan valittiin käyttöön
- Kuinka monta käyttäjää teillä on
- Kuinka monta pääkäyttäjää teillä on
- Kuinka monta normaalikäyttäjää teillä on

KÄYTTÖ

- Onko käyttömäärä lisääntynyt, vähentynyt vai pysynyt samana ajan saatossa
- Onko ohjelmiston käyttöönotossa tai käytössä ollut vastarintaa (vanha menetelmä toimii paremmin) Jos on niin millä keinoin sitä on saatu poistettua.
- Käyttävätkö kaikki hankintaosastot ohjelmistoa
- Koetteko että aiotte laajentaa käyttöä jossain vaiheessa esimerkiksi tarjouspyynnöstä myös huutokauppoihin tai muihin työkaluihin

KÄYTTÖKOHDE

- Minkälàisten kilpailutusten tekemiseen (suorat, epäsuorat, logistiikka) ohjelmisto soveltuu parhaiten ja miksi (Millaisiin kilpailutuksiin te sitä mieluiten käytätte)

- Minkälaisien kilpailutusten tekemiseen ohjelmisto ei mielestänne sovellu ja miksi (Oletteko jättäneet tietynlaisia kilpailutuksia tekemättä ohjelmistolla ja millaisiin kilpailutuksiin ette sitä mielellänne käyttäisi)

HYÖDYT

- Mitä konkreettisia hyötyjä olette saavuttaneet käyttämällä ohjelmistoa
- Onko hyötyjä mitattu
- Onko suuntaa antavaa arvioita ajansäästöistä ja rahansäästöistä
- Mitkä ovat tavoitteet ohjelmiston käytössä
- Oletteko saavuttaneet ohjelmiston käytöstä mielestänne maksimihyödyn (jos ette niin miksi, johtuuko teistä itsestänne vai voisiko palvelun tarjoaja tehdä jotain toisin)

KOULUTUS, TUKI JA HAASTEET

- Onko aloituskoulutuksemme mielestänne riittävä
- Kauan käyttäjät mielestänne tarvitsevat koulutusta ohjelmiston perehdyttämiseen
- Tarvitsevatko normaalikäyttäjät paljon pääkäyttäjän tukea ja neuvoja kilpailutuksen tekemiseen ja ohjelmiston käyttöön ylipäätään
- Onko tarjouspyyntötyökalussa joitain tiettyjä kohtia, jotka ovat haastavia -> mitkä kohdat eniten nopeuttaa ja mitkä kohdat koette ”haastaviksi” tai mitkä voisi toteuttaa nopeammin

- Ohjelmiston kautta tarjouspyyntöprosessia voi seurata reaaliaikaisesti → koetteko, että prosessi omaa paremman läpinäkyvyyden ja on täten paremmin hallussa
- Koetteko hyötyä siitä, että tarjouksen tiedot ja toimittajien tiedot kerätään keskitettyyn arkistoon hankintatiimin saataville ja ovat linkitettynä toisiinsa. Jos kyllä, miten hyödyt konkretisoituvat
- Koetteko saavanne helpdeskistämme / yhteyshenkilöltä tarvitsemanne avun tarpeeksi helposti ja nopeasti

HUUTOKAUPAT

- Oletteko tehneet huutokauppoja
- Soveltuvatko huutokaupat mielestänne omiin hankintoihinne
- Huutokaupan kriteerit ovat määriteltävyys, volyymi ja kilpailu – koetteko että teillä on sellaisia hankintoja joihin huutokauppaa voi hyödyntää
- Millaisia tuloksia olette karkeasti ottaen saavuttaneet huutokaupoissa
- Koetteko, että haluatte hyödyntää huutokauppoja tehdessänne Noventian apua vai tehdä itsenäisesti huutokauppoja – > jos tarvitsette apua niin mihin erityisesti

TOIMITTAJAT

- Kuinka toimittajat ovat kokeneet palvelun käytön
- Oletteko saaneet palautetta palvelusta toimittajilta

IDEAT

- Oletteko havainneet alustan käyttöön, toiminnallisuuksiin, tai palveluun liittyviä uusia tarpeita, joita palvelu ei vielä sisällä (ideoita palveluinnovaatioihin)
- Onko sinulla parannusideoita koskien Noventian palveluita tai toiminnallisuuksia

Appendix 2.

Semi structured Business Model related interview questions for Company X

KILPAILU

- Millaista kilpailua kohtaatte
- Miten pyritte erottautumaan kilpailijoista

ARVON LUOMINEN (arvolupaus)

- Miten pyritte luomaan arvoa asiakkaille
- Onko arvonluontiprosessi muuttunut ajan myötä
- Minkä takia asiakkaiden pitäisi käyttää juuri teidän palveluanne

ASIAKKAIDEN HALLINTA

- Miten hoidatte asiakassuhteitanne
- Millaisia asioita otatte huomioon erilaisia asiakkaissuhteita hoitaessa (toiset ovat tuottavampia kuin toiset)
- Kuinka pyritte sitouttamaan asiakkaat

MYYNTI JA MARKKINOINTI

- Kuinka markkinoitte / mainostatte ja missä
- Kuinka hankitte uusia asiakkaita
- Millainen on myyntiprosessinne (alusta loppuun)
- Oletteko segmentoineet kohdeasiakkaat myyntiin liittyen ja jos olette niin miten

MENESTYSTEKIJÄT JA RESURSSIT

- Mitkä ovat tärkeimmät menestystekijät

- Mitkä ovat tärkeimmät resurssinne (aineelliset ja aineettomat)
- Kuinka pyritte kehittämään resurssianne
- Toimitteko globaalisti vai tietyllä markkinalla -> Onko tarkoitus laajentaa toimintaa laajemmalle alueelle, jos on niin millä keinoin.

KUMPPANIVERKOSTO

- Onko teillä avainkumppaneita ja millaisiin tarkoituksiin
- Kuinka luotte arvoa kumppaneillenne
- Kuinka sitoutatte kumppaninne

RAHAVIRRAT JA KULUT

- Mistä / miten rahavirrat yrityksessänne muodostuvat
- Millaisista asioista kulunne muodostuvat