

LAPPEENRANTA-LAHTI UNIVERSITY OF TECHNOLOGY LUT
School of Business and Management
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Lili Tahko

Public procurement from supplier perspective: comparing supplier companies of different sizes

Masters' thesis

Examiners:

Professor Jukka Hallikas

Postdoctoral researcher Elina Karttunen

ABSTRACT

Author:	Lili Tahko
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The aim of this master's thesis is to examine public procurement from supplier perspective. The study explores the experiences of companies of different sizes in public procurement processes, especially in tendering processes. From the perspectives of companies of different sizes, it is possible to consider what matters affect to the activities of companies of different sizes in tendering processes and the contract period. This aspect is based on the requirement of the procurement act to consider small and medium-sized companies.

Empirical research is both quantitative and qualitative research. Quantitative research conducted a questionnaire survey to supplier-side companies. The results were deepened by qualitative research, theme interview, to the supplier side of the business. The results of the study show that companies of different sizes have different factors that influence their success in tendering, especially resources.

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Tämän pro-gradu työn tarkoitus on tutkia julkisia hankintoja toimittajan näkökulmasta. Tutkimus selvittää eri kokoisten yritysten kokemuksia julkisten hankintojen prosesseissa, erityisesti kilpailuttamisessa. Eri kokoisten yritysten näkökulmien kautta voidaan pohtia mitkä asiat vaikuttavat eri kokoisten yritysten toimintoihin kilpailuttamisessa ja sopimuskaudella. Näkökulmaa pohjustaa hankintalain edellytys huomioida pienet ja keskisuuret yritykset.

Empiirinen tutkimus on määrällinen sekä laadullinen tutkimus. Määrällinen tutkimus toteutettiin kyselytutkimuksena toimittaja puolen yrityksille, jonka tuloksia syvennettiin laadullisena tutkimuksena teema haastatteluna, myös toimittajapuolen yrityksille. Tutkimuksen tuloksien pohjalta voidaan todeta, että eri kokoisilla yrityksillä on eri tekijöitä, jotka vaikuttavat niiden menestykseen kilpailuttamisessa, erityisesti resurssit.

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1 INTRODUCTION

The introduction chapter leads the reader to the main matters of the study. The introduction includes the background of the study, why the matter is being examined and it also represents the objectives, research question and hypothesis to open the aims of the study.

1.1 Background

The base for the research is the authors own interest to public procurement and own background from the first procurement work assignment. Public procurement can be considered different, comparing to private sector procurement, because of the regulations. It is important that the end result of the procurement is high-quality and cost-effective contracts.

Public procurement pursues to enhance European Union's single markets, and this is achieved with regulations. In public procurement is liability to tender procurement and the purpose of this is to improve supplier's possibilities to offer their products and services to public sector in European Union (Eskola 2011, 21). Also, the main purpose is to enhance usage of public funds (Määttä & Voutilainen 2017, ch 1.1). Through tendering process and public procurement legislations is considered equality and non-discrimination of suppliers and efficient and transparent tendering are contributed (Ministry of Economic Affairs and Employment of Finland 2018b).

This study aims to consider public procurement from suppliers' aspect comparing experiences from processes between companies of different sizes. Procurement act obligates procurement units to observe different size of companies, especially small and medium size companies. Thus, it is also important to notice that the obligation to consider small and medium size companies in the procurement should not be driven ahead of the main purpose of the procurement. (Eskola, Kiviniemi, Krakaus & Ruohoniemi 2017, 33) According to this, the study aims to examine through aspects procurement act and consideration of small and

medium size companies, how different size of supplier companies experience public procurement processes, when comparing micro, small, medium and large companies. According to above, when considering these matters in theory, and with gathered data, can be considered public procurement processes from supplier perspective even better. The results indicate that resources are the one of the main factors which influences how much companies of different sizes can invest in tendering and to the contract period.

The literature review leads to the main themes of the study; supply management, public procurement, buyer-supplier relationship management, how different size of companies are considered and innovations. The main themes, which are introduced in figure 1., are included to the literature review to open the basic concepts of supply management in private and public sector, it considers the strategic point of supply management in company's actions. Also, the literature review discourses public procurement on its basis. The public procurement act governs the actions on it, and the study introduces the public procurement act and how the act affects to procurement in general. As the study considers suppliers point, it is important to consider buyer-supplier relationship management, because it is heavily related to supply management. From it can be gained versatile benefits and excellent relationship management can make purchasing particularly profitable on both sides. As in public procurement, it is important to treat the supplier equally, the study aims to examine how different size of supplier companies' experience public procurement processes. Also, innovations are considered because of its importance to business.

The main themes support each other and therefore are included to the study:



Figure 1: Main themes of the study

The study is accomplished by using quantitative and qualitative methods the research methods are better presented in the chapter 4.1 First, quantitative study survey results were compared between micro, small, medium, and large companies. This was followed by

qualitative research; the survey results were deepened by theme interview. After analysis of all results can be given conclusions and suggestions for future researches.

1.2 Objectives and research question

The objective of this study is to consider public procurement processes, buyer-supplier relationship management and innovations from the suppliers' aspect. The aim is to give suggestions from suppliers' point of view. By considering the perspective of companies of different sizes, it is also possible to examine whether the company size has an impact on sourcing decisions or on the management of supplier relations. There are lot of researches related to public procurement. Thus, often the researches concentrate on buyers' side. It is important to research from both sides, so that the market functionality is stable and observe also supplier side in the regulated tendering. According to this, the *research questions* are:

1. Does company size have effect to supplier companies' experiences and knowledge in public procurement?

1.1 How different size of companies experience public procurement processes?

1.2 How companies consider development and innovations, especially companies of different sizes?

In this study is used deductive approach. Saunders et al. (74, 2016) describes deductive approach as where is used previous literature to identify theories and ideas. Subsequent the theories and ideas are tested using data. In this study the aim is to review literature, develop conceptual framework and test it using data.

In inductive approach, which is an opposite approach to deductive, the aim is to develop theories from explored data. (Saunders et al. 74, 2016) This approach is not used in this study, because reverse order to operate data and literature is not suitable for this study.

The figure 2 represents the hypothesis of the study. The hypothesis considers the main matters of the study; public procurement, buyer-supplier relationship and innovations. Finally, the purpose of the study is to compare how different sizes of businesses experience the main matters. Because the research question itself examines the answer to how companies of different sizes perceive public procurement, certain things were assumed through hypotheses, more specifically which matters affect to the experiences to companies of different sizes. The hypotheses are as follows:

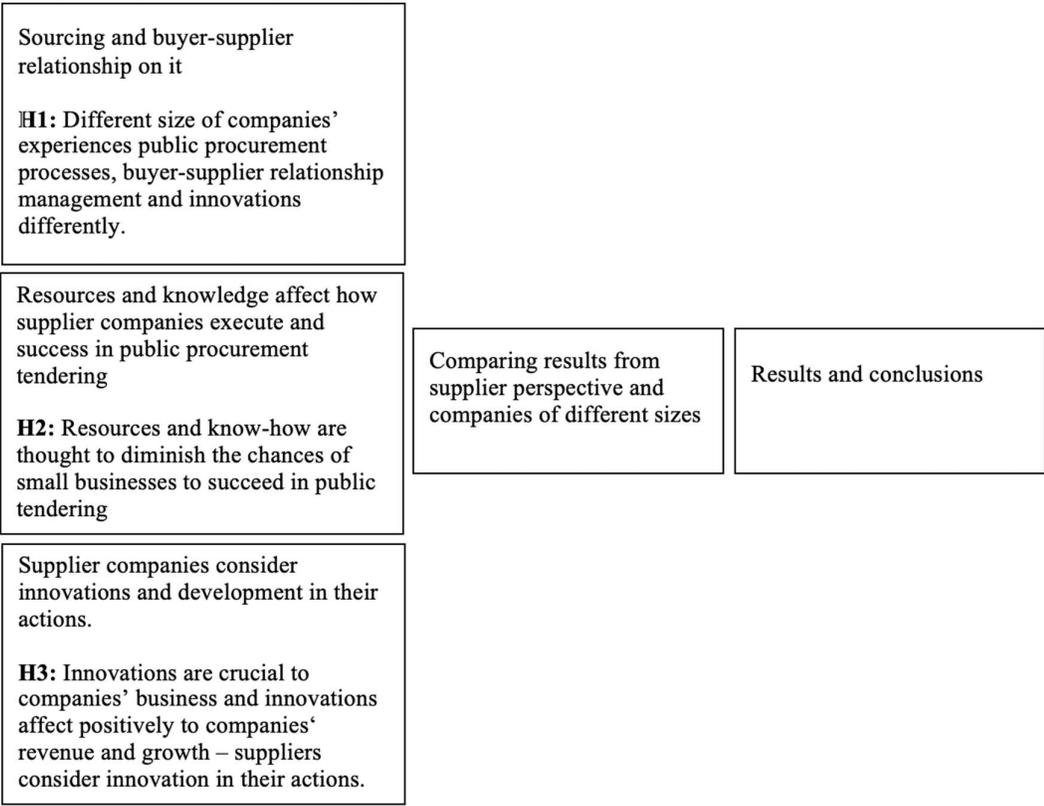


Figure 2 Hypothesis of the study

Hypothesis 1: When considering public procurement, it is important to notice that every supplier company should have equal opportunities (Karjalainen & Kemppainen 2008, 230). According to this, the study focuses on supplier's perspective in public procurement and how micro, small, medium and large size companies experience public procurement processes. *Hypothesis 1* assume that different size of companies' experiences public

procurement processes, buyer-supplier relationship management and innovations differently.

Hypothesis 2: According to literature, can be highlighted resources and knowledge as considerable factors, which affects to different size of companies tendering success, especially to SME companies' success (Saastamoinen, Reijonen & Tammi 2018, 4). According to this *hypothesis 2* expects that the smaller the company, the less it can invest in competition and tendering. Resources and knowledge can be expected to affect smaller companies' actions and experiences in competitive tendering. The basis for the assumption is that SME companies have lesser success rate in public procurement and more difficulties to respond to call for tender for public procurement.

Hypothesis 3: Innovativeness is topical matter and according to Saastamoinen, Reijonen & Tammi (2018, 2) innovations often affect positively to companies' performance and growth. Also, supplier companies have an important role in supply chain management when considering innovations. (Kim & Chai 2017, 42) According to this *hypothesis 3* assume that supplier companies are aware of their importance when considering innovations and supplier-side companies take account this in their actions.

1.3 Theoretical perspective resource-based view

One of major research area in strategic management field is understanding sustained competitive advantage (Barney, 1991, 99). The theoretical perspective called resource-based view or resource-based theory is field of research concentrating on unique firm-specific resources (hereafter RBV). In RBV the sustained competitive advantage is gained from internal strengths, neutralizing external threats and considering weaknesses from inside the company. Competitive advantage is sustained only when the source is valuable; that improves effectiveness and efficiency. (Nothnagel, 2008, 20; Barney 1991, 99-106)

According to Nothnagel (2008, 21) in RBV is highlighted that firm's resources are heterogeneous and Flynn concludes (2017, 993) that RBV theory is inside out viewing firm's performance. Through firm-specific resources can be achieved competitive advantage and

performance. In RBV resources are intangible or tangible bundles which are not commonly shared with another companies. Resources can be called as strategic resources, because based on these can be built competitive advantage. RBV is to create sustainable competitive advantage where is emphasized firms' internal recourses. It is important to understand this in strategic management. (Nothnagel, 2008, 20; Barney 1991, 99-106)

Resource based view is selected to support this study because capabilities and resources are valuable in tendering. According to Flynn (2017, 993-994) resources and capabilities impact to success level in the public sector marketplace and Flynn (2017, 993-994) also concludes that based on number of studies the finding shows that assets available for public tendering are related to firms' size.

1.4 Key concepts

To the study is selected certain key concepts. Public procurement and sourcing are the main key concepts of the study. Buyer-supplier relationship is included because it is heavily related to sourcing. The aim is to concentrate to these specific areas, which are essential to the study. This chapter introduces the key concepts which are opened in the literature review more specifically. The key concepts are;

Supply management and sourcing

Supply management is when company is procuring products and services to drive, maintain, lead and improve its business – supply management can be called external resource management. Supply managements main purpose is to support company's substance activity, and make it run without problems. (Nieminen 2016, 10) Sourcing is a function of supply management, and according to Sollish & Semanik (2011, 1) it is where is added maximum value to buyer's products and services. In sourcing process is located, developed, qualified and employed suppliers to gain the value. Supply chain management excellence comes from right selected suppliers. (Sollish & Semanik 2011, 1)

Public procurement

When public organizations are procuring for public consumption, it is called public procurement. When executing public procurement, it is important to adhere to procurement acts and regulations. Public procurement can be complex, and it requires merging different competing priorities. (Keränen 2017, 200) Public sector has massive buying power and public procurement's purpose is to fulfill public administration's needs and demands. (Obwegeser & Müller, 2018, 1)

Buyer-supplier relationship

As supplier management is an important element in supply chain management, the study includes a buyer-supplier perspective. According to Tanskanen (2015, 577) researches underline buyer-supplier relationships and how critical it is to a firm's performance – value is created in relationships. Also, Gullet, Do, Canuto-Carranco, Brister, Turner & Caldwell (2009, 329) concludes how important buyer-supplier relationships are in the business world, and search engines for scholarly articles include over 2000 articles related to the matter. Buyer-supplier relationship is a critical element of supply chain (Gullet et al. 2009, 329).

Innovations

Innovation concept can be interpreted in different ways. Innovation can be different matters from design or process to a new product (Kim & Chai 2017, 42). Innovations demand arise from the markets and new innovations are crucial to companies' business. (Nieminen 2016, 133; Fawcett, Jones & Fawcett 2012, 163). The supplier's role in buying organizations' innovations is important and innovations are created in unique buyer-supplier relationships. (Fawcett et al. 2012, 164)

2 SUPPLY MANAGEMENT

In the next chapter is introduced supply management and its importance in a company's actions. Supply management should be considered as a strategic function, because through good supply management can be influenced a company's overall performance.

2.1 Supply management

Supply management is in company's management one of the key components. (Ivanov & Sokolov 2010, 2) According to Monczka, Hanfield, Giunipero & Patterson (2011, 10-11) supply management is managing company's supply base effectively through planning – it is strategic approach to achieve organizational mission. Also, Spina, Caniato, Luzzini & Ronchi (2012, 1202) describes supply management as managing product, information and fund flows in the supply network through process-oriented approach – from suppliers to the end customers. To achieve strategic goals, should be used cross-functional teams and effective management. Supply management is all about strategic objectives. To achieve the set objectives, company needs to manage its resources and related capabilities. (Monczka, Hanfield, Giunipero & Patterson 2011, 10-11)

As it was stated above, supply management starts from suppliers and ends to customers. The range from raw material to end customers use can be long and the figure 3. represents supply chain as when it is at the simplest. First, the raw materials move to production and from production to end customers use. (Scott, Lundgren & Thompson 2011, 2)

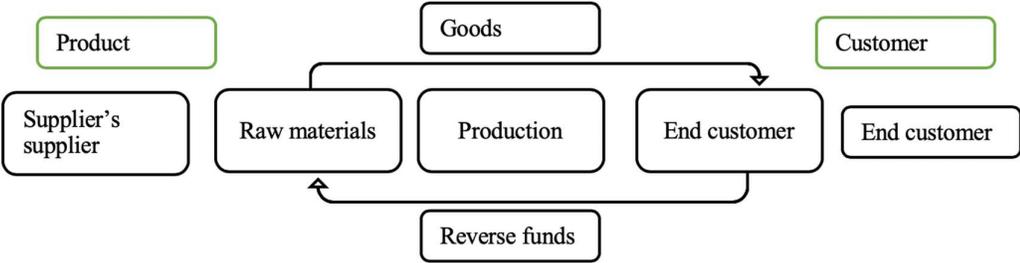


Figure 3: Supply chain, adopted from Scott, Lundgren & Thompson 2011, 2

In the literature the terms related to supply management can vary. Monczka et al. (2011, 10-11) describes term purchasing how it ensures the maximum value of delivers, and also it includes supplier identification and selection. Also, according to Monczka et al. (2011, 10-11) purchasing is “*buying, negotiation and contracting, supply market research, supplier measurement and improvement and purchasing system development.*” Purchasing includes five important steps;

- The right quality

- The right quantity
- The right time
- The right price

As purchasing is related to above mentioned matters, supply management is more strategic approach. Supply management is about strategic responsibilities, and these are connected to long-term performance from which is excluded routine responsibilities of purchasing. Supply management can be described as managing supply base but not in traditional arms-length approach. (Monczka et al. 2011, 10-11) Companies implement strategies based on collaboration, to ensure competitiveness in long-term, and collaboration is also connected to company's survival. (Ivanov & Sokolov 2010, 19)

According to Monczka et al. (2011, 12) supply management is to realize company's supply chain performance by e.g. managing, developing and selecting suppliers – to gain competitive advantage against competitors. In supply management demand and supply are balanced and through this can be gained course how sourcing, where production and delivery is managed. (Scott, Lundgren & Thompson 2011, 4) It is important to notice, how supply management is long-term win-win relationships between buying organization and selected supplier. It is involving internal and external resources to achieve advantages. The advantages can be in quality control, cycle times or in cost management. Good practices used in supply management indicates good results in company's overall performance. (Monczka et al. 2011, 12)

To achieve supply management excellence, the matters do not just happen. Monczka et al. (2011, 19-21) represents four pillars, which companies should consider. The pillars are introduced in figure 4. According to Monczka et al. (2011, 19-21) the four pillars includes divisions; human resources, organizational design, information technology and measurement.

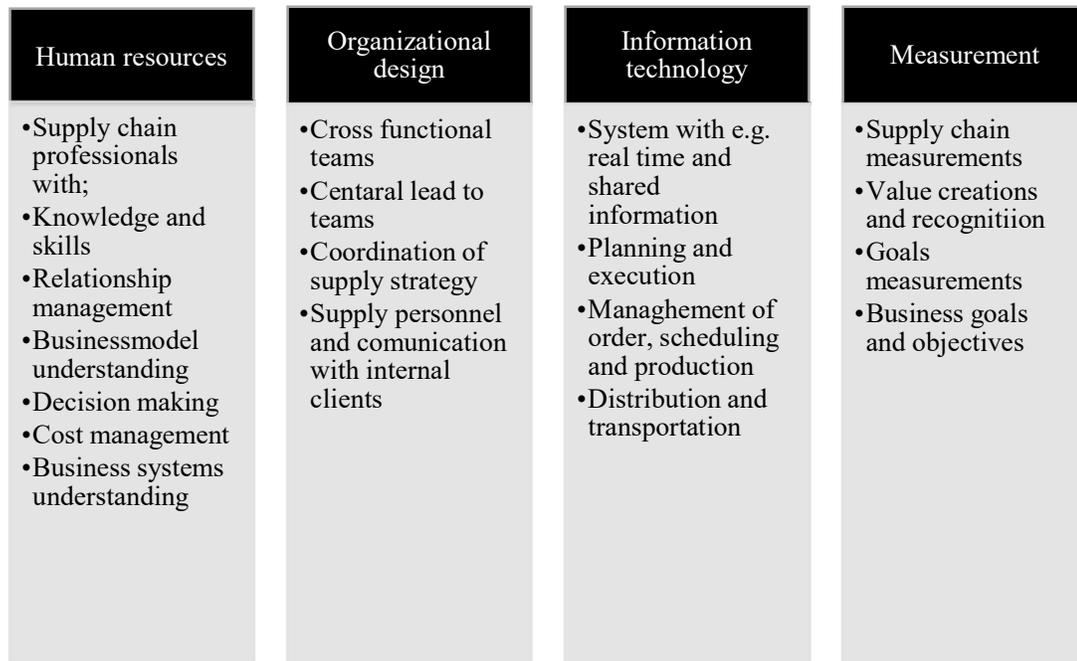


Figure 4: Four pillars of supply management excellence adopted from Monczka et al. 2011, 19-21

When considering these four pillars, company enables to achieve excellence in supply management and purchasing. Everything starts from company's business requirements and philosophies. These are matters such as supply chain integration, total cost management and reduced cycle times. The four pillars capabilities should support the company's development strategies and approaches. Sourcing strategy approach is also important to decide, and the matters which affects to sourcing strategy are market conditions, objectives and user preferences. (Monczka et al. 2011, 220-210, 42) Strategy, development and planning can be highlighted as important factors when company strives to supply management excellence.

2.2 Strategic sourcing

Sourcing is a function within supply chain management, and when buying team is looking for suppliers which are potential to their needs, the sourcing starts. Figure 5 represents phases of pre-order process, where sourcing is included. Sourcing can be split in high level into

two main categories. At first is the selection phase, where new right supplier is searched and selected. The supplier offers the desired product or service. Also, in this phase the supplier is analysed and the contract will be set up. What the second phase will be is supplier management over period of time. The time period depends, and it can be one-off purchase for short time or long time period for core materials of services. (Scott et al. 2011, 37-40)

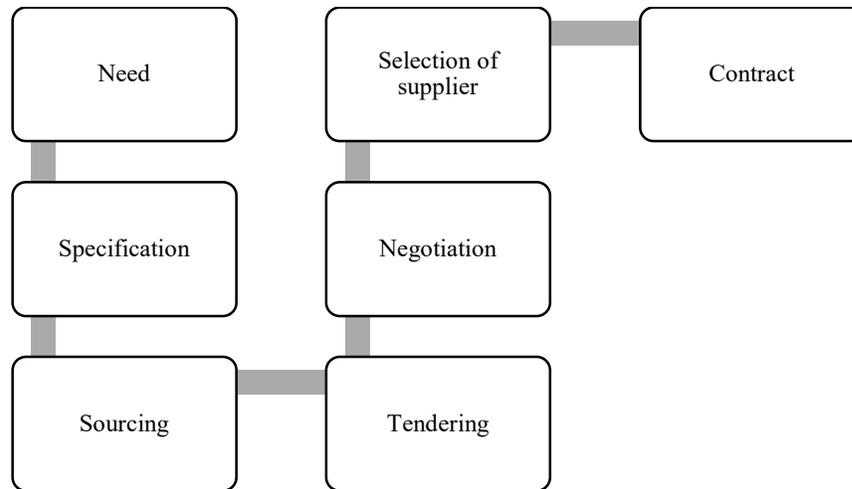


Figure 5: Sourcing adopted from Scott, et al. 2011, 40

Strategic sourcing is considered when company starts to outsource its products or services – to decide from who and how the product or service is bought outside the company (Monczka et al. 2011, 204). Sourcing is competitiveness and risk management and Kim & Chai (2017, 44) describes strategic sourcing as achieving operational and performance objectives utilizing supply network design and supply management. Also, according to Nieminen (2016, 13) it is important to notice that sourcing is not just purchasing products for company's needs. To accomplish sourcing, there are different practices to do it and Zhou, Shou, Zhai, Li, Wood & Wu (2014, 625) describes that literature has identified several different practices and the main identified best practices are;

- Selected purchasing team
- Long-term suppliers, key suppliers and reducing supplier base
- Using Just-In-Time practices
- Evaluation of supplier's performance and feedback

Sourcing is often divided into two different lots, strategic sourcing and operational sourcing. Operational sourcing is related more to daily business such as executing purchase orders and monitoring of deliveries. (Nieminen 2016, 11) According to Kim & Chai (2017, 44) to achieve operational and performance objectives, companies use strategic sourcing. It is supplier management and supply network design process. Nieminen (2016, 11) describes that, strategic sourcing is long term aims, management of sourcing and development of sourcing. Strategic sourcing in companies' practices can be highlighted, as Apte, Rendon & Salmeron (2010, 221) emphasize how purchasing functions have transformed from passive, reactive process to proactive and strategic functions. Strategic sourcing can be used in many different ways, and it has increased its attention in supply chain management literature. When applying strategic sourcing, it effects positively to company's supply chain agility and flexibility. It also improves buyer-supplier relationships. (Kim & Chai 2017, 44)

From literature can be stated, that strategic sourcing is positively associated to company's profitability (Kim & Chai 2017, 44). Apte, Rendon & Salmeron (2010, 221-223) highlights how strategic sourcing can be related to supplier development, supplier relationship and other contexts, as well Kim & Chai (2017, 44) emphasizes how strategic sourcing has positive impact to buyer-supplier relationships. In public procurement, current researches have focused strategic sourcing as competitive markets, innovations and demand-oriented policy. In public procurement it is also important to focus on contract management process in the turbulent marketplace. (Apte, Rendon & Salmeron 2010, 221-223)

Analyses and development of purchasing are important. Hesping and Schiele (2016, 101) underlines, that competitive advantage is achieved through strategic management of supply markets. Thus, it is important to notice that suppliers and purchased services and products should not be managed in the same way. Also, Moeller, Fassnacht & Klose (2006, 71) highlights that "on size fits for all" strategy is not suitable to use, and every supplier should not be treated as close partners. According to Nieminen (2016, 81) analyses and development can be done in two different ways; viewing total costs of purchasing or purchasing processes. When analyzing total costs of purchasing, can be examined where is the potential and importance of sourcing and business through euros. But also, analyses can be done when considering processes, developing purchasing processes functional and effective. (Nieminen 2016, 81)

According to Monczka et al. (2011, 204) category management in strategic sourcing is one of the most important way to create value and sourcing strategy typically focuses on categories. The categorization can be also called as strategy and through it can be identified right suppliers to every category. Products or services are divided in categories and each category has specific team. Categorization may have main categories, and subcategories. The categorization enables company to discourse specific products and services as stand-alone business. (Monczka et al. 2011, 204; Scott et al. 2011, 42)

According to Scott et al. (2011, 42) the main steps in category sourcing are “*profile the category group – select the sourcing strategy – generate the supplier portfolio – follow the purchasing process - negotiation*”. With category strategy can be also used to divided e.g. contract form, measures to performance or price and quality. (Monczka et al. 2011, 204)

Categorization and the benefits of it have been recognized long ago. Peter Kraljic introduced in 1980s purchasing portfolio analyses, which considers purchasing volumes and supplier markets. Although the portfolio analyze was introduced in 1980s, it is still in general use in organizations. Analyze is simple, usable and visual, and portfolio analyze includes four different types of main categories. By using these main categories, products can be distributed to; non-critical, leverage, bottleneck and strategic purchases. (Nieminen 2016, 85; Hesping and Schiele 2016, 101)

For every main category is introduced specific tactics and these are introduced in figure 6. The main categories are described low vs. high. Functionality of the supplier markets and supply risk are described in horizontal axis (the more the arrow moves to the right, the harder the market is) and profit impacts and strategic importance are described in vertical axis (the more the arrow moves the higher, the harder the market is). (Nieminen 2016, 86; Hesping and Schiele 2016, 102)

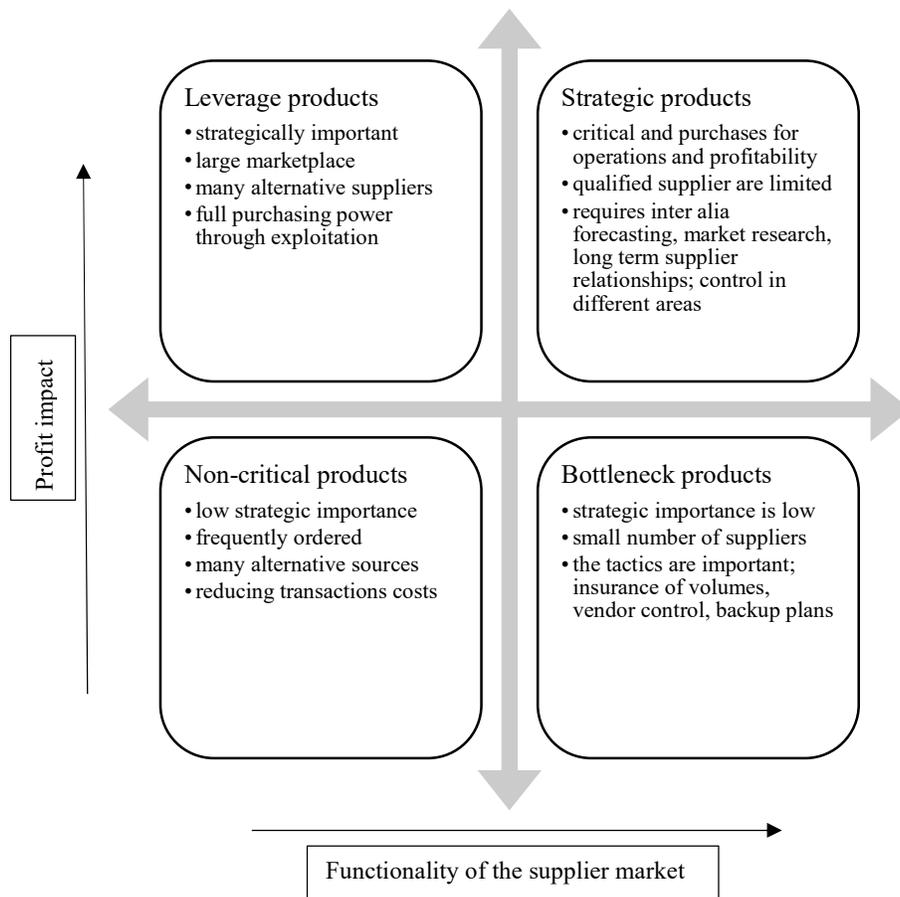


Figure 6: Categorization adopted from Nieminen 2016, 86; Hespings and Schiele 2016, 102

It is important to consider organizations competitiveness and performance, and these are fulfilled through suitable processes and resources. When considering these in purchasing, the competitiveness and performance comes from right suppliers and functional purchasing processes. The development should be considered from the point of view of the whole supply chain and over organizational boundaries. (Nieminen 2006, 96, 98)

2.3 Buyer-supplier relationship

Supplier relationship management, also called buyer-supplier relationship management, is managing the link between buyer and supplier proactively (Scott et al. 2011, 44). Purchasing functions are considered nowadays as competitive functions of firms, and therefore academic literature and business practices has increased attention to buyer-supplier

relationships. Purchasing has increased its strategic importance and relationships has changed more to cooperation-perspective. (Moeller et al. 2006, 70) Also, the importance of relationships arises from risks, as Hallikas, Puumalainen, Vesterinen & Virolainen (2005, 73-74) highlights how supply networks are vulnerable to different risks because of the complexity of it. According to this the importance of supplier relationship management has increased. Different suppliers need distinct practices and it is achieved through effective supplier management. (Hallikas et al. 2005, 73-74)

Good supplier relationship management can indicate different benefits, and according to Scott et al. (2011, 44) in company's actions these are such as;

- Joint thinking and innovations
- Supply chain visibility to both supplier and buyer
- Asset sharing across supply chain
- Duplications are removed
- More reliability through visibility to all parties

The crucial matter in buyer-supplier relationship is to understand that suppliers are an important resource. If buyer company does not ensure the performance of their supplier companies, it means that the buyer company's own performance is in low level. (Nieminen 2016, 18) Also, Moeller et al. (2006, 70) concludes that too constricted important suppliers are unable deliver quality. This means wasting resources and it leads competing short-term benefits. According to Park, Shin, Chang & Park (2010, 497) purchasing strategies of suppliers can be divided into two different categories; competitive approach where buyers purchase goods for minimum prices because of competition between suppliers. And the second is where buyer and supplier creates cooperative, strategic relationship to achieve long-term goals. (Park, Shin, Chang & Park 2010, 497)

Many companies are nowadays dependent from their suppliers because large amount from their cash flows goes to purchasing. With good buyer-supplier relationships, companies can secure the availability of their strategic products and services – the dependence of supplier should not be negative matter. From good buyer-supplier relationship companies can also

gain power to their product development or to innovativeness. (Nieminen 2016, 13) Collaboration with supplier leads to many different positive matters, and according to Moeller et al. (2006, 71) these are such as increased responsiveness, reduced inventory levels, cost savings, information flows and increasing business.

Supplier selection is an important part of good buyer-supplier relationship, and according to Park et al. (2010, 497) supplier selection process is complicated because of buyer's needs. Two problems arise; single source where one supplier fulfills buyer's needs – which supplier is the best. Second problem arises in multiple sourcing where buyer needs to choose multiple suppliers. (Park et al. 2010, 497) When considering supplier base in private and public sector, the difference is that public sector seeks to include more suppliers to increase the competition as private sector seeks to minimize suppliers, because this way can be controlled risks better. (Arlbjørn & Freytag 2011, 204)

The value creation takes place in the networks and that is why organizations has need to understand relationships better. The key is to understand how relationships work, and what the impacting factors are. The buying organization is traditionally the directive organizations when considering buyer-supplier relationships and value creation. Value creation in relationships can be in the tasks inside the contract or outside the contract. It is important to buying organization to be attractive to suppliers, because suppliers invest in these relationships more. (Nieminen 2006, 107-109)

As good buyer supplier relationships have benefits, it is also important to consider the risks on it. According to Hallikas & Lintukangas (2016, 487) the dependency, which arises from outsourcing and using external competencies, can leave companies vulnerable. Supply chain includes risks which can be e.g. disturbance and Hallikas & Kähkönen (2016) highlights how financial impact from risks can be large. In supply chain management is important to share risks and rewards with the supply chain members and when e.g. handling incidents or doing risk assessment, it is important to have open discussions with suppliers. When considering risk assessments with suppliers, working together is the key component. When buyer and supplier do risk identification, management, risk assessment and planning of business continuity together, the risk management is expanded to suppliers and sub-suppliers. (Norrman & Jansson 2004, 454)

2.4 Supplier market

The decision of where to source and what is the relationship type with the supplier are the main questions when company is outsourcing products or services. (Väänänen 2017, 46) This is the process which is called strategic sourcing (Monczka, Handfield, Giunipero & Patterson 2011, 204). Handfield (2010, 43) describes how through supply chain strategies can be responded and monitored appropriately market conditions. Also, according to Handfield (2010, 43) it is important that companies have intelligence to markets, and through this can be gained insight to “*core elements of market trends, commodity pricing, global capacity, and government and regulatory changes*”.

Väänänen (2017, 47) highlights how purchasing market research is one of the main elements of purchasing, it is process management. Through market research can be saved transaction costs and also consider supply risks. To achieve good results, purchasing unit needs to understand the supplier markets. (Väänänen 2017, 47) Also, team building is core element in strategic sourcing and according to Monczka et al. (2011, 205) using team approach and mixing personnel from different functions in organization brings knowledge to sourcing. In this matter it is important to set goals, boundaries and purpose to the sourcing. (Monczka et al. 2011, 205)

It is important to fully understand business unit objectives when sourcing. First, spend analysis can be used to determine past expenses. This is performed to supplier and supplies in specific category. It is important to pay attention to spend analysis to identify the supplier who are the primary sources in particular category. Only then can be started research in the marketplace. The importance is in understanding and building key suppliers. (Monczka et al. 2011, 209)

According to Monczka et al. (2011, 209-2010) in market research should be noticed

- Annual purchased volumes
- Specification of requirements which demands interview with stakeholders
- Key supplier identification through market research

Nieminen (2016, 14) also describes when nowadays companies outsource many of their activities, it is important to consider risk management. The risks can arise from e.g. global markets, when companies purchase their raw materials from abroad. It is important to consider the status of buyer company, because e.g. when demand is over supply, suppliers can prioritize the buyer companies. (Nieminen 2016, 14) Handfield (2010, 43) describes how organizations which invest in supply market intelligence creates competitive advantage and reduces risks. The results are achieved through supply market knowledge. Handfield (2010, 43) highlights three matters, which are an important factor in supply market intelligence;

- Intelligence in global markets, to support sourcing professional's strategic decision through forecasting and market intelligence
- Benchmarking to determine performance of company's sourcing
- Paying attention to emerging markets, support in expanding activities in these markets

In public procurement it is important to consider the preparation of the procurement and reserve time to it, especially when considering e.g. innovative solutions, and before the main procurement starts is recommended to do market analysis. Market analysis includes phases such as informing supplier markets about future procurement and/or request for information from suppliers as aim to sort out supplier willingness to participate or potential to offer to specific procurement. (Kuuttiniemi & Lehtimäki 2017, 261)

2.5 Value creation

Creation of added value is the basic element of business. When considering value creation on its basis, value creation is connected to product or service, but more broadly, it is dispersed over whole supply chain. (Ivanov & Sokolov 2010, 1) According to Kähkönen & Lintukangas (2018, 979) value creation is one of the aims in business as it is also competitive advantage in firm performance. Nieminen (2016, 16) highlights how business networks are important in value creation and collaboration. When competitive advantage is in the whole business networks interest, can be created value. In this point collaboration is fundamental

activity. It is academically proved that good business relationships effects positively to company's profitability. (Nieminen 2016, 16)

From the literature can be highlighted the relationship of value creation and networks, when Kähkönen & Lintukangas (2018, 979) emphasise how value creation potential is in the networks also, Holweg & Helo (2014, 230) highlights how nowadays entire value chains compete, not only companies. Value creation is traditionally considered as cost savings. Nowadays, in modern way, it is considering supplier development and supplier's role in supply management. This modern way of value creation means more collaboration with suppliers. (Kähkönen & Lintukangas 2018, 979)

According to Nieminen (2016, 16) collaboration and business relationships can be described in different ways and according to the type of the relationship. One description is that both parties should be committed to fulfill the expectations and this means active long-term work. (Nieminen 2016, 16) Supply management and value creation has clear connection and the connecting factors are collaborative relationships and supply management significance recognition in company and management of supplier relationships (Kähkönen & Lintukangas 2018, 979-978, 992).

Kähkönen & Lintukangas (2018, 979-978, 992) highlights how value is created in purchasing function nowadays in modern way, through suppliers. Also, supply management can be called also as interface to innovations, development, supply risk reduction and increasing competitiveness. All this requires integrated collaboration and supply chains. Companies needs to understand how value is created through managerial perspective, with their understanding and knowledge. (Kähkönen & Lintukangas 2018, 979-978, 992)

2.6 Innovations

Innovating is crucial to success and it can be related to products, organizations or supply chains, and Fawcett, Jones & Fawcett (2012, 163) describes how sustainable advantages source is innovations. Innovations and company' revenue growth is often positively associated and companies' performance is often affected positively by innovations

(Saastamoinen, Reijonen & Tammi 2018, 2). According to Kim & Chai (2017, 42) suppliers are in an important role in supply chain management and Nieminen (2016, 135) describes if company does not have the ability to develop products, it needs assistance from resources outside company to produce innovations – suppliers. Innovations and innovativeness practices are important, and suppliers are more responsible to be encourage to these practices. Innovations are generated in order to succeed in the competition and produce products or service in cost-effective way. (Nieminen 2016, 132)

Kim & Chai (2017, 42) describes how innovation or innovative practices can be e.g. new product development, design or process innovation. Also, Saastamoinen, Reijonen & Tammi (2018, 2) describes incremental and radical innovations from which primary means changes in existing products and latter means entirely new product. According to Nieminen (2016, 133) nowadays innovations have customer-oriented approach and the need is recognized in the markets.

Innovations are created in unique collaborative relationships and as an example great innovator such as Honda or Wal-Mart rely their innovation advantage on supply chains, which means searching supplier partners from supply chains. (Fawcett et al. 2012, 164) Also, Nieminen (2016, 136) uses term as innovative supplier, who needs to be recognized. Researches implicate that innovative suppliers typically have strong technological background and are close to the buying organization. (Nieminen 2012, 136) Suppliers' innovativeness faces challenges in supply chains, which can be customer power, business risks or cultural and geographical differences (Kim & Chai 2017, 42).

In public procurement innovation does not necessarily mean new product. The target is to satisfy human needs and also solve problems which are societal. (Equist & Zabala-Iturriagoitia 2012, 1758) Innovation term can mean different to one another and Kuuttiniemi & Lehtimäki (2017, 254) describes how in public procurement innovation can be the target of the procurement or new innovative way in procurement process, and also Saastamoinen, Reijonen & Tammi (2018, 2) describes how in public procurement innovations can be regular procurement with by-product or procurement where is procured product or service which is developed to the public order. Innovative public procurement can aim to procure new complete innovative product or service, or it can be procurement

where desire is to procure research and development which produces new innovative solutions. (Kuuttiniemi & Lehtimäki 2017, 254-255)

3 PUBLIC PROCUREMENT

This chapter introduces the core elements of public procurement and micro, small, medium and large size company's role on it. Public procurement is purchasing products or services by public funds. In public procurement needs to be considered the public procurement act.

3.1 Public procurement

Public procurement is purchasing e.g. products, services or construction work by public funds. At the simplest, procurement is considered as public procurement contract when *public procurement unit* agrees to procure from supplier against financial consideration. (Pekkala & Pohjonen 2010, 21) Public procurement supply chains has suppliers and "customers" as in private sector. When comparing public sector procurement to private sector, the objectives are wider because it impacts more than to only single company's profit. Also, public purchase of service can amount higher value. The object of public procurement can be such as IT, insurance, utilities, cleaning or services. (Arlbjørn & Freytag 2011, 204)

In public procurement, the *procurement unit* can be state, municipal authorities, joint municipal authorities, municipality consortium, the Evangelic Lutheran Church and the Orthodox Church, parishes and other authorities and state enterprises and bodies which are governed by public law. (Määttä & Voutilainen, 2017, ch 1.1) According to Karjalainen and Kempainen (2008, 230) in public procurement value for money should be high. The subject of the procurement can be also used to other purposes such as in economic or social purpose or assisting minority business or environmental protection. Procurements, which are fulfilled by above mentioned procurement units, are considered as public procurement. It is important to consider the threshold levels, and when the total value of the procurement is over national threshold level the procurement unit has obligation to observe the act of public procurement. Procurement can be also considered as public procurement when procurement unit has received financial support from bodies governed by public law, or other authorities, when

the support is more than half of the total value of the procurement. At this point also e.g., association or foundation can be considered as *procurement unit*. (Määttä & Voutilainen, 2017, ch 1.1; Pekkala & Pohjonen 2010, 21) The current threshold levels are introduced in chapter 3.2.

Supplier is party which offers e.g. products, services, construction work at the markets and it can be natural person, legal person, public body or consortium. When supplier has left its tender, it can be called *tenderer*. (Määttä & Voutilainen, 2017, kpl 1.1)

Public procurements are attractive to private sector suppliers for many reasons, such as stable and predictable demand source and payment certainty. When considering innovativeness, public procurement offers opportunity to private sector commercialize their new services and products. Thus, the reverse side in brief is bureaucratic, legalistic and arms-length business with public sector. (Flynn 2017, 992)

3.2 Public procurement planning and preparation

In order to execute successful procurement, the target must be clear. On the basis, planning is clarifying the object of the procurement. It is also important to consider desirable quality and desirable relationship with the supplier. The cooperation can be ensured with statements in the contract, such as incentive- and/or sanction mechanism or follow-up procedure for quality and to other operations. Contract is as important element as tendering process in public procurement. (Nieminen 2016, 208)

When considering the planning and preparation, the planning of procurement is an important phase. Karinkanta, Kontio, Krakau, Lahtinen & With (2012, 47) highlights the importance of the preparation in public procurement and market dialogue, before the main tendering starts, because in this phase supplier has better possibilities to influence to the target of the procurement. Also, informing is an important part of public procurement. (Nieminen 2016, 206-207) Suppliers' possibilities to effect to the target of the procurement decrease after call of tender is published and, in this phase, there can be done only minor detail changes – especially when is used open or restricted procedure. (Karinkanta et al. 2012, 47)

The informing can be an event for suppliers, individual informing for specific potential suppliers or using information channels such as company websites or HILMA which is an electronic reporting channel for public procurements in Finland. It is important to collect experience and documents from previous tendering's, in order that bad and good practices can be taken into account. (Nieminen 2016, 206-207)

After the procurement unit has defined the subject of the procurement, the tendering process can be started which means that contract notice and call for tender can be published. Call for tender is a document where procurement unit describes the target of the procurement, and practically sets the limits for the procurement. (Karinkanta et al. 2012, 55)

Procurement act regulates public procurements and the total value of the procurement defines how the procurement should be executed. The obligation to tender concerns procurements which are over national threshold levels and according to this, procurement unit needs to define the expected value of the procurement at the early stage. (Nieminen 2016, 204)

- Procurements, which are under national threshold level, applies procurement units' own instructions.
- Procurement, which are over national threshold level are informed in HILMA and has an obligation to tender.
- Procurements, which are over EU threshold level, are informed in HILMA and Tenders Electronic Daily channels (TED) and has an obligation to tender.

National WTO Agreement on Government Procurement (GPA) instructs to threshold levels in EU and in this study the introduced EU thresholds are applied in January 2018. Next is introduced in table 1, by example, for certain type of procurements EU threshold levels according to procurement act 26 § when procurement unit is central government authority. (Ministry of Economic Affairs and Employment of Finland 2019a)

Table 1: EU threshold levels (Ministry of Economic Affairs and Employment of Finland 2019a)

Contract type	Threshold
Purchases of goods and services	144 000 €
Public work contracts / construction work	5 548 000 €
Design contest	144 000 €

Next is introduced in table 2, by example, national threshold levels for certain type of procurements according to procurement act 25 §. (Ministry of Economic Affairs and Employment of Finland 2019a)

Table 2: National threshold levels (Ministry of Economic Affairs and Employment of Finland 2019a)

Contract type	Threshold
Purchases of goods and services	60 000 €
Public work contracts / construction work	150 000 €
Design contest	60 000 €

3.3 Tendering procedure

The public procurement act determines tendering procedures (Karinkanta, Kontio, Krakau, Lahtinen & With 2012, 68) and the value of the procurement, target, character of the procurement, complexity, suppliers and know-how of the procurement unit affects to the selection of tendering procedures. The primary procedures are open and restricted procedures, other procedures usage must be justified in the procurement documents and usage needs to fulfill specific conditions. (Kuuttiniemi & Lehtimäki 2017, 138)

Tendering procedures are open procedure, restricted procedure, negotiated procedure, competitive negotiated procedure, direct procurement, innovation partnership and design contest. (Finlex 2016, 1397/2016 §32; Kuuttiniemi & Lehtimäki 2017, 138) Every procedure has different content. The procurement procedure needs to be described in the contract notice and in the call of tender (Kuuttiniemi & Lehtimäki 2017, 109). Procurement unit has obligation to transparency, which mean obligation to do public contract notice. By contract notice is ensured real competition and open tender process. (Pekkala & Pohjola 2010, 291)

When taking into account planning, preparation and minimum time of contract notice, fulfillment of tender competition can take time. Figure 7. represents tendering process according to Pekkala & Pohjola (2010, 24, 26), when following open procedure or restricted procedure.

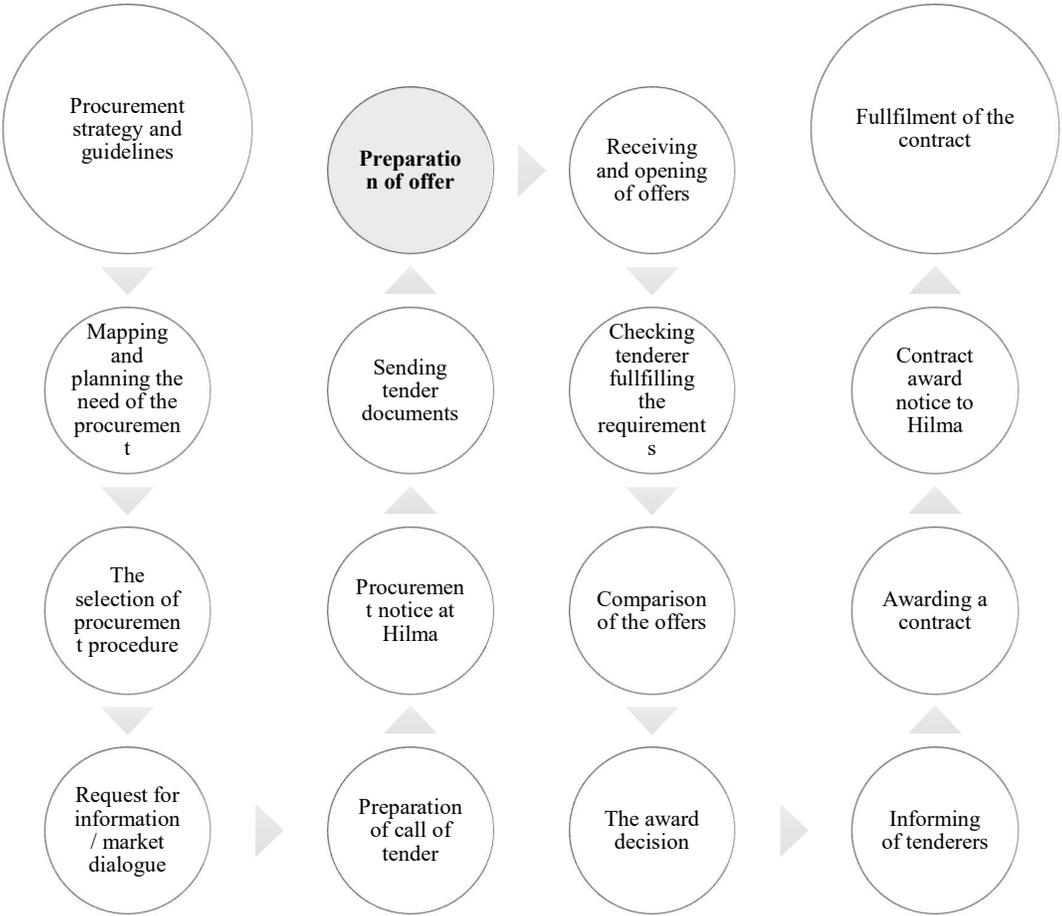


Figure 7: Tendering process adopted from Pekkala & Pohjonen 2010, 24-26

When planning procurement, it is important to notice also procurement units’ obligation to announce from the procurement – procurement act sets minimum times for contract notice and request to participate. Also, contract awards decision and tenderers rejection must be done from every procurement. (Pekkala & Pohjola 2010, 200, 299)

3.3.1 Procedures

The procurement act describes the procurement procedures in chapter five (Finlex, 2016, 1397/2016), next is introduced some of the public procurement procedures, first are introduced the mainly used.

Open procedure

Open procedure is the main procedure in conventional procurements, and in this procedure the procurement unit does not negotiate with supplier about the subject of the procurement. (Pekkala & Pohjonen 2012, 200) All tenderers are allowed to submit offer (Kuuttiniemi & Lehtimäki 2017, 109) and call of tender defines, what tenderers should include to the offer - the best offer wins. (Pekkala & Pohjonen 2012, 200)

Restricted procedure

In the restricted procedure supplier leaves a request to participate (Kuuttiniemi & Lehtimäki 2017, 109) and procurement unit chooses tenderers to the competition, the number of tenderers according as procurement unit has announced earlier (Pekkala & Pohjonen 2012, 200). Only pre-selected tenderers can submit offer (Finlex 2016, 1397/2016 §32). Restricted procedure is alternative procedure to open procedure. (Pekkala & Pohjonen 2012, 200)

Negotiated procedure

In the negotiated procedure can be used only with special criterion in the procurement (Pekkala & Pohjonen 2012, 200) and according to the name of the procedure, the terms of contract are negotiated (Finlex 2016, 1397/2016 §32). Procurement unit chooses at least three suppliers to negotiations. Also, the number of chosen tenderers can be reduced step by step. This procurement procedure can be used e.g. when target is design or innovative solutions, procurement cannot be purchased with existing solutions or if open or restricted procedure did not receive tenders which match with call for tender – at this point earlier started competition can be changed to negotiation. (Finlex 2016, 1397/2016 §32; Pekkala & Pohjonen 2012, 200)

Competitive negotiated procedure

When using competitive negotiated procedure, it requires special conditions. The negotiation process and the stages of it are regulated bit more than in negotiated procedure. This procedure can be used when procurement unit cannot specify the target, in very complex procurements. (Pekkala & Pohjonen 2012, 228, 230) The procurement unit can limit the number of candidates which are invited to negotiations and the number needs to be specified. In the contract notice needs to be specified procurement requirements, and if necessary, procurement unit can specify the needs and aims in project description. Negotiations can continue until procurement unit has solutions which responses to their specified needs. (Finlex 2016, 1397/2016 §32)

Direct procurement

The usage of direct procurement is exceptional, and the usage of this procedure needs to be always justified (Pekkala & Pohjonen 2012, 118). The terms and conditions are negotiated with selected supplier and the exceptionality of this procedure is that negotiations are held without contract notice and prior publication of it. This procedure can be used e.g. when only certain suppliers can respond to procurement unit needs, which increase from for example technical reasons. (Finlex 2016, 1397/2016 §32) Direct procurement is also possible if open or restricted procedure does not receive any offers to call of tender – if these procedures are unsuccessful, the procurement unit can proceed to negotiated procedure or to direct procedure. (Pekkala & Pohjonen 2012, 119)

Innovation partnership

Innovation partnership aims to develop innovative solutions. This procedure also requires from supplier permission to participate, after procurement unit has published contract notice. Innovations partnership can be used, if procurement unit cannot find satisfying solutions from the markets. Procedure requires negotiations and the selection of supplier is based on evaluation of development and innovation of suppliers' solutions and suppliers research and development capacity. (Finlex 2016, 1397/2016 §32)

Design contest

Design contest can be used when tendering any design. Hence, this does not only mean architecture design tendering. (Pekkala & Pohjonen 2012, 256) Procurement unit can limit participants by applying criteria, but at the same time it needs to act in a non-discriminatory manner. In design contest needs to be jury which members are independent from participants and whom at least third has as equivalent qualification as participants has. (Finlex 2016, 1397/2016 §32)

3.4 Regulations and contracting

Public procurement is dominated by clear regulations and EU directives conducts the regulations of public procurement within EU (Arlbjørn & Freytag 2011, 207). Public procurement needs to be carried out by following the act of public procurement. The legislation adheres national legislation, EU directives and World Trade Organization's Agreement on Government Procurement (GPA). The procurement act is observed only when procurement unit is procuring outside of the organization. Procurement act concentrates mainly to tendering process, and it is procurement unit's own decision if it produces the work itself or outsources it outside the organization. Procurement unit can itself also determine the specific need for the procurement, when taken into account that it do not discriminate or prefer any suppliers. (Pekkala & Pohjonen 2010, 21-23; Ministry of Economic Affairs and Employment of Finland 2019 b)

Finnish national legislation to public procurement is based on to European Union's directives and fundamental principles to public procurement are non-discrimination, free movement of goods, transparency, equal treatment and mutual recognition and proportionality. (Ministry of Economic Affairs and Employment of Finland 2018c)

The aim of public procurement is to make contractual relationship with functional and good terms. Usually, the buying organizations strategy and guidance gives frames for procurement

strategy. The main influential matters to public procurement schedules and totality are the buying organizations budget and economic planning. (Nieminen 2016, 206)

Määttä & Voutilainen (2017, kpl 1.1) describes public contract as an important part of public procurement. The contract is signed after the contract awards decision with the selected supplier. The contract is officially awarded after the signature (Pekkala & Pohjonen 2010, 520). In public procurement the procurement unit receives desired order from supplier, the subject of the procurement. After the actual delivery, the procurement unit completes to supplier financial compensation (the contract can include financial compensation or other economic value). (Määttä & Voutilainen 2017, kpl 1.1)

3.5 Private and public purchasing

Both private and public sector companies are fullfill procurement processes and management in their actions. However, there can be noticed differences. It can be assumed that private and public sectors conditions to execute purchasing are different, and the main differentiating factor between these two are public sectors regulations and transparency. (Arlbjørn & Freytag 2011, 205) According to Väänänen (2017, 70) private and public sector may have different goals in purchasing. In private purchasing is often focused to reduction of costs, quality and innovations when in public sector is focused from where is sourced, awareness of purchasing opportunities and green choices. (Väänänen 2017, 70) However, often both sectors utilize the necessary elements of these in their procurement.

Arlbjørn & Freytag (2011, 205) argues how roles are also different in private and public procurement and table 3 is adopted from Arlbjørn & Freytag (2011, 205) article.

Table 3: Differences between private and public purchasing adopted from Arlbjørn & Freytag 2011, 205

	Public	Private
<i>Users</i>	Citizens	Customers
<i>Target groups</i>	Identified by rights	Segmentation
<i>Changes</i>	Politically driven	Demand-driven

<i>Services</i>	Defined by experts and politicians	Defined by users
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Arlbjørn & Freytag (2011, 214) describe how in public sector the rules and regulations lead organizing of purchasing while private sector is more choosing from most advantageous mode. There are several good practices in both sector and Burnes & Anastasiadis (2003, 365) suggest how both sectors can learn from each other e.g. private sector could consider public sectors structured approach or contract specifications while public sector could implement private sectors strategy approach to outsourcing decisions.

3.6 Companies of different sizes

Small and medium size companies (hereafter SME) can often be called as the backbone of economy. In many countries these companies represent most of the country's businesses. Often SME companies are compared to large companies by their strengths and weaknesses. As large companies are structured and have competitive advantage in size when SME companies are vulnerable and have lesser resources. SME companies can be considered as the engine of growth but at the same time the barriers arise from imperfections of market and institutional weaknesses. SME companies' competitive advantage is, among other things, in their flexibility and innovations. (Gunasekaran, Rai & Griffin 2011, 5489; Beck & Demirguc-Kunt 2006, 2932)

The study examines how different size of supplier companies consider public procurement processes in topics such public procurement processes, buyer-supplier relationship and innovations. Are there differences how different size of companies experience public procurement processes. Whether this can highlight certain issues which in particular differentiate actions between companies of different sizes

Small and medium size companies' definition can vary, and the definition is not universal (Mphela & Shunda 2018, 92), however companies are often defined according to annual turnover, annual balance sheet total and number of employees (Gunasekaran, Rai & Griffin 2011, 5491). In this study is used European commission definition for micro, small and

medium size and large companies. EUR-Lex, European commission, has stated recommendation (EUR-Lex, 2003), announced 6th of May in 2003, for the definitions for different size of companies; micro, small, medium-sized and large companies.

- Large companies employ over 250 persons and annual turnover exceeds 43 million EUR
- Medium-size companies employ fewer than 250 persons and annual turnover is under 43 million EUR
- Small companies employ fewer than 50 persons and annual turnover is under 10 million EUR
- Micro companies employ fewer than 10 persons and annual turnover is under 2 million EUR (EUR-Lex 2003)

SME companies' rivals are traditional large structured companies, and overseas rivals which can compete with same but cheaply product because of economic conditions. It is argued that the importance of SME companies' actions in selected countries arise in export, employment and GDP and as SME companies' economics effect on many things, SME can be considered important in national economy. (Gunasekaran, Rai & Griffin 2011, 5489-5492) As SME companies pursue to be competitive, it is important to them to identify their weaknesses and strengths. The challenges may arise from quality, delivery and from resources. (Gunasekaran, Rai & Griffin 2011, 5490-5492)

Table 4. presents literature concerning SME companies. There are a lot of researches in the literature about SME companies' business, as well as the potential and effects of SMEs in public procurement. This study examines the position of companies of different sizes in public procurement, using the position of SMEs as a basis. Table 4 contains previous articles related to SMEs.

Table 4: Literature concerning SME companies

SME companies			
<i>Author</i>	<i>Article and publication</i>	<i>Key words</i>	<i>Summary of the article</i>
Beck, T. & Demirguc-Kunt, D.	Small and medium-size enterprises: Access to finance as a growth constraint. Journal of Banking & Finance. 2006. 30, 1, 2931-2943	SME enterprises, business environment, economic development	Summary of empirical researches between SME's and access to finance – how finance is an important growth constrains.
Gunasekaran, A, Rai, B., & Griffin, M	Resilience and competitiveness of small and medium size enterprises: an empirical research. International Journal of Production Research. 2011. 49, 18, 5489-5509.	SME, resilience, competitiveness, globalization, technology	Factors which influence to resilience and competitiveness of SME's.
SME companies and public procurement			
<i>Author</i>	<i>Article and publication</i>	<i>Key words</i>	<i>Summary</i>
Flynn, A.	Re-thinking SME disadvantage in public procurement. Journal of Small Business and Enterprise Development. 2017. 24, 4, 991-1008.	Capabilities, public sector, SME, resources, tendering	Comparison of resources and capabilities of micro, small, medium and large companies – desirability to understand of firm size and its effects better. The bigger the firm, the better it is resourced to its tenders. Resources has effect on tendering activity.
Karjalainen, K. & Kemppainen, K.	The involvement of small- and medium-sized enterprises in public procurement: Impact of resource perceptions, electronic systems and enterprise size. Journal of Purchasing and Supply Management. 2008. 14, 4, 230-240.	Public procurement, SME enterprises, suppliers, resources, electronic systems	Analyse of possible reasons, why SME's absence in public procurement The low involvement of SME companies can be explained by resources, especially from lack of legal expertise and administration.
Loader, K.	SME suppliers and the challenge of public procurement: Evidence revealed by a UK government online feedback facility.	Public procurement, SME, UK, content analysis	Challenges of SME suppliers in public procurement in UK – examination of the challenges when considering SME companies. Obstacles in such as requirements, qualification criteria's and procurement processes.

	Journal of Purchasing and Supply Management. 2015. 21, 2, 103-112.		
Saastamoinen, J., Reijonen, H. & Tammi, T.	Should SMEs pursue public procurement to improve innovative performance? Technovation. 2018, 69, 2-14.	Public procurement of innovations, SME's inter-organizational networks, innovative performance, product development	Finnish SME's – SME networks and innovative performance for private and public sector. Public procurement, innovations and SME's possible association to greater returns. Thus, importance of innovation of new products are in networks.
Stake, J.	Evaluating quality or lowest price: consequences for small and medium-sized enterprises in public procurement. The Journal of Technology Transfer. 2017. 42, 5, 1143-1169.	Public procurement, SMEs, innovation, quality evaluation, most economically advantageous tender	Comparing SME winning probability in the most economically advantageous tender (MEAT) vs. lowest price. According to the study MEAT decreases SME's possibility to win – because of e.g. lack of resource. Large firms have advantage in experience and frequent bidding.

From the literature can be concluded multiple factors which affects to different size of companies' success in public procurement tendering. SME companies position in public procurement is examined subject matter in the literature. According to table 4. can be concluded how studies related to SME companies position includes different stand points.

The researches focus on SME companies' success rate in public procurement processes, and often the results indicate how resources are the main factor. But the researches lack when considering the supplier perspective comparing different size of companies in buyer-supplier relationship and experiences about public procurement processes. This study aims to compare how different size of companies' experiences public procurement processes, buyer-supplier relationship management and innovations.

3.6.1 SME companies

As have been stated earlier in this study, all companies should have equal opportunities in public procurement, and this is stated in legislation (Karjalainen & Kemppainen 2008, 230). Additionally, procurement act highlights how small and medium-size companies should have equal access with other companies to competitive tendering (Finlex, 1397/2016 §2) and

it is also important to notice that SME companies should be encouraged to public procurement (Karjalainen & Kemppainen 2008, 230).

There are a lot of researches about why SME companies struggles to compete in public procurement, and this is a cross-cutting theme in research field (Flynn 2017, 991). SME companies position in public procurement is highly discussed and Stake (2016, 1144) highlights that the SME's participation importance is in growth and innovation. Also, Karjalainen & Kemppainen (2008, 230) argues that it is important to consider SME companies position in public procurement, because it has potentially positive impact to local economics. Through involving SME companies, can be gained results such as increased innovativeness, entrepreneurship, and creation of new jobs or development of economics. (Karjalainen & Kemppainen 2008, 230)

Kemppainen & Karjalainen (2008, 238) argues in their study how one of the factors, which affects to SME company's involvement in public procurement is lack of administrative capacity and legal expertise. Preparation of tender is time consuming and it also includes financial risks. Karjalainen & Kemppainen (2008, 239) also argues how operating models can affect to these matters, and the matters should be considered as e.g. using of standardized documentation in tendering processes. (Kemppainen & Karjalainen 2008, 239) Also Stake (2016, 1146) underlines how offer requires time to create and submit it, which affects to the SME companies less willingness to participate.

SME's are learning and market oriented, flexible and adapting to new changes, SME's tend to be more resilient and innovative. One of the SMEs strengths is innovations. (Gunasekaran et al.2011, 5493) SME's may have resource disadvantages, but when considering innovations, SME's justify significant share on these. The SME's success in innovations can be argued by their behavioral advantages. (Salavou, Baltas & Lioukas 2004, 1092)

Innovation and firm performance are typically connected to each other. When comparing private and public sector and the influence of it to the markets, the public sector innovation can be considered more immediate. In private sector markets might take long time to change whereas in public sector, the buyer can guarantee the purchase of innovative solutions more

immediately and the incentives comes in prizes. (Saastamoinen, Reijonen & Tammi 2018, 5)

Innovative public procurements encourage SME to innovativeness, and also, public procurement units need to consider more innovative elements in contracts. This improves SME's innovative performance and increases SME participation rate. (Saastamoinen et al. 2018, 10-11)

SME companies has a lot of customer potential in public side, as on the private side demand reduction is seen as main concern in economics. Some factors, which affect to SME companies' willingness to participate in public procurement are, among other things, procurement specifications which are poorly defined, long tendering processes and low tender prices. (Loader 2015, 105) From the literature can be stated factors, which affects to SME companies' success and willingness to participate in public tendering, and also barriers to SME companies' success.

As when there are a lot of literature concerning barriers of SME companies, there are also literature about SMEs is in general. The role of SMEs is widely discussed on both sides. According to this other standpoint, Flynn (2017, 992) argues that SME companies are spoken with monolithic terms and commonalities are overstated. It is important to notice that 99 percent of business entities in Europe are classified as SME company. The barriers are typically considered as the same, despite e.g. the size of the company, age or structure of the company. (Flynn 2017, 992) Also, as SME companies are often connected to innovations, however Stake (2016, 1144) state that scientific evidence does not always suggest that SME are more innovative than large companies.

When discussing SME companies' success in public procurement contracts, it is important to notice that although these companies can operate as subcontractors. In public procurement competition, small firms may constrain more difficulties in administrative capacity need, compared to large firms. (Stake 2016, 1146)

3.6.2 Barriers from the literature

SME's are under presented as suppliers in public procurements and they also struggles to compete in tendering (Flynn & Davis 2016, 2). Public procurement and SME companies' involvement on it has become central matter in governments policy. (Flynn 2017, 1004-1005) It is largely argued that public procurement is challenging for SME's and Flynn (2017, 991) concludes how challenges are in multiple levels and it is not easy to fix their position in one easy way.

According to Saastamoinen et al. (2018, 4) resources are one disadvantage factor between SME and large firms. The resource disadvantages can arise in different functions of organization, as in specialist expertise, finance or in marketing knowledge. (Saastamoinen, et al. 2018, 4) Also, Muñoz-Garcia & Vila (2018, 2) highlights same matters, as SME companies has disadvantages in public tendering, which are e.g. resource, when comparing to large firms. Number of employees affects to the success of SME company position in tendering. (Muñoz-Garcia & Vila 2018, 2) Also, Flynn (2017, 994) argues how studies indicates that firm size has link to how company success in public tendering, when tendering e.g. requires legal expertise and administrative capacity which can be difficult to produce for smaller companies. This highlights especially micro enterprises position, which has even lower success rate than SME companies (Muñoz-Garcia & Vila 2018, 2). From the literature can be concluded, that one of the major disadvantage factors to SME company's success are resources.

Flynn (2017, 1004-1005) describes how SME companies should not be considered as one entity and how micro, small, medium and large companies are different. Resources affects to tendering frequency and companies with more resources enabled tender contracts with more high value. As well company capabilities affect, and Flynn (2017, 1004-1005) considers this as link to performance. This means more success in tendering, and in other word, capabilities and performance has link. (Flynn 2017, 1004-1005)

Public contracts mean often large contracts, and the SME's capability to respond to the need may become more difficult. Stake (2016, 1146) argues how bidding experience is also important, and as SME companies may have constrains in administrative capacity, which preparation of offer needs, SME companies participate in call of tender less often than large firms. This indicates less experience in tendering which affects to the success rate in contract

awards. (Stake 2016, 1146) As it was mentioned above, challenges are in multiple levels and challenges can differ in companies.

Table 5: Summary of SME companies' positive impact as supplier

Impacts	Barriers
Economic growth	Lack of resources
Positive impact to local economics	Lack of administrative capacity
Innovativeness	Challenges in multiple levels
Entrepreneurship	Large contracts
Creating new jobs	Ability to respond to procurement
	Experience

Table 5 represents summary from SME companies' positive impact as supplier in public procurement, and their barriers to compete in public tendering.

Loader (2015, 111) argues, how SME's position in public procurement has been researched, and a lot of obstacles are acknowledged, however SME's continues report the same concerns. Loader (2015, 111) suggests how policymakers should do co-operation with SME representatives to determine most effective methods. The SME companies' position, impact to economics and barriers are recognized in the literature. According to above, the matter should be examined from different perspectives in order to provide better information on how competition could be promoted for companies of different sizes.

From the literature can be concluded how SME companies should not be considered as the same and consider it differently e.g. how Flynn (2017, 1004) describes, that it would be more appropriate consider rather micro and small companies MSEs' than SMEs' and also, the support requirements and actions needs to be more targeted only to micro and small companies.

4 EMPIRICAL PART

The empirical part of the study introduces research methodology; the data collection methods which are used in this study. The study includes two different data collection methods to deepen the results, quantitative and qualitative methods. The empirical part also introduces collected data which were analysed and summarized. On the final section, discussion and conclusions, are presented summary and final results.

4.1 Research methodology

Qualitative research is research methodology which can be used to produce knowledge. It can be used in real-life business context to explain why specific matters work in certain way and how the matters can be changed. Qualitative research method generates non-numeric data and is practical when research tends to deal with unstructured problem. Qualitative research method is exploratory and flexible. (Eriksson & Kovalainen, 2008, ch 1; Saunders, Lewis & Thornhill, 2016, 165)

Quantitative research is research methodology to examine variables and data, which is numerical. The data is often analysed using e.g. graphical or statistical techniques. In quantitative research data can be collected using techniques such as questionnaire. (Saunders, Lewis & Thornhill, 2016, 165-166) The main difference of these two methodologies are numerical and non-numerical data.

Qualitative and *quantitative* methods do not exclusive one another. Hirsjärvi et al. (2008, 132) conclude that these methods can be used side by side. When quantitative phase come before qualitative phase, the comparative groups can be more reasonable to form based on e.g. survey-research. (Hirsjärvi et al. 2008, 133) This study observes this pattern, to utilize quantitative results (survey) to qualitative research (theme interview).

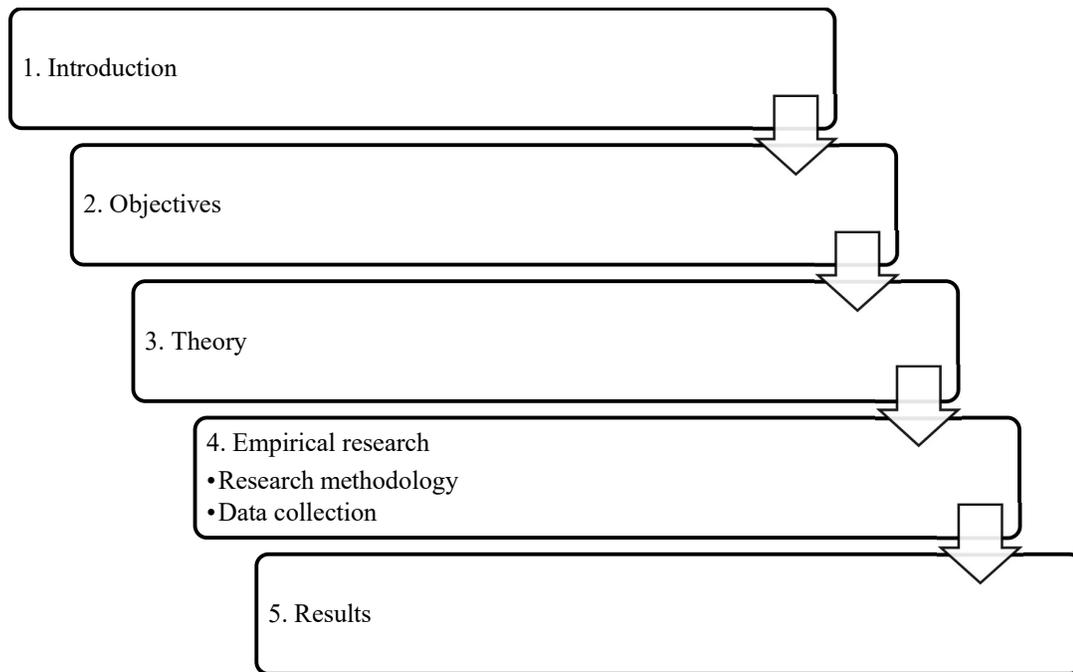


Figure 8: Outline of the study

The outline of the study is presented in figure 8. The aim of the study and objectives are introduced first, after this is given understanding to the main subject with existing literature. Then the empirical research is introduced with research methodology and data collection, followed by the results.

In research project, it is important to review previous literature critically. Critically reviewed literature gives good understanding to previous researches and trends. The approach to critical review depends of the research. (Saunders et al. 74, 2016) The literature review discourses the basis of sourcing, buyer-supplier relationship and public procurement. The sources of the literature must be valid, and in this study is used articles, books and valid web sites. These topics have been selected to the study, because these supports the fundament idea, opens the key concepts to new reader and supports the empirical part.

4.1.1 Data collection methods

In this study the empirical data is qualitative and quantitative where survey (online questionnaire) and theme interview were used as data collection methods.

Survey is a method to collect data, and in questionnaire respondents form one sample. Usually in questionnaire the questions are standard and from every respondent is asked the same question in the same way. (Hirsjärvi et al. 2007, 189) In this study the first sample was collected by using survey, online questionnaire, to examine how different size of companies' responses to different questions - how different size of companies experience public procurement processes. The results of the survey were originally collected to doctoral thesis. The original survey included questions formulated to suppliers, from which in this study were used questions which adapted this study's main themes. The privilege of survey is that using this method can be collected much data at the same time (Hirsjärvi 2007, 189).

Theme interview as data collection method gives flexibility (Hirsjärvi 2007, 201). In this study was used theme interview because the interview wanted to be carried out by using the main themes from the literature review. It is typical for the theme interview that it is adapted to certain themes. Also, theme interview is typical to include the same themes and subject matter to all interviewees, but the order can be different. (Hirsjärvi & Hurme 2010, 48) This data collection method, theme interview, was selected to have flexible way to fulfill the interview, however following the same frames in both interviews to have comparable results. In this study was used these two methods to deepen the survey results with theme interview.

4.1.2 Data collection

First the quantitative data was collected through survey using online questionnaire, and it was launched in March 2019. The sample selection included companies which were potential respondents to the survey; companies were different size and from different industries, and companies which acts or have been acting as a supplier in public procurement. The email contacts of the potential respondents were collected from company websites, and in this was utilized supplier data from Tutki Hankintoja -website. As the research emphasizes the supplier's point of view, the contacts were from sales side. There were over 800 contacts from over 700 different companies which were contacted by email, using Webropol tool. One sample was contacted by phone before the survey was sent to enhance response rate. In the end, 137 responses were collected through the survey.

The survey was sent in Finnish and the results were afterwards translated to English. The survey included questions related to suppliers' background variables and then continuing with topics such as market functionality, purchasing markets, public procurement capability, public procurement organization and innovativeness in public procurement. Only certain questions from the survey were used in this study; questions which adapted this study's main themes. The results were analysed by examining the median rate of answers in the categories micro, small, medium and large size companies. The purpose was to examine if there were differences in responses between these categories.

The qualitative data was collected after the survey. Data was collected by two company interviews to deepen the survey - the results of the survey can be deepened by using this means. The interviews were held on the mother tongue of the interviewees, in Finnish. Both interviewees were contacted beforehand, and the interview questions were sent beforehand. The questions were formulated by using literature review's material and quantitative survey results and the method of interview was theme interview. Both interviews were recorded and afterwards the interviews were transcribed open. The results were then reported and are presented in chapter 4.3. Both interviewees are working in ICT-sector companies and they have experience from public procurement processes as supplier.

4.1.3 Validity and reliability

Both, survey and theme interview have disadvantages which can affect to the reliability and validity of the research. Often the results of survey can be kept superficial and it is hard to manage how respondents understands the questions – the control of it. Also, it can be difficult to make conclusions how the respondents know the field. When interview is used as data collection method, the disadvantages can be in error of sources, interviewee do not feel good about the interview and it takes a lot of time. Also, when interviewing the interviewee can easily give socially suitable answers which can affect to the reliability of the data. (Hirsjärvi et al. 2008, 190, 201)

Validity is the research methods ability to measure intended matter. The reliability of the study's results is related to whether the results repeat the same matter, whether the results are random or not. The similarity of results can be measured in different ways depending on

the study. (Hirsjärvi et. al. 2008, 226). The validity of this study is confirmed by using selected sources, describing concepts well, using limitations and focusing to the analysis of empirical part. There were held only two interviews which can affect to the validity of the results. The reliability of the study did stand out from the results of the survey and interviews, which did mainly comply with earlier studies.

4.2 Survey analyses

The survey examined public procurement from the supplier aspect. On the survey analyses was gathered data from questions which supported this study's standpoint; sourcing, public procurement, buyer-supplier relationship and innovations. The selected questions were analysed comparing results from different size of companies; micro, small, medium and large size companies. The aim was to examine is there wide differences how different size of companies experience questionnaires claims. The study's aim was to compare how different size of companies experience public procurement processes.

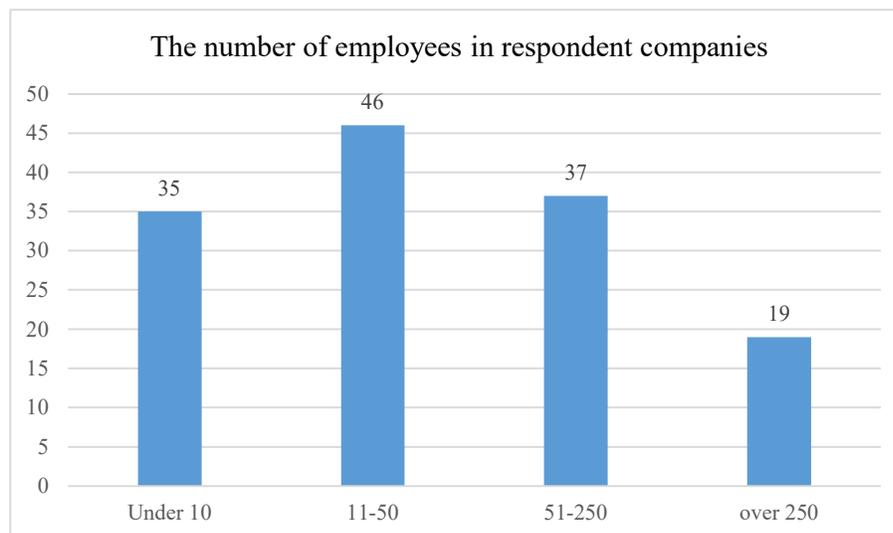


Figure 9: The size of the respondent companies in the survey

In this analyse is considered company size according to its employees. The results were compared between the company sizes categories and figure 9. represents how companies of

different sizes responded to the survey. The responses were steadily from every category; micro, small, medium and large companies, thus there were a little less answer from large companies. It was important to the analyse of the study, that from every company size was valid amount of responses. The results needed to be comparable. Next is introduced the results of the survey. The survey results are divided in categories which adapts the main themes of the study.

4.2.1 Results in category public procurement

Figure 10. represents the results from category where questions were related to public procurement and public tendering. In the first question the respondents evaluated the questions on a scale 1= very rarely; 5= very often, in the second question on a scale 1= very low; 5= very good, in the third question on a scale 1= randomly; 5= very actively and the rest of the questions on a scale 1= completely disagree; 5= completely agree.

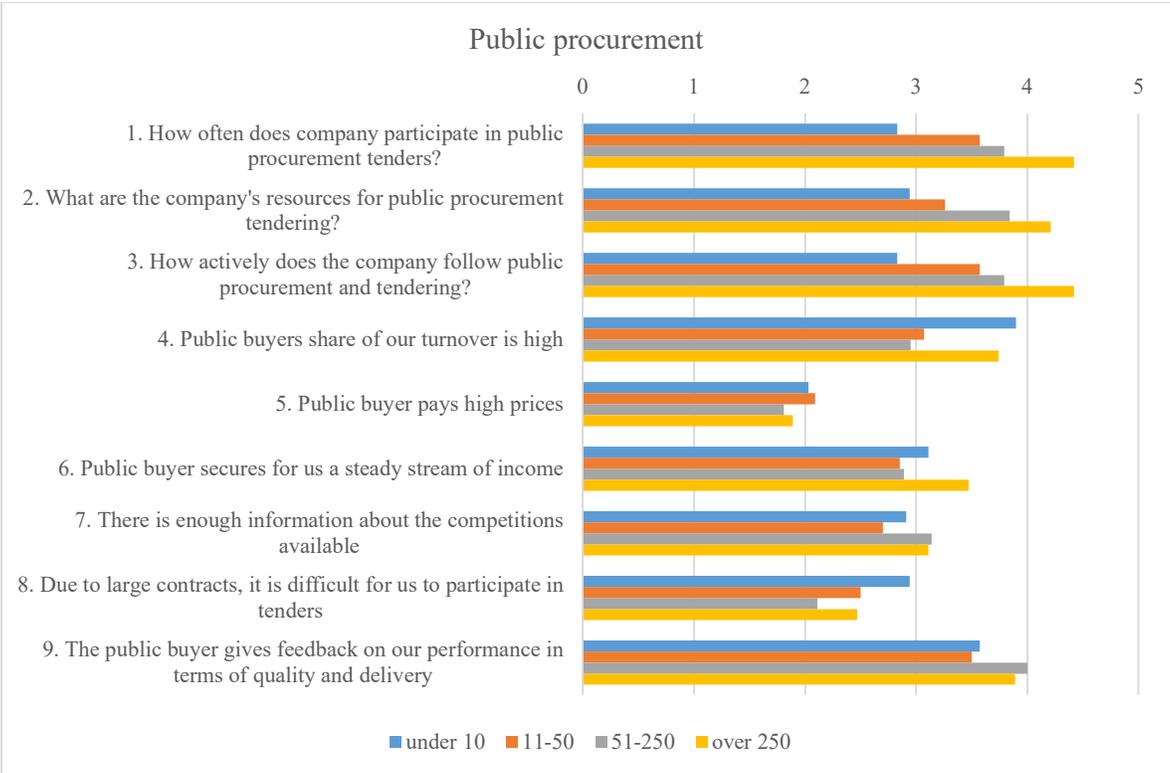


Figure 10: Category public procurement

It can be concluded that the smaller the company the less often it participates on public procurement tendering, and also the activity to follow public procurement is lower for smaller companies, according to claim and responses in *how often company participate in public procurement tender* and *how actively company follow public procurement and tendering*. Also, the company size has connection to how much company has resources for public tendering. It can be concluded that the smaller the company, the less it has resources to tendering process. Also, it can be stated that micro and large companies experience that public buyers share of company's turnover is larger, more than small and medium size companies. Although, it can be concluded that the share is impressive for every company.

The answers to the other questions were very similar regardless of the size of the company. It can be concluded that despite the size of the company, companies consider that public buyer secure quite steady income, according to responses to claim *public buyer secures for us a steady stream of income*. When considering available information from competitions in claim number six, *there is enough information about the competitions available*, micro and small companies' responses under three (3) which means they mostly disagree with the claim, when medium and large companies agrees with the claim more and answers are rated over three (3), which means the information from competitions is in their opinion in good level. The claim number seven (7), *due to large contracts, it is difficult for us to participate in tender*, discussed about contract sizes in public procurement. Micro companies agreed most with the claim, and large public contracts has impact to micro companies' activity in tendering. Small, medium and large companies responded close to number two, from which can be concluded that the matter is not significant.

It can be concluded from the results that despite the size of the company, supplier companies consider that the price level is low, according to claim *public buyer pays high prices*, where all respondents answered little over or little under number two (2). However, public buyer gets good responses for giving feedback about supplier performance in terms of quality and delivery.

4.2.2 Results in category buyer supplier relationship

Figure 11 represents responses which were related to buyer-supplier relationship. The questions were evaluated on a scale 1= *completely disagree*; 5= *completely agree*. In overall can be stated, according to the results of the survey, that buyer-supplier relationship related matters are in good level in public buyer supplier relationships. In this category there are no significant differences when considering the results according to company's size. Despite the size, companies responded in quite same way.

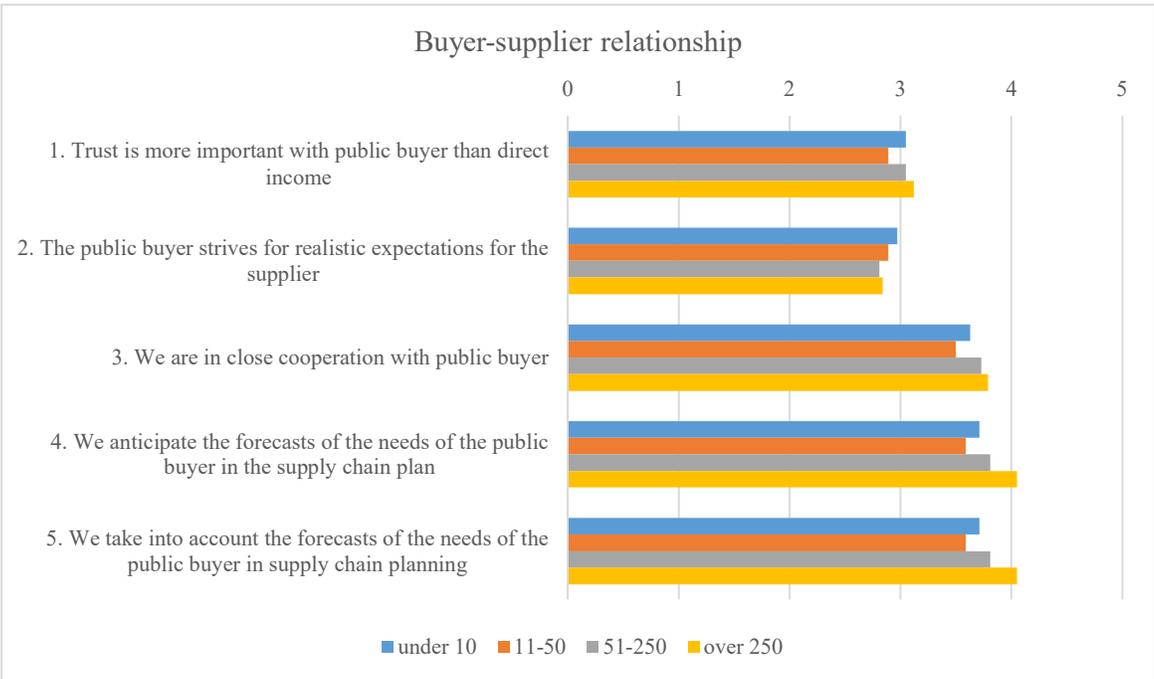


Figure 11: Category buyer-supplier relationship

The respondents agreed on the average level, that *trust is more important with public buyer than direct income*. As the result is fairly in average level, it can be concluded that both direct income and trust are important in public buyer relationships. Also, respondents highly agree with the claim *we are in close cooperation with public buyer* from which can be concluded, that the buyer- supplier relationship management is in quite good level. Supplier companies sets lower agreement level in claim *the public buyer strives for realistic expectations for the supplier* and in this claim companies of different size responses in the same way.

The respondents agree in good level with the claims *we anticipate the forecasts of the needs of the public buyer in the supply chain plan* and *we consider the forecasts of the needs of the public buyer in supply chain planning*. Also, in this claim, there are not significant differences in the responses when comparing companies' size. It can be concluded that companies observe, and forecasts public buyers supply chain management.

Public buyer receives lower grades on categories; *public buyer strives for realistic expectations for the supplier* and *public buyer strives for realistic expectations for the supplier*. It can be concluded, that suppliers consider and forecast public buyers needs in their supply chain planning. Also, it can be concluded that buyers and suppliers are in close cooperation in public procurement.

4.2.3 Results in category competition

Figure 12 represents the results from claims which were related to competition. Also, in these questions respondents rated the questions on a scale *1= completely disagree; 5= completely agree*. In competition related questions can be seen quite clearly that companies of different sizes see competition differently. The differences are not significant, but it can be noted that matters affect to companies of different sizes in different way when considering competition.

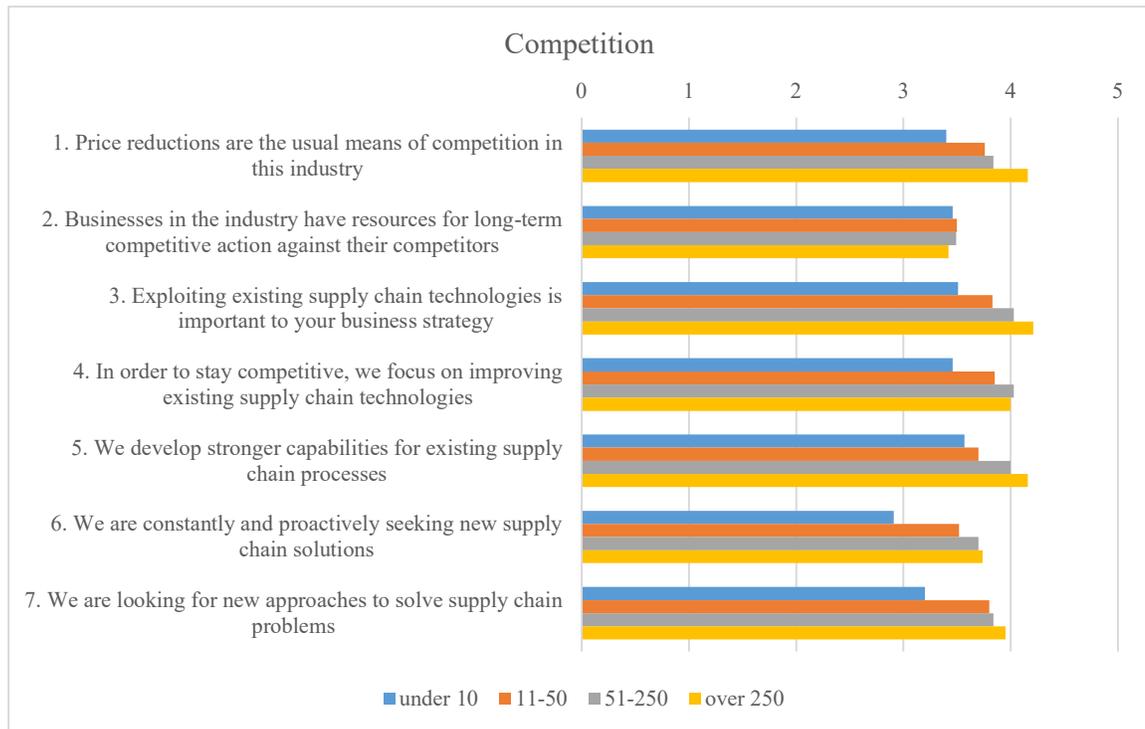


Figure 12: Category competition

It can be concluded that the larger the company, the more it agrees that *price reduction are the usual means of competition in this industry*. However, in overall all companies agrees with the claim over level three (3) which means every company size considers price reductions in competition. In claim *businesses in the industry have resources for long-term competitive action against their competitors* companies agrees with the claim, and there are no differences between different size of companies.

When considering technologies in supply chains, in claim *exploiting existing supply chain technologies is important to business strategy* and *in order to stay competitive, we focus on improving existing supply chain technologies* can be seen differences in responses when considering companies size. The larger the company is, the more it agrees with these two claims. It can be concluded that technology has connection to company size when considering competition and supply chains.

It can be also concluded that company size has connection to responses in claims *we develop stronger capabilities for existing supply chain processes*, *we are constantly and proactively*

seeking new supply chain solutions and we are looking for new approaches to solve supply chain problems. The larger the company is, the more it agrees with these claims. It can be concluded that larger company is, the more important it consider the factors influencing competition and supply chain. As the answers follow the principle of the larger the company, the more it agrees with the claim, must be also considered that larger companies are able to invest more financially.

4.2.4 Results in category development and innovation

Figure 13 represents responses relates to how public buyer take into account development and innovation. Also, responses represent supplier own actions in the same matters. The respondents evaluated the questions on a scale 1= completely disagree; 5= completely agree. There can be seen differences in this category, how different size of companies' responses, but the connection is not directly to how large or how small the company is.

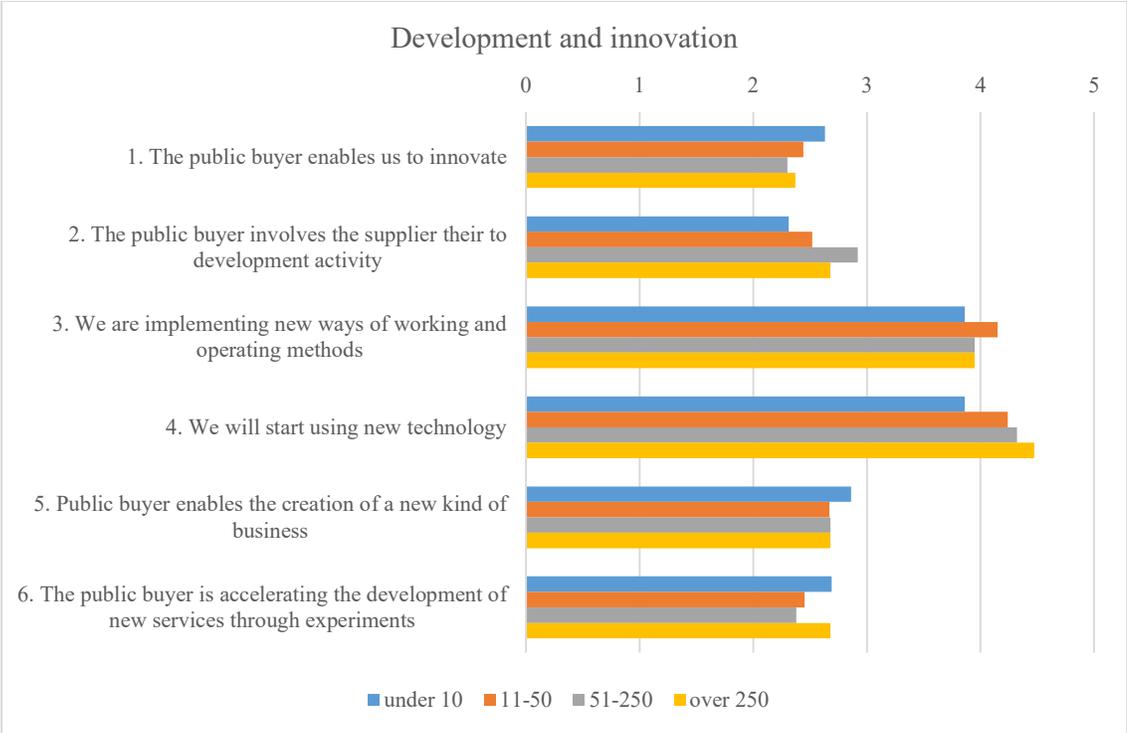


Figure 13: Category development and innovation

The questions which were related to public buyer and how suppliers see their involvement in development and innovation were evaluated in mostly low level, the respondents often disagreed with the claims. However, when considering suppliers perspective to their own operating methods and technologies, respondents agrees with the claims in higher level. From which can be concluded that suppliers consider development and innovation to be at in good level in their own processes, but they do not see that the public buyer involves supplier to innovating and development in their processes in the same way.

In claim *the public buyer enables us to innovate* the respondents agrees with the claim in low level, where medium size companies disagree the most, and micro companies agrees the most. Also, respondents agree in low level with the claim *the public buyer involves the supplier to their development activity*, where micro companies disagree the most and medium size companies agree the most. It can be stated that companies experience involvement to innovation and development differently but generally at a low level

When the claims made were related to the suppliers' own perspectives and processes to development and innovation, the average response rate increased, suggesting that they consider innovation and development in their own operations. Respondents agrees in good level to claim *we are implementing new ways of working and operating models* and small companies agree the most with this claim. Also, in claim *we will start using new technology* the average response rate rose to a good level, and in this claim can be seen that the larger the company is, the more it will start using new technology.

When considering *public buyer enables the creation of a new kind of business* the respondents agree in low level. In this claim every size of company responded in very similar way. Also, *the public buyer is accelerating the development of new services through experiments*, the respondents agrees in low level, where small and medium companies disagree the most and micro and large companies agree the most.

When considering the aspect of different size of companies in development and innovation, can be stated only two claims where can be seen differences; *the public buyer involves the supplier to their development activity*, and *we will start using new technology*. The smaller

the company, the more it disagrees with these claims. In development and innovation public buyer receives generally lower grades.

4.3 Theme interview results

Next is introduced the results from the interviews. The theme interview questions were generated from the literature and from the survey results adapting the main themes of the study, the interview form used is attached as annex 1.

The first interview questions were related to interviewees position, company and background. Both interviewees have experience from public procurement procedures from current assignment or from previous assignment.

BUYER-SUPPLIER RELATIONSHIP

What are the most significant differences in the management way of private and public sector relationships? Describe the differences below.

- Request for information

Both interviewees consider that the requests for information in the tendering processes are quite the same both in private and public sector. It is the place where the customer's needs are reviewed, and the suppliers present their products and solutions. Interviewee 1 sees that the biggest difference is seen in which forums who are present. On the private side, people who are in charge of procurements often explore the markets more openly, when on the public side people wait until they can explore more things – people explore the markets differently when comparing private and public procurement. On the private side the procurement unit per se buys where they desire, so procurement unit may decide at the end of the tendering, from whom to buy.

- The subject of the procurement and description of its requirements

The interviewees consider that procurement unit needs to understand what is available on the markets and compare it to own needs. On the public side the descriptions and

requirements of the procurement are more precise, and this is clear difference. On the private side can be looked for the right solution more widely and there are no exact specs for the procurement. Interviewee 2 considers that on private side it may be easier to supplier to provide to the customer a solution which the supplier sees as the best for them.

- The tendering process and making of offer

Interviewees consider that there are differences in the tendering process, when comparing private and public tendering. On the public side is used more request for information and request for proposal and this is the conventional process. On the public side is also used only request for proposal but when also the request of information is used, often the tender is seen more successful. Interviewee 2 sees when considering the tendering process, on the private side suppliers do not have to consider mistakes on their offer as much as in public side. Also, on the private side can be continued negotiation after tendering which is not always possible on the public side. The written part is just a pretext for negotiating with the supplier on the private side. On the public side, the supplier wins who wins it on paper and in the competitive tender.

- Order-delivery process and communication

Both interviewees consider that it is always important to do business from person to person, thus interviewee 1 sees that public side is more official than private side. The communication on order-delivery process are seen to be at good level, as long as the supplier company knows the procurement units processes well. It is seen as an advantage if the supplier company is familiar with the procurement units' processes. Communication is seen as an important matter.

- Communication during the contract period

Interviewee 1 considers that on public side communication is often official and written and on the private side can be agreed matters more freely. Interviewee 2 do not necessarily see differences, communication in contract period is quite the same, however interviewee 2 also notices that there is more flexibility on the private side. It is seen that on the public side the customer is more bound by the contract and compliance with it. It is not easy to resign from the contract.

- Other significant

Interviewee 1 notices how the tenders on public procurement should be more similar, such as forms and other materials. Even the smallest things in changes of documentations or practices can cause delays.

Do you see purchasing unit's management of external resources in your work, for example in the form of developing supplier relationships, especially in the public sector?

Interviewees consider that development is tied to actors and product area. There are actors who are willing to develop and advance matter together. Working together should be a goal, not procurement unit and supplier, and at some point, together. Development depends on the persons and decision makers who are involved on the procurement. Interviewee 2 sees that there are a lot of companies who are willing to develop together. Supplier always have willingness to bring new solutions to the markets, it is crucial to the business.

Are you in close contact with a public buyer, for example, receiving feedback and other support?

Interviewees consider given feedback differently, interviewee 1 consider that feedback needs to be asked itself, when interviewee 2 considers how processes are followed always for example on quarter meetings. The feedback loop is seen as very important to develop order-delivery processes and it can be used as help when preparing procurements on the future. It is seen that suppliers have will to satisfy the customers, it can be advantage on the future tendering.

How important is it to monitor the needs of a public buyer in your operations? For example, are you following purchase / tender calendars?

Both interviewees consider that it is vital to follow public tendering's, thus tendering calendars are not seen as the most current channel. Hilma and other websites are followed, the information are received from market dialogues and by forecasting customer needs.

According to forecasting can be maintained short-term calendars. Close co-operation with customers is seen as an advantage in future procurements.

PUBLIC PROCUREMENT

Do you think that some of the following statements are particularly relevant to the success of the supplier company in the tendering process?

- Company's previous participation in tenders

The interviewees consider the previous participation differently. Interviewee 1 do not see that it has role on procurement when interviewee 2 considers that earlier supplier relationship with public buyer is relative to better success. However, interviewee 1 considers that it is important from where the invitation to call for tenders has come, whether this can be influenced by an early relationship with the public buyer. The channel where public sector buyers report their public procurement is not always so useful, the call for tenders can be missed. Secondly, references from the supplier are often required, so reference from a previous tender can be a big factor.

- Resources

Both interviewees consider that resources are highly relevant to supplier company's success on public tender. Supplier know-how is an important factor.

- Industry

Interviewees considers that one industry is better suited to one company than another. Industry certainly have an effect and supplier company have to have references from the industry and about their competence. Competence is affected according to how complex the subject matter is.

- Subject of the procurement

Interviewees considers that subject matters effects on the same way as the industry. Also, the subject matter needs to be well communicated so that the supplier can communicate offer

also well, responding to the need of the procurement unit and how much supplier's competency matches the competition.

- Procurement procedure

Interviewees consider that procurement procedures affect the success of a supplier company as there are procedures which are seen as good procedures. Also, suppliers' know-how and knowledge of different procurement procedures may also affect.

- Low pricing

Both interviewees feel that low pricing influences the success of tendering. Some suppliers can play more with the price, when others set more price to the quality.

How important is the public sector as a client? Is the public buyers share of your turnover significant?

Both interviewees consider the public sector as an important customer. Interviewee 1 considers that the importance is significant. The company wants to make unique expertise, where the products are not bulk. This reflects to prices – quality costs. According to this company, they do not always participate in public tendering. Interviewee 2 considers that generally, the share of the public sector is seen large. In Finland, the public sector is half of the markets, and in the IT sector it is a significant part.

How do you experience the public procurement process in general? Are there any particular factors why you want / do not want to participate in a public procurement tender?

Interviewee 1 considers that suppliers should participate in public procurement because of visibility, basically documents are public. From a market point of view, it is very important to participate in public tendering for example, the procurement unit which is preparing their tendering might explore previously tendered documents which means visibility to the supplier. In Finland, the IT sector is also very small, and the customer can change supplier with a fast cycle, which is why it is worth participating. The company would like to do a stronger analysis of whether or not to participate and would like to be able to communicate it with

customers as well. Both interviewees consider why not want to participate is that the documents can be really heavy, and the job compared to what you can get is really different. Interviewee 2 also considers that participation is important because there are a lot of euros on public procurement, it is a big part of business. If company is out from large framework agreement for many years, it can affect company's business a lot.

What do you think about the price level in public procurement?

Interviewees considers that price level depends on the industry. Bulk products which are not strategic or complex, the price level can be very affordable. Interviewee 2 considers that in more complex IT solutions, the price level is about the same on the public sector as on the private sector, there are not large differences, when interviewee 1 considers that expectations and price levels do not always match, thus according to traditional market economy price is normal way to compete. Bulk products price level is considered lower in public procurement and generally expertise is seen expensive and it also costs to the supplier company.

Do you think the public procurement units' expectations are realistic?

Interviewees both considers that expectations are often realistic, but not always. Quality and price do not always match. If procurement unit do not give enough information or information is unrealistic, it is hard to respond according to statements. Interviewee 1 tells how in IT sector it is usual to outsource services, but when outsourcing it is important to tell every detail, and if not, it is common that supplier needs to do extra work, which means also higher price. Thus, this problem can be highlighted also on the private side. Interviewee 2 sees that expertise of the purchasing unit will have an impact on this matter.

THE COMPANY SIZE IN PUBLIC PROCUREMENT

Are there any special factors which affects to company's participation in public procurement? According to the following:

- Resources

Interviewee 1 considers that usually they always participate in tendering, although company would not have resources. The processes are usually long, which means that situations may change. Both interviewees see that resources may affect when responding to call for tender, if there are not enough people to make the offer. Also, interviewee 2 considers that there needs to be enough resources to fulfill the service on the contract period.

- Strict specification of procurement

Interviewee 1 considers that strict specification of subject matter is not bad, but it needs to be realistic. The specification tells how much the procurement unit have been thinking matters. As long as the subject matter responses reality, it is good. However, interviewee 1 considers that there can be technical matters or determinations which excludes the supplier company out from the tendering. Also, penalties of sanctions can be too large risk to supplier company.

- Long tender time

Interviewees do not consider that long tender times affects to companies' participation to public procurement tenders. Interviewee 2 considers that participation decisions are done by other statements.

- Price range

Both interviewees consider that price range affects to the participation to public procurement tenders. Interviewee 2 sees that price range affects when it is known that pricing might be aggressive.

- Too large contracts / purchases

Interviewees considers that large contracts do not affect, but interviewee 2 sees that it might be a problem to small companies. Smaller companies cannot take too large contracts but for larger companies it is not excluding factor.

- Bureaucracy

Both interviewees consider that bureaucracy do not affect, but it can slow down. Interviewee 2 considers that it is not excluding factor and the decision to participate is not done based on the bureaucracy questions.

What do you consider to be the most important things that a company gets when it acts as a supplier in public sector procurement?

Interviewee 1 considers how references are important so that the company can tell about their expertise in the future. It is important to have permission to tell about the work as reference. If the company know that they would not get reference permission from their delivery, it can affect to their willingness to participate in the tendering procedure. Interviewee 2 considers that business is important naturally, but besides the euro and the margin, supplier companies can gain experience, visibility, public sector references - these are usually very important for the supplier. And, of course, the permanence of availability. In large contracts, when a sufficient amount of business can be achieved, the products gets more movement. This way, well-sold products can be obtained also elsewhere in Finland.

Do you think that the size or experience of the supplier company is important for success in tendering?

Interviewees consider that experience is important. Interviewee 1 tells that how credible and reliable a company is seen is important. If you cannot trust a smaller company, that it will be able to deliver the order, then it will not succeed in the tendering. Interviewee 2 also considers that company size matters. Company size is not necessarily important if the company have experience and know-how. If there is a large contract, then customers will appreciate large company size. However, both matters are important.

Do you think that the position of SMEs should be taken better into account in public procurement or whether large companies are dominant in the tendering process? Should equality be better considered?

Interviewee 1 consider that large companies are dominant, but there are processes which consider SME companies better such as dynamic purchasing systems, where the procurement is cut into smaller pieces. And it is also important to procurement units to have diversity in their supplier pools, which can be also created through categorization of companies of different sizes. Interviewee 2 sees that should be considered better. The

expertise in companies can be different despite the company size. In public sector tenders, the smaller can be excluded from the call for tender, even if they have more experience and expertise.

Can the tendering process and the complexity of public procurement have an impact on the frequency how often companies participate in call for tender/do not participate, especially SMEs?

Both interviewees consider that complexity can affect to frequency how often companies participate in call for tender. Interviewees highlight large documentation, which means that there needs to be employees to respond to all documentations. The know-how of public procurement processes might affect to how often company's response to call for tender. Interviewee 2 sees that there are also lighter processes, such as mini competition within framework agreements, and because of this the complex tenders are not always problem for smaller businesses. However, the problem can be in getting involved to framework agreements as a supplier.

Do you feel that you could use outside help for public procurement, because of lack of resources or lack of legal knowledge?

Both interviewees consider that they could use help from third parties to public procurement. Interviewee 1 considers help in ensuring the quality of the offer, to be ensured that it includes all defined matters. But often when the company leaves the offer, they need to be able to tell about own know-how, so outside help may not work in this matter. Interviewee 2 considers third party help in for example, legal knowledge. Also, to preparation of an offer, if the outside resources are capable.

INNOVATIONS

How can innovations be promoted in public sector procurement?

- Market Dialogue

Interviewee 1 considers that transparency is important at the preparation of the tendering and in market dialogue it is important to tell about subject matter and the intent of the procurement unit, through this the suppliers can react to call for tender better. Interviewee 2 sees that innovations could be more considered in market dialogue. Certainly, it is already tried, but it could be included to market dialogue even more.

- Tendering procedure

Interviewee 1 considers that it depends how limited the target of the procurement is. If the target is more open, then there are more options to supplier and buyer plan together. Interviewee 2 considers that often customers must make compromises during the competitive tendering, how the target of the procurement is tendered.

- Any other way

Interviewee 1 sees that one of the largest issues in public procurement and innovation are the practices. Also, the buyer's own will and target affects. There needs to be courage to try something new. If there is willingness to innovate, then the decisions must also be made quickly. Interviewee 2 considers that negotiated procedure is something which procurement units could utilize more. It can be heavy procedure, so that customers do not want to utilize it. Also, it is important to increase market dialogues, and moving towards to negotiated procedures. These could be the solutions for more innovative competitive tendering.

What does innovativeness mean to you?

Interviewee 1 sees innovation as something that connects people. It is something what is done together. One person cannot know everything, and then the value of innovation is not realized. Innovation means thinking together and experimenting together. It's a state of being, not a thing that can be done. Interviewee 2 consider that it can be any future preparation. It is important to procure products or services which serve still after years.

Do you think there are differences in the innovation of SMEs and large companies?

Interviewees do not see that company size have affect to how innovative company is. Interviewee 2 considers that on their industry the products are quite the same despite the company size.

How important do you consider that company develops new innovations in business?

Both interviewees consider innovations as vital to the business. Interviewee 1 tells that their company cannot innovate by them self. It always must be done to their customers. Interviewee 2 considers innovations as extremely important; companies cannot stay still. The development of innovations is the base for everything.

How innovation appears in public procurement and in general in your field?

Interviewee 1 consider that innovations appears in how suppliers are involved to the subject matter of the procurement. If the subject matter is precisely specified or not. Interviewee 2 sees that quite little, it depends how the competitive tendering is executed.

Do you think procurement procedures in public procurement is an advantage or a barrier to innovative product or service?

Interviewee 1 tells that it is the procedure, the attitude of people and sharing of information. Interviewee 2 considers that it can be both. It can be advantage or barrier.

What do you see as a bottleneck of innovation in public procurement? How do you think innovative procurement could be promoted?

Interviewee 1 considers that the procurement procedure, people and approach must be beneficial to innovations. Also, the procurement procedure, processes and information sharing must be considered. Interviewee 2 considers that innovation opportunity should be equal and not to be a limiting factor. There should be opportunity for everyone to offer. If a supplier has an innovative product, then another limiting factor in the competitive tendering may be an obstacle to offer this product.

Do you consider that companies have opportunities to innovate and develop products and services through public procurement?

Interviewee 1 consider that it depends about the decision making and mandate, if suppliers are allowed to do certain matters and interviewee 2 considers that opportunities to innovate are in low level.

How much do you invest in public sector relations outside the tendering, for example, by telling about innovative products?

Interviewee 1 considers that they could promote more their innovative products and interviewee 2 tells that they promote a lot. It is salespersons work to tell the customers about new solutions which could ease and help their actions. It is something what the company do every day.

4.4 Findings and summary of results

Public procurement

From the results can be concluded that public procurements call for tenders' subject matters are often defined in good level. Supplier companies considers that strict specifications show that the procuring entity have spent time for thinking of the target of the procurement. It is also seen that the availability of information about public procurements is generally in good level. Supplier companies appreciates well communicated procurements. There are different channels where supplier companies can seek available information in general level. In public procurement, one industry is perceived to be better suited to one company than another, which is clear, because certainly supplier companies participate in call for tenders in their own industry.

As public procurement can be considered as bureaucracy, supplier companies considers this only as a slowing factor. Supplier companies consider price reductions as common way to compete. Thus, it is important to notice that price reductions in call for tenders are common

and are in connection to traditional market economy. The subject matter of the call for tender affects to pricing, and more complex subject matters, not bulk products, costs more.

When considering third party assistance in supplier companies' preparation for tendering, supplier companies sees that consultation can be obtained from third parties when especially legal expertise is needed. Supplier companies sees possibility to procure third party assistance also when ensuring the quality of their offer.

Buyer-supplier relationship

From the results can be stated that the buyer-supplier relationship in public sector are in close contact, and trust is important. It is important to maintain relationships. The clear connection channel is appreciated on the contract period, and as the target of the procurement needs to be clearly described in tender documents – the subject matter must be interpreted correctly. It can be concluded from the results that it is more important to know what the procurement unit desires from the procurement in public sector, than in private sector. It can also be concluded that, previous buyer-supplier relationships have an impact to upcoming tendering's in form of references and experience.

Public sector is seen as very formal actor in procurement processes when all communication needs to be in written, and the procurements are often described in very precise level. Thus, public sector and public tendering's has its own challenges, which are suppliers' risk being excluded from the tender because of mistake in their offer. The importance of doing business from person to person is highly appreciated and the feedback from procurement unit is welcomed. Also, the suppliers are aware of public sector tenders, suppliers are able to forecast and prepare tenders for public sector procurements. In general, competitions are tracked through various channels and through existing buyer-supplier relationships.

Companies of different size

When considering buyer-supplier relationship management and different size of companies, it can be concluded that the differences how relationships are managed are more connected to industries and to persons, than to company size. From the results can be concluded that

there are no significant matters, which makes buyer-supplier relationships different, when comparing companies of different sizes. Smaller and larger companies see processes in the same way.

Supplier companies' resources are one of the main factors which affects to success in tendering process. From the results can be concluded that resources affect to companies' activity to tender and activity to seek information from the tender. The company size and experience affect how often company participates in public procurement tendering. From the results can be concluded that the smaller the company the lesser it has resources to place to public tenders.

The resources affect to how much time supplier companies are able to prepare the offer and also, they need to consider working hours for the contract period. In addition to these, one of the main factors which affects to smaller companies, especially to micro size companies' activity to participate in public tender are large contracts. Smaller companies may have expertise, but at the same time large contracts are exclusive factor. Resources are seen as a main factor to success in the competitive tendering.

Experience is seen as an important factor to success in public tenders, because even though company have experience it do not have to be necessarily large. Experience can be both in large and in smaller companies. Thus, the reverse side is, as mentioned above, larger companies may have better security to supply the order. The advantage of different size of companies can be seen as diversity in supplier pool. Smaller companies may have excellent knowledge in specific field when larger companies have better abilities to develop matters and keep up in technological changes. From this can be concluded that larger companies have better ability to response to customer needs, especially in IT sector. The difficulty of the matter is compounded to; smaller companies may have excellent expertise from the procured subject matter, but it cannot respond to large contracts, when large companies can response to both matters.

When considering different size of companies in innovation and development, the smaller companies can be seen as companies which considers new ways of working and operating models in their business the most. Thus, it is seen that every company consider these matters

in their actions, because it is vital to the business. Larger companies implement and invest in new technology, but this difference can be explained through resources.

Innovation and development

From the results can be concluded that, transparency and market dialogue before publishing the main call for tender are considered as an important matter in tendering. This is the stage when the supplier can affect to the subject matter of the tender especially when considering innovations and development. In overall suppliers feels that they are involved to public procurement units' innovations and development activity in low level. Also, supplier companies consider that they are not involved enough to creation of new business through public procurement. Thus, from the results can be concluded how current practices do not always lead to results which are innovative. Negotiated procedure is seen as a way which could lead more innovative and developed results, but it can be also heavy to utilize.

Besides the considerations of public buyers' ways to include innovations to procurement, supplier companies consider that in their own actions and in their own work they implement new ways of working. Innovations and development are considered as a backbone of business.

Table 6 Innovations and innovativeness

<i>Requirements for innovations and innovativeness</i>
Innovations requires involvement
In public procurement innovations requires right procedures
New innovations require team who builds it together, it is not one person's work
Innovations requires transparent communication
The approach to innovate must be right
The creation of innovations requires mindset and intent from people who are involved
The involvement is required both from buyer and supplier side

Innovation is an extensive concept, but it can be concluded that it brings people together and the results are generated together. Table 6 represent in a summary the main matters; what innovation requires to be created. It can be concluded, that innovations and development in public procurement are made with suppliers, with right procedures which supports innovation and development, and with transparent communication. The approach to innovative solutions must be clear and the will must be right – to produce innovative solutions.

5 DISCUSSION AND CONCLUSIONS

The discussion and conclusion summarize this study's results. In this chapter the results are compared with existing theory. The purpose of this is to examine are there same and different results with existing theory. In conclusions are answered to research questions and the hypothesis are examined. Also, the further research possibilities are given. Discussion and conclusions summarize the whole study and represents end results.

5.1 Theoretical and empirical findings

The theoretical part of the study was built around certain themes; public procurement, buyer-supplier relationship management, to earlier literature about SME companies and innovations. As the main themes and research questions are heavily related to supplier relationship management, the theoretical perspective called resource-based view was chosen to the study because it is important to consider competitive advantage and resources in tendering process. According to this, whether the competitive advantage and resources affects differently in different size of companies' actions.

Public procurement

When considering the theoretical and empirical findings generally in public procurement, the results of the study and theory aspects are quite the same. The procurement act requires to execute matters in public procurement in the specific way, which for one's part explains the results. The theoretical findings and the empirical study produce the same results, especially when considering how the subject matter is defined in the call for tenders. The theoretical findings highlight how the target of the procurement must be well defined (chapter 3.2) when the empirical study emphasizes the same matter in the results; the specifications of the subject matters shows that the procuring entity have been considering the target of the procurement. It can be concluded that well prepared tendering results desired procurement on the contract period.

Empirical study results show that supplier companies appreciate well informed procurements, and from the theory can be highlighted the importance of informing and market dialogue before the main call for tender is published, because in this phase supplier companies can give their opinion and proposals to the subject matter of the tendering (chapter 3.2).

From the empirical results can be highlighted also industry specific matters. The empirical results show that the outcome depends on industry-specific practices and the skills of the

personnel – both buyer and supplier company. Thus, it is obvious that the supplier companies prepare their offers to the field of their specialty.

Buyer-supplier relationships

When comparing results from the empirical part and theory in buyer-supplier relationship, can be highlighted same matters. The empirical results emphasize how close cooperation between buyer and supplier is important. The target of the procurement needs to be clearly described in the call for tender so that the target of the procurement is clear on the contract period. According to this, the clear connection channels between buyer and supplier are important. The theory highlights (chapter 2.3) how supply networks are vulnerable, and this especially increases the importance of communication. It can be concluded that communication is important.

Also, as theory highlights the importance of market dialogue (chapter 3.2) in public procurement. In buyer-supplier relationships it is important to do supplier management and research the supplier market (chapter 2.4). The empirical results also show how close contacts between buyer and supplier are important on the contract period and also afterwards to gain information about the future procurements and to forecast future needs of the buyer. It is important to notice that the value of the relationship is created also outside the contract period. The importance can be highlighted from theory (chapter 2.3) and from the empirical results, when considering communication afterwards the contract period, in the form of feedback.

Companies of different sizes

From the theory and from the empirical part results, one of the main factors which affects to actions of companies of different sizes are resources. According to theory, the lack of administrative capacity (chapter 3.6.1) and resources (chapter 3.6.2) affects to SME companies' actions. From the empirical part results can be also concluded how resources affects to companies tendering activity and to activity to seek information. Also, procurement know-how is in connection to resources. The buyer know-how is in connection

to how effective the procurement is, as experience and capabilities stand out from theory (chapter 3.6.2) and from empirical part results. The effects of company size depend on the perspective from which the matter is examined. Large contracts must be able to be delivered but when it comes to expertise, the size of the company is not affected.

The theory highlights the innovativeness of smaller companies, as smaller companies are seen resilient and innovative. Also, in the empirical results can be highlighted how smaller companies have will to implement new ways of working and operating models, when larger companies consider more new technologies.

Innovations and development

From the theory (chapter 2.6) and from the results of empirical part can be concluded how innovations are crucial to company's business. The theory highlights how suppliers are in important position when considering buying organizations innovations. According to the theory (chapter 2.6) and empirical results, innovations are broad concept and it can mean different matters. Innovation can be connected to product or services or to ways of working. Thus, smaller companies do not invest in new technologies as much as larger companies, according to empirical results.

Theoretical perspective; resource-based view

The empirical results emphasize the importance of resources, and the chosen theoretical perspective resource-based view (chapter 1.3) highlights how resources are firm-specific internal strengths. Resources improves effectiveness and efficiency. From theory can be concluded how resources and capabilities impact to supplier companies' success level in public tendering and assets available for public tendering are related to firm's size. Also, from the empirical results can be concluded that company's own know-how affects to preparation of tendering, and in this companies are not willing to use third-party help – companies are willing to use their own knowhow.

Summary

In overall the theory and empirical results were connected to each other. The main matters which combined these were resources. The resource matter affects to companies' action in tendering process, buyer-supplier relationship and in innovations. Also, resources are one of the critical matters when comparing companies of different sizes. The main difference was in innovations, as from the theory can be considered the innovativeness of smaller companies, when in empirical results can be observed difference, but the difference was not significant.

Table 7 Summary

<i>Where company size matters</i>	<i>Where company size does not matter</i>
Smaller companies participate less often on public procurement tendering, and activity to follow public procurement is lower.	Diversity of supplier pool is important, and it can be contributed using different size of companies. Expertise in supplier companies can be different, despite the company size
Micro and small companies consider, that there could be more information available about public tenders.	Companies consider that public buyer secure steady income.
Micro companies consider that large contracts make more difficult to participate to public tendering.	Public buyer gives feedback to supplier in terms of quality and delivery.
Larger companies invest more to exploiting to new supply chain technologies. Improvement of supply chain technologies are considered as competitive advantage in larger companies – consideration of technology has connection to company size.	Direct income and trust are important in buyer-supplier relationship.

Larger companies invest more to development of existing supply chain processes, seeking for new solutions and looking for new approaches to solve supply chain problems – larger companies can invest more to these matters	Suppliers forecasts the need of public buyers and considers that cooperation is in good level and supplier companies considers long-term competitive actions.
Smaller companies need to have ability to show their credibility and reliability, to show the ability to deliver the order.	Suppliers considers development and innovations in their own processes

The table 7 introduces short summary of the main matters, in which can be seen factors how different size of companies consider study’s main themes in different way. Also, the table represents as comparison where the company size does not matter. From the table can be concluded the main matters for different size of companies’ actions.

5.2 Answering to research questions and testing hypothesis

1. Does company size have effect to supplier companies’ experiences and knowledge in public procurement?

From the results can be concluded, that there are matters in which company size matters, it is simply difficult for smaller companies to compete with larger companies because resources do not match in size. Thus, when considering matters related to public procurement in more general level, there are not significant differences between companies’ experiences. In innovations smaller companies invest to new way of working when larger companies invest to new technologies.

In principle, resources affect to how much supplier companies can invest to tendering. Resources are one of the main factors and from the results can be concluded that knowledge both in buyer and in supplier side are appreciated. Thus, from the results, cannot be

highlighted how experience and know-how of the resources are affected in tendering process, but more generally. However, impact of the resources is in high level when considering the preparation of tender and order-delivery process of different size of companies.

Hypothesis 1: When considering public procurement, it is important to notice that every supplier company should have equal opportunities (Karjalainen & Kemppainen 2008, 230). According to this, the study focuses on supplier's perspective in public procurement and how micro, small, medium and large size companies experience public procurement processes. *Hypothesis 1* assume that different size of companies' experiences public procurement processes, buyer-supplier relationship management and innovations differently.

From the results can be concluded that companies of different sizes do not necessarily see, on a general level, public procurement processes in a different way. The results highlighted the most differences, when considering companies resources. Thus, the company size did not create significant differences in the results on other matters. In innovations can be concluded difference, when smaller companies are more willing to implement new ways of working when larger companies invest more to new technologies. The hypothesis expected that smaller companies and larger companies' answers would have had more differences. The results did not correspond with the hypothesis.

1.1 How different size of companies experience public procurement processes?

The different size of companies experiences public procurement processes in the same way on a general level. Thus, there are matters which can be highlighted to create different experiences, when comparing companies of different sizes. As research question one already answers that resources are one of the main factors, it can also be concluded that resources are related to matters that differ the experiences of companies of different sizes. Resources affect to companies' ability to tender, to how companies can response to order-delivery and how much companies can invest to development and innovations, especially in technology and supply chain matters. As a summary, the differing experiences of smaller companies

from larger companies are emphasized in contexts such as resources, investments to technology and order-delivery process.

Hypothesis 2: According to literature, can be highlighted resources and knowledge as considerable factors, which affects to different size of companies tendering success, especially to SME companies' success (Saastamoinen, Reijonen & Tammi 2018, 4). According to this *hypothesis 2* expects that the smaller the company, the less it can invest in competition and tendering. Resources and knowledge can be expected to affect smaller companies' actions and experiences in competitive tendering. The basis for the assumption is that SME companies have lesser success rate in public procurement and more difficulties to respond to call for tender for public procurement.

From the results can be concluded that resources are significant matter in companies' actions. It affects to how much time supplier company can invest to follow call for tenders, and how much time it can invest to prepare the offer. Also, results show that company size affects to which size of procurement the company can participate as a supplier. The results were consistent with the hypothesis.

1.2 How companies consider innovativeness, especially companies of different sizes?

Companies considers development and innovation in their own processes. Supplier companies implements new ways of working, and new technologies. Innovations are vital to businesses. Thus, supplier companies do not consider public procurements as way to accelerate the development of new services. Companies of different sizes consider innovativeness in quite same way. Only when considering public buyers' involvement of supplier companies to development activity, and when considering new technologies in companies' actions, smaller companies do not see the implementation of these matters in the same way as larger companies – larger companies considers the matter more in higher level. Innovations and innovativeness are seen in different ways; it is future preparation and matter

which connects people. Creating new innovations demands the right decision making and mandate.

Hypothesis 3: Innovativeness is topical matter and according to Saastamoinen, Reijonen & Tammi (2018, 2) innovations often affect positively to companies' performance and growth. Also, supplier companies have an important role in supply chain management when considering innovations. (Kim & Chai 2017, 42) According to this *hypothesis 3* assume that supplier companies are aware of their importance when considering innovations and supplier-side companies take account this in their actions.

From the results can be concluded that companies consider innovation in their actions, and innovations are described as important for business. When considering differences between companies' size in innovations, larger companies implement more new technologies in their actions when smaller companies are more willing to adapt new ways of working and new operating models. When considering innovations in public procurement, supplier companies do not consider that they are involved in innovation at a very high level, but it is important to note that innovation is not always about creating something new, but also about following new ways of doing things. The results were consistent with the hypothesis.

5.3 Summary

The central results indicate that the ability of smaller companies to respond to competitive tendering both for the tendering process itself and for the contract period is affected by resources. The advantage of larger companies is their ability to invest in development and new technologies, as well as in tracking public procurements. As when considering the preparation of tender, requirements from supplier company or investments, the resources of supplier company stands out. Thus, these matters are not in connection to the expertise of the company.

The difficulty of the matter is compounded to; smaller companies may have excellent expertise from the procured subject matter, but they may not be able to meet the needs of the procurement unit, i.e. when considering large contracts, as when large companies can response to both matters.

From the results can be concluded how market research is important, when buyer company is preparing the tender. As the results highlights how large companies have better ability to respond to large contracts, when considering order delivery, however smaller companies may compete with experience and knowledge in specific matters. These highlights industry specific matters, how supplier companies should be managed and considered. Larger companies may have resources to invest, when smaller companies can compete with their expertise. The most important matter when preparing procurement is to act according to procurement unit's needs, however, good market research and management of supplier markets can improve the end result. The advantage of different size of supplier companies can be seen as diversity in supplier pool.

As the study examined how different size of supplier companies consider public procurement processes in topics such public procurement processes, buyer-supplier relationship and innovations; there can be highlighted differences such as in resources and investments, when similar approaches can be highlighted in the importance of innovation for business, also in tracking and predicting future tendering's.

5.4 Limitations

The limitations are an important matter when writing thesis. This study focuses only to public procurement, buyer-supplier relationship and innovations. Also, data collection concentrates only to supplier side. Results are compared between micro, small, medium size, and large companies, and between their experience and knowledge. Does company size have link to how companies experience public procurement processes.

The empirical study is limited only to companies which have been participating in public contracts. In the survey is considered only companies with public procurement background, because they have the experience how processes are executed – companies which know

processes can also give constructive feedback. The theory is limited only to key concepts which are defined in chapter 1.4.

5.5 Future research

The results of the study can be generalized as from earlier researches can be highlighted matters which affect to smaller companies' success in public procurement, such as lack of resources and lack of knowledge. According to the results, the future studies should include industry aspect, because companies and sizes in different industries varies. According to this, the limitations of this study could have also included industry specific matter. As when considering improvements in the study, there could have been done more interviews, which would have brought more validity to the results. Thus, the survey gave desirable basis to the interviews.

The future *recommendations*; in the survey were answers from supplier companies in good level and the results are comparable. One recommendation is to research SME and large companies per industry. As the results are from many different industries, the viewpoint does not necessarily bring generalizability to the results to all industries, because the mode of operation in industries differ. The researches should consider in the future the SME approach, considering especially the matters in specific industry. Also, as from the theory raised matter how rather micro and small companies should be compared to medium and large companies.

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APPENDICES

ANNEX 1: Interview form

TAUSTAKYSYMYKSET

Yrityksen koko ja toimiala

Haastateltavan positio

Kokemus julkisista hankinnoista tarjoajana

TOIMITTAJASUHTEIDEN HALLINTA, ostaja – toimittaja suhde

Hankintoja kuvaillaan nykyisin hyvin strategisena funktiona:

Mitkä ovat huomattavimmat erot yksityisen ja julkisen sektorin toimittajasuhteiden hallinnoimistavoissa? Kuvaa erot alla oleviin kohtiin.

- Markkinavuoropuhelu
- Hankinnan kohde ja sen vaatimuksien kuvaus
- Kilpailutusprosessi ja tarjouspyynnön teko
- Tilaus-toimitus prosessi ja kommunikointi
- Sopimuskauden aikainen kommunikointi
- Jokin muu merkittävä

Näetkö työssäsi ostoyritysten ulkoisten resurssien hallintaa, esimerkiksi toimittajasuhteiden kehittämisen muodossa, erityisesti julkisen sektorilla?

Oletteko läheisessä toimittajasuhteessa julkisen tilaajan kanssa, esimerkiksi saatte palautetta ja muuta tarvittavaa tukea?

Kuinka tärkeää on seurata toiminnassanne julkisen tilaajan tarpeita? Seuraatteko esimerkiksi hankinta-/ kilpailutuskalentereita?

JULKINEN HANKINTA

Vaikuttaako mielestäsi jokin seuraavista väittämistä erityisen paljon yrityksen menestymiseen tarjouskilpailussa? Perustele

- Yrityksen aikaisemmat osallistumiset tarjouskilpailuihin
- Resurssit
- Toimiala
- Hankinnan kohde
- Hankintamenettely
- Alhainen hinnoittelu

Kuinka tärkeä asiakas julkinen sektori on teille? Onko julkisen tilaajan osuus liikevaihdostanne merkittävä?

Miten koet julkisen hankintaprosessin yleisesti?

Onko jotain erityisiä tekijöitä, minkä vuoksi juuri haluatte/ette halua osallistua julkisen hankinnan kilpailutukseen?

Minkälainen hinta taso on mielestäsi julkisissa hankinnoissa?

Ovatko mielestäsi julkisen tilaajan odotukset realistisia, perustelee.

YRITYKSET KOKO JA JULKISET HANKINNAT

Onko jotain erityisiä tekijöitä, joiden takia jättäisitte osallistumatta julkisen hankinnan kilpailutukseen?

- Omat resurssit
- Hankinnan tiukka määrittely
- Pitkä kilpailutusaika
- Hintataso
- Liian suuret sopimukset/hankinnat
- Byrokratia

Mitä asioita pidät tärkeimpinä, joita yritys saa ollessaan toimittajana julkisen sektorin hankinnoissa?

Onko mielestäsi toimittajayrityksen koolla tai kokemuksella merkitystä tarjouskilpailussa menestymiseen esimerkiksi resurssien puolesta?

Tulisiko mielestäsi pk-yrityksien asema huomioida paremmin julkisissa hankinnoissa tai ovatko isot yritykset hallitsevassa asemassa tarjouskilpailussa? Tulisiko tasapuolisuus huomioida paremmin?

Voiko mielestäsi julkisien hankintojen tarjousprosessilla ja vaativuudella olla vaikutusta siihen, kuinka usein yritykset jättävät tarjouksia/jättävät ollenkaan tarjouksia, erityisesti pk-yritykset?

Koetko, että voisit käyttää ulkopuolisen apua julkisen hankinnan tekemiseen, tarvittavien resurssien tai laki osaamisen puutteessa?

INNOVATIIVISUUS

Miten innovointia voitaisiin edistää julkisen sektorin hankinnoissa?

- Markkinavuoropuhelu
- Kilpailutus
- Jokin muu keino

Mitä innovatiivisuus tarkoittaa sinulle?

Onko mielestäsi pk-yritysten ja isojen yritysten innovoimisessa eroavaisuuksia?

Kuinka tärkeänä näet yrityksen liiketoiminnan kannalta kehittää uusia innovaatioita?

Miten innovatiivisuus näkyy julkisissa hankinnoissa ja yleisesti omalla alallasi?

Onko mielestäsi kilpailutus julkisissa innovaatiohankinnoissa etu vai este tuotteelle tai palvelulle?

Mitkä asiat näet pullonkaulana julkisten hankintojen innovatiivisuudessa? Miten innovatiivisia hankintoja voitaisiin mielestäsi edistää?

Näetkö yrityksillä mahdollisuuksia innovoida ja kehittää tuotteita ja palveluita julkisten hankintojen avulla?