Utilization of private purchasing best practices in procurement of services in Finnish municipalities

The case of housing services for the elderly

Esa Väänänen
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Abstract

The importance of purchasing in the private sector has been acknowledged, at least in successful organizations. Purchasing has transformed from being a clerical function to a strategic function. Public procurement has been criticized due to poor quality of the purchased services. Time after time the tendering is assessed by Finland's Market Court often due to an equivocal invitation for bid. Public procurement is claimed to be simply a legal-based function. In several studies it has been acknowledged that public procurement has focused too much on the competitive tendering process, rather than on the planning phase of the tendering as well as on the follow-up phase of the purchased service. The number of the elderly is growing fast in Finland and it is therefore important to organize the services provided by the municipalities in Finland effectively. The objective of this research is twofold. First, private purchasing best practices are identified via literature-based research. Second, a multiple case study covering municipalities in the metropolitan area is conducted with the aim of examining whether the identified private purchasing best practices are used in procurement of services. This study covers tendering for housing services for the elderly during 2007-2012. The study is a multiple case study covering Helsinki, Espoo, Vantaa, Lohja, and the Karviainen federation of municipalities. The study was conducted by interviewing persons involved in the tendering of housing services for the elderly. The best practices in private purchasing that were identified are market knowledge, purchasing strategy, total cost of ownership, cross-functional teams, co-operation, and sustainability. The results indicate that these best practices are indeed partly utilized in procurement of services in the cases studied. Cross-functional teams were used in all studied cases. Purchasing strategy was established in some municipalities during the study period. Only Helsinki studied properly the supply market prior to tendering. Total cost of ownership and co-operation were not utilized in a wider scale. The identified best practices in private purchasing can be criticized due to limited number of sources of information. The number of studied tendering cases could have been higher. This research is the only research that studies the utilization of private purchasing's best practices in public procurement of services. Its value is that it sheds light on the resources within public procurement organizations, showing the shortage in purchasing skills, purchasing strategy, and time. In the forthcoming social and health care reform the competences of the procurement personnel should be recognized and more clearly defined.

Keywords Purchasing, public procurement, services, best practice, resources

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As Socrates said “There is only one good, knowledge, and one evil, ignorance”. These words occurred to me when thinking about procurement of services in Finnish municipalities. When I started this study I wanted to know if there would be means and ways to improve the performance of public procurement. This was a real challenge for somebody who had never prior this study been involved in public procurement. I had worked in private purchasing though. This experience gave me some background to conduct this dissertation.

There are several people who have made possible for me to execute this dissertation. I wish to express my gratitude first of all to my supervisor Markku Kuula, who has been a valuable source of new ideas.

I need to thank my pre-examiners for a remarkable job in making sure that this document is an academically sound piece of work. Professor Gyula Vastag and Professor Sukran Atadeniz have helped me to improve my academic writing.

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However, the greatest thanks go to my family and friends. My parents Seppo and Aini have given their full support throughout the process. My children Katarina and Juha together with their families have continuously encouraged me during the process. My wife Tarja has participated in numerous discussions which I have raised with her during writing the dissertation. Special thanks to Tarja

Lohja 28.2.2017

Esa Väänänen
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<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>APQC</td>
<td>American Productivity and Quality Center</td>
</tr>
<tr>
<td>ARA</td>
<td>The Housing Finance and Development Centre in Finland</td>
</tr>
<tr>
<td>BC</td>
<td>Before Christ</td>
</tr>
<tr>
<td>DEFRA</td>
<td>Department for Environment, Food &amp; Rural Affairs - Government in the UK</td>
</tr>
<tr>
<td>EC</td>
<td>European Community</td>
</tr>
<tr>
<td>ESC</td>
<td>Ecole de Commerce in Lyon</td>
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<tr>
<td>ETA</td>
<td>European Economic Area</td>
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<tr>
<td>ETENE</td>
<td>The National Advisory Board on Social Welfare and Health Care Ethics in Finland</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>GATS</td>
<td>General Agreement in Trade on Services</td>
</tr>
<tr>
<td>GATT</td>
<td>General Agreement on Tariffs and Trade</td>
</tr>
<tr>
<td>GPA</td>
<td>Government Procurement Agreement</td>
</tr>
<tr>
<td>HILMA</td>
<td>An electronical information channel, where public procurement units are informing their acquisitions</td>
</tr>
<tr>
<td>HM Treasury</td>
<td>Her Majesty’s Treasury</td>
</tr>
<tr>
<td>IMP</td>
<td>International Marketing and Purchasing (group)</td>
</tr>
<tr>
<td>JIT</td>
<td>Just in time</td>
</tr>
<tr>
<td>JYSE</td>
<td>The general provisions for public procurement</td>
</tr>
<tr>
<td>KM</td>
<td>Knowledge Management</td>
</tr>
<tr>
<td>KPI</td>
<td>Key performance indicator</td>
</tr>
<tr>
<td>KPMG</td>
<td>One of the largest specialist organizations in the World providing service in audit and tax issues</td>
</tr>
<tr>
<td>NPD</td>
<td>New product development</td>
</tr>
<tr>
<td>NPM</td>
<td>New public management</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
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<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>OECD</td>
<td>The Organization for Economic Co-operation and Development</td>
</tr>
<tr>
<td>RAVA</td>
<td>Assessing functional ability of an elderly person</td>
</tr>
<tr>
<td>RFB</td>
<td>Request for bid</td>
</tr>
<tr>
<td>RFI</td>
<td>Request for information</td>
</tr>
<tr>
<td>RFP</td>
<td>Request for proposal</td>
</tr>
<tr>
<td>RFQ</td>
<td>Request for quote</td>
</tr>
<tr>
<td>RFX</td>
<td>Catch-all term covering RFI, RFP, RFQ and RFB</td>
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<tr>
<td>SCI</td>
<td>Supply chain integration</td>
</tr>
<tr>
<td>SCM</td>
<td>Supply chain management</td>
</tr>
<tr>
<td>SCOR</td>
<td>A systematic framework to help organizations to improve their supply chain performance</td>
</tr>
<tr>
<td>SLA</td>
<td>Service level agreement</td>
</tr>
<tr>
<td>TCA</td>
<td>Transaction cost analysis theory</td>
</tr>
<tr>
<td>TCO</td>
<td>Total cost of ownership</td>
</tr>
<tr>
<td>TED</td>
<td>Tenders electronic daily is a system giving information about public procurement contracts in the European Union</td>
</tr>
<tr>
<td>TEKES</td>
<td>The Finnish Funding Agency for Innovation</td>
</tr>
<tr>
<td>TQM</td>
<td>Total quality management</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>UMIST</td>
<td>University of Manchester Institute of Science and Technology</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>US</td>
<td>United States (of America)</td>
</tr>
<tr>
<td>VALVIRA</td>
<td>National Supervisory Authority for Welfare and Health in Finland</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
<tr>
<td>3 S Model</td>
<td>Three dimensions of interest to supply chain scholars and practitioners</td>
</tr>
</tbody>
</table>
Purchasing has evolved dramatically from the days when the pyramids were built around 3000 BC. At that time there was not a proper purchasing function organizing materials for the pyramids. The Egyptians were using scribes to organize the materials management. We can see them as first operators in the purchasing function (Nolan, 2015). On the other hand we can see similarities with today’s global sourcing and with the medieval expeditions of Kolumbus and Marco Polo. The target is the same, i.e. to find economic value. (Iloranta and Pajunen-Muhonen, 2012).

Paulraj et al. (2006) have described purchasing’s evolution as having the following phases: materials management, buying, purchasing, procurement and supply management, supply chain management. Moreover the purchasing evolution can be described in forms of maturity models. Maturity models are used in Quality Management and in ICT. In the literature we can discover several purchasing maturity models. In this study models from Reck and Long (1988), Keough (1993), Stannack and Jones (1996), van Weele et al. (1998), Burt et al. (2003), Schiele (2007) and van Weele (2014) are discussed.

Purchasing is according to van Weele (2014, p. 3): “The management of the company’s external resources in such a way that the supply of all goods, service, capabilities and knowledge which are necessary for running, maintaining and managing the company’s primary and support activities is secured under the most favorable conditions.” According to Lysons and Farrington (2006, p. 8) the definition of purchasing is “The process undertaken by organizational unit that, either as a function or as part of an integrated supply chain, is responsible for procuring or assisting to procure, in the most efficient manner, required supplies at the right time, quality, quantity and price and the management of suppliers, thereby contributing to the competitive advantage of the enterprise and the achievement of its corporate strategy”. According to Murray (2001) private sector purchasing has the following goals: cost reduction, quality improvement, innovation transfer and security of supply. Today’s successful organizations have acknowledged the importance of purchasing as a strategic function of the organization. The more organizations have focused on their core businesses, the higher the share of purchasing costs of the organizations’ sales income has become. In many organizations this share can be as high as 60-80 per cent (Bailly et al., 2008).

The share of services purchased by an organization has been rising over the years. Services are increasingly purchased from organizations specialized in
providing those services (van Weele, 2014). Grönroos (2000) defines service “as a process consisting of a series of more or less tangible activities, that normally take place in the interaction between customer and supplier employees, or physical resources and systems, that are offered as an integrated solution to customer problems”. On the other hand van Weele (2014) highlights the importance of personal relationships in the process of purchasing services. This may lead to a situation where internal users are dominating this purchasing process leaving the purchasing unit in an administrative role. This may impact on the cost of the service. However services differ from goods in the following features: intangibility, heterogeneity, perishability and inseparability (Shostack, 1977; Berry, 1980). The intangibility of services is causing purchasers problems in assessing the service quality (Parasuraman et al., 1985; Zeithaml and Bitner, 1996). Customer satisfaction can be built when services are acquired based on long-term relationships (Payne, 1995). On the other hand the importance of purchasing of services is increasing for reasons such as the growing services industry, the deregulation of the public services sector and increasing outsourcing in both the private and public sectors (Bryntse, 1996). Service level agreements (SLA) can be made between a client and a supplier of services. In these agreements quantified elements of the service provision are defined (Bailly et al., 2008). Additionally according to Lysons and Farrington (2006) SLAs have many advantages: the service providers and customers are specified as are the particular service or services, customers understand what services they’ll receive and they have information about additional services a provider can offer, the real needs and levels of service required by the customer are identified, the costs of different optional services and their basis are specified, and monitoring of services and service levels has been agreed. According to Lysons (2001) the following reasons for SLAs failing can be listed: lack of commitment by customers and service providers; an inadequate support structure (shortage of project team, SLA manager and regular service level review meetings); too detailed SLA or SLA not detailed enough; and finally inadequate staff training.

Public procurement has the following goals (Murray, 2001): local sourcing/preference, internal advice, to create awareness of purchasing opportunities, and green purchasing. The main difference between public procurement and private purchasing is that public procurement is more regulated. All member states of the EU are forced to implement the EC procurement directives. The legal basis for the EC procurement directives is included in the Treaty of Rome from 1957. The key principles of this treaty are (Lindskog et al., 2010): To increase transparency of procurement procedures and practices throughout the community, to allow the free movement of goods, services, capital and people between member states, to develop effective competition for public contracts, to standardize specifications and to provide advance information of procurement needs to the marketplace. Public procurement in the EU represents 14 percent of the total gross national product. The value was in the year 2004 approximately 1,000 billion euros (TED, 2004). However prior to the European Community legislation, just 2 percent of the public contracts were captured by an-
other member state than the issuing country (Sanderson, 1998). Thus this procedure was expensive for purchasing organizations due to lack of proper competition. In addition the supply market was not developing.

Rönnbäck (2012) studied how to integrate quality into the public procurement process. The study was carried out in the public transportation industry where service provision had been outsourced. Rönnbäck (2012) found three alternative models to evaluate service quality of tenders. They are price only, the use of key performance indicators (KPIs) and self-assessment. In contrast service level agreements (SLA) can be made between a client and a supplier of services. In these agreements quantified elements of the service provision are defined (Bailly et al., 2008).

The social and health services reform which is under consideration in Finland is causing public debate concerning the role of private service providers in this reform. Municipalities have traditionally organized their services for their residents by producing these services themselves.

This reform can be seen as a reflection of the New Public Management paradigm (Moore, 1994), which is favoring a higher rate of outsourcing and competitive tendering of public sector services. In most cases up to the year 2000 municipalities in Finland acquired services directly through negotiations. The European Union’s procurement directives and national procurement legislation started to influence this process only in 2004 (Sinervo and Taimio, 2011). The obligation for tendering in Finland took effect along with the ETA free-trade agreement on January 1st 1994. The value of public procurement in Finland in the year 2012 was 23, 4 billion euros (Hilma 6.2.2013). The procurement of local authorities formed nearly half of this value.

The Organization for Economic Co-operation and Development noticed in a survey that many countries have used new management practices involving the private for-profit sector to bring changes in their way to manage public services (OECD, 1993a). These practices have been mentioned as part of the new public management (NPM) (Hood, 1991). Pollitt and Bouckaert (2000) and Hood (1991) have studied the new concept of the new public management (NPM). The idea of the NPM is to aim for a more efficient public sector. The new public management has developed over the years. However according to Moore (1994, p.13), “The central feature of NPM is the attempt to introduce or simulate, within those sections of the public service that are not privatized, the performance in-centives and the disciplines that exist in a market environment.”
Table 1. Doctrinal components of the new public management (modified from Hood 1991, pp. 4-5)

<table>
<thead>
<tr>
<th>Doctrine</th>
<th>Meaning</th>
<th>Typical justification</th>
</tr>
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<tbody>
<tr>
<td>‘Hands-on professional management’ in the public sector</td>
<td>Active, visible, discretionary control of organizations from named persons at the top, ‘free to manage’</td>
<td>Accountability requires clear assignment of responsibility for action, not diffusion of power</td>
</tr>
<tr>
<td>Explicit standards and measures of performance</td>
<td>Definition of goals, targets, indicators of success, preferably expressed in quantitative terms, especially for professional services</td>
<td>Accountability requires clear statement of goals; efficiency requires ‘hard look’ at objectives</td>
</tr>
<tr>
<td>Greater emphasis on output controls</td>
<td>Resource allocation and rewards linked to measured performance; breakup of centralized bureaucracy-wide personnel management</td>
<td>Need to stress results rather than procedures</td>
</tr>
<tr>
<td>Shift to disaggregation of units in the public sector</td>
<td>Break up of formerly ‘monolithic’ units, unbundling of U-form management systems into corporatized units around products, operating on decentralized ‘online’ budgets and dealing with one another on an ‘arms-length’ basis</td>
<td>Need to create ‘manageable’ units, separate provision and production interests, gain efficiency advantages of use of contract or franchise arrangements inside as well as outside the public sector</td>
</tr>
<tr>
<td>Shift to greater competition in public sector</td>
<td>Move to term contracts and public tendering procedures</td>
<td>Rivalry as the key to lower costs and better standards</td>
</tr>
<tr>
<td>Stress on private-sector styles of management practice</td>
<td>Move away from military-style public service ethic, greater flexibility in hiring and rewards; greater use of PR techniques</td>
<td>Need to use ‘proven’ private sector management tools in the public sector</td>
</tr>
<tr>
<td>Stress on greater discipline and parsimony in resource use</td>
<td>Cutting direct costs, raising labor discipline, resisting union demands, limiting ‘compliance costs’ to business</td>
<td>Need to check resource demands of public sector and ‘do more with less’</td>
</tr>
</tbody>
</table>

1.1 Motivation of the study

What is the problem? The Finnish population is aging fast. This is creating high and rising costs to taxpayers. At the same time the aged population and their relatives are dissatisfied with the services provided for the elderly. Why is the problem important? We need to provide sufficient services for the aged population. We must, however, ensure that the services are produced in the most economical manner. The public procurement function must perform according to these requirements. The potential solution to this problem is that public organizations are starting to plan their procurements in a manner similar to their counterparts in private purchasing. This planning consists of proper resources in terms of personnel and time, i.e., that competent persons are having enough time, possibly in a project type of structure, to perform.

The emphasis in public procurement seems to be on the tendering phase in practice, even though the emphasis should be placed on planning and preparation of the acquisition together with implementation of the established agreement.

Stenecker (2008, pp. 35-36) noticed that many purchasing organizations concentrate in the RFX which is the catch-all term covering Request for Information (RFI), Request for Proposal (RFP), Request for Quote (RFQ) and Request for Bid (RFB), negotiation and agreement phases. Stenecker argued that
organizations would achieve better results if they were to focus on the preparation of the acquisition and by focusing on agreement implementation and monitoring activities. This is illustrated in figure 1.

Figure 1. The efforts of the purchasing organization in different stages of the procurement process (Stenecker, 2008, pp 35-36).

Iloranta and Pajunen-Muhonen (2012) are discussing the same issue. This is illustrated in figure 2. They emphasize the importance of separating the part of a procurement process regulated by the public procurement legislation from the rest of the public procurement process.
Procurement of services from private suppliers has in municipalities created discussion and tendering have often ended in the Market Court. The Market Court is a special court hearing market law, competition law, public procurement and civil Intellectual Property Rights cases in Finland (www.merkkinaoikeus.en). These problems in tendering have been seen caused by a shortage of procurement skills in municipal organizations (e.g., Sinervo and Taimio, 2011; Syrjä, 2010).

Finland’s population is aging fast (Sinervo and Taimio, 2011). This is causing higher costs to local authorities and as a consequence higher taxes to taxpayers, if the costs of the elderly cannot be reduced. Outsourcing of housing services for the elderly has been seen as one solution. The economically most important solution is to support living of the elderly at home as long as possible.

Public procurement in municipalities in Finland has not been studied from this perspective, i.e., finding out if the best practices of private purchasing have been utilized in public procurement. International research of public procurement focuses mainly on juridical issues in tendering procedures (e.g., Arrowsmith 2005, 2006; Bovis 2005, 2006; Prosser 2005). Public-private partnerships (f.e.g. Ghobabian et al., 2004) have been studied together with collaboration in procurement (f.e.g. Erridge and Greer 2002; Bovaird 2006).

In Finland several studies of procurement in different sectors have been conducted including services for the elderly (e.g., Haho et al., 2007; Kähkönen and Volk, 2008), housing service for the elderly (e.g., Sinervo et al., 2010; Syrjä, 2010; Lundström, 2011). In addition new areas of public procurements have been studied, innovation in public procurement (e.g., Yliherva, 2006; Halme and Kotilainen, 2008) and internationally sustainability in public procurement (e.g., Carter and Jennings, 2004; Amann et al., 2014).

The difference between private purchasing and public procurement have been studied by, among others, Murray 2001; Heinritz et al., 1991; Lian and Laing, 2004; McCue and Pitzer, 2005; Arlbjorn and Freytag, 2012. In the research of...
Arlbjorn and Freytag (2012) they compared private sector purchasing and public procurement and studied whether they could learn from each other. Their research indicates that procurement of public services could benefit from the latest developments in supply chain management in the private sector. Especially in Finland where the population is ageing fast there is a need to improve the efficiency of public procurement. The sustainability gap, i.e., that Finnish authorities have difficulties in the long run to finance the public economy, has during the past years been an important discussion issue.

1.2 Research question and objectives

In this chapter the research question will be introduced. The research question is: How are the Finnish municipalities utilizing in the procurement of services private purchasing best practices? Case Housing services for the Elderly.

This doctoral thesis studies similarities and differences between public procurement and private sector purchasing in Finland. The main interest is to study how much best practices of the private sector are utilized in procurement by Finnish municipalities. The study will begin by specifying best practices in private purchasing. This will be done through a literature review. Secondly it will be demonstrated how these practices are utilized in the procurement of Finnish municipalities. The thesis tries to come to terms with the idea that success in public procurement is not only based on knowledge of procurement law. Success depends even more on capabilities in general purchasing. The theory of this thesis is the Resource-based View.

1.3 The organization of the thesis

This thesis is organized as follows:

Chapter 1 is an introduction that highlights the motivation for the study and the nature of purchasing and procurement. The research question and objectives, the phases of the study and the organization of the study are explained. Terminology used in this study is listed.

Chapter 2 discusses research methodology. The conduct of the case study and especially the multiple case study is discussed. The theory of the research, the Resource-based View, is discussed.

Chapter 3 reviews literature regarding purchasing in the private sector. From databases Business Source Elite, Emerald, ProQuest, ScienceDirect and ebrady and search terms (“purchasing or procurement”) and “best practice” together with relevant books best practices in purchasing are searched and identified. A literature review concerning public procurement is conducted. The comparison of private purchasing and public procurement is made. The background for the housing services for the elderly is discussed.

Chapter 4 introduces the studied cases, giving justification for choosing these particular cases, introducing the tendering of housing service for the elderly in each municipality during 2007-2012, observing the guidelines of the elderly care policies in each municipality, and discussing the form of questions used in the interviews. The relevance of the form of questions to reflect the identified best practices is discussed.
Chapter 5 introduces the results from the multiple cases. An interview of a procurement law specialist introduces an interpretation of the existing and the forthcoming procurement law. The form of questions is discussed thoroughly question by question and a summary of this discussion is presented. Chapter 6 discusses the findings, the limitations of the study and validation of the study. This chapter draws conclusions and suggests directions for further research. Figure 3 summarizes the research phases of this study.

1.4 Terminology of the study

This study uses specific meanings for certain terms that may have other meanings in research literature or common language. The following is a list of terms that have or may have various interpretations.

*Purchasing* is the process by which an organization is managing its external resources in such a way that the organization’s primary and support activities are secured under the most favorable conditions.

*Procurement* is a process that includes all activities that are required in order to get a product or service from the supplier to its final destination.

*Supply Chain Management* is a process which manages all activities associated with the flow and transformation of goods and services up from suppliers to the end users fulfilling all the expectations.

*Resource-based View* is an approach that argues that the competitive edge of an organization depends on the manner how the organization is utilizing its resources. The resources may be internal and external.
Knowledge is data, information, facts, truths, concepts, theories, judgment, institution, insight, experience and predictability which creates understanding and therefore ability to take effective action.

Best practice is a method or process that achieves better results than another method or process in an operation.

Maturity is a level of professionalism in a function.

Tendering is a process including activities to select a contractor for the work based on competitive bids in public procurement.
2. Theoretical and methodological foundations

The aim of research is according to Karlsson (2009, p. 14) “the creation and development of knowledge and the output is contribution to knowledge”. The concept of knowledge can be defined e.g. “Knowledge is information that has been organized and analyzed to make it understandable and applicable to problem solving and decision making” (Turban, 1992) or “Knowledge consists of truths and beliefs, perspectives and concepts, judgement and expectations, methodologies and know-how” (Wiig, 1993).

The choice of research methodology is influenced by issues such as the research goals and objectives, research questions (what, who, how, why, etc.), the research problem and the characteristics of the studied phenomenon (Ellram, 1996; Näslund, 2002; Frankel et al., 2005). Research methodology options include qualitative and quantitative methods to collect data of the studied phenomenon. Table 2 illustrates classification of different research approaches. The purpose of this study is to increase understanding of public procurement of services. The researcher acted as an external participant.

<table>
<thead>
<tr>
<th>Table 2. Classification of different research approaches and methods including their characteristics (Kananen, 2013, p. 29)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor</strong></td>
</tr>
<tr>
<td>Relationship between Theory and Practice</td>
</tr>
<tr>
<td>Purpose of Research</td>
</tr>
<tr>
<td>Researcher’s Role</td>
</tr>
<tr>
<td>Research Questions</td>
</tr>
<tr>
<td>Theme interview</td>
</tr>
</tbody>
</table>

As Table 2 indicates, qualitative research is inductive aiming to add understanding of the studied phenomenon. According to Flick (2014, p.12) “the main reason for using qualitative research should be that a research question requires the use of this sort of approach and not a different one”.
2.1 Resource-based View

According to Penrose (1959), Rubin (1973) and Wernerfelt (1984) the resource-based view consists of “a collection of productive resources” which can be utilized to create competitive advantage. Dietrickx and Cool (1989) added that the more valuable and rare the resources are, the more competitive advantage the firm can obtain. This static view of the resource-based view has been developed, for example by Dyer and Singh (1998), to include the resources of different members of a supply chain. Newbert (2007) studied the resource-based view literature and identified three resource-based view approaches to describe the role of IT in enabling competitive supply chain strategies:

1. **The resource-heterogeneity approach** discusses the relationships between unique resources/capabilities and a sustained competitive advantage, which then leads to a sustained performance (Prahalad and Hamel, 1990; Barney, 1991).

2. **The organizing approach** states that certain firm-level conditions enable the firm to more fully exploit key resources. To achieve a competitive advantage, valuable resources must be properly organized and leveraged (Peteraf, 1993; Henderson and Cockburn, 1994; Wiklund and Shepherd, 2003).

3. **The dynamic-capabilities approach** discusses the need to transform resources into a dynamic capability such as an e-commerce capability to achieve superior performance in a changing environment (Zhu and Kraemer, 2002).

Fawcett et al. (2011) studied information technology deployment in supply chain strategy formulation and execution when aiming to achieve superior performance. They used a dynamic-capabilities approach. They found that information technology’s “connecting” role remains a valued and somewhat rare capability and a firm’s willingness to share information creates improved performance, and finally when firms are learning to use information sharing this leads to an improved collaboration and higher satisfaction. According to Grant (1991) to be able to formulate a strategy for an organization, the organization must consider the resources and capabilities. “The key to a resource-based approach to strategy formulation is understanding the relationships between resources, capabilities, competitive advantage, and profitability” (Grant, 1991, p.133). Barney divides resources of an organization into three groups: resources of physical capital, resources of human capital and resources of organizational capital (Barney, 1991). Additionally Sorensen (1992) discovered that an organization gains sustainable competitive advantage only if it manages in tandem both its internal and external operations. And above all the organization has to secure the continuous development of its internal competencies. Oliver (1997, p. 699) formulated her interpretation of a resource-based view “…from a resource-based perspective, sustainable competitive advantage is the outcome of discretionary rational choices, selective resource accumulation and deployment, strategic industry factors, and factor market imperfections. Consistent with a strategic orientation, the resource-based view assumes that economic motives drive resource procurement decisions and that economic factors in the firm’s competitive and resource environments drive firm conduct and outcomes.”

The resource-based view has been the dominant approach in strategy research in North America and Europe. This applies explicitly to the private sector and implicitly to the public sector (Barney 2001a, 2001b; Bovaird 2005; Hoopes et al. 2003). According to Szymaniec-Mlicka (2014) resource-based view has been widely used in the strategy and management of private organizations, but there is shortage of research of implementation of resource-based view in the management of public organizations. Bryson et al. (2007) studied how to improve
effectiveness in public organizations. They state that it is important for the success of a public organization to identify and build strategic capabilities to be able to provide value for the stakeholders of the organization at a reasonable cost. Bryson et al. (2007) developed a process for identifying and making use of distinctive competencies in public organizations. By distinctive competencies they denote “competencies that are very difficult for others to replicate and therefore are a source of enduring advantage”. By competencies these researchers “connote a subset of resources and (they) consist of abilities, sets of actions, technologies, or processes that help an organization to perform well against important goals”. (Bryson et al. 2007, p. 704). According to Butler (2009) the most important resources and competences in a turbulent environment of a public organization are: a culture focused on providing high quality of service, knowledge and a practice to exchange it within an organization, the aim of managers to improve the performance of the organization and the ability of organizational learning.

2.2 Multiple case study

Case research was chosen as a research method in this study. “Case research and other forms of field research enrich not only theory, but also the researchers themselves” (Voss et al., 2016). In this research a practical approach to the research problem was aimed at. According to Voss et al. (2016, p. 174) multiple cases may have limited depth of study because the resources are constrained, but they may enhance external validity and “help guard against observer bias”. Retrospective cases were chosen due to the nature of public procurement. Current tendering could not be analyzed. The disadvantage of using retrospective cases can be that “participants may not recall important events” (Voss et al., 2016) or they may not have been involved in all the tendering. In this research five cases were studied by interviewing in most cases three persons from the respective organizations participating in the tendering of housing services for the elderly. In the case of Espoo only two persons were interviewed. Originally several additional cases were considered, but during the research process it was decided that the chosen cases were representative enough to explain the manner in which Finnish municipalities are procuring their services. Helsinki, Espoo and Vantaa were chosen because their size indicates that they would have at least one or several tenderings during the study period. I also assumed that these cities would have the most developed procurement structures and procedures in Finland. This assumption is based on the fact that these cities are part of the metropolitan area and they are the largest cities in Finland. To cover smaller municipalities I chose to study Lohja. Karviainen was chosen due to its nature, a federation of municipalities.

The time frame of the studied tendering was 2007 - 2012. This time frame was chosen because Public procurement law started to have effect in Finland only in 2004 and the researcher wanted to know how the tendering was functioning under the influence of this law. The other restricting factor for the time frame was the period when the interviews were conducted, in 2013.

A case study has its advantage (Yin, 2003, p. 9), when “a ‘how’ or ‘why’ question is being asked about a contemporary set of events, over which the investigator has little or no control”. Thus “the first and most important condition for differentiating among the various research methods is to classify the type of research question being asked” (Yin, 2009, p.10). A case study is often a mixture of qualitative and quantitative research (Kananen, 2013). The case study approach has been according to Yin (2009) criticized over the lack of rigor. By using multiple-case research this issue is possible to overcome. The other issue where the case study approach has been criticized is that case studies do not provide much basis
Multiple-case research can however overcome this problem. Yin (2009, p.18) defines the scope of a case study; “A case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident”. A case research definition according to Yin (2003) is: “Doing case research means conducting an empirical investigation of a contemporary phenomenon within its natural context using multiple sources of evidence”. For case studies following components of research design are according to Yin (2003) important: a study’s questions, its propositions, its units of analysis, the logic linking the data to the propositions and the criteria for interpreting the findings.

A case study can be either descriptive, explanatory or exploratory (Yin, 2003). Case studies are utilizing a combination of data collection methods such as archives, interviews, questionnaires, and observations. The evidence is presented as words, numbers, or both (Eisenhardt, 1989). According to Voss (2009, p. 164) “case studies can be used for different types of research purposes such as exploration, theory building, theory testing and theory extension/refinement”. On the other hand longitudinal case studies give greater opportunity to observe the sequential relationships of events (Voss, 2009). This study is explanatory and it is partly creating new theory (related to the Resource-based View).

“Construct validity is the extent to which we establish correct operational measures for the concepts being studied” (Voss et al., 2016, p. 184). It can be according to Voss et al. (2016, p. 184) tested by, for example, “using multiple sources of evidence (similar results are evidence of convergent validity)”. “Internal validity is the extent to which we can establish a causal relationship” (Yin, 1994, p. 35). According to Yin (1994, p. 36) “external validity is knowing whether a study’s finding can be generalized beyond the immediate case study”. Reliability is, according to Yin (1994, p. 36), “the extent to which a study’s operations can be repeated, with the same results”. In this study the validity was taken care of by using the same interview form in all the cases.

The research methods used in this thesis include a systematic literature review settling on best practices of private purchasing. The main focus in this research is in understanding procurement in Finnish municipalities from the private sector’s purchasing best practice perspective. The idea was to first make a literature review of the common practices in private purchasing. This was conducted by studying relevant literature and articles from respected supply chain management journals. The articles were found by using databases Business Source Elite (Ebsco), Emerald, ProQuest, ScienceDirect and Ebrady. The search term was “purchasing or procurement” and “best practice”. The empirical data of tendering in the case municipalities was collected by interviewing relevant personnel in respective municipalities and by studying the documentation of the tendering. Personnel which had taken part into tendering of housing services for the elderly in Helsinki, Espoo, Vantaa, Lohja and Karviainen (federation of municipalities) was interviewed. The interviews were based on structured forms. This study is also longitudinal in the respect that in some cases two tendering processes were organized during the studied time period.
2.3 Framework of this study

Literature review in order to come up with the best practice of private purchasing was conducted by using databases and relevant books. Scientific papers were studied to explore research concerning these best practices related to public procurement. In Figure 4 the framework is presented. In the box on the left best practice in private purchasing is discussed. Based on databases and literature the discovered best practices relating to market knowledge, purchasing portfolio, total cost of ownership (TCO), cross-functional teams, co-operation and sustainability will be discussed in the cited chapter. In the box on the right the discovered best practices are reviewed from literature in reference to public procurement in the cited chapters. These best practices will be analyzed in reference to procurement of services in case municipalities. The findings will be reported in the box below.

<table>
<thead>
<tr>
<th>Best practice in private purchasing</th>
<th>Literature review of private purchasing's best practice in public procurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market knowledge</td>
<td>chapter 3.2.1 Market knowledge chapter 3.3.2</td>
</tr>
<tr>
<td>Purchasing portfolio</td>
<td>chapter 3.2.2 Purchasing portfolio chapter 3.3.3</td>
</tr>
<tr>
<td>TCO</td>
<td>chapter 3.2.3 TCO chapter 3.3.4</td>
</tr>
<tr>
<td>Cross-functional teams</td>
<td>chapter 3.2.4 Cross-functional teams chapter 3.3.5</td>
</tr>
<tr>
<td>Co-operation</td>
<td>chapter 3.2.5 Co-operation chapter 3.3.6</td>
</tr>
<tr>
<td>Sustainability</td>
<td>chapter 3.2.6 Sustainability chapter 3.3.7</td>
</tr>
</tbody>
</table>

Utilization of best practices of private purchasing in public procurement

| Market knowledge                   |
| Purchasing portfolio / Strategy    |
| TCO                               |
| Cross-functional teams            |
| Collaboration                     |
| Sustainability                    |

Figure 4. Framework of this study
3. Literature review

This chapter reviews research in areas which are central to understanding how purchasing has developed over the years from a task orientated function to a vital strategical function of an organization. The basic idea to write this chapter has been the finding that development of private purchasing is far ahead of public procurement. This is illustrated by van Weele (2014) in Figure 9 where he is placing public procurement in the lowest end of the development. Best practices in private purchasing are searched and defined and they are discussed in relation to public procurement.

3.1 Private purchasing

The history of purchasing extends beyond the modern history of industrialization. A contract dated around 2800 BC states roughly: “HST to deliver 50 jars of fragrant smooth oil each 15 days after (a starting date) and during the reign of AS. In return he will be paid 5600 small weight in grain. This order will continue indefinitely until the purchaser or his son removes his consent” (Lysons and Farrighton, 2006, p. 9).

Henderson (1975) studied the status of purchasing in the 1960s. He discovered that purchasing executives in most organizations did not regard purchasing as an important function. However the purchasing function has changed greatly from those days. An important step in the evolution of purchasing was Peter Krajlic’s article “Purchasing must become Supply Management” (Krajlic 1983). Since then supply management has taken more like strategic role in particular in manufacturing companies. (Ellram and Tate, 2015).

The concept of materials management was introduced after the Second World War. In 1960’s the literature was referring to a new term called logistics (Pinkerton, 1999). Supply chain management was introduced first by Houlihan in 1985 (Houlihan, 1985). For example Paulraj et al. (2006) are describing the evolution of purchasing: materials management concept changes to buying, purchasing to procurement and supply management to supply chain management. On the other hand according to Giunipero et al. (2008) supply chain management incorporates features from logistics and transportation, operations management and materials and distribution management, marketing, as well as purchasing and information technology (Giunipero et al., 2008).

Purchasing has been defined earlier in this study (on page 11). Supply chain management is defined as “the systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long term performance of the individual companies and the supply chain as a whole” (Mentzer et al., 2001, p. 18).
Table 3 indicates that organizations are paying increasing attention to an internal and external collaboration and they are utilizing real-time and shared information technologies.

Table 3. Changing aspects of Purchasing and Supply Management (modified from Lyons and Farrington, 2006 and Monczka et al., 2011)

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Traditional</th>
<th>Changing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure</td>
<td>Vertical, hierarchical, functionally orientated</td>
<td>Cross-functional teams</td>
</tr>
<tr>
<td></td>
<td>Purchasing regarded as a separate function</td>
<td>Centrally led or self-managed supply teams</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Internal collaboration; purchasing as part of an integrated supply chain</td>
</tr>
<tr>
<td>Procedures</td>
<td>Paper-based</td>
<td>Real-time and shared information technology systems</td>
</tr>
<tr>
<td></td>
<td>Slow, high cost</td>
<td>Reverse auctions</td>
</tr>
<tr>
<td>Purchase considerations</td>
<td>Price only</td>
<td>Total cost of ownership</td>
</tr>
<tr>
<td></td>
<td>Buy what we can’t make</td>
<td>Subcontract or outsource non-core business</td>
</tr>
<tr>
<td>Sourcing</td>
<td>Multi-sourcing</td>
<td>Reducing supplier base</td>
</tr>
<tr>
<td></td>
<td>Local or national</td>
<td>Global sourcing</td>
</tr>
<tr>
<td></td>
<td>Little use of purchasing consortia</td>
<td>Increasing use of purchasing consortia</td>
</tr>
<tr>
<td>Supplier relationships</td>
<td>Short term</td>
<td>Alliances and partnerships</td>
</tr>
<tr>
<td></td>
<td>Adversarial and confrontational</td>
<td>Information sharing</td>
</tr>
<tr>
<td></td>
<td>Win-lose negotiations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Retention of information</td>
<td></td>
</tr>
<tr>
<td>Quality and specification</td>
<td>Purchaser specifications of design and quality</td>
<td>Supplier quality management</td>
</tr>
<tr>
<td></td>
<td>Inspection of goods on receipt</td>
<td></td>
</tr>
<tr>
<td>Inventory and lead times</td>
<td>High to provide security</td>
<td>On-site supplier managed inventory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Demand planning</td>
</tr>
<tr>
<td>Purchasing performance</td>
<td>Assessed mainly on price differences and savings</td>
<td>Link to business goals and objectives</td>
</tr>
</tbody>
</table>

According to Monczka et al. (2006) the purchasing function is increasing its importance as part of strategic thinking in different organizations. As a result the organizations which emphasize purchasing capabilities and strategic thinking are achieving best results (Reinicke et al., 2007). On the other hand van Weele (2010, p. 60) is defining purchasing performance as “the extent to which the purchasing function is able to realize its predetermined goals at the sacrifice of a minimum of the company’s resources”.

McKinsey and Supply Management Institute studied more than 200 corporations. Their study indicates that the purchasing function has great influence on a company’s profitability. In the best companies the personnel was well trained, there had been set clear targets for the purchasing function, and the purchasing organizations utilized cross-functional collaboration (Reinicke et al., 2007). The results of Reinicke’s study are shown in figure 5.
3.1.1 The development and maturity of purchasing

In the literature the term “maturity” is either seen as a process maturity describing the way a particular business process is defined, managed, measured, controlled, and effective (Fraser and Vaishnavi, 1997; Paulk et al., 1993) or as an object maturity, describing how e.g. a software product or a company report fulfills its purpose (Gericke et al., 2006) or as a people capability, describing how well the workforce can create knowledge and skills (Nonaka, 1994). Maturity is defined as “a very advanced or developed form or state” (Cambridge Advanced Learner’s Dictionary, http://dictionary.cambridge.org) or “the state or quality of being fully grown or developed” (The Free Dictionary, http://www.thefreedictionary.com). Actually Maturity thinking has its base in the quality management (Fraser et al., 2002). Watts Humphrey utilized Philip Crosby’s quality management maturity grid thinking when he developed the software process maturity framework (Paulk, 2009). Crosby introduced his Quality Management Maturity Grid to indicate different phases of emphasizing quality in an organization (see Table 4). This maturity grid starts from a phase where the organization does not manage quality, rather it is a quality department’s work. The highest level of quality management represents stage 5 where the quality is an essential part of the organization.
The Software Engineering Institute developed a five-level Capability Maturity Model for Software (see Figure 6). This model explains how software organizations can develop their capability in programming (Paulk, 2009). The success of the Software Capability Maturity Model has according to Paulk (2009) influenced a number of other maturity models in other areas. In the software process maturity framework, Humphrey recognized five maturity levels (Humphrey, 1987 and Humphrey, 1988). The maturity levels are showing areas to be improved. At the Initial level, the software process is acting ad hoc, the processes are not well defined and the operation is based on an individual effort and heroics. At the Repeatable level the Engineering processes are planned but not described in detail. At the Defined level the software processes are documented, standardized and integrated. At the Managed level software process and product quality are measured. At the Optimizing level the process is continuously improved (Paulk, 2009).

<table>
<thead>
<tr>
<th>Quality Management Maturity Grid (Crosby)</th>
<th>Assessor</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement Categories</td>
<td>Stage 1: Uncertainty</td>
<td>Stage 2: Awakening</td>
</tr>
<tr>
<td>Management understanding and attitude</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality organisation status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem handling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of quality as % of sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality improvement actions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summary of company quality posture</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4. The Quality Management Maturity Grid by Philip Crosby (1979)
Rozemeijer et al. (2003, p.7) defined purchasing development and maturity as “the level of professionalism in the purchasing function”. Different purchasing maturity models have been researched by among others Schiele (2007) and van Weele (2010). In particular Foerstl et al. (2013), Paik (2011), Cousins et al. (2006), Hartmann et al. (2012), Paulraj et al. (2006) and Schiele (2007) discovered that purchasing maturity is increasing a firm’s success. However, the concept of purchasing maturity is still, after extensive research, partly unclear (van Poucke et al., 2014). In addition purchasing maturity models are full of conceptual content, but have little empirical validation (van Poucke et al., 2014). Moreover some researchers (Alinaghian and Srai, 2011 and Bemelmans et al., 2013) have noticed that these models have not been transferred to purchasing development management and practices.

Van Poucke et al. (2014) discuss the key elements of purchasing maturity. These include purchasing involvement in the purchasing process, the contract coverage rate hinting to the share of the purchasing volume that is contracted. The third element is contract duration showing how much longer term collaborative buyer-seller relationships there exists (Spekman and Carraway, 2006). As a result mature purchasing organizations are using purchasing best practices (Chiesa et al., 1996 and Ellram et al., 2002). Based on this finding if we can measure organization’s purchasing maturity, we may find whether the quality of the purchasing function is contributing to the organization’s performance (Schiele, 2007).
In the literature we can discover several purchasing maturity models (Table 9). Many of them are according to Schiele (2007) conceptual in nature. Each maturity model will be discussed separately in due course. The model of Reck and Long is presented first. This model of Reck and Long (1988) describes purchasing’s development from a passive function to a function which is actively helping to improve the performance of the respective organization.

Table 5. Characteristics of each stage of development (modified from Reck and Long, 1988)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Passive</th>
<th>Independent</th>
<th>Supportive</th>
<th>Integrative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nature of long-range planning</strong></td>
<td>None</td>
<td>Commodity or procedural</td>
<td>Supportive of strategy</td>
<td>Integral part of strategy</td>
</tr>
<tr>
<td><strong>Impetus for change</strong></td>
<td>Management demands</td>
<td>Competitive parity</td>
<td>Competitive strategy</td>
<td>Integrative management</td>
</tr>
<tr>
<td><strong>Career advancement</strong></td>
<td>Limited</td>
<td>Possible</td>
<td>Probable</td>
<td>Unlimited</td>
</tr>
<tr>
<td><strong>Evaluation based on</strong></td>
<td>Complaints</td>
<td>Cost reduction &amp; supplier performance</td>
<td>Competitive objectives</td>
<td>Strategic contribution</td>
</tr>
<tr>
<td><strong>Organizational visibility</strong></td>
<td>Low</td>
<td>Limited</td>
<td>Variable</td>
<td>High</td>
</tr>
<tr>
<td><strong>Computer system focus</strong></td>
<td>Repetitive tasks</td>
<td>Techniques &amp; efficiency</td>
<td>Specific decision requirements</td>
<td>Needs of decision makers</td>
</tr>
<tr>
<td><strong>Sources of new ideas</strong></td>
<td>Trial and error</td>
<td>Current purchasing practices</td>
<td>Competitive strategy</td>
<td>Inter-functional information exchange</td>
</tr>
<tr>
<td><strong>Basis of resource availability</strong></td>
<td>Limited</td>
<td>Arbitrary/affordable</td>
<td>Objectives</td>
<td>Strategic requirements</td>
</tr>
<tr>
<td><strong>Basis of supplier evaluation</strong></td>
<td>Price &amp; easy availability</td>
<td>Least total cost</td>
<td>Competitive objectives</td>
<td>Strategic contributions</td>
</tr>
<tr>
<td><strong>Attitude towards suppliers</strong></td>
<td>Adversarial</td>
<td>Variable</td>
<td>Company resource</td>
<td>Mutual interdependence</td>
</tr>
<tr>
<td><strong>Professional development focus</strong></td>
<td>Deemed unnecessary</td>
<td>Current new practices</td>
<td>Elements of strategy</td>
<td>Cross-functional understanding</td>
</tr>
<tr>
<td><strong>Overall characterization</strong></td>
<td>Clinical function</td>
<td>Functional efficiency</td>
<td>Strategic facilitator</td>
<td>Strategic contributor</td>
</tr>
</tbody>
</table>

Keough (1993) introduced his evolution stages of strategic purchasing. The stages are split into five phases (figure 7).
Keough is discussing the barriers to strategic purchasing. He finds at least the following potential weaknesses in an organization: poor information, for example, shortage in knowledge of the total spend of the organization; weak administration i.e., the purchasing process is not working adequately; missing skills, e.g., day-to-day problems are handled, but planning and strategic thinking are missing; no performance measures, i.e., good measures of performance and value-added are missing in the purchasing function; low status, i.e., is there a purchasing manager represented in the management group of the organization (Keough, 1993).

Stannack and Jones (1996) identified four stages of purchasing evolution (see Table 6). This evolution model emphasizes the importance of a product in purchasing. However, their model stage 4 indicates a wider perspective towards a total business like thinking.
Table 6. The evolution of purchasing (Stannack and Jones, 1996 from Lysons and Farrington, 2006, p.10)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage 1</strong></td>
<td><strong>Product-centred purchasing</strong></td>
</tr>
<tr>
<td></td>
<td>Product-focused - concerned with the five “rights”, which concentrate exclusively on the purchasing of tangible products and outcome dimensions by means of which this product can be described and mentioned</td>
</tr>
<tr>
<td><strong>Stage 2</strong></td>
<td><strong>Process-centred purchasing</strong></td>
</tr>
<tr>
<td></td>
<td>Product-focused - moves beyond a concern with outcomes and begins to measure a process via which the outcome is delivered</td>
</tr>
<tr>
<td><strong>Stage 3</strong></td>
<td><strong>Relational purchasing</strong></td>
</tr>
<tr>
<td></td>
<td>Process- and relationally-focused - expanded to include purchaser-supplier relationships and how these might be used to manage the quality and nature of the supplier</td>
</tr>
<tr>
<td><strong>Stage 4</strong></td>
<td><strong>Performance-centred purchasing</strong></td>
</tr>
<tr>
<td></td>
<td>Focused on best product management methods. Employs an integrated methodology to manage relationships, processes and outcomes. Jointly resources this methodology with suppliers</td>
</tr>
</tbody>
</table>

The World Class Supply Management model emphasizes continuous improvement of the processes of an organization in order to improve its profitability (see figure 8). Thus to achieve world-class status, the management must understand the vital role of supply management and support improvement programs (Burt et al., 2003).
Schiele (2007) studied purchasing maturity by analyzing the relationship between organizations’ maturity and their performance in terms of cost savings. He discovered that the studied organizations revealed a significant relationship between purchasing’s maturity level and their performance in terms of cost savings. Schiele (2007) found the following functions to describe the maturity level of purchasing in an organization: Procurement planning, i.e. studying the environment and demand; specifying materials, and organizational structure of purchasing covering structure and status of purchasing; and process organization including the existence of a sourcing strategy, the supplier selection process,
supplier evaluation and supplier development; and human resources and leadership including job descriptions, job requirements, management of purchasing personnel; and finally purchasing controlling.

Like the other purchasing evolution models also van Weele is describing the stages starting from a clerical activity towards a centrally-led, cross-functional and customer-driven activity. In the first stage the basic task of purchasing is to buy the required raw materials and supplied components in such a way that they are never running out. The purchasing is reactive. In stage 2 purchasing is aiming for lowest prices. The purchasing is after good deals. In stage 3 the purchasing is led by a central purchasing department. This may lead to purchasing bureaucracy. In stage 4 cross-functionality is utilized, with emphasis on team-based management. In stage 5 collaboration with supply-chain partners is emphasized, with the aim of maximising leverage of the company’s external resources. In stage 6 the importance of the end-customer is recognized. Purchasing strategy is a vital part of strategy of the particular organization (van Weele 2014, pp. 67-71). Departing from other purchasing evolution models van Weele is placing different industries in his evolution model. The public sector has been placed in the less-developed phase, following by the public utilities in the second lowest development phase. At the other end the automotive, consumer electronics and IT and communication industries are located. According to van Weele the three first phases are having functional focus and the following three phases...
are having cross-functional focus indicating how the organization as a whole is participating in procurement operations. In the first three phases the purchasing organization is decentralized and in the following three phases it is centrally-led, demonstrating the independence of the purchasing functions.

Table 7 presents different purchasing models which, depending on the author, are called development model (Keough, 1993; van Weele, 1998, 2014) or evolution model (Stannack and Jones, 1996) or progression model to the world-class level (Burt et al., 2003). The first maturity model in Table 7 is the model of Reck and Long (1988). Their model is based on interviews and it emphasizes the impact of purchasing to the competitive strategy of an organization. Keough’s development model is based on interviews of more than 150 organizations around the world. In addition, Keough’s model is based on Reck and Long’s work including some additional stages and dimensions. Stannack and Jones’s model, however, emphasizes the importance of the product in purchasing. On the other hand the maturity model of van Weele et al. (1998) is a combination of all the maturity models presented earlier.

Table 7. Purchasing maturity / development models (modified from van Weele, 2014)

<table>
<thead>
<tr>
<th>Author</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Stage 4</th>
<th>Stage 5</th>
<th>Stage 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reck and Long</td>
<td>Passive</td>
<td>Independent</td>
<td>Supportive</td>
<td>Integrative</td>
<td>World-class supply management</td>
<td></td>
</tr>
<tr>
<td>(1988)</td>
<td>No strategic direction</td>
<td>Company strategy and purchasing</td>
<td>Purchasing function supports company</td>
<td>Purchasing’s strategy fully integrated to company</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>strategy not integrated</td>
<td>strategy</td>
<td>strategy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keough (1993)</td>
<td>Serve the factory</td>
<td>Lowest unit cost</td>
<td>Coordinated purchasing</td>
<td>Cross-functional purchasing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clerical</td>
<td>Cost analysis</td>
<td>Purchasing committee</td>
<td>Supplier development</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Supplier relationships and quality</td>
<td>Managing relationships, processes and outcomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schiele (2007)*</td>
<td>0-25%</td>
<td>25-50%</td>
<td>50-75%</td>
<td>Value chain orientation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Van Weele (2014)</td>
<td>Serve the factory</td>
<td>Reduce cost</td>
<td>Savings through synergy</td>
<td>Total cost of ownership</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Order processing</td>
<td>Tendering</td>
<td>Global sourcing</td>
<td>Cross-functional buying teams</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clerical</td>
<td>Approved supplier lists</td>
<td>Contracting</td>
<td>Vendor rating</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Supply chain optimization</td>
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<td></td>
<td>Outsourcing</td>
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<td></td>
<td>E-commerce</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cost models</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total customer satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Customer-driven activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Supplier development</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Global supplier network</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the chapter discussing the Resource-based View the importance of knowledge was identified. The concept of knowledge will be discussed in the following chapter.
3.1.2 Knowledge

Knowledge is seen as one of the key factors in an organization’s success (Darroch and McNaughton, 2002; Ferrari and Toledo, 2004). Researchers like Al-Ali (2003); Chen et al. (2005); Maditinos et al. (2011) and Sullivan (2000) are stating that the intellectual capital includes knowledge, applied experience, processes and technology in the organization, customer relationships and products. Additionally King (2007) and Wiig (1997) have discovered that knowledge includes creating and organizing it for improved performance. Moreover Ngosi et al. (2011) are referring to KPMG’s study of top 500 organizations in the EU (KPMG, 2003) concerning knowledge management. The findings are indicating that knowledge management is widely used f.e.g. in procurement, but at the same time over half of the studied organizations are feeling that they are not exploiting knowledge properly in their activities (Table 8).

Table 8. Conceptual Knowledge Management (KM) model for increasing maturity and capabilities (modified from KPMG, 2003)

<table>
<thead>
<tr>
<th>Maturity levels</th>
<th>Level 1 Initial</th>
<th>Level 2 Basic</th>
<th>Level 3 Intermediate</th>
<th>Level 4 Advanced</th>
<th>Level 5 Optimize</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capability</td>
<td>Leadership ability to set direction of KM effort</td>
<td>Coherent culture development &amp; capabilities</td>
<td>Organization identity</td>
<td>Managed knowledge assets for sharing &amp; lessons learned</td>
<td>Management capabilities</td>
</tr>
<tr>
<td>Maturity</td>
<td>Formal plans:</td>
<td>Knowledge, culture &amp; implementation of KM programs:</td>
<td>Integration &amp; Measurement:</td>
<td>Leadership style in specific target areas</td>
<td>Governance &amp; continuous improvement:</td>
</tr>
<tr>
<td></td>
<td>● KM strategy</td>
<td>● KM roles</td>
<td>● KM Infrastructure defined &amp; managed</td>
<td>● Knowledge repository fully managed</td>
<td>● Roadmap to sustaining competitive advantage</td>
</tr>
<tr>
<td></td>
<td>● KM roadmap</td>
<td>● KM pilot projects</td>
<td>● Practices defined</td>
<td>● Knowledge stewardship</td>
<td>● Integrated &amp; aligned KM infrastructure</td>
</tr>
<tr>
<td></td>
<td>● KM lifecycle</td>
<td>● Culture programs</td>
<td>● Structured measurement</td>
<td>● Capability audits &amp; lessons learned</td>
<td>● Recommendations from lessons diffused</td>
</tr>
<tr>
<td></td>
<td>● Target areas</td>
<td>● Skill training</td>
<td>● Skill enhancement</td>
<td>● Collected for evaluation</td>
<td>● Structured governance mechanisms</td>
</tr>
<tr>
<td></td>
<td>● IT evaluation, modernization - Structured change management</td>
<td>● Integrated KM activities</td>
<td>● Performance management systems implemented</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If an organization desires to shift from level 1 to level 2, it needs to define key aims of KM, identify and prioritize subsequent programs and ensure communication of KM aims. To shift from level 2 to level 3 an organization needs to develop a detailed KM roadmap and develop, implement and manage knowledge library. If an organization aims to shift from level 3 to level 4, it needs to define an integrated KM infrastructure. If a shift from level 4 to level 5 is desired an organization needs to e.g. ensure proper communication of KM activities and benefits (Ngosi et al., 2011). Actually Business Process Oriented Knowledge Management can be defined as “a knowledge management architecture where the structure, content and context of knowledge are determined by the business processes within which the knowledge is both created (usually through decision making) and used” (Abecker et al, 2002; Jablonski et al, 2001; Maier and Remus, 2002; Maier and Remus, 2003).

The terms “data”, “information”, “knowledge” and “knowledge management” have been defined in the article of Kaner and Karni (2004): “Data is a set of
discrete, objective facts” (Abecker et al., 2002, pp.1-22) “Information is data that has been organized or given structure - that is, placed in context and thus endowed with meaning” (Glazer, 1991, pp. 1-19). “Knowledge is information combined with experience, context, interpretation and reflection... that is ready to apply to decisions and actions” (Karni and Arciszewski, 1997, pp. 146-167). In addition “knowledge is best understood as the capacity to take effective action... the action is effective when it produces the anticipated and desired results. Many of the ideas normally considered to make up knowledge (data, information, facts, truths, concepts theories, judgement, intuition, insight, experience, predictability, etc.) contribute to create the understanding and ability needed to take effective action” (Bennet and Bennet, 2003, pp. 439-455). “Knowledge management is an organizational capability that allows people in organizations, working as individuals or in teams, projects or other such communities of interest, to create, capture, share and leverage their collective knowledge to improve performance” (Balasubramanian et al., 1999, pp.145-162).

If we assume that an organization is implementing knowledge management in order to enhance efficiency, the first step would be to identify the existing knowledge and start developing the knowledge from there (Klimko, 2001).

Table 9. Knowledge management maturity levels (Klimko, 2001, pp. 269-278)

<table>
<thead>
<tr>
<th>Maturity levels</th>
<th>Level 1 unaware</th>
<th>Level 2 discoverer</th>
<th>Level 3 creator</th>
<th>Level 4 manager</th>
<th>Level 5 renewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td>No focus</td>
<td>Scanning existing internal and external knowledge</td>
<td>Creation of new knowledge</td>
<td>Optimal allocation of resources</td>
<td>Inter-organizational cooperation</td>
</tr>
<tr>
<td>Key knowledge management processes</td>
<td>Organization unaware of any knowledge management activities</td>
<td>Scanning, appraising, capturing, transferring</td>
<td>Commitment, understanding business needs, innovation</td>
<td>Institutionalization, documentation, measurement</td>
<td>Sharing</td>
</tr>
<tr>
<td>Challenge</td>
<td>No challenge felt</td>
<td>Codification, transfer</td>
<td>Understanding the environment and the trends</td>
<td>Integration confidence</td>
<td>Achieve</td>
</tr>
<tr>
<td>Pitfalls</td>
<td>No utilization of organizational knowledge</td>
<td>Wrong appraisal Dependence on technology</td>
<td>Waste of resources</td>
<td>Having an end in itself</td>
<td>Vulnerability</td>
</tr>
</tbody>
</table>

3.2 Best practice in private sector purchasing

Camp (1989) defined "best practice” as a method or process which achieves better results than another method or process in an operation. Camp combined benchmarking to the idea of best practice. He stated that any organization willing to improve its products or processes is obliged to use benchmarking. According to Camp (1998) “benchmarking is finding and implementing best practices”. Moreover Camp (1995) and Mittelstaedt (1992) defined that “benchmarking is a market-based learning process by which a firm seeks to identify best practices that produce superior results in other firms and to replicate these to enhance its own competitive advantage” (Vorhies and Morgan, 2005, p. 81). Benchmarking consists of different stages: a search stage in which firms having outstanding performance are searched, following a gap-assessment stage in which the gap between a firm and an outstanding firm is assessed and a final
stage in which a firm plans and implements the gap-closing improvements (Vorhies and Morgan, 2005, p. 81).
The American Productivity and Quality Center (APQC) defines best practices as “activities or systems that have been shown to produce superior results. Best practices are selected by a systematic process, and judged as exemplary, good or successfully demonstrated. They can be adapted and to fit an organization’s specific needs” (APQC, cited in Jarrar and Zairi, 2000). According to Chapman et al. (1997) for an organization to be successful in purchasing and supply management is that it constructs and manages supplier networks based on the purchaser’s strengths. Additionally best practice companies strongly outsource and at the same time reduce the number of suppliers aiming for partnership with the key suppliers. (Chapman et al., 1997). To get there organizations must make certain changes in the way they operate. They have to transform their thinking from a price focus to a total cost focus; from a vertical, stand-alone process to a horizontally integrated one to form cross-functional teams. They have to start hiring best skilled people instead of hiring low-skilled people into the purchasing function. And they have to start using innovative tools such as online bidding. (Chapman et al., 1997).
To find the best practices in today’s purchasing in private sector several databases were analyzed. The databases were: Business Source Elite (Ebsco), Emerald, ProQuest, ScienceDirect and ebrady. The search term used was (“purchasing or procurement”) and “best practice”. Following table is showing the articles from the mentioned databases. In the column “subject” refers to a procedure relevant to purchasing.

Table 10. Best practice in purchasing (articles from scientific journals)

<table>
<thead>
<tr>
<th>Article</th>
<th>Writer</th>
<th>Publication</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Influence of a Firm’s Cross-Functional Orientation on Supply Chain Performance</td>
<td>Teck-Yong Eng 2005</td>
<td>Journal of Supply Chain Management, Vol 41, 4, 4-16</td>
<td>Cross-Functional teams</td>
</tr>
<tr>
<td>Supply chains and power regimes: Toward an analytic framework for managing extended networks of buyer and supplier relationships</td>
<td>Cox, Andrew; Sanders, Joe; Watson, Glyn 2001</td>
<td>Journal of Supply Chain Management, Vol 37, 2, 28-35</td>
<td>Co-operation</td>
</tr>
<tr>
<td>A Meta-Analysis of Supply Chain Integration and Firm Performance</td>
<td>Leuschner, Rudolf; Rogers, Dale S; Charvet, François F 2013</td>
<td>Journal of Supply Chain Management, Vol 49, 2, 34-57</td>
<td>Co-operation</td>
</tr>
<tr>
<td>The Relationships between external integration and plant improvement and innovation capabilities: the moderation effect of product clock speed</td>
<td>Peng, David X; Verghese, Anto; Shah, Rachna; Schroeder, Roger G 2013</td>
<td>Journal of Supply Chain Management, Vol 49, 3, 3-24</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Article</td>
<td>Writer</td>
<td>Publication</td>
<td>Subject</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Peeking inside the black box: towards an understanding of Supply Chain Collaboration Dynamics</td>
<td>Fawcett, Stanley E; Fawcett, Amydee M; Watson, Bradlee J; Magnan, Gregory M</td>
<td>Journal of Supply Chain Management, Vol 48, 1, 44-72</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Information Technology as an Enabler of Supply Chain Collaboration: A Dynamic-Capabilities Perspective</td>
<td>Fawcett, Stanley E; Wallin, Cynthia; Allred, Chad; Fawcett, Amydee M; Magnan, Gregory M</td>
<td>Journal of Supply Chain Management, Vol 47, 1, 38-59</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Moving Corporate Boundaries: Consequences for Innovative Redesign</td>
<td>Gadde, Lars-Erik</td>
<td>Journal of Supply Chain Management, Vol 49, 4, 12-26</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Building a more complete theory of sustainable Supply Chain Management using case studies of 10 exemplars</td>
<td>Pagell, Mark; Wu, Zhaohui 2009</td>
<td>Journal of Supply Chain Management, Vol 45, 2, 37-56</td>
<td>Sustainability</td>
</tr>
<tr>
<td>The power perspective in procurement and supply management</td>
<td>Cox, Andrew 2001</td>
<td>Journal of Supply Chain Management, Vol 37, 2, 4-7</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Strengthening the Innovation Chain: The Role of Internal Innovation Climate and Strategic Relationships with the Supply Chain Partners</td>
<td>Oke, Adegoke; Prajogo, Daniel I; Jayaram, Jayanth 2013</td>
<td>Journal of Supply Chain Management, Vol 49, 4, 43-58</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Supply Management Strategies for the Future: A Delphi Study</td>
<td>Ogden, Jeffrey A; Petersen, Kenneth J; Carter, Joseph R; Monczka, Robert M 2005</td>
<td>Journal of Supply Chain Management, Vol 41, 3, 29-48</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Supplier development practices: Product- and service-based industry companions</td>
<td>Krause, Daniel R; Scannell, Thomas V 2002</td>
<td>Journal of Supply Chain Management, Vol 38, 2, 13-21</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Outsourcing as seen from the perspective of knowledge management</td>
<td>Bustinza, Oscar F; Molina, Luis M; Gutierrez-Gutierrez, Leopoldo J 2010</td>
<td>Journal of Supply Chain Management, Vol 46, 3, 23-39</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Triads in Supply Networks: Theorizing Buyer-Supplier-Supplier Relations</td>
<td>Choi, Thomas Y; Wu, Zhaohui 2009</td>
<td>Journal of Supply Chain Management, Vol 45, 1, 8-25</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Article</td>
<td>Writer</td>
<td>Publication</td>
<td>Subject</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Total Cost of Ownership in the Services Sector: A Case Study</td>
<td>Huirkens, Krisje; van der Valk, Wendy; Wynstra, Finn 2006</td>
<td>Journal of Supply Chain Management, Vol 42, 1, 27-37</td>
<td>TCO</td>
</tr>
<tr>
<td>Coping with time pressure and knowledge sharing in buyer-supplier relationships</td>
<td>Thomas, Rodney W; Fugate, Brian S; Koukova, Nevena T 2011</td>
<td>Journal of Supply Chain Management, Vol 47, 3, 22-42</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Sourcing Indirect Spend: A Survey of Current Internal and External Strategies for Non-Revenue-Generating Goods and Services</td>
<td>Cox, Andrew; Chicksand, Daniel; Ireland, Paul; Davies, Tony 2005</td>
<td>Journal of Supply Chain Management, Vol 41, 2, 39-51</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Effectively selecting suppliers using total cost of ownership</td>
<td>Zeger Degraeve; Roodhooff, Filip 1999</td>
<td>Journal of Supply Chain Management, Vol 35, 1, 5-10</td>
<td>TCO</td>
</tr>
<tr>
<td>The Ailing Healthcare Supply Chain: A Prescription for Change</td>
<td>McKone-Sweet, Kathleen E; Hamilton, Paul; Willis, Susan B 2005</td>
<td>Journal of Supply Chain Management, Vol 41, 1, 4-17</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Buyer-Supplier Relationships: Delivered Value over two Decades</td>
<td>Terpend, Regis; Tyler, Beverly B; Krause, Daniel R; Handfield, Robert B 2008</td>
<td>Journal of Supply Chain Management, Vol 44, 2, 28-55</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Buyer Dependency and Relational Capital Formation: The Mediating Effects of Socialization Processes and Supplier Integration</td>
<td>Petersen, Kenneth J; Handfield, Robert B; Lawson, Benn; Cousins, Paul D 2008</td>
<td>Journal of Supply Chain Management, Vol 44, 4, 53-65</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Supplier Assistance Within Supplier Development Initiatives</td>
<td>Dunn, Steven C; Young, Richard R 2004</td>
<td>Journal of Supply Chain Management, Vol 40, 3, 19-29</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Transparency in supply relationships: Concept and practice</td>
<td>Lamming, Richard C; Caldwell, Nigel D; Harrison, Deborah A; Phillips, Wendy 2001</td>
<td>Journal of Supply Chain Management, Vol 37, 4, 4-10</td>
<td>Co-operation</td>
</tr>
<tr>
<td>Thinking Differently about Purchasing Portfolios: An Assessment of Sustainable Sourcing</td>
<td>Pagell, Mark; Wu, Zhaohui; Wasserman, Michael E 2010</td>
<td>Journal of Supply Chain Management, Vol 46, 1, 57-73</td>
<td>Portfolio Sustainability</td>
</tr>
</tbody>
</table>
The content of the articles in table 10 is shortly summarized by substance area in the following chapters. A more thorough discussion follows later.

**Purchasing portfolio**

Geldermann and van Weele (2002) have studied the actual use of purchasing portfolio models. They argue that Kraljic’s portfolio model is the most used portfolio model, but this model as such does not give guidance for strategic movement of commodities in the matrix. In addition Geldermann and van Weele found that if Kraljic’s portfolio model is tailored, it enables a company to utilize it for effective purchasing strategies. The need for a supply strategy depends on two factors: first on the strategic importance of purchasing and second on the complexity of the supply market. The organization must analyze its position in terms of these two variables. By acting this way the management can minimize the supply risks (Kraljic, 1983). Figure 10 illustrates the idea of the portfolio model of Kraljic. Kraljic’s purchasing portfolio is according to van Weele (2014,
“a matrix indicating for quadrants, represented for basic supply strategies, based upon financial impact and supply risk represented by a specific product category”. The variables of the portfolio are the purchasing turnover and the supply risk (van Weele 2014).

![Figure 10. Product categories and purchasing strategies according to Kraljic (1983) (Gelderman and van Weele, 2002)](image)

In different segments of the purchasing portfolio best practices may vary and in different segments the focus tends to be on different best practices. Non-critical products or services require effective purchasing or rather automatic ordering based on flexible agreements with often local suppliers. Bottleneck products or services require secure supply and search for alternatives. Market knowledge and co-operation are important. Leverage products or services require competitive bidding. Market knowledge, cross-functional teams and total cost of ownership are important. Strategic products or services require performance and partnership. Market knowledge, total cost of ownership, cross-functional teams and co-operation are important. In strategic products or services it could be beneficial to move up to higher stage in terms of maturity.
**Total cost of ownership**

Ellram (1993) studied the benefits of total cost of ownership (TCO). She found the following areas where TCO was valuable: performance measurement, decision making, communication, understanding trends and continuous improvement. Ellram and Siferd (1998) studied strategic cost management and total cost of ownership analysis and their relationship. They state that TCO is a relevant instrument in strategic cost management. It requires the purchasing organization to understand all the costs related to the purchase of a good or service over its entire life cycle.

**Cross-functional teams**

Ellram and Pearson (1993) studied the role of the purchasing function from a team participation perspective. They made an extensive survey and noticed that the purchasing function is moving from individual purchasing responsibility to a team or project activity. By this new approach organizations are aiming to increase early supplier involvement, to reduce time-to-market, to improve quality and to reduce costs. Thus the results of this study are indicating that the purchasing function is having more responsibility in areas where it did not previously have much to say. Moreover Tech-Yong (2005) studied the influence of a firm’s cross-functional orientation on supply chain performance. Tech-Yong’s findings indicate that a cross-functional orientation have a positive effect on customer satisfaction and on supply chain responsiveness.

**Co-operation**

Ellram (1993) studied purchasing co-operation and she noticed that traditionally US-based organizations have confrontational relationships with suppliers. She stated further that as the competition in the world market increases, organizations have noticed that close relationships with their key suppliers may be beneficial. In contrast Whipple and Frankel (2000) examined strategic alliance success factors. They noticed that organizations are striving for participating in co-operative supply chain arrangements, such as strategic alliances. Cox (2001) on the other hand examined the power perspective in procurement and supply management. He stated that the best practice in procurement demands for a long-term collaborative approach based on trust and partnerships instead of confrontational buyer relationships. To achieve collaboration both sides must obtain some gains. In contrast Choi and Wu (2009) studied triads in supply networks. They noticed that previous studies in supply chain management have been discussing dyadic relationships (e.g. buyer-supplier). However, dyads are not forming the holistic part of a network. Choi and Wu argue that triads are forming the fundamental building blocks of a network. By a triad the researchers mean a buyer-supplier-supplier relationship.

**Sustainability**

Pagell and Wu (2009) studied sustainable supply chain management. They noticed that practices aiming for a more sustainable supply chain are similar to the best practices in traditional supply chain management. Some of these practices are conflicting with the existing best practice. In another study Pagell et al. (2010) studied purchasing portfolios and sustainable sourcing. They identified
a potential shift in supply chain management, especially in sustainable sourcing. They discovered that organizations are not utilizing fully Kraljic’s purchasing portfolio in certain cases, they are in fact utilizing sustainable supply chain management. We can call this a modified sustainable purchasing portfolio model. In contrast Reuter et al. (2010) studied sustainable global supplier management. Based on the global supply base of many Western firms the purchasing function must ensure that their suppliers comply with their corporate codes of conduct and that environmental issues are taken care of as well as social misconduct. Based on their study the researchers are arguing that sustainable global supplier management capabilities are a source of competitive advantage. On the other hand Golicic and Smith (2013) examined sustainable supply chain management practices and firm performance. Their findings indicate as well that there is a direct correlation with the environmental supply chain practices and the performance of an organization.

Conclusion of the literature review

Based on the above literature review and books by Baily et al., (2008), Lysons and Farrington (2006), Monczka et al. (2011), van Weele (2014) and Iloranta and Pajunen-Muhonen (2012), the following best practices in purchasing have been identified: purchasing portfolio, total cost of ownership, cross-functional teams, co-operation and sustainability. Additionally market knowledge has been added into the list of best practices in purchasing. This will be justified later. Detailed description of the discovered best practices in purchasing is presented in the following chapters.

3.2.1 Market knowledge

When an organization has decided to outsource a product or service, the organization needs to decide where to source it from and the form of the relationship with the product or service supplier. This process is called Strategic sourcing process (Monczka et al., 2011). This process is according to Monczka et al. (2011) often called category strategy process because it is focusing on a category of products or services. “The strategic sourcing decision is typically made by a cross-functional team, composed of sourcing professionals, operations managers, finance, or other stakeholders of the product or service” (Monczka et al., 2011, p. 205).
Table 11. Strategic sourcing process (modified from Monczka et al., 2011)

<table>
<thead>
<tr>
<th>Steps</th>
<th>Step 1 Build the Team</th>
<th>Step 2 Market Research</th>
<th>Step 3 Strategy Development</th>
<th>Step 4 Contract Negotiation</th>
<th>Step 5 Supplier Relationship Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal</td>
<td>Develop a scope of work and plan</td>
<td>Understand the supply market</td>
<td>Classify suppliers and define sourcing approach</td>
<td>Negotiate a win-win contract</td>
<td>Continuously improve performance</td>
</tr>
<tr>
<td>Inputs</td>
<td>Project leader Other team members</td>
<td>Interviews Online research Conferences Report on supply trends, changes, pricing, capacity, etc.</td>
<td>Market research Portfolio matrix Forecasted spend</td>
<td>Negotiation plan Supplier evaluation tool</td>
<td>Contract Supplier scorecard</td>
</tr>
<tr>
<td>Outputs</td>
<td>Baseline data Product charter Work plan</td>
<td>Supplier evaluation tool with desired relationship</td>
<td>Signed contract</td>
<td>Supplier development plan Communication</td>
<td></td>
</tr>
</tbody>
</table>

To enable organizations to capture best options in the supply market the organizations need to understand the supply markets (Handfield, 2010). Purchasing (or supply) market research can according to van Weele (2010, p. 125) be defined as: “The systematic gathering, classification and analysis of data considering all relevant factors that influence the procurement of goods and services for the purpose of meeting present and future company requirements.” However according to van Weele (2010) some studies suggest a distinction between purchasing research and supply market research. Purchasing research is seen as concerning the internal organization (for example, spend analysis and internal efficiency) whereas supply market research is seen concerning the external suppliers’ market.

Handfield (2010, p 43) defines supply market intelligence (SMI) “as a process for creating competitive advantage and reducing risk through increased knowledge of supply market dynamics and supply base composition”. Handfield (2010, p. 43) continues that “truly successful SMI organizations excel at engaging stakeholders in defining knowledge requirements as well as disseminating information to ensure that it is effectively applied in key impacted business sectors across the organization”. Handfield (2010) found the sources of market intelligence data to be: suppliers via request of information or trade journals, websites and third parties or income statements and finance balance sheets or detailed market intelligence reports.

Van Weele (2014 p. 118-119) classifies four types of market structures of the supply side. Pure competition: “Characteristic of this market structure is that neither the supplier nor the buyer can influence the price of the product.” Monopolistic competition: “This market structure is similar to many actual markets and is characterized by a high degree of product differentiation.” Monopoly: “Characterized by the presence of only one supplier of the product in question.” Oligopoly: “An oligopoly is a market type characterized by a limited number of suppliers and a limited product differentiation.” Cartel: “Price can be set by a market- or price- leader, or arranged through some form of price arrangements.”

According to van Weele (2014) purchasing market research is the main element of the purchasing management process. Purchasing market research is tackling areas like materials, goods and services. It aims to save in transaction costs and to reduce supply risks. Additionally purchasing market research is concerned
with analyzing the relationship with different suppliers. Purchasing market research is also giving relevant management information. Van Weele (2014, p. 125) has defined the process of purchasing market research. The process starts with determination of the objectives, following with cost-benefit analysis and feasibility study. The next phase is the design of the research plan including a desk research and a field research. The following phase is the execution of the research activities, data collection and data analysis. After this the research report is prepared and the evaluation is conducted.

Organizations need to research the supply market in order to maintain up-to-date information about technological changes, supplier markets, competition and supplier relationships (van Weele, 2014). Additionally Lysons and Farrington (2006) have identified the following areas of sourcing information: analysis of market conditions to enable the organization to see the longer term demand for the product and thus the price trends; directives which can be issued, for example by the EU, central or local authorities; and companies. Additional sourcing information is available from e-sourcing and locating supplier sources (e.g., databases, searchable directories). Supplier appraisal assessments are providing a useful venue to achieve sourcing information together with supplier performance ratings. On the other hand according to Lysons and Farrington (2006) strategic purchasing uses business intelligence to study the purchasing environment and to make decisions and recommendations. Furthermore Mena et al. (2014) argue that purchasing is responsible for keeping an eye on potential new entrants and potential substitutes.

Traditionally an organization has the need for a product or a service and the purchasing function is trying to find a source for this need. The modern purchasing process however is trying to combine the competence of the organization, customer needs and supplier market opportunities to find the best option (Iloranta and Pajunen-Muhonen, 2012). Iloranta and Pajunen-Muhonen (2012) illustrate the change in thinking in following figures (Figure 11. and Figure 12.). Figure 11 introduces the traditional purchasing process. In this case the purchasing function acts passively, only fulfilling the internal needs of an organization. Figure 12 introduces the modern purchasing process. Here the purchasing function is actively trying to combine customer needs and supply market opportunities and is developing a supply base to serve better the customers.
3.2.2 Purchasing portfolio

Purchasing departments are facing increasing changes in their operations. Already decades ago there were identified threats such as resource depletion and shortages of raw materials, political turbulence and governmental intervention in markets, increasing competition, and rapid technological change (Kraljic, 1983). These changes have accelerated since Kraljic’s statement. As a consequence these threats mean that management of purchasing organizations must change the way they are operating. They have to move from purchasing (an operative function) to supply management (a strategic one). As a consequence a four-stage approach follows this thinking according to Kraljic (1983); the organization has to first classify all its purchasing spend in terms of profit impact and supply risk, then it must analyze the supply market of this spend following the strategic supply position and action plans accordingly. Geldermann and van Weele (2002) have studied the actual use of purchasing portfolio models. They argue that Kraljic’s portfolio model is the most used portfolio model, but that this model as such does not give guidance for strategic movement of commodities in the matrix. In fact Gelderman and van Weele (2002) are stating that all buyer-supplier relationships should be managed in the individual way. To be able to successfully manage supply chains a portfolio of relationships must be managed (Bensaou, 1999). The Kraljic portfolio approach is seen as an important result in the development of theory in the field of purchasing and supply management (Syson, 1992). Gelderman and van Weele (2002) studied the use of a portfolio approach in purchasing and supply management. The case study
was conducted in a large industrial company which is structured around a number of fairly autonomous business groups. The findings suggest that the portfolio approach is very useful in positioning commodities in the different segments and in developing purchasing strategies. (Gelderman and van Weele, 2002). Additionally many researchers have discovered the utility of the portfolio model for developing a purchasing function (e.g. Ellram and Carr, 1994; Carter and Narasimhan, 1996, Dyer, 1996; Mol, 2003; Chen et al., 2004). Kraljic portfolio approach has become the everyday tool for all the professional purchasing persons (Cox, 1997). In another study Geldermann and van Weele (2005) wanted to know if the use of purchasing portfolio models can be seen as a measure of purchasing’s development stage. Their findings show that quality of purchasing has a positive correlation with the greater use of portfolio models. On the other hand in a recent study Pagell et al. (2010) studied supply management and purchasing portfolios. They noticed that the purchasing portfolio concept has been widely used as a practical instrument in the supply chain management literature. They found however indications that in the sustainable sourcing a number of leaders were not following the Kraljic’s purchasing portfolio model. The study of Pagell et al. indicates that in certain cases organizations are buying leveraged commodities in the same way that Kraljic’s purchasing portfolio suggests buying strategic items.

Purchasing portfolio models have however faced criticism too. Arguments include how in the complex business environment simple recommendations are adequate. (Heege, 1981; Dubois and Pedersen, 2002). Dubois and Petersen (2002) continue arguing that the purchasing portfolio model is too simplifying, for example not taking into account networks. (Dubois and Pedersen, 2002). Also Cox (1997) criticized the purchasing portfolio approach. He stated that the methodology “does not provide us with any proactive thinking about what can or should be done to change the existing reality of power.” On the other hand, based on the research by among others Carter (1997), Lilliecreutz and Ydreskog (1999), Gelderman and van Weele (2002), and Wagner and Johnson (2004), there is not much empirical evidence of the usefulness of purchasing portfolio models. In addition Gelderman and van Weele (2005) conducted a study among purchasing professionals. They found that arguments supporting portfolio models are based on qualitative case studies. The criticism however is based on theoretical and conceptual studies.

In summary, to succeed in purchasing an organization needs to form a purchasing strategy. To be able to form a purchasing strategy a portfolio analysis is required in order to understand the supply market.

3.2.3 Total cost of ownership

In organizations the accounting function is a key source of information for both the external parties concerned (financial accounting) and the internal decision makers (management accounting). Management accounting is providing accurate information for decision makers. (Degraeve and Roodhooft, 1999). The information provided by management accounting is mainly used to make internal improvements. However, in many businesses, the cost of externally purchased goods and services represents a substantial part of the total cost. Therefore, savings can be made for purchased goods and services. Thus it is vital to understand the total costs generated by external purchasing in addition to the price. After
all, the lowest prices are not necessarily giving the most economical result if one were to take into account all the additional costs incurred by the supplier in the value chain of an organization (Degraeve and Roodhooft, 1999). The Total cost of ownership concept is trying to look at the supplier cost in wider perspective including the entire life cycle costs of the item. As an example Ellram (1993) studied the benefits of total cost of ownership. Her findings are shown in table 12.

Table 12. Benefits of total cost of ownership (Ellram, 1993, p. 4)

<table>
<thead>
<tr>
<th>Performance Measurement</th>
<th>Good framework to evaluate suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Concrete way to measure results of quality improvement efforts</td>
</tr>
<tr>
<td></td>
<td>Excellent tool for benchmarking</td>
</tr>
<tr>
<td>Decision making</td>
<td>Forces purchasing to quantify tradeoffs</td>
</tr>
<tr>
<td></td>
<td>Good basis for making supplier selection decisions</td>
</tr>
<tr>
<td></td>
<td>More informed decision making</td>
</tr>
<tr>
<td></td>
<td>Creates a structured problem-solving environment</td>
</tr>
<tr>
<td>Communication</td>
<td>Excellent communication vehicle between a firm and its suppliers</td>
</tr>
<tr>
<td></td>
<td>A way to get other functions involved in purchasing decisions</td>
</tr>
<tr>
<td>Insight/Understanding</td>
<td>Provides excellent data for trend analysis on costs</td>
</tr>
<tr>
<td></td>
<td>Provides excellent data for comparing supplier performance</td>
</tr>
<tr>
<td></td>
<td>Provides excellent data for negotiations</td>
</tr>
<tr>
<td></td>
<td>Provides critical data for target pricing</td>
</tr>
<tr>
<td></td>
<td>Requires purchasing to develop an awareness of most significant non-price factors that contribute to TCO</td>
</tr>
<tr>
<td></td>
<td>Provides a long-term orientation by focusing on the “big picture”</td>
</tr>
<tr>
<td>Support Continuous Improvement</td>
<td>Helps identify where suppliers should focus improvement efforts—drives suppliers to work on the “right thing”</td>
</tr>
<tr>
<td></td>
<td>Helps identify cost savings opportunities</td>
</tr>
<tr>
<td></td>
<td>Forces a firm to look at internal issues—how their own requirements &amp; specifications may actually increase costs</td>
</tr>
<tr>
<td></td>
<td>Encourages professional growth in purchasing personnel by broadening their perspective</td>
</tr>
</tbody>
</table>

Ellram and Siferd (1998) studied strategic cost management and total cost of ownership (TCO) analysis and their relationship. They found that TCO is a relevant instrument in strategic cost management. It requires the purchasing organization to understand all the costs related to the purchase of a good or service over its entire life cycle. On the other hand Zeger and Roodhooft (1999) studied how to effectively select suppliers by using total cost of ownership. They claim that existing cost management instruments are concentrating on production and distribution costs rather than on purchasing costs. They presented a rigorous mathematical programming model using total cost of ownership information. This model enables the purchasing and supply management to compare and follow up different options. Hurkens et al. (2006) in turn studied total cost of ownership in the services sector. They claim that most of the studies regarding utilization of total cost of ownership have been conducted in manufacturing organizations. Services have not widely been studied from this perspective. Their study sheds light on possibilities to use the total cost measurement systems in the services sector.

When using the total cost of ownership concept an organization must identify and measure costs additional to the standard unit price. “Total cost of ownership is defined as the present value of all costs associated with a product, service, or capital equipment that are incurred over its expected life.” (Monczka et al., 2011). In fact according to Menezes (2001) in total cost analysis the costs can be broken into four broad categories: First into purchase price, second into acquisition costs including costs like sourcing, administration, freight costs and taxes; Third into usage costs – all the converting costs of the part or material
and costs associated with supporting it through its usage life. Concerning a service, all costs associated with the performance of the service that is not included in the purchase price. Concerning capital equipment, all costs associated with operating the equipment through its life. Fourth and finally, into end-of-life costs: costs like obsolescence, disposal, clean-up, and project termination costs. In addition Mena et al. (2014) introduce a five-step process to implement TCO (see Table 13).

Table 13. A five-step process to implementing TCO (modified from Mena et al. 2014, pp. 105-109)

<table>
<thead>
<tr>
<th>Process step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determine desired benefits of TCO</td>
<td>provide performance measurement framework for cost analysis</td>
</tr>
<tr>
<td></td>
<td>benchmark performance</td>
</tr>
<tr>
<td></td>
<td>more informed decision making</td>
</tr>
<tr>
<td></td>
<td>communication of cost issues internally and with suppliers</td>
</tr>
<tr>
<td></td>
<td>encourage cross-functional interaction</td>
</tr>
<tr>
<td></td>
<td>support external teams with suppliers</td>
</tr>
<tr>
<td></td>
<td>better insight/understanding of cost drivers</td>
</tr>
<tr>
<td></td>
<td>build a business case</td>
</tr>
<tr>
<td></td>
<td>support an outsourcing analysis</td>
</tr>
<tr>
<td></td>
<td>support continuous improvement</td>
</tr>
<tr>
<td></td>
<td>help identify cost savings opportunities</td>
</tr>
<tr>
<td></td>
<td>prioritize/focus time on high potential opportunities</td>
</tr>
<tr>
<td>Form a team to work on TCO analysis</td>
<td>a procurement person</td>
</tr>
<tr>
<td></td>
<td>a member of the users</td>
</tr>
<tr>
<td></td>
<td>functional/technical experts</td>
</tr>
<tr>
<td></td>
<td>a finance/accounting person</td>
</tr>
<tr>
<td>Identify relevant costs and gather data</td>
<td>price for items</td>
</tr>
<tr>
<td></td>
<td>quality levels</td>
</tr>
<tr>
<td></td>
<td>lead times</td>
</tr>
<tr>
<td></td>
<td>inventory levels</td>
</tr>
<tr>
<td></td>
<td>transportation, duties and tariffs</td>
</tr>
<tr>
<td></td>
<td>payment terms (impact cash flow and money tied up)</td>
</tr>
<tr>
<td></td>
<td>damage in transit</td>
</tr>
<tr>
<td>Fine-tune the TCO analysis; including sensitivity analysis</td>
<td>re-analyzing the total model with different cost estimates</td>
</tr>
<tr>
<td>Present recommendations to top management</td>
<td>executive summary (background, summary of alternatives, key issues, TCO results, key sensitivities and recommendations)</td>
</tr>
<tr>
<td></td>
<td>summary of TCO analysis results</td>
</tr>
<tr>
<td></td>
<td>sensitivities</td>
</tr>
<tr>
<td></td>
<td>non-cost issues</td>
</tr>
<tr>
<td></td>
<td>recommendations</td>
</tr>
<tr>
<td></td>
<td>appendices (detailed calculations and assumptions)</td>
</tr>
</tbody>
</table>

According to Ferrin and Plank (2002) the concepts of total cost (Cavinato 1991, 1992), life cycle costing (Jackson and Ostrom, 1980), product life cycle costs (Shields and Young, 1991), and total cost of ownership (Ellram and Siferd, 1993, 1998; Ellram, 1993, 1994, 1995) are all related. The concepts indicate that purchasing organizations should have a long-term perspective rather than a short-term price perspective when planning purchasing. Additionally these researchers are emphasizing the reduction of indirect costs. Monczka et al. (2011, p. 670) define indirect spend “as any purchased good or service that does not end up in the product or service delivered to a customer”. Actually the total cost concept has existed since the beginning of the 1990’s, but Milligan (1999) stated that most organizations do not use it in practice. On the other hand Meckbach (1998) has reported that TCO is hard to measure.

Avery (1999) discovered that many organizations are concentrating on direct costs thinking, with the idea that indirect costs will fall as direct costs fall. However, she found organizations that have successfully reduced total costs via project teams. Actually several researchers have studied the total cost of ownership
methodologies, finding use for activity-based costing (Ellram, 1995), cost drivers and activity-based management systems (Porter, 1993), logistics cost management (Tyndall, 1988) and software systems (Ersten, 1998). Additionally Ferrin and Plank (2002) state that there exists limited empirical research of the utilization of TCO in supply management. Ellram and Siferd (1993) on the other hand discovered that 18 percent of their sample of 103 purchasing officials were using TCO. In the study of Ellram and Siferd (1998) they reported reasons why more firms don’t use TCO. These reasons include complexity of TCO measurement, organizational culture, and arguments regarding the relevance and proper use of TCO data. In fact Geiger (1999) discovered that selection of cost drivers can create managerial responses to reduce drivers because they are seen to be causing the cost on which the firm evaluates managers. This means that an effective selection of cost drivers can focus management attention on the process attributes that create cost.

3.2.4 Cross-functional teams

Ellram and Pearson (1993) studied the role of the purchasing function from a team participation perspective. They made an extensive survey and noticed that the purchasing function is moving from individual purchasing responsibility to a team or project activity. With this new approach organizations are aiming to increase early supplier involvement, to reduce time-to-market, to improve quality and to reduce costs. Thus the results of this study are indicating that the purchasing function is having more responsibility in areas where it did not previously have much to say. On the other hand Trent (1996) studied cross-functional sourcing and the role of team leaders in those sourcing teams. He found clear correlation between sourcing team leadership and team success. According to van Weele (2014, p.365) is defining cross-functional buying teams: "Specialists from user departments and buyers are put together in teams to develop specific sourcing and commodity strategies and plans". Due to hardening competition organizations are forced to improve their performance. One possibility to do so in purchasing is to build cross-functional sourcing teams. (Trent, 1996). Additionally Trent (1996) discovered that if the cross-functional team is built properly it can bring together the knowledge and resources required, whereas the traditional functional approach cannot achieve this. Murphy and Heberling (1996) are suggesting based on their case studies a model to organize successfully cross-functional teams. As a consequence they are proposing a model for developing the skills which the team approach demands.

However, Likert (1961) found that the cross-functional sourcing approach due to groups and teams can greatly benefit the respective organization, or it can do great harm. (Likert, 1961, p.162). Whereas Teck-Yong (2005) studied empirically how cross-functional orientation influenced firm’s supply chain performance. The study showed that the cross-functional orientation had positive impact on the customer satisfaction and supply chain responsiveness. However, some researchers have discovered that working across functions can delay decisions (Cespedes, 1995), and cause disharmony (Souder, 1988) and even conflict (Weinrauch and Anderson, 1982) between different functions.

In Supply Chain Management, the collaboration between different functions has been discovered to improve service and distribution performance (Andraski, 1998; Ellinger et al., 2000a). However in a new product development some researchers have seen positive performance improvement of interdepartmental collaboration and/or cross-functional interaction using cross-functional
teams (e.g. Denison et al., 1996; Griffin and Hauser, 1996). Following antecedents for cross-functional orientation in an organization has been discovered (Teck-Yong, 2005):

- If an organization favors inter-functional cooperation
- If an organization favors operational linkages
- If an organization favors open information exchange
- If an organization favors participative management style
- If an organization is networking supply chain activities together using technologies

On the other hand West (1997) examined purchasing professional services, especially advertising agencies. He claims that it is beneficial for both the buying organization and its agencies if the purchasing function is together with the marketing function as a team participating in purchasing advertising services. On the other hand Giunipero and Pearcy (2000) analyzed which purchasing skills are required for a world-class purchasing professional. They claim that this issue has not been widely researched. Their study identifies the following key skills: strategy, process management, team building, decision making, behavioral, negotiation and quantitative skills. Separately Lakemond et al. (2001) developed a configuration typology for involving a purchasing specialist in product development. They found that the competencies and skills of purchasers are improving the ability for purchasers’ to take part in a development project.

3.2.5 Co-operation

Research into co-operative relationships started in the 1980’s from indefinite best practices to tortuous case studies (Burnes and New, 1997; Ellram and Edis, 1996) and statistical methods (Anderson and Narus, 1990; Monczka et al., 1998). A successful co-operation can be achieved if a purchasing organization is working in a close relationship with a few key suppliers seeking mutual benefits in a win-win type of a set up (Ellram and Edis, 1996). Figure 13 presents the way a purchasing organization should work in developing a partnership (Ellram 1991). The process starts from establishing the strategic need and forming a team. In the following phase the selection criteria are specified and based on those the potential partners are identified. The third phase includes screening and selecting the potential partners. In the following phases relationships are established and evaluated. Ellram (1993) studied purchasing co-operation and she noticed that traditionally the US-based organizations have confrontational relationships with suppliers. She stated further that as the competition in the world market increases, organizations have noticed that close relationships with key suppliers may be beneficial. In fact the value of partnership has been widely discussed in the sourcing literature. Transaction cost analysis theory (TCA) is combining economic theory with management theory to find an economical way the organization should act in respect of working together with other organizations (Ellram and Edis, 1996). According to Ellram and Edis (1996) transaction costs depend on the following factors: the frequency of the transaction, the level of transaction-specific investments, and external and internal uncertainty.
Figure 13. Developing a partnership (Ellram 1991, pp. 2-8)

The fundamental premises for a good co-operation are according to Ellram and Edis (1996): Trust, communication, mutual benefit, long-term perspective and top management commitment at both companies. However the traditional approach to co-operation in purchasing has been the idea to keep suppliers at "arm's-length" and to avoid closer collaboration. This has particularly been the case in the United States at least until the success of Japanese firms which were using the collaboration approach (Dyer et al., 1998). Some studies contain evidence that the Japanese-style partnerships deliver improved performance because the partnering firms (Dyer et al.1998, p. 58):

- “share more information and are better at coordinating interdependent tasks” (Fruin, 1992)
• “invest in dedicated or relation-specific assets which lower costs, improve quality, and speed product development” (Asanuma, 1989) and
• “rely on trust to govern the relationship, a highly efficient governance mechanism that minimizes transaction costs” (Dore, 1983)

Zaheer et al. (1998) investigated trust in buyer-supplier relationships. They examined trust from both the buyers’ and suppliers’ perspectives. They noticed how management practices are affecting trust in buyer-supplier relations. In fact, in the research of, for example, Monczka et al. 2000; Koufteros et al. 2005; van Echtelt et al. 2007 issues like trust, commitment and open communication have been seen as requirements for a good co-operation. On the other hand the study of Dyer et al. (1998) suggests that firms should think more strategically about supplier management and perhaps should not have the “one-size-fits-all” strategy for the supplier management. Instead, suppliers should be analyzed strategically to understand the possible benefits in a close co-operation. A company should be able to segment suppliers to find the most suitable way to work with a particular firm. The best way to work varies. With some companies the best way may be working at arm’s-length. In Table 14 the top five alliance success factors from both buyers’ and suppliers’ perspective is presented. The priority order of different factors varies.

Table 14. Alliance success factors asked from buyers and suppliers in food and health and personal care industries in North America. (Whipple and Frankel 2000, p. 23)

<table>
<thead>
<tr>
<th>Buyer response</th>
<th>Supplier response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>Senior Management Support</td>
</tr>
<tr>
<td>Senior Management Support</td>
<td>Trust</td>
</tr>
<tr>
<td>Ability to Meet Performance Expectations</td>
<td>Ability to Meet Performance Expectations</td>
</tr>
<tr>
<td>Clear Goals</td>
<td>Partner Compatibility</td>
</tr>
<tr>
<td>Partner Compatibility</td>
<td>Clear Goals</td>
</tr>
</tbody>
</table>

The development of purchasing into supply management (Davis, 1993) increased the importance of the supply side during the 1980’s and 1990’s. On the other hand Lewis (1995) states that based on this approach companies are gaining competitiveness not only through their own capabilities, but particularly through co-operative relationships with other organizations. According to this perspective, competitive advantage no longer resides with a company’s own innate capabilities, but rather with the relationships and linkages the firm can forge with external organizations (Lewis, 1995). The traditional resource-based view (RBV) originally stated that the superior performance of a firm follows from the inter-organizational competencies (Barney, 1991). However, it has been acknowledged that collaborative relationships are expanding this focus (Mathews, 2003; Duschek, 2004). On the other hand Kanter (1994) and Madhok and Tallman (1998) discovered that a strategic approach to supply management has clear impact on knowledge transfer. The ability of strategic purchasing to foster close working relationships built on trust constitutes a significant impact on a two-way communication and knowledge transfer. Additionally, according to Gadde and Snehota (2000), purchasing organizations aim even more than before to use outsourcing, to build close relationships with key suppliers and to decrease the number of suppliers. In contrast Bustinza et al. (2010) analyzed outsourcing from a knowledge-based perspective. They investigated how knowledge and the capabilities to manage this knowledge influenced the benefits of outsourcing. They noticed that knowledge management influenced the results of outsourcing decisions. On the other hand Fawcett et al., (2011) examined information technology as an enabler of supply chain collaboration. They noticed that albeit heavy investments are placed on information technology the hoped-for improvements in supply chain performance have not materialized. They discovered that the best results are achieved when
these investments in information technology enable a dynamic supply chain collaboration capability. As a consequence Fawcett et al. (2012) studied supply chain collaboration. They noticed that only a few managers understand the complexity of managing heterogeneous resources and competences in a supply chain. The researchers sought to enrich the theory of collaboration. Furthermore Cox (2001) discusses “the power perspective” in effective purchasing and supply management. According to him today’s best practice in purchasing includes long-term cooperation with chosen partners. This cooperation is based on trust and alliances. Figure 14 presents the basic choices of adversarial arm’s-length, adversarial collaborative, non-adversarial arm’s-length, and non-adversarial collaborative. In this figure adversarialism is describing the rate of conflict of interests the parties may have in their co-operation. (Cox, 2001). In his study Cox (2001) is stating that we must understand the power structures in the buyer and supplier relationships before we can decide which strategy suits best our purchasing interests. Cox (2001) on the other hand examined the power perspective in procurement and supply management. He states that best practice in procurement demands a long-term collaborative approach based on trust and partnerships instead of confrontational buyer relationships. To achieve collaboration both sides must obtain some gains.

Figure 14. A portfolio of buyer and seller relationship management choices (Cox 1999, p. 23)

Some researchers (for example, Olsen and Ellram, 1997; Smith and Laage-Hellman, 1992) however, have stated that the buyer-seller relationships should be studied as buyer-seller-seller relationships. In addition Choi and Wu (2009) studied triads in supply networks. They noticed that previous studies in supply chain management have been discussing dyadic relationships (e.g. buyer-supplier). However, dyads are not forming the holistic part of a network. Choi and Wu argued that triads form the fundamental building blocks of a network. By a
The researchers mean buyer-supplier-supplier relationship. They identified nine triadic examples of buyer-supplier-supplier relationships. Additionally, several studies (for example, Ellram and Hendrick, 1995; Helper, 1991; Anderson and Narus, 1990) have been conducted about the way purchasing organizations are operating in their relationships with their suppliers. On the other hand, Choi et al. (2002) studied this relationship discussing the terms co-operative and competitive relationships. In the co-operative relationship they see openness and collaboration, whereas in the competitive relationship they see neglecting information sharing and arms-length behavior. Furthermore, Paulraj and Chen (2005) studied buyer-supplier relationships. They identified first the key components of the buyer-supplier relationships. These are, according to this study, reduction of suppliers, long-term relationships and proper communication. Additionally, the impact of these components was tested. The results indicated that strategic supply management enhances the quality performance of both organizations. Moreover, Krause and Scrannel (2002) compared supply base management practices of product and service organizations. Their findings indicate differences in the approach of product and service organizations. The product-based organizations are using assessment, incentives and direct involvement more often than service organizations. On the other hand, Petersen et al. (2008) studied socialization processes between buyers, suppliers, and supplier integration. This study increases our understanding of organizations building relationships with their suppliers. In addition, Terpend et al. (2008) studied buyer-supplier relationships from academic journals between 1986 and 2005. They noticed that the focus in those articles changed during the reviewed period of time. They found that scholars have been interested in operational performance improvements, integration-based improvements, supplier capability-based improvements and financial performance outcomes. On the other hand, Paulraj and Chen (2007) researched the influence of strategic buyer-supplier relationships and information technology on an organization’s logistics integration and agility performance. Their model detects that strategic buyer-supplier relationships and information technology produce logistics integration thus affecting agility performance of organizations. According to several studies (Ellinger et al., 2006; Fawcett et al., 2007) of co-operative purchasing, the collaborative process is still unclear. However, it has been discovered that at least the following results of collaboration can be achieved: faster new product development, improved quality, lower product and supply chain costs, better delivery times, and better customer service (Cachon and Fisher, 2000; Frohlich, 2002; Ketchen et al., 2007; Rinehart et al., 2008). These consequences of collaboration are according to Holcomb et al. (2006) difficult to reproduce. Additionally, Fawcett et al. (2012) studied supply chain collaboration dynamics. The main findings were:

- Resistance to change in collaboration early stages can be strong.
- A co-operative approach is a process of building trust.
- Management must advertise a collaborative approach and thus find ways to improve the commitment of the relevant personnel.

Typical for this kind of arrangement is a long-term and partnership type relationship between the buyers and suppliers. On the other hand, Leuschner et al. (2013, pp. 34-57) studied supply chain integration (SCI). They found that the supply chain integration has significant impact on a firm’s performance.
tionally they defined supply chain integration as “the scope and strength of linkages in supply chain processes across firms”. Wagner (2003) examined the supplier integration. Wagner developed a phase-differentiated approach toward the supplier integration. Additionally Wagner examined supplier integration in various industries. In contrast Dunn and Young (2004) studied supplier development. They developed a model to help purchasers in improving their suppliers’ performance. Their results indicate that purchasers are using ineffective measurement criteria in their supplier development activities. On the other hand Giannakis and Croom (2004) proposed the “3S Model” to conceptualize the supply chain. The model introduces three dimensions of interest to supply chain scholars and practitioners. In contrast Claycomb and Frankwick (2004) investigated buyer-supplier relationship development process and communication elements involved. On the other hand Fredendall et al. (2005) examined purchasing’s internal and external co-operation. They noticed that a long-sighted leadership improves purchasing’s internal and external co-operation, improving also purchasing’s internal service performance. On the other hand Terpend et al. (2011) investigated management of buyer-supplier relationships. They argue that the patterns of purchasing strategy consists of the organization’s intent for a given purchase, the purchasing environment and the buyer-supplier relationship. In contrast Thomas et al. (2011) studied time pressure coping mechanisms and their impact on knowledge sharing in buyer-supplier relationships. Meanwhile Leuschner et al. (2013) examined supply chain integration. As supply chain activities are scattered, there is need for the supply chain integration. Their findings indicate that the supply chain integration has positive impact on organization’s performance. On the other hand Peng et al., (2013) studied product clock speed as the rate of product changes. This influences the supply chain design. The literature is arguing that supply chain integration is improving innovation capabilities of the organization concerned. Their study provides practical understanding into the supply chain integration with plant capabilities under the contingency of product clock speed. On the other hand Gadde (2013) examined the interplay between innovative redesign and boundary movements. He discovered three findings: the boundaries of firms are multilateral, corporate boundaries are dynamic and trade-off between specialization and integration is critical as well as the interaction between internal and external capabilities of the firm.

Wynstra, et al. (2001) studied integrated new product development. They found that the ability to co-operate with potential suppliers in new product development depends on the maturity of an organization in its cross-functional and process thinking. “Supplier integration (also called supplier involvement) in new product development (NPD) is the collaboration of a focal firm with a supplier in the NPD process.” (Wagner, 2012, p. 38). On the other hand McGinnis and Rafeekh (1999) investigated new product success from a co-operational perspective. Their study indicates that the purchasing function’s involvement and supplier involvement affect the new product’s success. Their results shed light on the roles of purchasing and supplier involvement in new product development. Additionally Oke et al., (2013) studied how to improve the innovations of a firm. According to Bowonder et al. (2010); Duane and Webb (2007); Lengnick-Hall, (1992); Tidd and Pavitt (2005) innovation is an important source of the competitiveness of a firm. In contrast Tan and Tracey (2007) studied collaborative new product development environments. Their study confirms that many organizations do not use an integrated model in new product development. Senior management ought to instruct their organization to use the integrated new product development procedure. On the other hand Hong and Hartley (2011) examined management of the supplier-supplier interface in the product development. Their research investigates different options that buyers can use to manage the interface between suppliers in the product development.
These options are: using an interactive team, making the supplier-supplier connection to communicate and coordinate effectively, and using a modular design. Wagner (2012) studied tapping of supplier innovation. This study discussed the role of suppliers and the influence of supplier integration on the new product development of the organization concerned. In contrast Oke et al. (2013) studied internal innovation and strategic relationships with supply chain partners. Their findings show that the innovativeness of a key supply chain partner effects positively on product innovation strategy. This is even stronger when firms have stronger strategic relationships with their key supply chain partners.

However supplier selection is an activity which has a long-term impact on a buyer’s performance (Choi and Hartley, 1996; Vonderembse and Tracey, 1999). Thus the supplier selection is critical (Lao et al., 2010): as firms are more and more depending on the performance of their suppliers. Gonzalez and Quesada (2004) discovered that the supplier selection was the most important process for improving product quality. However, the result of the utilization of supplier capabilities depends also on the firm’s ability to integrate the supplier into the firm’s operations (Koufteros et al., 2012). Koufteros et al., (2012) studied the impact of a supplier selection to a firm’s capability for the new product development. They used a resource-based view. Their findings show that it is imperative to select the vital resources. In contrast Kannan and Keah (2002) studied the effective supplier selection and assessment. Their research identifies relationships between the supplier selection and assessment criteria and a buying organization’s business performance. They discovered additionally that a supplier’s strategic commitment to a buyer has great impact on the performance of the buying organization. Information sharing was also regarded as vital for the performance.

Many recent studies indicate that supply management is seen as strategically important for an organization (Wisner and Tan, 2000; Krause et al., 2001; Goebel et al., 2003; Mol, 2003). In contrast Lawson et al. (2009) investigated strategic purchasing from the inter-organizational relationships point of view. They found that it is not enough for a firm to have a strategic purchasing orientation; a firm must also allow the buyer and supplier to develop the relationship. In contrast Whipple and Frankel (2000) examined strategic alliance success factors. They noticed that organizations are striving for participating in co-operative supply chain arrangements, such as strategic alliances. The key issue in these arrangements is the buyer-supplier relationship. Their research is aiming to find an answer to how to succeed in these arrangements. One of their findings is that there are opportunities for improvement regarding the alliance target clarification, communication and performance assessment. Paulraj and Chen (2007) examined environmental uncertainty and strategic supply management. Their study identified that strategic supply management is driven by supply and technology uncertainty. Furthermore Cox et al. (2005) studied sourcing strategies for indirect spend. They discovered that the most typical purchasing manner for an indirect spend is a long-term collaboration with preferred suppliers instead of reverse auctions and outsourcing options. They found evidence of the indirect spend suffering from maverick buying and fragmentation of buying. They define maverick buying “as buying outside the contracts that have been set up, or buying that uses procedures not compatible with optimizing value for money” (Karjalainen et al., 2009). Furthermore Ogden et al. (2005) examined supply management strategies for the future. They discovered that the most im-
important strategies are increased integration, information sharing and collaboration with supply chain partners. On the other hand Paulraj and Chen (2005) studied strategic supply management. They emphasize that buyer-supplier relationships are more complex than just a single construct. Their study identifies three critical constructs: supply base reduction, communication and long-term buyer-supplier relationships. Their study identifies that strategic supply management is improving the quality performance of both supplier and buyer organizations. In contrast Kocabasoglu and Suresh (2006) studied strategic sourcing. Their results indicate that strategic sourcing is based on the position of the purchasing function inside the organization, the amount of internal coordination of purchasing inside the organization, information sharing with the most important suppliers and development of the most important suppliers. However, Helper (1991) states that though these partnerships are giving benefits, it has been discovered that these partnerships are costly to set up and maintain and difficult to break away. Hartley (2000) studied supplier involvement in value analysis based on the experiences of automotive suppliers. He noticed that the supplier involvement in value analysis benefits buyer-supplier relationships. One barrier to value analysis implementation can be reluctance to share cost data. On the other hand Lamming et al. (2001) studied transparency in supply relationships i.e. the exchange of information and knowledge between a customer and a supplier. They tried to understand the problems appearing in this context.

In the articles above, the power perspective was discussed. McKone-Sweet et al. (2005) studied supply chain practices in the healthcare industry. They discovered barriers like lack of executive support, conflicting incentives, lack of data collection and performance measurement, limited education and vague relationships between purchasing functions and other supply chain partners. On the other hand Choi and Dooley (2008) studied theories and models of supply networks. They noticed that an organization's supply network is critical to the success of the organization but difficult to control. Additionally they found tension between what can be controlled and what cannot be controlled by the organization concerned.

### 3.2.6 Sustainability

Sustainability has been defined “as meeting the needs of the present without compromising the ability of the future generations to meet their own needs” (UN Documents, 1987). The existence of literature concerning sustainability is still somewhat limited. Corbett and Kleindorfer (2003) and Corbett and Klassen (2006) have studied sustainability in supply management and they state that interest in this issue has been increasing during the past years. However, there are many issues still to be addressed (Pagell and Wu, 2009). Additionally sustainability studies are taking into consideration the performance of supply chain, and the impact of the supply chain on environmental and social systems (Gladwin et al., 1995; Starik and Rands, 1995; Jennings and Zandbergen, 2005). Thus the real sustainable supply chain does not cause damage to either nature or social systems (Pagell and Wu, 2009).

Most organizations base their sustainability in co-operation with suppliers on The International Organization for Standardization (ISO) certificate. In this way they are using methods which are linked to purchasing (Pagell and Wu, 2009). There is evidence (e.g. Clark 1999; Curkovic et al., 2000; King and Lenox, 2001) that other methods of improving a firm’s performance, such as Total Quality
Management (TQM), Just in Time (JIT) and lean could improve a firm’s sustainability as well. However, exploiting these methods does not make a firm sustainable (Pagell and Wu, 2009). On the other hand the purchasing function has used collaboration and certification to improve a firm’s sustainability (Carter and Carter, 1998; Zhu and Sarkis 2004). In fact in a certification of social issues, factors such as child labor and unsafe work conditions are included (e.g. Teuscher et al., 2005). However, the real challenge for firms is to integrate sustainability goals and practices into every day working procedures. The top management must show the way (Pagell and Wu, 2009). On the other hand management research is including sustainability in its treatment of social responsibility. Social responsibility in fact includes issues such as social, cultural, legal, political, economic and natural environmental (Wood, 2010). Golicic and Smith (2013) studied environmental supply chain practices. They found a positive correlation between environmental supply chain practices and a firm’s performance. Additionally Bai and Sarkis (2014) studied sustainable supply chain key performance indicators (KPI). Table 15 shows their results.

The SCOR model has been developed by the Supply Chain Council, which is a non-profit organization. SCOR is a systematic framework to help organizations to improve the performance of their supply chains (Slack et al., 2013, p. 427). The SCOR model is intended to improve processes: source; “identify, select, and manage and assess sources”, make; “manage production execution, testing and packaging”, deliver; “invoice, warehouse, transport and install”, plan; “plan and manage demand/supply” and return; “raw materials and finished goods” (Heizer and Render, 2014, p. 488). The SCOR model has been developed for benchmarking performance based on key performance indicators such as cost, time, quality, flexibility and innovation (Bai and Sarkis, 2011). However, according to Bai and Sarkis (2014) these measures do not include social and environmental sustainability measures. Using the SCOR model Bai and Sarkis have included environmentally sustainable supply chain performance measures in a table (see Table 15) together with traditional supply chain performance measures.
Table 15. SCOR-based sourcing. Source Bai and Sarkis 2014, p. 278 (originally from Sarkis and Talluri, 2002; Shepherd and Gunter, 2006; Gunasekaran and Kobu, 2007)

<table>
<thead>
<tr>
<th>Business performance measures</th>
<th>Environmental performance measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost</strong></td>
<td><strong>Costs</strong></td>
</tr>
<tr>
<td>Supplier cost-saving initiatives</td>
<td>Environmental costs savings</td>
</tr>
<tr>
<td>Labor efficiency</td>
<td>Energy efficiency of systems</td>
</tr>
<tr>
<td>Cost variance from expected costs</td>
<td>Environmental cost performance variance</td>
</tr>
<tr>
<td><strong>Time</strong></td>
<td><strong>Time</strong></td>
</tr>
<tr>
<td>Supplier lead time against industry norm</td>
<td>Length of time to implement environmental programs</td>
</tr>
<tr>
<td>Supplier’s booking-in procedures</td>
<td>Meeting environmental program implementation period</td>
</tr>
<tr>
<td>Purchase order cycle time</td>
<td>Speed of acquiring environmental information</td>
</tr>
<tr>
<td>Percentage of late deliveries</td>
<td>Communication speed on environmental issues to supplier’s suppliers</td>
</tr>
<tr>
<td>Information timeliness</td>
<td></td>
</tr>
<tr>
<td>Efficiency of purchase order cycle time</td>
<td></td>
</tr>
<tr>
<td><strong>Quality</strong></td>
<td><strong>Quality</strong></td>
</tr>
<tr>
<td>Buyer-supplier partnership level</td>
<td>Environmental relationship and cooperation level</td>
</tr>
<tr>
<td>Level of supplier’s defect-free deliveries</td>
<td>Supplier rejection rate</td>
</tr>
<tr>
<td>Supplier rejection rate</td>
<td>Waste generated from products and materials</td>
</tr>
<tr>
<td>Delivery reliability</td>
<td>Percentage recycled material</td>
</tr>
<tr>
<td>Percentage of wrong supplier delivery</td>
<td>Mutual trust on environmental issues</td>
</tr>
<tr>
<td>Mutual trust</td>
<td>Mutual planning for environmental improvements</td>
</tr>
<tr>
<td>Satisfaction with knowledge transfer</td>
<td>Environmental information accuracy</td>
</tr>
<tr>
<td>Satisfaction with supplier relationship</td>
<td>Environmental information availability</td>
</tr>
<tr>
<td>Supplier assistance in solving technical problems</td>
<td></td>
</tr>
<tr>
<td><strong>Flexibility</strong></td>
<td><strong>Flexibility</strong></td>
</tr>
<tr>
<td>Supplier ability to respond to quality problems</td>
<td>Amount of environmentally safe alternatives</td>
</tr>
<tr>
<td>Response to product changes</td>
<td>Response to environmental programs for suppliers</td>
</tr>
<tr>
<td>Materials variety (number of materials available)</td>
<td>Response to environmental product requests</td>
</tr>
<tr>
<td>Product and service variety</td>
<td></td>
</tr>
<tr>
<td>Product volume variability capabilities</td>
<td></td>
</tr>
<tr>
<td>Product development time</td>
<td></td>
</tr>
<tr>
<td><strong>Innovation</strong></td>
<td><strong>Innovation</strong></td>
</tr>
<tr>
<td>Satisfaction with knowledge transfer satisfaction</td>
<td>Environmental knowledge transfer satisfaction</td>
</tr>
<tr>
<td>Technological capability levels</td>
<td>Environmental technology levels</td>
</tr>
<tr>
<td>Involvement in new product design</td>
<td>New environmentally sound processes introduced</td>
</tr>
<tr>
<td>Introduction of new processes</td>
<td>New environmentally sound product development</td>
</tr>
</tbody>
</table>

Miemczyk et al. (2012) conducted a literature review of sustainability in purchasing and supply management. Their research reviews the concept of sustainability in three areas i.e. dyad (referring to a relationship between an organisation and its supplier), supply chain and network. Miemczyk et al. wanted to develop a taxonomy of measures used by sustainable purchasing and supply at the dyad, supply chain and network levels of analysis. Their finding is shown in Figure 15. All three areas are covering environmental and social issues. The dyadic area is having the widest coverage of different sustainability issues. The network area is having the most limited coverage of sustainable issues.
Figure 15. A taxonomy of measures in sustainable purchasing and supply research (Miemczyk et al., 2012)
3.3 Public procurement

This chapter describes the development of public procurement in recent years. Since the Treaty of Rome the public procurement in the European Union has been regulated by the EU directives and, based on those directives, the national laws.

3.3.1 History and evolution

All members of the EU are forced to implement the EC procurement directives. The legal basis for the EC procurement directives is included in the Treaty of Rome from 1957. The key principles of this treaty are (Lindskog et al., 2010): To increase transparency of procurement procedures and practices throughout the community, to allow the free movement of goods, services, capital and people between member states, to develop effective competition for public contracts, to standardize specifications and to provide advance information of procurement needs to the marketplace.

The OECD member country governments have agreed to regulate their public procurement procedures. Government procurement is excluded from the national treatment and most-favored-nation treatment rules of GATT 1994 (Article III; 8(a)) and GATS (Article XIII; 1). It is dealt with instead by the Government Procurement Agreement (GPA) which is one of the plurilateral agreements annexed to the WTO Agreement (see generally Arrowsmith, 1996; Blank and Marceau, 1996; and WTO, 1996). The GPA is therefore part of the WTO AGREEMENT only as between those members of the WTO who have accepted it (WTO Agreement, Article II; 3).

Public procurement in the EU represents 14 percent of the total gross national product. The value was in 2004 approximately 1,000 billion euros (TED, 2004). However prior to the European Community legislation, just 2 per cent of public contracts were captured by another member state than the issuing country (Sanderson, 1998). Thus this procedure was expensive for purchasing organizations due to lack of proper competition. Additionally the supply market was not developing. As a consequence the European Community started to develop the public procurement legislation. The Public Tendering Process legislation was approved between 1988 and 1992. It had two goals: to end national preferences and to remove artificial barriers in trade between different EU countries (Cox and Furlong, 1997). In 2004 the European Union renewed the public procurement directives. As a consequence this directive is simplifying and modernizing the legal framework (Pourbaix, 2004). This directive contains three different contract award procedures: the “open procedure” inviting all interested suppliers to make a tender, the “restricted procedure” where only invited suppliers may take part in tendering and the “negotiated procedure” where the purchasing organization may negotiate with one or more suppliers (Roodhooft and van den Abbeele, 2006). In fact the most common procedure is the open procedure, as it provides the highest degree of competition. Additionally there is a new “competitive dialogue”, for complex contracts. This procedure allows the purchasing organization to have a dialogue with at least three bidders to find the best solution (Pourbaix, 2004).

A tendering process starts with a call for tender by the purchasing organization. This call includes specifications about the product or service in question. The criteria for the selection and award of the contract have to be included in the call for tender. The selection criteria can be either the lowest price or the most “economically advantageous” tender (Roodhooft and van den Abbeele, 2006). Tenders are typically based on arm’s length relationships between the supplier and purchasing organization. On the other hand the EU and, for example, UK governments are persuading suppliers and purchasing organizations to combine
competition and co-operation (H.M. Treasury, 1998). However the EU procure-
ment rules proves to rule out for public organizations the use of collaborative
procurement (Roodhooft and Abbeele, 2006). Buying firms can improve sup-
pliers’ performance and capabilities by increasing supplier performance goals
(Monzcka et al., 1993); by providing the supplier with training (Galt and Dale,
1991); by providing the supplier with equipment, technological support and
even investments (Galt and Dale, 1991; Monzcka et al., 1993); by formally eval-
uating supplier performance (Watts & Hahn 1993); and by recognizing supplier
progress in the form of awards (Galt and Dale, 1991).
Mutual recognition - the documents and certificates issued by the appropriate
authority in a member state - must be accepted in the other member. The main
stakeholders in public procurement are according to Lindskog (2006) and Lind-
skog et al. (2010):

- Politicians who are elected by citizens
  - Central government responsible for the whole country
  - Local government responsible for the local authority
- Agency to procure for the central government
- Agency to procure for the local government
  - Agency management
  - Procurement department
  - End-users/employees
- Citizens and businesses

According to Roodhooft and van den Abbeele (2006) “public sector organiza-
tions may need to develop new buying skills in market management, specification,
competitive process, negotiation regulation and monitoring”. On the other hand Graves (2011) studied best practices and key risks associated with tender-
ing systems by examining medical tendering processes in 10 countries. Accord-
ing to Graves (2011) there is evidence that tendering may reduce direct procure-
ment costs, but many tendering systems have difficulties in decreasing total
health-care spend and improving patient access to new health-care break-
throughs. Additionally, many government regulations are not increasing com-
petition and are often causing inefficiencies (Graves, 2011).
Table 16. Summary of medical device tendering best practices (Graves 2011, pp. 103-106)

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Best practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectively lower total healthcare spend</td>
<td>Cross-functional involvement in product selection</td>
</tr>
<tr>
<td></td>
<td>Use of healthcare economics data</td>
</tr>
<tr>
<td>Maximize patient access</td>
<td>Physician involvement in purchasing</td>
</tr>
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<td></td>
<td>Monitoring of the clinical impact of tendering</td>
</tr>
<tr>
<td></td>
<td>Provisions for rapid adoption of new products</td>
</tr>
<tr>
<td></td>
<td>Provisions to allow for off-tender purchasing</td>
</tr>
<tr>
<td>Ensuring competition</td>
<td>Selection of multiple suppliers</td>
</tr>
<tr>
<td></td>
<td>Avoidance of whole-market tenders</td>
</tr>
<tr>
<td></td>
<td>Increased frequency of contract turnover</td>
</tr>
<tr>
<td>Limiting inefficiency</td>
<td>Clear definition of process and requirements</td>
</tr>
<tr>
<td></td>
<td>Oversight of the bidding process</td>
</tr>
<tr>
<td></td>
<td>Communication of results and rationale to all bidders</td>
</tr>
<tr>
<td></td>
<td>Avoidance of “administrative fees”</td>
</tr>
</tbody>
</table>

Bowerman et al. (2002) studied benchmarking in the public sector. They found that in the private sector, benchmarking aims for best practice whereas in the public sector benchmarking aims for “good enough”. Additionally they found that in the private sector benchmarking is conducted as an internal management tool whereas in the public sector benchmarking is seen as an imposed exercise.

The application of best practices of private purchasing in the literature of public procurement is discussed in the following sections. The order of the discussed best practices follows a similar pattern to that which was presented in the case of private purchasing. In the literature of public procurement the discovered best practices of purchasing are not discussed as extensively as they are discussed in the literature of private purchasing. This may indicate the limited utilization of these in public procurement. The discovered best practices in private purchasing will be discussed concerning public procurement in the following chapters.

3.3.2 Market knowledge

It is essential for any public organization to follow changes in the marketplace. This will enable the organization to utilize the available resources in the best possible manner and this will provide good services for its customers. Market research is therefore a critical activity in both private purchasing and public procurement. Market research influences procurement, for example in identifying alternative solutions, cost issues and so on (OECD, 2013). Additionally reasons to explain ignorance of market research include lack of understanding within the organization of its value added, limited time and resources for market research, and lack of competence to conduct market research (OECD, 2013).

3.3.3 Purchasing portfolio

Researchers have discovered in public procurement trends such as procedures where goals are clearly set and made accountable (Eden & Cropper, 1992) and strategic procurement and professional development in public procurement (Thai, 2001). Galbraith (1952) has given a definition to competition in the public sector: “A market is workably competitive if, among other things, there is a pro-
gressive technology, (and) the passing on to consumers of the results of this progressiveness in the form of lower prices, larger output.” However public markets often fail to be competitive because the models they are using are short of perfect information and low barriers to supplier entry (Caldwell et al., 2005). Additionally Caldwell et al. (2005) are discussing innovative practices in public procurement. They state that there exists risk sharing partnerships such as the Private Finance Initiative. An example of this is the National Health Service in the UK. Additionally they have discovered that public organizations need to start rewarding suppliers for excellence rather than for volume. One of the key findings in their study is that public purchasing must develop more towards strategic issues, especially towards managing post-contract awarding.

3.3.4 Total cost of ownership
Based on the study of Graves (2011) procurement decisions and processes should be evaluated based on total cost, not on product price. This approach will assure that products with high initial procurement costs (but long-term benefits) are not overlooked, and that initially inexpensive products with long-term costs are not overemphasized.

3.3.5 Cross-functional teams
Academics have been discussing how to attract professional people to work in public procurement. Teamwork and other interpersonal skills have been mentioned as a skill required in the future purchasing (van Weele et al., 1998; Giunipero, 2000). On the other hand Graves (2011) discovered that cross-functional involvement (of physicians, co-medical staff, administrators, data analysts and so on) in product selection can encourage purchasers to use the total cost approach and benefit of product use.

3.3.6 Co-operation
Some researchers (e.g. Axelsson and Easton, 1992; Ford, 1997) have discovered that in the public purchasing there is a trend from competition to co-operation. The relational models have been developed from the interaction models of purchasing by the International Marketing and Purchasing (IMP) group (Ford, 2002). The IMP Group was originally formed in the mid-1970s, as a research project on “Industrial Marketing and Purchasing”, by a group of researchers representing five European countries and universities; the Universities of Uppsala, Bath, UMIST, ESC Lyon and Ludwig Maximilians University (Munich) (http://www.impgroup.org). The exchange is taking place through an ongoing interaction. According to the study of Lian and Laing (2004) there is a shift towards co-operation with fewer suppliers. With this procedure longer term relationships with key suppliers can be formed. This can lead to wider networks and social relationships (Lian and Laing, 2004). Additionally Boyett et al. (1996) and Hoxley (2001) found that public sector purchasing has in some extent started to emphasize co-operation instead of pure competitive tendering. Many governments are under pressure financially due to economic crisis and therefore they are trying to find ways to reduce their spending. One way to do so is to reduce inefficiencies in procurement by enforcing more collaborative
public procurement (Walker et al., 2013). However public organizations face difficulties in their attempts to practice inter-organizational relationships such as purchasing collaborations (Schotanus et al., 2011). Organizations do not find help from literature in these difficulties (Dyer and Singh, 1998). According to Walker et al. (2013) when buyers from different operations collaborate for greater efficiency and to improve their purchasing power with suppliers, this is called a “buyer-buyer relationship”. It seems to be easier for public organizations to practice this instead of buyer-supplier relationships.

The relational perspective has been used in several previous studies of public sector co-operation: strategic alliances in social service (Graddy and Chen, 2006), enhancing network governance (Imperial, 2005), strategy formation and strategic governance in public agencies (Johanson, 2009) and a firm’s networking capabilities and performance (Spithoven and Knockaert, 2011).

In the study of Walker et al. (2013) they state four potential enablers of collaborative procurement: First, investments in relation-specific assets. Second, substantial knowledge exchange. Third, combining complementary but frugal resources or capabilities. Last, effective governance mechanisms leading to lower transaction costs. Walker et al. (2013) concluded their study by stating that collaborative procurement in public sector is hindered by local politics and differing priorities. Additionally collaboration is prevented by lack of knowledge of the supply market, supplier resistance, reliance on supplier data, and lack of strategic buying. Furthermore Gobbi and Hsuan (2015) investigated collaborative purchasing of complex medical technologies. Because service operations are about delivering services to the customers, the service providers must understand the customers’ needs (Gobbi and Hsuan, 2015) as well as how to allocate operational capabilities that are aligned with customer needs (Coltham and Devinney, 2013).

3.3.7 Sustainability

New et al. (2002) studied private and public purchasing in terms of green supply. They wanted to know the degree of environmental issues in purchasing decisions. They found differences but also similarities. The decisive factors seemed to be the organizational structure, the decision-making procedures and information flows. The objectives of the respective organizations were also important. Furthermore Preuss (2009) studied sustainability in public procurement particularly in local government authorities in England. The UK government has set a target to achieve a leading position in sustainable procurement in the European Union by 2009 (DEFRA and HM Treasury, 2007). On the other hand in the supply chain management literature during the past two decades sustainability has been discussed increasingly in several studies (Preuss, 2009): for example, social and environmental issues in the fashion business (Carter and Rogers, 2008), the impact of purchasing on the environment (Green et al., 1998; McIntyre et al., 1998), supplier employment conditions (Graafland, 2002; Mamic, 2005) or ethnic minority suppliers (Krause et al., 1999; Carter et al., 1999). Furthermore Carter and Jennings (2004) created a concept of Purchasing Social Responsibility to guide purchasing to include features of sustainable supply chain management. This concept contains environment, diversity, safety, human rights and philanthropy.
There is shortage of academic research of sustainable supply chain management (Preuss, 2007).

Figure 16. A conceptual model of the influences on sustainable public procurement (Walker and Brammer 2009, adapted from Gelderman et al., 2006)

The conceptual model described in Figure 16 above begins, according to Walker and Brammer (2009), from the fact that sustainable public procurement is based on the pressures on the organization to commit itself to its implementation. The first factor deals with the informational aspects of implementing sustainable procurement. The organization must understand the concept of the sustainable procurement. The second factor deals with financial aspects of implementing sustainable procurement. Green or socially responsible manufacturing methods are perceived as being more costly than other methods. The third factor deals with the way an organization is supportive of sustainability. This can obviously be helped by incentives. The final factor of implementing sustainable procurement is the supply side. The availability of sustainably-produced goods and services is decisive (Walker and Brammer, 2009). Furthermore Amann et al. (2014) studied sustainability policy goals in public procurement tenders. They discovered that public procurement was more effective in influencing socially responsible goals than environmental goals. On the other hand vendors achieved greater progress in delivering green than socially responsible operations.

3.3.8 Comparison with private sector purchasing

Private sector purchasing has the following goals: cost reduction, quality improvement, innovation transfer and security of supply (Murray, 2001) (see Table 17). Public procurement instead has the following goals: local sourcing/preference, internal advice, create awareness of purchasing opportunities and green purchasing (Murray, 2001).
Heinritz et al. (1991) listed the following differences between public and private sector purchasing: size of purchases in public procurement; leverage – in many industries the public sector is the only or by far the most important customer, the government has unique power; legal restrictions (public procurement); security in commercial relationships (public procurement); compliance with regulation (public procurement); solicitation of vendors (public procurement); procedure (public procurement); bureaucracy and part of policy (public procurement). On the other hand according to Christensen and Laegreid (1997) and Gianakis (2002) what is the procedure in the private sector today will be the procedure in the public sector tomorrow. There does not, however, exist empirical evidence that private and public sector purchasing would be becoming increasingly similar (Marshall and Humby, 1998). According to Murray (1999) this may lead to situations where purchasing managers are complying with private sector strategies when inappropriate. In fact McCue and Pitzer (2005) found that the public and private procurement professionals have different goals and practices in their work. Public sector purchasers are governed by legal issues, laws, and regulations; private sector purchasers are guided by boards of directors and business plans.

For instance Korosec (2003) splits supply chain management into four main areas: it requires up to date information technology, it favors decentralized decision making, it uses co-operation both internally and externally and it focuses on integrated chains. Korosec studied the use of supply chain management in a municipal government in the United States. He found evidence that supply chain management is not on the agenda of procurement in most municipalities. On the other hand Lian and Laing (2004) compared private and public sector purchasing concerning public sector purchasing of health services. They argued that it is important to understand the different purchasing paradigms, i.e. transactional purchasing and relational purchasing. In transactional purchasing exchanges are based on arms-length, one off transactions (Campbell, 1985). This approach is based on models by Robinson et al. (1967), Webster and Wind (1972) and Sheth, (1973).

Leenders et al. (2002) describe public sector purchasing with expressions such as perceived lack of interest, expenses and inventory costs, lack of transportation expertise, lack of experience in dealing with suppliers and tendency to competitive bidding. On the other hand according to Gragan (2005) public procurement professionals should improve their communication with vendors and users. He is arguing that public purchasers should be trained properly. Actually when comparing public procurement and private sector purchasing the most important difference is the public procurement’s stricter jurisdiction to avoid
corruption, bribery and the misuse of power by public producers (Lindskog et al., 2010). Similarities and differences between private and public sectors are shown in Table 18.

Table 18. Similarities and differences between private and public sectors (modified Lindskog et al., 2010, p.169)

<table>
<thead>
<tr>
<th>Items</th>
<th>Private</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Size of organizations</td>
<td>1-10,000+</td>
<td>1-10,000+</td>
</tr>
<tr>
<td>Geographical dispersion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Regional</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>National</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>International</td>
<td>yes</td>
<td>yes (few)</td>
</tr>
<tr>
<td>Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goods</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Services</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Profit driven</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Openness/transparency</td>
<td>no (limited)</td>
<td>yes</td>
</tr>
<tr>
<td>Contacts with customers</td>
<td>vary</td>
<td>yes</td>
</tr>
</tbody>
</table>

Arlbjorn and Freytag (2012) compared the private and the public sector’s procurement process and studied whether they could learn from each other’s. The dominating focus of supply chain management theories and models has according to Arlbjorn and Freytag (2012) been in the physical movement of materials and information flow together with business processes. However, latterly supply chain management has been connected to services (Ellram et al., 2004). Therefore public service procurement could benefit from the latest SCM development (Arlbjorn and Freytag, 2012). On the other hand in the private sector the target is to obtain the best prices. Competitive bargaining is therefore an important part of private purchasing’s task. Nevertheless, collaborative relationships are also part of a modern private organization’s practice. The public sector attempts to attract as many participants to the tenders as possible, thus emphasizing competition (Arlbjorn and Freytag, 2012). However Telgen et al. (2007, p. 17) state that “when comparing public and private sector procurement it appears that the demands of public procurement are greater and more highly varied than those of private sector procurement.” As a consequence Telgen et al. (2007, pp. 17-19) demonstrate the differences between public procurement and private purchasing in the following points:

- External demands (transparency, integrity, accountability, exemplary).
- Internal demands (multiple goals, political goals, multiple stakeholders).
- Context demands (budget driven, open budget, interdependent budgets, cultural specific).
- Process demands (rules & procedures, long-term relationships, co-operation with other public entities).
- Multiple roles (public entities are large buyers, reciprocity, determines some regulations).
Evald and Freytag (2007, p. 31) have discovered the following differences:

- Users are citizens, rather than customers.
- Target groups are identified by rights, not by segmentation.
- Changes are more politically driven than demand-driven.
- Services are mostly defined by experts and politicians and less defined by users.
- Communication is aimed at regulating behavior and informing about rights; it is seldom about positioning the public enterprise.
- Public enterprises are mainly budget-driven, aiming for multiple goals, and less concerned about market innovation.

Bovaird (2006) states, regarding other relationship forms in the public sector, that the public sector should start looking for ways to enter collaborative marked-based relationships with private enterprises. On the other hand Jackson (1985) raised the concept of “switching cost”. What is the cost to shift from one supplier to another?

Regulations such as the EU directives within Europe are dominating public procurement (Arlbjorn and Freytag, 2012). The first public procurement directive was imposed in 1972 (Steinicke, 2005). In 1989 the first control directive was adopted (Arlbjorn and Freitag, 2012). A white book about “The single European market” was approved in the early 1990s (Arlbjorn and Freytag, 2012). In 1996 the European Commission published a green paper regarding public procurement (European Commission, 1996). However Martin et al. (1997) question the true existence of openness in the EU’s public procurement practices. According to Arlbjorn and Freytag (2012), in 2004 new tender directives were developed. The latest renewal of EU public procurement directives is nationally taking place in 2016.

Procurement of Social and healthcare public services has been studied due to their high influence on public spending. For example in Finland these costs form 31 percent of the costs of municipalities (Statistics Finland, 2012). Statistics from the year 2012 have been used due to the fact that the empirical study of this thesis covers time period from year 2007 to year 2012.

Effectiveness of public service procurement has been emphasized as a major challenge in the last decade (Lawther and Martin, 2005; van der Valk and Rozemeijer, 2009; Merkert and O’Fee, 2013), especially in the social and healthcare domain, where many challenges can be found (Crosby and Bryson, 2005).

To be able to improve the effectiveness of public services procurement, the collaboration between the local authorities (the buyers) and the service providers must be improved (Guzman and Sierra, 2012). Service is provided in public sector by organizations from the private and non-profit sectors. We need to organize a practical cross-sector collaboration to provide good service. Well working partnerships are needed in this area (Vilén and Palko, 2010). According to Cahill (1996) a good partnership demands management actions and good management skills.

Collaboration in the procurement of services, or buyer-supplier relationships, has been studied from many different perspectives, such as efficiency (Byoung-Chun et al., 2011), effectiveness (Manzoni and Islam, 2007; Chen, 2010), performance (Heimbürger and Dietrich, 2012), and success (van der Valk and Rozemeijer, 2009; Plane and Green, 2012). However, only a few of these studies
focus on collaboration in public procurement (e.g. Chen, 2010). Additionally in collaborative relationships, information exchange is targeted (Chen, 2010). In partnerships, a common goal brings partners together (Cooke, 2012). Grudinschi et al. (2014) studied partnerships in pre-existing collaborative relationships. They wanted to clarify the concepts of collaboration and partnership. Often, they are used interchangeably (Carnwell and Buchanan, 2008). However, they are different concepts, with collaboration being a component of a complete partnership. Collaborative relationships develop in this order: (1) involvement, (2) collaboration, (3) participation, (4) partnership (Cahill, 1996). Therefore, partnership is the highest level of a collaborative relationship. According to van der Valk and Rozemeijer (2009) service procurement involves often complex risks. Therefore risk management is important in collaboration management in public service procurement (Chung et al., 2010).

3.3.9 Public procurement in Finland

Tynkkynen et al. (2012) studied fundamentals used by Finnish authorities when they argue about contracting out primary health care and elderly care services to the private sector. They noticed that there does not exist much literature concerning the motivations that drive the decisions to contract with the private sector in health care and social services. However contracting public services out has increased in several countries such as the Nordic countries, United Kingdom, New Zealand, Australia and Canada (Almqvist and Högberg, 2005; Hodge and Coghill, 2007, Perrot, 2006 and Pollock, 2004). Cultural and economic changes explain the development towards increasing privatization in welfare provision (Stolt and Winblad, 2009). Also Laamanen et al. (2008), Entwistle (2005), Keane et al. (2001) and Sorensen and Bay (2002) studied the role of local authorities and politicians in purchasing. Thus based on different studies the targets in contracting out are improved cost-control and more flexible organization (Alexander and Young, 1996), improved resource allocation and better management (Almqvist and Högberg, 2005), cost-efficiency and improved service quality (Sorensen and Bay, 2002) and interest in concentrating on the “core service” of the organization (Laamanen et al., 2008, Entwistle, 2005, Sorensen and Bay, 2002, Alexander and Young, 1996, Keane et al., 2001, Donahue, 1989).

There is, however, some doubt about the performance of public and private service providers (Stolt et al., 2011, Tynkkynen et al., 2011, Warner, 2008). On the other hand Vining and Globerman (1999) state that the criticism of contracting out may be caused by issues such as the competition in health care and social services is often limited which may cause overcharging for services. Additionally it may be difficult to define the best quality of such services. Finally contracting does not allow the purchasing organization to cancel the contract.

Local authorities are responsible for organizing health care and social services for their residents in Finland. They have had the possibility to contract with private providers since 1984 in social services and since 1993 in health care services (Tynkkynen et al., 2012). However, a considerable share of the housing services which today are provided by private sector has traditionally been provided by private not-for-profit providers. However, the EU competition legislation has made the contracting with private service providers a process which favors competition instead of co-operation (Tynkkynen et al., 2012). In addition for-profit
providers have increased their interest in the growing market of services for the elderly. This development has led to a situation where in Finland in 2009 the market share in sheltered housing was for not-for-profit providers 23 percent whereas the for-profit providers had a share of 32 percent (The Ministry of Social Affairs and Health, 2012).

3.3.10 Public services

Municipalities can organize services that they provide to their citizens in many ways. Figure 17 shows a summary of the possible ways to organize services. The traditional way of organizing services for citizens has been that municipalities are producing the services by themselves. Another option to organize services is to co-operate with other municipalities. The co-operation can take place through normal cooperation or through a company owned by a municipality or a number of municipalities (Peltonen, 2008).

![Figure 17. Different organizing modes of municipal procurement units (Peltonen, 2008)](image)

3.4 Housing service for the elderly

Local authorities are obliged by law to organize housing services for the elderly. Additionally municipalities can organize housing services either by themselves or by purchasing from service providers or by providing service vouchers. The main function of the social and health agency in local councils is to provide conditions for effective services which are supporting the ability of elderly people and which are securing a high quality service entity for the aging persons (Ministry of Social Affairs and Health and Association of Finnish Local and Regional Authorities, 2013). The Elderly Service Act regulates the operation of local social and health agencies. Housing services are aimed for persons in need of particular support in their housing. Private service providers (associations and companies) covered of the housing services 18000 places, which is 52 per cent of the total housing service places in Finland.

Services for the elderly can be divided into outpatient services and institutional services. In practice local authorities are aiming to support living of the elderly
as long as possible at home (Syrjä, 2010). When living at home is no longer possible, the customer has traditionally been transferred to a long-term institutional care facility or to an old people’s home (Syrjä, 2010). The Ministry of Social Affairs and Health has aimed to increase the share of services for the elderly living at home. The target has also been to reduce the number of old persons in long-term institutional care and living at old people’s homes. In 1980’s and 1990’s local authorities utilized the activity of the non-profit service providers. Their service operations were supported by subsidies from the Finnish Slot Machine association. This increased the number of housing services in municipalities (Lith, 2012). The situation changed in early 2000, when the law concerning involvement of the Finnish Slot Machine association took effect. This law prevented non-profit service providers to gain from these subsidies in competitive bidding (Lith, 2012). The share of private service providers in housing service for the elderly started to increase somewhat, based on the decision to dismantle the system where state subsidies for social welfare were earmarked (Anttonen and Haikio, 2011, p. 75). This decision “strengthened the idea that municipalities are in charge of arranging services, but they have the freedom to decide how these services are arranged and produced”.

Table 19 presents the share of different services for the elderly over 75 years old in years 2000-2010 and the national target. The national target for the number of persons being in enhanced sheltered service is 5-6 per cent of the over 75 years old persons.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lives at home/ supported by service</td>
<td>89.8</td>
<td>89.3</td>
<td>89.5</td>
<td>91-92</td>
</tr>
<tr>
<td>Is getting regular home care</td>
<td>11.3</td>
<td>11.9</td>
<td>13-14</td>
<td></td>
</tr>
<tr>
<td>Is receiving financial support for caring for close relatives</td>
<td>3.0</td>
<td>3.9</td>
<td>4.2</td>
<td>5-6</td>
</tr>
<tr>
<td>Is in enhanced sheltered service</td>
<td>1.7</td>
<td>4.2</td>
<td>5.6</td>
<td>5-6</td>
</tr>
<tr>
<td>Is in long-term institutional care</td>
<td>8.4</td>
<td>6.3</td>
<td>4.7</td>
<td>3</td>
</tr>
</tbody>
</table>

As local authorities guided customers weak in health into housing service, the 24-hour service was needed. This form of service is called an enhanced sheltered service (Syrjä, 2010). The share of this service has increased due to local authorities transferring customers from long-term institutional care to enhanced sheltered service and due to increases in purchased services from private service providers.

According to Anttonen and Haikio (2011) the state has intended to increase the share of private service by introducing the tax credit for domestic help in 2001. “This credit can be used for employing assisting personnel, including domestic and care workers, for instance, at an aged person’s home” (Anttonen and Haikio, 2011, p.76). The introduction of the service voucher system is one way to give freedom to a customer in a municipality to select the service provider. “A municipality or a municipal federation may use service vouchers in organizing social and healthcare services, which are provided by the private sector and approved by the municipality. Service vouchers can be used to complement and support municipal services for the good of the residents and for increasing their freedom of choice” (www.sitra.fi/en). The working group set up by the Ministry
of Social Affairs and Health proposes modifying the structures of 24-hour care by gradually changing over from the present three-tier 24-hour care system (enhanced care service housing, homes for older people, municipal health centre wards) towards a one-tier system of 24-hour care. The change can be implemented so that institutional care is not replaced by institutional-like solutions (Ikkähoiva-työryhmä, 2011).

Lane (2001) studied public contracting. He stated that the public purchasing organization has to be able to separate in the tendering and contracting phase good suppliers from bad ones. This is possible if the tender includes both the quoted price and quality issues. This requires competence in the preparation phase of the tendering.

Table 20. Number of housing service locations by end of 2010 in Finland (The Association of Finnish Local and Regional Authorities, 2012)

<table>
<thead>
<tr>
<th></th>
<th>Number of places</th>
<th>Number of places in public service</th>
<th>Number of places in private service</th>
<th>Number of locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old peoples’ home</td>
<td>16082</td>
<td>14351</td>
<td>1731</td>
<td>413</td>
</tr>
<tr>
<td>Enhanced service housing</td>
<td>28644</td>
<td>13768</td>
<td>14876</td>
<td>1339</td>
</tr>
<tr>
<td>Service housing</td>
<td>6675</td>
<td>2982</td>
<td>3693</td>
<td>525</td>
</tr>
</tbody>
</table>

The gross cost of housing service for the elderly was in the six largest cities in Finland 55 € per care day and 115 € per day in enhanced housing service. Sheltered housing means in general a service which includes an accommodation and associated services. These services can include nursing services and care services and various support services such as catering, security and cleaning. The housing service for the elderly is divided into housing service and enhanced housing service. Housing service includes an accommodation and associated services such as nursing and care services, and when needed catering service and other supporting services. In the housing service unit the service personnel is present during the day time. Enhanced housing service includes an accommodation, nursing and care service and catering services. In this unit the personnel is present 24 hours a day. For the accommodation the resident pays a rent and for the services he or she pays a customer fee. When a local authority is exploiting private service providers, the process involves public procurement law. When doing so the local authority is obliged to ensure that the purchased services equal the service levels of public service. In both public and private service a personal care and service plan is obliged to be formulated (Quality recommendation for securing good ageing and improving services. Publications of the Ministry of Social and Health 2013:11. Social and Health Ministry and Association of Finnish Local and Regional Authorities 2013).

Central actors in the housing service for the elderly are the following: The Finnish Ministry of Social Affairs and Health supports the welfare of people in Finland via social and health services and by ensuring income security. Valvira is “a national agency operating under the Ministry of Social Affairs and Health,
charged with the supervision of the social and health care, alcohol and environmental health sectors. We provide licensing for social and health care providers and offer guidance to the Regional State Administrative Agencies to achieve harmonized licensing, guidance and supervisory practices throughout Finland” (www.valvira.fi). Regional State Administration Agencies control the quality of the service in housing services. The law of private social services requires that the service provider formulates a self-surveillance plan to secure the quality of the provided services. The National Supervisory Office is guiding these self-surveillance plans. Regional State Administrative Agencies’ “mission is to promote regional equality by carrying out executive, steering and supervisory tasks laid down in the law. To this end, they aim to strengthen implementation of basic rights and legal protection, access to basic public services, environmental protection, environmental sustainability, and public safety and also to provide a safe and healthy living and working environment in the regions. There are six Regional State Administrative Agencies in Finland. The agencies work in close collaboration with local authorities. The areas of responsibility are; Basic public services, legal rights and permits, education and culture, occupational health and safety, environmental permits, rescue services and preparedness” (www.avi.fi). The National Advisory Board on Social Welfare and Health Care Ethics ETENE: “The purpose of The National Advisory Board on Social Welfare and Health Care Ethics is to discuss general principles in ethical issues in the field of social welfare and health care and concerning the status of patients and clients as well as to publish recommendations on them” (www.etene.fi).

The Municipal management system: The Finnish local government management system is characterized by division into political and professional management. Each municipality must have a municipal council, a municipal board, an auditing committee for auditing municipal administration and finance, and an election committee, which is responsible for organizing elections. A municipality must also have a municipal manager or mayor, elected by the municipal council. The municipal manager is not a member of the local council. Local authorities can also set up other organs, for example school boards, equality commissions, boards of management or planning and human resource divisions.” (www.localFinland.fi)

The social and health services are in Finland strongly regulated by legislation and statutes. Table 21 lists those laws that are central for services for the elderly.
Table 21. Central laws covering services for the elderly in Finland (Finlex)

<table>
<thead>
<tr>
<th>Law</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td></td>
</tr>
<tr>
<td>The Constitution of Finland</td>
<td>731/1999</td>
</tr>
<tr>
<td>Primary Health Care Act</td>
<td>66/1972</td>
</tr>
<tr>
<td>Health Care Act</td>
<td>1326/2010</td>
</tr>
<tr>
<td>Act on the Status and Rights of Patients</td>
<td>785/1992</td>
</tr>
<tr>
<td>Act on Specialized Medical Care</td>
<td>1062/1989</td>
</tr>
<tr>
<td>Private Health Care Act</td>
<td>152/1990</td>
</tr>
<tr>
<td>Degree on Private Health Care</td>
<td>744/1990</td>
</tr>
<tr>
<td>Act on Health Care Professionals</td>
<td>559/1994</td>
</tr>
<tr>
<td>Social services</td>
<td></td>
</tr>
<tr>
<td>Social Wellfare Act</td>
<td>1301/2014</td>
</tr>
<tr>
<td>Private Social Services Act</td>
<td>922/2011</td>
</tr>
<tr>
<td>Act on Qualification Requirements for Social Welfare Professionals</td>
<td>272/2005</td>
</tr>
<tr>
<td>Act on Client Fees in Social Welfare and Health Care</td>
<td>734/1992</td>
</tr>
<tr>
<td>Act on Vouchers in Social Welfare and Health Care</td>
<td>569/2009</td>
</tr>
<tr>
<td>Act on Support of Caring for Close Relatives</td>
<td>937/2005</td>
</tr>
<tr>
<td>Act on the Status and Rights of Social Care Clients</td>
<td>812/2000</td>
</tr>
<tr>
<td>Act on Supporting the Functional Capacity of the Older Population and on Social and Health Services for Older Persons</td>
<td>980/2012</td>
</tr>
</tbody>
</table>

Housing services for the elderly are often tendered as a framework agreement. A framework agreement means an agreement between one or more purchasing unit and one or more suppliers. The intention of this procedure is to confirm after a certain period of time the conditions (prices and quantities) for the forthcoming purchasing contracts. A framework agreement can include one or more suppliers. These suppliers are chosen by open or restricted procedure. A framework agreement can be done for maximum four years. The general provisions for public procurement (JYSE 2009) were renewed in 2009. For the housing services JYSE 2009 SERVICES can be used (Association of Finnish Local and Regional Authorities, 2012). The quality of services must be monitored systematically. Service providers are obliged to collect feedback from the elderly and their close relatives (Ministry of Social Affairs and Health and Association of Finnish Local and Regional Authorities, 2013). The tendering process in general has been discussed in chapter 3.3.1.

Table 22. Costs of some services for the elderly in 2011 (Association of Finnish Local and Regional Authorities, 2013)

<table>
<thead>
<tr>
<th>Service</th>
<th>m €</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home help services</td>
<td>635</td>
</tr>
<tr>
<td>Health visiting</td>
<td>350</td>
</tr>
<tr>
<td>Financial support for caring for close relatives</td>
<td>107</td>
</tr>
<tr>
<td>Sheltered housing</td>
<td>26</td>
</tr>
<tr>
<td>Enhanced sheltered housing incl. nursing homes</td>
<td>2680</td>
</tr>
<tr>
<td>Total</td>
<td>3798</td>
</tr>
</tbody>
</table>
Lith (2012) studied markets for housing services in Finland. He observed that in the years 2007-2010 the share of large companies employing more than 250 persons of housing services in Finland increased from 19 to 28 per cent. By personnel the largest service providers were Invalidiliiton Asumispalvelut (Housing services of Invalid Federation), Attendo, Mainio Vire, Rinnekotisäätiö (Rinneko Foundation) and Helsingin Diagonissalaitoksen Säätiö (Helsinki Deaconess Foundation) (Lith, 2012, p. 14).

If we study in which segment of the purchasing portfolio falls the procurement of housing services for the elderly, we’ll find following. There exists a number of service providers for housing services of various types for the elderly. On the other hand the profit impact of these services for the procuring organization tends to be high. Therefore we can place these services into leverage services. “Leverage products/services can be obtained from various suppliers at standards quality grades. They are bought at large volumes” (van Weele, 2014, p. 165).

If we consider the best practice for procuring housing services for the elderly, we can find that due to the number of service providers and high volume we need to know the supplier market well and understand the cost structure of the service. That is to say, we need to use the total cost of ownership approach. When procuring housing services for the elderly it is important to use cross-functional teams to involve all the respective specialists. If for some reason (for example, due to restricted competition) a situation may develop that a service becomes a strategic service, thus leading to a different procurement approach, the best practices in this case would be market knowledge, cross-functional teams, total cost of ownership and co-operation. Sustainability would be applied as well.
4. Introduction of the cases

The justification for selecting these cases is now discussed. Helsinki, Espoo and Vantaa were chosen because they are the main components of the metropolitan area, they are all fast growing municipalities and they have according to Syrjä (2010) different age distributions in their population (see Table 23).

Table 23. Population by age group in Helsinki, Espoo and Vantaa by 31st Dec 2010 / per cent (www.sotkanet.fi)

<table>
<thead>
<tr>
<th>Age group / years</th>
<th>Helsinki</th>
<th>Espoo</th>
<th>Vantaa</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-64</td>
<td>85</td>
<td>89</td>
<td>88</td>
</tr>
<tr>
<td>65-74</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>75-84</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>85-</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 24. The share of 75 year old persons of Helsinki, Espoo and Vantaa in full time care of the whole population / per cent in 2010 (www.sotkanet.fi)

<table>
<thead>
<tr>
<th>Type of care</th>
<th>Helsinki</th>
<th>Espoo</th>
<th>Vantaa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensified care</td>
<td>5.5</td>
<td>6.2</td>
<td>7.0</td>
</tr>
<tr>
<td>Retirement home</td>
<td>5.2</td>
<td>2.3</td>
<td>3.4</td>
</tr>
<tr>
<td>Health center long term</td>
<td>0.5</td>
<td>0.8</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Based on the quality guidelines of services for the elderly the intensified care should cover six per cent of the population of over 75 years’ old persons. Helsinki has failed to observe these guidelines. Based on these guidelines only three per cent of the over 75 years old persons should be located in long term institutions. Helsinki exceeds this limit substantially.

Table 25. The share of purchased housing service for the elderly of own production in Helsinki, Espoo and Vantaa in 2010 / per cent (www.sotkanet.fi)

<table>
<thead>
<tr>
<th>Service provider</th>
<th>Helsinki</th>
<th>Espoo</th>
<th>Vantaa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own production</td>
<td>57</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Purchased production</td>
<td>43</td>
<td>100</td>
<td>84</td>
</tr>
</tbody>
</table>

In Espoo and Vantaa a substantial part of the housing services for the elderly are purchased from commercial service providers. The traditional way of purchasing housing services in Finland has been to purchase these services as a negotiated procedure without a prior publication of a notice (Syrjä, 2010). All studied municipalities had according to Syrjä (2010) this procedure in place until the millennium.
Lohja and federation of municipalities Karviainen were chosen to get a different view from that of the larger municipalities. Lohja is a smaller town in the growing area of the edge of the metropolitan area. Karviainen is the only federation of municipalities in the study. It is chosen to give an example of a federation of municipalities. Karviainen during the time period of this study was formed by Karkkila, Nummi-Pusula and Vihti. Nummi-Pusula has been part of Lohja since 1st January 2013.

Table 26. Population by age group in Lohja and Karviainen by 31st Dec 2010 / per cent (www.sotkanet.fi)

<table>
<thead>
<tr>
<th>Age group / years</th>
<th>Lohja</th>
<th>Karviainen</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-64 5</td>
<td>83</td>
<td>86</td>
</tr>
<tr>
<td>65-74</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>75-84</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>85-</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 27. The share of 75 year old persons of Lohja and Karviainen in full time care of the whole population / per cent in 2010 (www.sotkanet.fi)

<table>
<thead>
<tr>
<th>Type of care</th>
<th>Lohja</th>
<th>Karviainen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensified care</td>
<td>3.4</td>
<td>0.3</td>
</tr>
<tr>
<td>Retirement home</td>
<td>3.7</td>
<td>0.0</td>
</tr>
<tr>
<td>Health center long term</td>
<td>1.5</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Table 28. The share of purchased housing service for the elderly of own production in Lohja and Karviainen in 2010 / per cent (www.sotkanet.fi)

<table>
<thead>
<tr>
<th>Service provider</th>
<th>Lohja</th>
<th>Karviainen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own production</td>
<td>64</td>
<td>13</td>
</tr>
<tr>
<td>Purchased production</td>
<td>36</td>
<td>87</td>
</tr>
</tbody>
</table>

Lohja’s own production of housing service for the elderly is high whereas Karviainen is acquiring most of its needs from the market.

The empirical data concerning the tendering of housing services for the elderly was collected by interviewing personnel in the respective municipalities responsible for housing services for the elderly. Additional data are the tender documents in years from 2007 to 2012.

Additionally Markus Ukkola, Senior Government Secretary, responsible for drafting the new procurement legislation was interviewed. This interview was conducted to clarify certain juridical aspects of the existing and forthcoming Procurement law. The interview was conducted via email. In Table 29 the tendering of housing services for the elderly in years 2007-2012 in the studied municipalities is presented.
Table 29. Tendering in the studied municipalities (documentation from tendering)

<table>
<thead>
<tr>
<th>Tendering 1</th>
<th>Helsinki</th>
<th>Espoo</th>
<th>Vantaa</th>
<th>Lohja</th>
<th>Karviainen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of beds</td>
<td>600-800</td>
<td>550-670</td>
<td>530-740</td>
<td>65</td>
<td>Various</td>
</tr>
<tr>
<td>Procedure</td>
<td>Open procedure</td>
<td>Open procedure</td>
<td>Open procedure</td>
<td>Open procedure</td>
<td>Open procedure</td>
</tr>
<tr>
<td>Selection criteria</td>
<td>Most economically advantageous</td>
<td>Most economically advantageous</td>
<td>Lowest price</td>
<td>Lowest price</td>
<td>Most economically advantageous</td>
</tr>
<tr>
<td>Framework agreement</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tendering 2</th>
<th>Helsinki</th>
<th>Espoo</th>
<th>Vantaa</th>
<th>Lohja n/a</th>
<th>Karviainen n/a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of beds</td>
<td>769</td>
<td>66</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedure</td>
<td>Open procedure</td>
<td>Open procedure</td>
<td>Open procedure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selection criteria</td>
<td>Most economically advantageous</td>
<td>Most economically advantageous</td>
<td>Lowest price</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Framework agreement</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Tendering 1**

Helsinki invited service providers to tender for the 600-800 beds of which 150 beds belong to a Swedish speaking housing service. Helsinki makes a framework agreement with the best service providers. The contract covers the years 2009-2012. The selection criteria are weighted towards the most economically advantageous offer. The weight of price is 80 per cent and the weight of additional quality factors of the service is 20 per cent.

Espoo invited service providers to tender for the 500-600 beds for Finnish speaking persons and 50-70 beds for Swedish speaking persons. The contract period is 2008-2014. The selection criteria are also weighted towards the most economically advantageous offer, albeit less so. The weight of price is 70 per cent and the weight of additional services is 30 per cent.

Vantaa invited service providers to tender for the 500-700 beds for Finnish speaking persons and 30-40 beds for Swedish speaking persons. The contract period is 2013-2015. The selection criterion is lowest price.

Lohja invited service providers to tender for 65 beds. The contract period 2011-2015. The selection criterion is lowest price.

Karviainen invited service providers to tender for various numbers of beds. The contract period is 2012-2014. The selection criteria are weighted towards the most economically advantageous offer. The weight of price is 80 per cent and the weight of quality is 20 per cent.

**Tendering 2**

Helsinki invited service providers to tender for 769 beds of which 144 beds are for Swedish speaking persons. The contract period is 2013-2017. The selection criteria are weighted towards the most economically advantageous offer. The weight of price is 90 per cent and the weight of quality is 10 per cent.
Espoo invited tenders for Kuusikoti. Kuusikoti has 66 beds. Most of the customers are veterans. The contract period is 2010-2012. The selection criteria are similarly weighted towards the most economically advantageous offer. The weight of price is 60 per cent and the weight of additional services is 40 per cent. Vantaa invited tenders for enhanced sheltering housing in Koivukylä for 24 beds. The contract period is 1st September 2011-2012. The selection criterion is lowest price.

Interviewing personnel in municipalities requires a research permission. Interviewing was organized by first asking research permission from the local authorities of Helsinki, Espoo, Vantaa and Lohja. Additionally the federation of Karviainen was interviewed. After having the research permission the researcher contacted social service personnel in relevant organizations. Data security prevents revealing the names or the roles of the interviewed persons.

**Helsinki**

The strategy of Helsinki (2009-2012) from the perspective of the elderly included following issues: “User-specific services are provided by strengthening the share and responsibility of the resident. New service culture will be created. The service strategy will increase alternatives. Diversity and immigrants is an important issue. Equality and parity will be increased. Electronical services, interaction and share will be strengthened. Differences of residents’ health and welfare will be narrowed. The advancement of health will be enhanced. Maintaining of ability to function of the ageing residents will be promoted. Exclusion will be prevented.” Additionally: “Helsinki is a pioneer of user-friendly innovations. Conditions for the growth of services, competence centers and enterprises will be created. The impressiveness of services will be improved. The organization will be developed to improve the services.”

Strategic objectives related to service architecture are: “The focus in services for the elderly is in open service i.e. preventative service, home care. According to the strategy program of years 2009-2012 the service architecture will be tempered by increasing open services and reducing institutional care.”

Focus in services for the elderly according to the strategy in years 2009-2012: “New strategy into services for the aged, specification of value network, partnership approach and action and development of service vouchers.”

The value network of the services for the aged includes: Civil organizations and associations (association for caring for close relatives, associations for the pensioners), strategic partners with whom different development projects are conducted, citizens and citizen societies, own service production, contracted enterprises, persons caring for close relatives, volunteers and service providers. The situation regarding potential customers: queuing time for sheltered housing appr. 3 months and queuing time for institutional care approximately 2 months (Peiponen, 2012).

**Espoo**

The vision of Espoo: “Espoo is a pioneer. Espoo is a good place to settle, live, work and to be an entrepreneur. The Leading Principles of the Aging Policy Program: Living at home is a priority, regardless of the decline in handling daily
activities. This means that we are supporting elderly citizens living at home. Service provision is based on preventive and rehabilitating efforts, including: Implementation of effective means for preventive care and new forms of care and integration of services.”

Successful aging in a sociocultural context means: Self-determination (“citizens have the right to decide”). Empowerment of the elderly (seeing the elderly as subjects rather than objects). Involvement of senior citizens.

24/7 care is delivered in home-like living environments, meaning: Hospital care focuses on acute care and geriatric rehabilitation. From organisation-centredness towards genuine client- and family-centredness. From narrow functional-capacity thinking towards a more holistic view aiming for high quality of life. Long-term care in home-like surroundings. Application of new technology. Continuous quality improvement. Development towards a value-generating system (www.espoo.fi). Figure 18 indicates Espoo’s target in the coming years. The number of persons over 75 years old is increasing and the share of sheltered housing is at the same time increasing.

![Number of beds](image)

**Figure 18.** Trends; Change of long-term inpatient care services within Elderly Care in Espoo, Finland (www.espoo.fi)

**Vantaa**

“A shared responsibility for a good old age.”

The strategic goal of elderly care in the city of Vantaa is to ensure its elderly citizens a good and safe old age by respecting their independence and supporting their functional capacity and full participation in the society. A shared responsibility for a good old age constitutes the core of the elderly care policy in the city of Vantaa. It means that all sectors and actors have to take responsibility for the ageing population in their plans and policies. Arranging services for the
elderly population is not the sole responsibility of the social and health care sector as all sectors will have to contribute. This is due to the fact that resource increases will not match the growing needs of the elderly population. Thus, the social and health care sector has to focus on activities requiring its special expertise. This core objective also has to reflect the wide variety of needs the elderly population has. As there is no old-age strategy in the city of Vantaa, elderly care strategic objectives are included in the balanced strategy of Vantaa. Vantaa’s balanced strategy consists of its mission, that is, the city’s obligations and tasks; its vision, that is, the future the city desires; the city’s values; and a city-level balanced scorecard. This balanced strategy is part of the city’s financial plan, which is approved by the city council annually (Lyytikäinen, 2009).

**Lohja**

The procurement strategy of services for the aged.
The local authority is responsible for the care and rehabilitation of the ill and weak aged persons. Private services are purchased to complete communal services in support services and to even out the backlogs. The service offerings is completed with a service voucher.
The support for caring for close relative will be developed. The share of enhanced sheltering housing will be increased to 5-6 per cent of the amount of 75 years old. Home care will be made available 24 hour a day. A plan for a geriatric center will be made. The training of personnel to a rehabilitable working manner (www.lohja.fi).

**Karviainen**

The services cover over 65 year-olds in case they require special services for the aged such as care, rehabilitation and support. The main objective is to let a person live a well-balanced life up to a high age by supporting by many means living at home, but ensuring the required care such as by organizing a 24 hour home care. The philosophy in the care of the aged among the nursing staff includes following values: positive behavior, regeneration, rectitude, responsibility (www.karviainen.fi).

For the interview a structured form of questions was formulated to reflect the studied issues, i.e. how the best practices of private purchasing are utilized in the procurement of housing services for the elderly in the chosen municipalities. The form of questions included following questions:

1. **Procurement in the municipality/federation of municipalities**
   - Does the municipality/federation of municipalities have a procurement strategy or procurement policy?
   - Does the municipality/federation of municipalities have instructions and consistent modus operandi for the procurement process?
   - Did the budget of the municipality/federation of municipalities direct the procurement?

2. **The preparation phase of the procurement**
   - Who defined the need for service? Based on which grounds?
- Did you discuss the problems of the operation of the existing service provider? Did you consider improvement proposals?
- Did you inform the potential service providers the strategy of the local authority?
- Did you have in the procurement unit cross-functional meetings prior publishing the request for quotation?
- Who participated in these meetings?
- Did you describe the service unambiguously?
- Did you define the roles of service provider and buyer clearly?
- How did you examine the supplier market?
- What information regarding the suppliers was collected?

3. Procurement phase
- Did you organize meetings with the potential service providers? Were these organized in private or as a public meeting?
- What subjects were discussed during these meetings?
- Who defined the procurement procedure?
- Based on what grounds was the particular procedure chosen?
- Who defined the selection criteria? On what grounds?
- How were different parties informed during the procurement process?

4. Procurement settlement phase
- Which collaboration and monitoring operations models were established?
  - An incentive bonus and sanction models
  - A follow-up model for the agreement and quality, for example, a record of the end-users’ experience during the agreement
  - The termination procedure
  - The procedure for notifying any defects
  - The procedure for arbitration

5. Post-procurement phase
- How did you train and guide the service provider for the job?
- How do you monitor the operation of the chosen service provider?
- Have you had joint development projects with the service provider?
- How did you communicate the agreement?
- What kind collaboration are you having with the service provider?

Table 30 shows the questions reflecting the utilization of private purchasing’s best practices in the interviewed municipalities. Total cost of ownership was not included in the form of questions. It was studied from the tendering documentation. It must be noticed that TCO differs from the concept of most economically advantageous (offer). The concept of most economically advantageous (offer) includes price and often quality issues. Sustainability was not either included in the form of questions. It was studied from the tendering documentation.
Table 30. How does the form of questions reflect best practices?

<table>
<thead>
<tr>
<th>Best practice</th>
<th>Question in the form of questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market knowledge</td>
<td>Did you organize meetings with the potential service providers?</td>
</tr>
<tr>
<td></td>
<td>How did you examine the supplier market?</td>
</tr>
<tr>
<td></td>
<td>What information of the suppliers was collected?</td>
</tr>
<tr>
<td>Purchasing portfolio</td>
<td>Does the municipality/federation of municipalities have a procurement strategy or procurement policy?</td>
</tr>
<tr>
<td>TCO</td>
<td>Procurement documentation</td>
</tr>
<tr>
<td>Cross-functional teams</td>
<td>Did you have cross-functional meetings prior to publishing the request for quotation?</td>
</tr>
<tr>
<td>Co-operation</td>
<td>Which collaboration and monitoring operations models were established?</td>
</tr>
<tr>
<td></td>
<td>Have you had joint development projects with the service provider?</td>
</tr>
<tr>
<td>Sustainability</td>
<td>Procurement documentation</td>
</tr>
</tbody>
</table>
5. Results

In this chapter the answers to the form of questions are discussed. The utilization of the identified best practices is also discussed. Prior to discussing the answers to the form of questions an interview of Markus Ukkola, Senior Government Secretary, responsible for drafting the new procurement legislation, is presented. This interview aims to clarify the role of public procurement law in public procurement. Issues like market dialogue, collaboration between a buyer and a service provider and innovative procurement require clarification. I did explain in my email to Mr Ukkola on 8th December 2015 the background of this interview, i.e., what I am studying in my doctoral thesis and how I am conducting it.

Question 1: A good supply market knowledge demands close discussions between local procurement units and private service providers. Is it possible under existing procurement law to have these discussions? Does the forthcoming procurement law alter this situation?

Answer: The existing procurement law enables a dialogue between a procurement unit and suppliers prior organizing the tendering. There is however no separate provision in the procurement law. During the validity of the procurement law procurement units have formed various practices for the use of this dialogue: some are publishing so called requests for information concerning forthcoming acquisition and are requesting interested suppliers to provide visions in writing to the procurement unit; some invite suppliers to meet during the planning stage of the acquisition or are organizing briefings; some are contacting familiar suppliers informally and having discussions with them. There has been only a few court cases during the existing procurement law concerning demarcation whether discussions between a procurement unit and particular supplier or suppliers have led to favoring or discrimination in a tender.

Ukkola states further that in the forthcoming procurement law the so-called market mapping in the planning of an acquisition will be emphasized also in the law level. In the new procurement directive’s 2014/24/EU 40 section following is legislated concerning preliminary market mappings:

“Before launching a procurement procedure, contracting authorities may conduct market consultations with a view to preparing the procurement and informing economic operators of their procurement plans and requirements. For this purpose, contracting authorities may for example seek or accept advice from independent experts or authorities or from market participants. That advice may be used in the planning and conduct of the procurement procedure, provided that such advice does not have the effect of distorting competition and does not result in a violation of the principles of non-discrimination and transparency.”
Ukkola continues that to prevent favoring or discrimination in the market mapping the new procurement directive has a separate section for the participation of applicants and bidders in the preparation of an acquisition (41 section):

"Where a candidate or tenderer or an undertaking related to a candidate or tenderer has advised the contracting authority, whether in the context of Article 40 or not, or has otherwise been involved in the preparation of the procurement procedure, the contracting authority shall take appropriate measures to ensure that competition is not distorted by the participation of that candidate or tenderer. Such measures shall include the communication to the other candidates and tenderers of relevant information exchanged in the context of or resulting from the involvement of the candidate or tenderer in the preparation of the procurement procedure and the fixing of adequate time limits for the receipt of tenders. The candidate or tenderer concerned shall only be excluded from the procedure where there are no other means to ensure compliance with the duty to observe the principle of equal treatment. Prior to any such exclusion, candidates or tenderers shall be given the opportunity to prove that their involvement in preparing the procurement procedure is not capable of distorting competition. The measures taken shall be documented in the individual report required by Article 84."

In the new procurement legislation the procurement units’ possibilities to negotiate also during the tender is extended. In the procurement directive 2014/24/EU the preconditions to conduct a procurement using a negotiation procedure are lowered. During this new negotiation procedure, differing from other procurement procedures, a procurement unit is allowed to negotiate with the accepted bidders of the terms of the acquisition (with certain limitations).

Question 2: What kind of collaboration is acceptable according to procurement law between a local authority and a service provider during a contract? Will the forthcoming procurement law change this situation?

Answer: The third stage when negotiations between a procurement unit and suppliers can be conducted is the contract period of the procurement contract. In the existing procurement law this is not regulated. In the new procurement directive there is however a new section concerning possible modifications during the procurement contract period. In case that the procurement contract is during contract period fundamentally modified compared to the original procurement notification a new tender must be organized. The instructions of the directive are based on an established settlement rule of the union court (for example, settlements in case C-464/06, press text and C-81/08, Wall AG). Numerous such settlements of the EU court as a matter of fact demand even during the existing procurement law that a procurement unit is not allowed to fundamentally modify the tendered procurement contract (without a new tender) during the contract period.

Question 3: Which kind of innovative procurement possibilities does the existing procurement law provide to local authorities? Will the forthcoming procurement law change this situation?

Answer: Innovative procurement may mean different issues. In the web pages Tekes suggests three different definitions to innovative procurement:

In the existing procurement law a procurement unit can take innovative aspects into account, for example by determining the acquisition in a goal-directed way (the desired result or goal in the request for quotation is specified). However even according to the existing procurement law procurement units are allowed to negotiate during the tender (by using particular negotiation procedures mentioned in the procurement law). In the web pages of Tekes you can find practical information about conducting innovative procurement under existing law.

The new procurement directive is intending to enhance the usage of innovative procurement, for example by:
- legislating a new innovation partnership procedure, where a procurement unit can combine in the same procurement procedure both a new product or service development and an idea to be implemented without two different tenders;
- the extension of the negotiation procedure provides wider possibilities to consider new ideas and aspects during the tender

The answers to the form of questions are discussed next. The discussion follows the order of questions presented to the interviewees.

1. Procurement in the municipality/federation of municipalities

**Does the municipality/federation of municipalities have a procurement strategy or procurement policy?**

In Helsinki the procurement strategy was approved by the City Executive in 2011. Espoo had the Espoo-policy in force. In Vantaa the procurement strategy was under construction, common procurement guidelines were in use. In Lohja procurement guidelines were approved by the municipal executive in 2011. In Karviainen the procurement rule was established only in 2013.

**Does the municipality/federation of municipalities have instructions and consistent modus operandi for the procurement process?**

Helsinki had a more advanced tendering in 2012. Espoo had operationalised the process. The guidelines existed in Vantaa. Lohja had procurement guidelines approved in 2011 whereas Karviainen did not.

**Did the budget of the municipality/federation of municipalities direct the procurement?**

Basically in all studied municipalities the budget was guiding the procurement. The municipalities took the actual demand into consideration as well.

2. The preparation phase of the procurement

**Who defined the need for the service? Based on what grounds?**

In all cases Social and health care headed by the director of the welfare service defined the need for the service. In Helsinki the ratio of own production versus demand guided the need for outsourced service. In Espoo a research group estimated the demand. In Vantaa the need of service was based on customer needs and on a care and service plan. Lohja on the other hand did not have formal tendering; the strategy of services for the elderly defined the service need. In Karviainen the previous contract was expiring and a new contract was needed.

**Did you discuss the problems of the operation of the existing service provider? Did you consider improvement proposals?**

In the case of Helsinki cooperation during the contract period generated improvement proposals, as well as visitations and annual inspection. Espoo was
learning all the time, listing problems. Espoo had 15-20 qualified service producers. Vantaa surveyed problems that occurred during the previous contract period when preparing for the new tendering. Lohja acted in a similar way. Karviainen noticed new quality issues.

**Did you inform the potential service providers about the strategy of the local authority?**

Helsinki informed in 2012, but not in 2008. Espoo held an extensive gathering involving relatives, service providers and authorities. Vantaa did inform the expectations of the city. Lohja and Karviainen did not inform, their strategy being non-existent.

**Did you have in the procurement unit cross-functional meetings prior to publishing the request for quotation?**

In Helsinki in the second round (2012) they had, but not in the first round (2008). In Espoo they had together with social and health security, the steering group and procurement group. In Lohja this was organized inside the basic security as well as in Karviainen.

**Who participated in these meetings?**

In Helsinki the participants were a jurist, a procurement specialist, a substance specialist and a controller. In Vantaa in the work group preparing the tendering they had the substance specialists from the elderly and disabled care unit, a procurement specialist and a jurist. In Lohja the participants were a basic security director, procurement specialists and substance specialists. In Karviainen the participants were a service manager, a doctor, an external jurist and a procurement coordinator.

**Did you describe the service unambiguously?**

In Helsinki the experiences from other cities tendering were exploited. Espoo utilized its service concept. Vantaa improved the description of the service from 2007 to 2012. Both Lohja and Karviainen did describe the service and minimum requirements properly.

**Did you define the roles of service provider and buyer clearly?**

All the studied municipalities claimed having defined the roles of different organizations properly.

**How did you examine the supplier market?**

All the municipalities claimed that they knew the supply market. Only in Helsinki prior to both tenderings a market study was conducted. Lohja claimed that all the capable suppliers wanted to take part in their tendering in order to get a reference close to Helsinki.
What information regarding the suppliers was collected?

Helsinki collected corporate social responsibility issues, the black economy, number of places, quality level. In Espoo no information was gathered systematically. In Vantaa some service providers introduced themselves. Lohja acted back to front, they organized first the tendering and audited thereafter. Karviainen claimed that they already had the information required.

3. Procurement phase

Did you organize meetings with the potential service providers? Were these organized in private or as a public meeting?

Helsinki organized a common briefing in 2012 and held annual discussions with the suppliers. Espoo organized a general gathering as did Vantaa. Lohja allowed service providers the possibility to make inquiries. Karviainen organized a general briefing.

What subjects were discussed during these meetings?

In the case of Helsinki the forthcoming tendering was discussed and especially the quality criterion. A group work was conducted involving different service providers. In Espoo and Vantaa the forthcoming tendering was discussed.

Who defined the procurement procedure?

The elderly care department proposed and the committee of the social welfare approved. All municipalities were using open procedure.

Based on what grounds was the particular procedure chosen?

The open procedure was chosen based on good previous experience (Helsinki), because no other options were presented (Espoo) and because it was seen as an appropriate procedure. Lohja was benchmarking with other municipalities and chose open procedure due to freedom to choose.

Who defined the selection criteria? On what grounds?

In most of the studied cases the selection criteria whether lowest price or most economically advantageous tender was proposed by the social and health service department. The decision was made by the committee responsible for social welfare, in some cases the town council or executive. In Helsinki was the most economically advantageous tender (price 90 per cent, quality 10 per cent). Extra points from good premises. Quality was specified to a required level also in case of the lowest price.

How were different parties informed during the procurement process?

Normal information channels were used.
4. Procurement settlement phase

Which collaboration and monitoring operations models were established?

None of the studied municipalities were using an incentive bonus procedure. In Helsinki other tenderings have used an incentive bonus procedure (for instance, housing services for the disabled in 2011). Sanctions are commonly used. Helsinki have used these if the feedback has been poor. Espoo has used sanction procedures if there has been delay or the quality of the operation has been poor. In Espoo there has been a monitoring plan to follow-up the quality of the service. This includes an annual report concerning the fulfilment of the monitoring plan. Karviainen is using monitoring procedures including assessing the functional ability of the elderly person (RAVA). The termination procedure of the contract is specified in the blanket agreement. The procedure for notifying the defects is not written into the contract, but will be discussed (Espoo). Vantaa is stating: “The service level must fulfil the level specified in the request for quotation in the appendices, in the quotation and in this contract. In case the quality level of the service will decrease in any sector from the agreed the city is entitled unambiguity decrease the cost of the care day for all customers by 10 per cent from the date of the decreased quality until the service quality agreed has been restored. The city has the right to withhold the respective cost reduction (contractual penalty) from the fee to the service provider. The quality of the care and service is monitored based on both customer and professional feedback, and the producer commits itself to implementing immediate measures in case of a quality deviation. The service provider is committed to measure customer satisfaction regularly at least every second year by asking the relatives and customers. Each customer feedback and relevant actions are delivered in writing to the city. The city reserves the right to audit or otherwise to verify the quality level of the service provider during the contract period. The service provider shall provide the city with information of the number of personnel, the use of personnel and customer feedback. In the event of any possible dissents, these are first subject to a process of negotiation such that they would be resolved primarily by mutual agreement. In case an agreement is not achieved the district court in Vantaa shall settle the dispute In case any of the contract parties desires to discontinue the contract in the middle of the contract period the termination shall be made in writing latest six (6) months prior to the desired termination date. The termination of the contract does not cause to the parties any financial consequences.” The procedure for the arbitration has not typically been included in the contract.

5. Post-procurement phase

How did you train and guide the service provider for the job?

Helsinki stated that this is not applicable. In Espoo the procedure is in use. In Vantaa the service providers’ seminar, private meeting and possible audits have been used. In Lohja there is no orientation. During blanket agreement negotia-
tions this was discussed. Visitations (by own specialists and by regional administration office). Location, cost, profile. Karviainen paid support services only according to the usage. RAVA -training was organized with the producer. The cooperation group of the sheltered homes meets annually twice. Customer satisfaction enquiry has been organized every second year.

**How do you monitor the operation of the chosen service provider?**

In Helsinki the procurement unit has been monitoring the black economy. New producers are briefed. Visitations, during the contract inspection the quality audit have been conducted. In case of complaints the producer is obliged to deliver specific information leading to a visit by our care specialist. Each year together with the annual contract the procedures are discussed including quality and quantity issues. In Espoo the social security unit has a monitoring plan in place (visitations). In Vantaa quality coordinator has been organizing visitations. Report to the city and to the regional administration office. If the relatives are giving negative feedback, the issue will be discussed with the service provider. Additionally surprise visitations are made. In Lohja and Karviainen surprise visits are paid.

**Have you had joint development projects with the service provider?**

Helsinki: In certain degree? Observation leading to information flow to our own production and vice versa. No projects. Espoo: All the time. During 2012 3 large development meetings. A physical exercise handbook concerning good practice was created together with a service provider. In the case of Vantaa: The contract states:”The service provider undertakes to an interactive cooperation with the service procurer to secure and develop the service quality. The service provider is expected to have an active measure to develop the services. The cooperation discussions between the service provider and procurer will be held regularly.” Lohja and Karviainen are not having development projects. Good practices are discussed and regular meetings held. Karviainen has organized RAVA -training and medication training.

**How did you communicate the agreement?**

Helsinki had a common gathering and a blanket agreement with each approved supplier and an annual contract with some suppliers. Vantaa: The blueprint of the contract as an appendix of the request for quotation and private meetings. During these meetings the content of the contract was discussed. Lohja stated that the service providers are often active in information sharing. Karviainen: We had problems with this area. The control of blanket agreements was inadequate. We had problems with those bidders whose premises were not completed. We should have been able to sign the contract immediately.

**What kind collaboration are you having with the service provider?**

Helsinki: Observation leading to information flow to our own production and vice versa. No projects. Espoo: A blanket agreement -> an annual contract. Invocation of doctors in charge, cooperation with Jorvi hospital, internal hygiene
group and an annual gathering. Vantaa: 2 times a year a service provider’s seminar is organized (spring and fall). Service providers inform in these seminars of their service developments. Relative satisfaction survey was conducted in 2012. Karviainen: We are defining together a uniform invoicing form. Cooperation meetings.

Additional comments

Espoo has 28 nursing homes for the elderly, 70 per cent of the housing service places for the elderly are procured from private service providers. Large service providers are very sleek. The best development for this tendering (2007) was the service concept. "Hair rollers, newspapers and coffee after sauna" are important for the elderly.

Vantaa: 70 per cent of the housing service places for the elderly are procured from private service providers. ARA (The Housing Finance and Development Centre of Finland), Valvira (National Supervisory Authority for Welfare and Health) and Regional Administration Office are the operators in the housing service for the elderly. Regional Administration Office: 10 per cent of the elderly can be placed in rooms for two persons. Regional cooperation should be more coordinated.

Lohja: Some elderly persons desire to live in a room for two persons. This is against the recommendations by the regional administration office. What is good procurement in these cases?

Karviainen: The more precise contract is the easier it is to monitor. Municipalities are short of resources in this area.

In the following table the utilization of the identified best practices is reported.

<table>
<thead>
<tr>
<th>Best practice</th>
<th>Helsinki</th>
<th>Espoo</th>
<th>Vantaa</th>
<th>Lohja</th>
<th>Karviainen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market knowledge</td>
<td>Some activity</td>
<td>No activity</td>
<td>No activity</td>
<td>No activity</td>
<td>No activity</td>
</tr>
<tr>
<td>Procurement strategy/portfolio</td>
<td>Existing by 2012</td>
<td>Existing by 2012</td>
<td>Some guidelines existing</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>TCO</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Cross-functional teams</td>
<td>A practice</td>
<td>A practice</td>
<td>A practice</td>
<td>A practice</td>
<td>A practice</td>
</tr>
<tr>
<td>Co-operation</td>
<td>Minor</td>
<td>Some</td>
<td>Minor</td>
<td>Minor</td>
<td>Minor</td>
</tr>
<tr>
<td>Sustainability</td>
<td>Some</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Market knowledge

Helsinki was the only local authority which organized a research of the supplier market. In 2008 the survey was conducted by Helsinki School of Economics, Continuing Education Centre. In 2012 the survey was conducted by BearingPoint. In general the local authorities trusted in their experience to know all the relevant service providers and therefore were not surveying the market. None of the studied municipalities had conducted private discussions with the potential service providers.
Procurement strategy

Helsinki and Espoo had a procurement strategy in place during the latter part of the studied period of 2007-2012. Vantaa had certain guidelines.

TCO

None of the studied municipalities could argue that they had utilized total cost of ownership thinking in their procurement.

Cross-functional teams

All the studied municipalities could argue that they had utilized cross-functional teams in their procurement.

Co-operation

Only Espoo has ongoing development programs with the suppliers during the contract period (2012).

Sustainability

Helsinki is emphasizing sustainability (environmental issues and black market). It may be that the studied municipalities could have stronger emphases on sustainability when acquiring goods or construction work, but this was not studied in this case.

In Figure 19 the framework of this study including results is presented. As discussed when the framework of this study was introduced, the best practices of private purchasing were discovered from databases and literature. These best practices are market knowledge, purchasing portfolio, total cost of ownership, cross-functional teams, co-operation and sustainability. These best practices in private purchasing were discussed in the chapters mentioned in Figure 19. In the box right literature review of private purchasing’s best practice in public procurement was conducted. Thereafter studied cases, i.e., tendering of housing services for the elderly in the chosen municipalities, were analyzed aiming to explore utilization of the private purchasing’s best practice in public procurement. The findings are shown in Figure 19 below.
<table>
<thead>
<tr>
<th>Best practice in private purchasing</th>
<th>Literature review of private purchasing’s best practice in public procurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market knowledge</td>
<td>chapter 3.2.1 Market knowledge chapter 3.2</td>
</tr>
<tr>
<td>Purchasing portfolio</td>
<td>chapter 3.2.2 Purchasing portfolio chapter 3.3</td>
</tr>
<tr>
<td>TCO</td>
<td>chapter 3.2.3 TCO chapter 3.4</td>
</tr>
<tr>
<td>Cross-functional teams</td>
<td>chapter 3.2.4 Cross-functional teams chapter 3.5</td>
</tr>
<tr>
<td>Co-operation</td>
<td>chapter 3.2.5 Co-operation chapter 3.6</td>
</tr>
<tr>
<td>Sustainability</td>
<td>chapter 3.2.6 Sustainability chapter 3.7</td>
</tr>
</tbody>
</table>

Utilization of best practices of private purchasing in public procurement

| Market knowledge                  | Not emphasized in public procurement                                          |
| Purchasing portfolio / Strategy   | Not emphasized in public procurement                                          |
| TCO                               | Not emphasized in public procurement                                          |
| Cross-functional teams            | This is a common practice in public procurement                               |
| Collaboration                     | The procurement regulation is hindering                                        |
| Sustainability                    | Public procurement is acknowledging grey economy                               |

**Figure 19.** Framework of this study including results
6. Discussion and conclusions

This chapter discusses key findings and concludes the study. The starting point was reviewing literature to explore procedures in private purchasing and especially to identify development of procedures in private purchasing. Several development or maturity models were identified and their message was that private purchasing is clearly ahead in evolution compared to public procurement. Therefore best practice in private purchasing was explored and a literature review concerning public procurement was conducted to find papers and books discussing the utilization of the identified best practice in public procurement. To explore if these best practices are utilized in procurement of services in Finnish municipalities a multiple-case study was conducted.

6.1 Discussion

Chapter 1.1 discusses the motivation of this study. Finland’s population is aging fast (Sinervo and Taimio, 2010). This is increasing the costs of local authorities. Therefore the authorities are trying to find means and ways to reduce the costs caused by the growing number of elderly. Outsourcing of services for the elderly has been seen as one solution to this. Different studies (for example, Stenecker, 2008 and Iloranta and Pajunen-Muhonen, 2012) indicate that in public organizations the tendering phase is dominating the interest of the purchasing function. The focus on planning and preparation of the acquisition or guiding of the service provider during the contract period is getting less attention. This course of action tends to generate poor requests for quotations, thus often leading to unclear quotations. This may in the worst case end up being referred to the Market Court, thus delaying the enforcement of the new service contract. Thus the question arises whether public procurement operators could learn from private purchasing.

The research methodology of this study was discussed in chapter 2. Multiple-case study was chosen as the research methodology. Resource-based View was used as the perspective of this study.

In chapter 3 the development and maturity models of purchasing were identified. Several different models were introduced. Much attention has been given to the concept of knowledge. As Bennet and Bennet (2003, pp. 439-455) define knowledge as “best understood as the capacity to take effective action... the action is effective when it produces the anticipated and desired results. Many of the ideas normally considered to make up knowledge”.

In chapter 3.2 the concept of best practice is introduced. Camp (1989) defined "best practice" as a method or process which achieves better results than another method or process in an operation. Based on databases and literature best practice of private purchasing was identified. 55 scholarly journal articles were analyzed. This identification of best practices can be criticized due to factors such as low number of articles, possibly fallacious search words, etc.

Chapter 3.3 discusses public procurement and tries to find scholarly journal articles concerning the identified best practice in purchasing. There is a clear indication that in general these issues have not been widely studied in public procurement. Therefore it was difficult to find articles concerning these issues. Only collaboration has raised more interest in scholarly journal articles. Walker et al. (2013) studied collaborative procurement in public sector and they discovered that the collaboration is hindered by local politics and differing priorities. Additionally collaboration is prevented by lack of knowledge of the supply market, supplier resistance, reliance on the supplier data, and lack of strategic buying.

In chapter 3.4 housing service for the elderly is introduced.

Chapter 4 introduces the case municipalities together with the studied tendering of these municipalities. The form of questions for the interviews is introduced. The discussion concerning the coverage of the questions in describing the usage of the identified best practice can be criticized due to lack of questions concerning the usage of total cost of ownership and sustainability. The answers to these issues can be found in the documentation of the respective tenderings. Chapter 5 discusses the results starting with an interview of Markus Ukkola, Senior Governmental Secretary, responsible for drafting the new procurement law in public procurement. This interview tries to shed light on issues like how intimately a public procurement unit can discuss with different service providers. The other issue of interest is the collaboration between a public procurement unit and a service provider. A third issue of interest is the usage of innovative procurement. The individual answers to each question in the interviews are discussed in this chapter. The summary of the utilization of the identified best practices in studied cases is presented.

6.2 Conclusions

The literature review was conducted in two phases. First it was studied which the best practices in private purchasing are. The study was conducted by using databases such as Business Source Elite (Ebsco), Emerald, ProQuest, ScienceDirect and ebrary. The search term used was (purchasing or procurement) and “best practice”. Even though it is not unambiguous to select these best practices, six procedures were found to have these characteristics: market knowledge, purchasing portfolio, total cost of ownership, cross-functional teams, co-operation and sustainability. Secondly the utilization of these best practice procedures was studied in the literature of public procurement.

The research problem was whether these private purchasing best practices are utilized in the procurement of local authorities in Finland. To find empirical data it was chosen to study the procurement of housing services for the elderly in Helsinki metropolitan area (Helsinki, Espoo and Vantaa) and in Lohja town
and in the federation of municipalities Karviainen. The time frame for this empirical data was tendering in the years 2007-2012.

The theoretical perspective was a resource-based view, which states that a firm’s resource base is the antecedent to competitive advantage; in the case of a local authority this is an economical and high quality procurement.

Based on interviewing the relevant persons involved in the tendering of the studied municipalities the following conclusions could be drawn: in general local authorities have limited capabilities in following the best practices from the private purchasing; market knowledge is not up-to-date, the procurement units are not discussing with the potential service providers in private, nor do they actively collect market information; procurement strategies are not giving directions to the procurement units; total cost of ownership is not a practice utilized in the tendering; cross-functional teams are well utilized, but even there the local authorities have room to improve; co-operation is not a practice which is widely used, there are some signs of extension in this issue (Espoo); sustainability is a practice which is getting additional attention both in private purchasing (apparel industry) and in public procurement (tax havens).

What is the current level of purchasing ‘maturity’ regarding the procurement of services for the elderly in the public sector? It seems to be on a Commercial orientation level (see Figure 9, chapter 3.1.1, and page 36). There are no major differences among cases studied in this respect.

To be able to understand why in public procurement the best practices of private purchasing can be difficult to use, we need to analyze the differences between private purchasing and public procurement. The main difference is that public procurement is governed by legal issues, laws and regulations which do not apply to private purchasing. In public organizations procurement tends to be controlled by legal specialists. The fear of the tendering ending up into the Market Court strongly influences public procurement.

When analyzing those possibilities that the regulations give for public procurement to utilize the best practices of private purchasing, we can conclude that the purchasing portfolio, total cost of ownership and cross-functional teams are not affected by the public procurement regulations. Market knowledge is not either limited by the regulations, while individual meetings with potential suppliers can be arranged as long as these meetings are not distorting competition. Co-operation with potential suppliers is not limited by the procurement regulations as long as the competition is not distorted. Collaboration between a procurement unit and suppliers during the contract period of the procurement contract was not regulated by the “old” procurement law (see Question 2 of Ukkola’s interview). Sustainability has been gaining increasing attention in the public procurement regulations in recent years, but neither do the regulations limit utilization of this best practice of private purchasing.

Is there anything that the private sector could learn from public procurement? Maybe longer term contracting.

Based on the researcher’s own experience from teaching courses in public procurement, it can be diagnosed that procurement organizations are not planning properly their annual tasks. They are not allocating adequate time for preparation phase of a tendering. The procurement organizations seem to be too rushed for proper preparation.

The resource-based view argues that the success of an organization depends on its capability to utilize its resources. This research is indicating that in Finnish
municipalities the procurement units require additional training to utilize better the best practices of private purchasing.

In municipalities and in public procurement in general politics plays a vital role. When adding to this the public administration we can possibly understand the problems we may face in public procurement.

When reflecting afterwards the way this research was conducted, certain weaknesses can be found. The conducting of interviews started rather early. The literature review should perhaps have been finalized first. This caused, for example, the absence of sustainability questions in the form of questions.

The Social and health services reform will eventually change the responsibilities to organize services for the elderly. This does not mean that the competence requirements for the purchasing functions would be any lower. The purchasing function both in the private and public sectors should remember that the best results are achieved by utilizing purchasing knowledge rather than legislation knowledge. Obviously the assistance of legal advisors is required, but while necessary, it is not sufficient.

6.3 Managerial and research implications

This dissertation does not aim at ranking different studied municipalities in terms of their capability in procuring services. The aim is to find practices that are delivering better outcomes. Municipalities should analyze how the tendering in 2007 - 2012 succeeded and they should consider whether the best practices presented in this dissertation ought to be utilized.

This research has not covered the role of the service providers. What competencies should a service provider have? A service provider should be able to quote according to the request for quotation, but it should be proactive, innovative and offer services which the procuring unit possibly did not regard as valid. A competitive service provider should have an ongoing debate with the procuring unit to ensure that the capabilities of the particular service provider are fully appreciated by the procuring unit. What are the resources needed (in terms of the resource-based view) by the public sector to add value to the relationship with the supplier of the services? The public sector needs to reserve enough time for each tendering (planning, preparation and follow up of the implementation of the contracts). It also needs purchasing competence to understand and utilize the purchasing best practices. It needs courage to prioritize purchasing competence (and not legal issues). It needs to become more innovative.

This dissertation emphasizes that the management in municipalities should firstly appreciate the importance of proper procurement when providing services to the citizens of municipalities. Secondly, to achieve a properly working procurement, the management must provide adequate resources in terms of both time and capacity. The management should also regard the procurement legislation as a guiding function, not a leading function of the procurement. Innovative acquisitions should also be welcomed.

For the researcher a lesson to learn is another study which compared private and public procurement, in this case from a resource-based view perspective. The study complements the thinking of the resource-based view arguing that intangible resources such as knowledge of best practice in private purchasing can improve the performance of a public procurement unit. This study indicates that public procurement could learn from private sector purchasing.
6.4 Suggestions for future research

The service providers’ perspective should be studied to understand better their understanding of the workability of existing procurement procedures. Further research is required to study the procurement of services in the new reformed architecture. Further research is also required to encourage procurement functions and service providers to increase both the usage of co-operation and innovative procurement. Sustainability in the acquisition of services in public procurement has room for further research.
References


Association of Finnish Local and Regional Authorities, 2013, Tilastotietoja.


Crosby, P.B. (1979), Quality is free, McGraw-Hill.


Giunipero, L. A Skill-Based Analysis of the World Class Purchaser, 2000, CAPS Research, Arizona


Lith, P. Tilastollinen päivitysmuistio yksityisten tavara- ja palveluostojen merkityksestä kunta-alalla, Helsinki lokakuu 2012

Lundström, I. (2011), Kuntien palveluhankintojen murros. Tutkimus kuntien palveluhankintojen kilpailuttamisessa esiintyvistä ongelmista ja niiden syistä (The change in local authorities’ service procurement. A study of problems and their


Ministry of Social Affairs and Health (2012), Sosiaali- ja terveyspalveluiden kilpailutamisen toimivuus (Functionality of competitive tendering in social and health care services) Reports and Memorandums, Vol. 1, pp. 8-10.


OECD Public Governance Reviews 2013. Public Procurement Review of the State’s Employees Social Security and Social Services Institute in Mexico, pp. 139-160.


Tynkkynen, L-K., Lehto, J. and Miettinen, S. (2012), ”Framing the decision to contract out elderly care and primary health care services - perspectives of local politicians and civil servants in Finland”, BMC Health Services Research, Vol. 12, No. 201, pp. 1-12.


Web sites

www.valvira.fi (accessed June 2016)
www.tekes.fi (accessed June 2016)
www.avi.fi (accessed March 2016)
www.etene.fi (accessed March 2016)
www.lohja.fi (accessed May 2016)
www.espoo.fi (accessed May 2016)
www.karviainen.fi (accessed May 2016)
www.markkinaoikeus.en (accessed March 2016)
www.impgroup.org (accessed March 2016)
http://dictionary.cambridge.org (accessed March 2016)
www.sotkanet.fi (accessed May 2016)

Interview

Ukkola Markus, Senior Government Secretary, interviewed in December 2015
Appendix 1: Housing services for the elderly in statistics

Figure 20. Development over years by number of children and elderly in Finland (Statistics Finland)

Table 31. Procurement notifications in Hilma by procurement categories in 2011/ % by value. Source Ministry of Employment and the Economy

<table>
<thead>
<tr>
<th>Category</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>20.0</td>
</tr>
<tr>
<td>Services</td>
<td>47.1</td>
</tr>
<tr>
<td>Building contracts</td>
<td>32.6</td>
</tr>
<tr>
<td>Others</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Table 32. Procurement notifications in Hilma by procurement units in 2011/% by value. Source Ministry of Employment and the Economy

<table>
<thead>
<tr>
<th>Category</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government authorities and public utilities</td>
<td>6.6</td>
</tr>
<tr>
<td>Local authorities, federations of municipalities and other regional authorities</td>
<td>47.5</td>
</tr>
<tr>
<td>Others</td>
<td>45.9</td>
</tr>
</tbody>
</table>

Table 33. Production of social services (value) by producer type in years 1995, 2000, 2005 and 2011/ %. Source Statistics Finland

<table>
<thead>
<tr>
<th>Type</th>
<th>1995</th>
<th>2000</th>
<th>2005</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public corpora-</td>
<td>81.6</td>
<td>76.6</td>
<td>71.6</td>
<td>68.3</td>
</tr>
<tr>
<td>tions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associations</td>
<td>14.6</td>
<td>17.1</td>
<td>18.0</td>
<td>15.4</td>
</tr>
<tr>
<td>Private compa-</td>
<td>3.8</td>
<td>6.1</td>
<td>10.4</td>
<td>16.4</td>
</tr>
<tr>
<td>nies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 34. Production of social services (value) by producer type and by housing service type in 2010/ %. Source Statistics Finland

<table>
<thead>
<tr>
<th></th>
<th>Institutional care</th>
<th>Housing service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public corporations</td>
<td>80.8</td>
<td>54.6</td>
</tr>
<tr>
<td>Associations</td>
<td>13.1</td>
<td>24.3</td>
</tr>
<tr>
<td>Private companies</td>
<td>6.2</td>
<td>21.1</td>
</tr>
</tbody>
</table>

Table 35. Various sections of a service description for enhanced housing service (Organizing sheltered housing and tendering. Association of Finnish local and regional Authorities, 2012)

- The formulation, implementation, follow-up and evaluation of an individual care and service plan
- Round-the-clock care and support by the personnel of the housing service unit
- Dietary
- Toilette
- Personal hygiene and cleanliness, toilet visits
- Medical care, health care and nursing
- Rehabilitation for maintaining ability to function
- Participation to routine tasks, to social relations, to recreation and to outdoor activities
- Cooperation with relatives, with next of kin and with partners
- Counselling and guidance in different issues (f.e.g. when applying benefits)
- Clothing maintenance
- Cleaning
- Dietary services
- Assurance of the service quality
- Services and products which are not included in to the enhanced housing service
- Accommodation: rental agreement between the resident and the owner of the residence

Table 36. An example of estimated costs of different cost development in different scenarios of services for the elderly. Source Social and health ministry and Association of Finnish Local and Regional Authorities 2013

<table>
<thead>
<tr>
<th>Service structure options (% over 75 years)</th>
<th>Change in service costs 2011-2017 (in 2011 costs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option A. Existing (2011) service structure</td>
<td>+503 m€</td>
</tr>
<tr>
<td>home care 12.2 %</td>
<td></td>
</tr>
<tr>
<td>financial support for caring for close relatives 4.4 %</td>
<td></td>
</tr>
<tr>
<td>enhanced sheltered housing 5.9 %</td>
<td></td>
</tr>
<tr>
<td>retirement home 3.0 %</td>
<td></td>
</tr>
<tr>
<td>health centre ward 1 %</td>
<td></td>
</tr>
<tr>
<td>total 27 %</td>
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</tbody>
</table>

| Option B.                                    | +163 m€                                           |
| home care 13 %                               |                                                   |
| financial support for caring for close relatives 6 % |                                                   |
| enhanced sheltered housing 6 %               |                                                   |
| retirement home 2 %                          |                                                   |
| health centre ward 1 %                       |                                                   |
| total 28 %                                   |                                                   |

| Option C.                                    | +172 m€                                           |
| home care 14 %                               |                                                   |
| financial support for caring for close relatives 7 % |                                                   |
| enhanced sheltered housing 7 %               |                                                   |
| retirement home 1 %                          |                                                   |
| health centre ward 1 %                       |                                                   |
| total 30 %                                   |                                                   |
Appendix 2: Individual interviews of the cases

Helsinki

1.1 Procurement in the municipality/federation of municipalities

- Does the municipality/federation of municipalities have a procurement strategy or procurement policy?
  - A: Approved by town board on 13.6.2011
  - B: Town board and city council
  - C: in 2008 maybe not consistent; 2011 published procurement strategy

- Does the municipality/federation of municipalities have instructions and consistent modus operandi for the procurement process?
  - A: -
  - B: 2. tendering more advanced
  - C: Yes

- Did the budget of the municipality/federation of municipalities direct the procurement?
  - A: Of course
  - B: Yes
  - C: Yes

1.2 The preparation phase of the procurement

- Who defined the need for service? Based on what grounds?
  - A: through own production the required are familiar; standing order of housing service
  - B: Own production vs. demand; approximately 40 per cent was purchased already in 2005; on the strength of cost-effectiveness
  - C: The area of responsibility for the elderly care -> Director of the Welfare Service

- Did you discuss the problems of the operation of the existing service provider? Did you consider improvement proposals?
  - A: Cooperation during the agreement period generates improvement proposals, as well as visitations and annual quality inspection
  - B: Continuous dialogue -> feedback f.e.g. purchased and own production are compared
  - C: Service description was improved/elaborated

- Did you inform the potential service providers the strategy of the local authority?
  - A: Yes
  - B: Yes; what we expected from the service providers
  - C: In 2012 yes, 2008?

- Did you have in the procurement unit cross-functional meetings prior to publishing the request for quotation?
  - A: Yes: a jurist, a procurement specialist and substance specialist and a controller
  - B: In the first round we did not have (2008), in the second tendering (2012) we did have
  - C: In 2008 a project was established, in 2012 the personnel of the elderly care together with a controller, a procurement specialist and a jurist

- Who participated in these meetings?
  - A: See above
  - B: See above
o C: See above

- Did you describe the service unambiguously?
  o A: The service description was performed in detail
  o B: The service description was performed in detail, the experiences from other cities tenderings were exploited; RAI
  o C: The description accuracy of elderly care has in Helsinki been good (score 9) in 2012, 2008?

- Did you define the roles of service provider and buyer clearly?
  o A: Yes
  o B: The substance specialists had the main responsibility, the procurement specialists were in the background
  o C: Yes

- How did you examine the supplier market?
  o A: In 2008 a study was conducted with the school of economics, in 2012 with Bearing Point
  o B: The supplier market was familiar to us. For the second tendering a market research was conducted
  o C: The supplier market was familiar to us. Concerning new operators we may have lacked some information, e.g. their capacity

- What information of the suppliers was collected?
  o A: Corporate responsibility issues, the black economy; the producers are familiar to us
  o B: Good supplier knowledge, quality system a question mark regarding new suppliers; we purchased from all known producers
  o C: Number of places (the size of the company), quality level, we aimed to visit all the suppliers -> to gain a picture of the suppliers dynamism. In 2012 a briefing was organized prior the tender

1.3 Procurement phase

1. Did you organize meetings with the potential service providers? Where these organized in private or as a public meeting?
  o A: Common briefings. Annual discussions with the suppliers.
  o B: Common / similar information to all potential suppliers
  o C: Common briefing in 2012

2. What subjects were discussed during these meetings?
  o A: The forthcoming tendering; especially quality criterion were discussed. A group work was conducted (different operators in the groups) about premises, personnel, operation, self-monitoring. The meeting lasted half of a day
  o B: The producers took part into the preparation of the criterion (2012)
  o C: The tendering related issues

3. Who defined the procurement procedure?
  o A: Open procedure. Blanket agreement tendering
  o B: Discussed and planned in the elderly care department. The committee determined finally.
  o C: Open procedure. The elderly care department proposed, the committee of the social welfare approved.

4. Based on what grounds was the particular procedure chosen?
  o A: It is a common procedure
  o B: A reverse tendering was considered
  o C: Based on good previous experiences
5. Who defined the selection criteria? On what grounds?
   - A: Most economically advantageous tender (cost 90 per cent, quality 10 per cent). E.g. extra points from good premises. Quality points; if of the customers 90 per cent have their own room with own toilet (5 p), an exit to the yard (2 p), the supplier possesses an audited quality system (3 p)
   - B: A blanket agreement, cost and quality ratio. The elderly care department decided.
   - C: Proposed by the elderly care department, decided by the committee of the social welfare. Based on good previous experiences.

6. How were different parties informed during the procurement process?
   - A: Well, also shop stewards and management
   - B: Dialogue with the procurement unit.
   - C: Meetings, e-mail, city jurist, introduction to the committee of the social welfare

1.4 Procurement settlement phase
   1. Which collaboration and monitoring operations models were established?
      4.1.1 An incentive bonus and sanction models
         - A: No incentive bonus procedure, sanction model applicable
         - B: In the second tendering the incentive bonus procedure was considered, sanction model applicable
         - C: The incentive bonus procedure has not been used in housing services for the elderly, but it has been used in other tendering (e.g. in tendering of housing services for the disabled in 2011). Sanctions are used if the feedback is poor leading to no allocation of new customers or contractual penalty or cost reduction or cancellation of the contract
      4.1.2 A follow-up model for the agreement and quality, for example, the exploitation of the end-users' experience during the agreement
      4.1.3 The termination procedure
      4.1.4 The procedure for notifying the defects
      4.1.5 The procedure for arbitration

1.5 Post-procurement phase
   1. How did you train and guide the service provider for the job?
      - N/A
   2. How do you monitor the operation of the chosen service provider?
      - A: Annual discussions, visitations, RAI-model in use. Pre-visitations and case of complaints allocated visitations
      - B: Established practice: visitations with the regional administration office for new producers, in case of complaints the producer is obliged to deliver specific information leading to a visit by our care specialist
      - C: The procurement unit is monitoring the black economy. New producers are briefed. Visitations, during the contract inspection the quality audit is conducted. Each year together with the annual contract the procedures are discussed including quality and quantity issues.
   3. Have you had joint development projects with the service provider?
      - A: By producer if needed
      - B: No
C: In certain degree? Observation leading to information flow to our own production and vice versa. No projects.

4. How did you communicate the agreement?
   a. A: A common gathering and a blanket agreement with each approved supplier and an annual contract with some suppliers.
   c. C: See above

5. Which kind of collaboration are you having with the service provider?
   a. A: See above
   b. B: See above
   c. C: See above

Espoo

1 Procurement in the municipality/federation of municipalities
   - Does the municipality/federation of municipalities have a procurement strategy or procurement policy?
     a. A: -
     b. B: No, but there is the Espoo-policy.
   - Does the municipality/federation of municipalities have instructions and consistent modus operandi for the procurement process?
     a. A: -
     b. B: Yes
   - Did the budget of the municipality/federation of municipalities direct the procurement?
     a. A: Yes
     b. B: Yes, but the demand is also guiding

2 The preparation phase of the procurement
   - Who defined the need for service? Based on what grounds?
     a. A: The service concept and possible supplementary services
     b. B: Social and health care defined the need for services. The research group estimates the demand.
   - Did you discuss the problems of the operation of the existing service provider? Did you consider improvement proposals?
     a. A: We are learning all the time. Problems are listed.
     b. B: Yes. We had 15–20 qualified producers.
   - Did you inform the potential service providers of the strategy of the local authority?
     a. A: Briefing by the Basic security director
     b. B: We held an extensive gathering involving relatives, service providers and authorities.
   - Did you have in the procurement unit cross-functional meetings prior publishing the request for quotation?
     a. A: Yes guided by myself. The steering group plus the substance group plus procurement group.
     b. B: Partly held. The social and health security controlled it.
   - Who participated in these meetings?
     a. A: The substance group managed by myself.
     b. B: The social and health security
   - Did you describe the service unambiguously?
o A: The service concept (invented in Espoo), which defines the service level. A supplier had to sign to be able to tender. On top of this a supplementary quality was required.
  o B: The service concept.

- Did you define the roles of service provider and buyer clearly?
  o A: Yes
  o B: Mostly yes

- How did you examine the supplier market?
  o A: -
  o B: By experience and from the service providers advertising.

- What information of the suppliers was collected?
  o A: -
  o B: We did not gather systematically.

3 Procurement phase

a. Did you organize meetings with the potential service providers? Were these organized in private or as a public meeting?
  o A: A general gathering was held.
  o B: General

b. What subjects were discussed during these meetings?
  o A: The forthcoming procurement in general level.
  o B: Our experiences and the introduction of the request for quotation.

c. Who defined the procurement procedure?
  o A: We decided together. Open procedure.
  o B: The committee of the social welfare defined. An open procedure was chosen.

d. Based on what grounds was the particular procedure chosen?
  o A: According to the strategy
  o B: No other option were presented.

e. Who defined the selection criteria? On what grounds?
  o A: Most economically advantageous tender; due to the supplementary quality
  o B: The committee of the social welfare, according to the service concept including both basic services and supplementary services.

f. How were different parties informed during the procurement process?
  o A: By the steering group.
  o B: The social security unit controlled centrally. Concerning the request for quotation service providers are able to make enquires and the answers are visible for all parties included in tendering.

4 Procurement settlement phase

a. Which collaboration and monitoring operations models were established?
  i. An incentive bonus and sanction models
     o A: No incentive, but a sanction in the blanket agreement.
     o B: No incentive, but sanctions (delay, the quality of the operation).
  ii. A follow-up model for the agreement and quality, for example, the exploitation of the end-users' experience during the agreement
     o A: Espoo.fi -> social and health care (monitoring plan). The committee of the social welfare requires a report annually concerning the fulfilment of the monitoring plan.
iii. The termination procedure
   o A: In the blanket agreement
iv. The procedure for notifying the defects
   o A: No, but will be discussed.
v. The procedure for arbitration
   o A: No, but will be discussed. A penalty fee has been used.

5 Post-procurement phase
a. How did you train and guide the service provider for the job?
   o A:
   o B: This procedure is in use.
b. How do you monitor the operation of the chosen service provider?
   o A: The monitoring team (2 registered nurses, 2 social workers plus myself)
   o B: The social security unit has a monitoring plan in place (visitations)
c. Have you had joint development projects with the service provider?
   o A: All the time. During 2012 3 large development meetings. A physical exercise handbook concerning good practice was created together with a service provider.
   o B: A form to monitor different plans
d. How did you communicate the agreement?
   o A: The committee of social welfare decided. The quantities are determined during the annual negotiations.
   o B: Concerning Kuusikoti a press release was formulated.
e. What kind collaboration are you having with the service provider?
   o A: A blanket agreement -> an annual contract. Exploitation of doctors in charge, cooperation with Jorvi hospital, internal hygiene group
   o B: An annual gathering.

Additional:
Espoo has 28 nursing homes for the elderly, 70 per cent of the housing service places for the elderly are procured from private service providers.
Large service providers are very sleek.
The best development for this tendering (2007) was the service concept.
"Hair rollers, newspapers and coffee after sauna" are important for the elderly.

Vantaa

1 Procurement in the municipality/federation of municipalities
   • Does the municipality/federation of municipalities have a procurement strategy or procurement policy?
     o A: No, it does not direct the procurement of the housing services for the elderly
     o B: No, but it is under construction. Common procurement guidelines in the municipality and in the profit center
   • Does the municipality/federation of municipalities have instructions and consistent modus operandi for the procurement process?
     o A: Yes
     o B: It has been described by the procurement center and general procurement guidelines in the municipality do exist.
   • Did the budget of the municipality/federation of municipalities direct the procurement?
A: Yes
B: Yes when applicable. City has budgeted each service. In the tendering the selection criteria is the lowest cost based on which the procurement order according to the procurement law was established. The service and quality requirements were defined accurately in the request for quotation. Thus all the residents of the city are receiving similar housing service even when they are placed in many different locations.

According to the terms in the request of quotation the service provider in the blanket agreement is chosen in case of a particular customer based on individual need, consideration and based on the applicability of the service. The individual need of the customer and particular conditions are deciding which kinds of services the city in each case is organizing. If based on the customer need there are many applicable service providers, the one with the lowest cost will be chosen.

2 The preparation phase of the procurement

- Who defined the need for service? Based on what grounds?
  - A: Service unit for the elderly and disabled. The assessment of the service need -> care plan until year 2025.
  - B: The service unit of the city for the elderly and disabled defined the service need. The procurement team guided. Based on customer needs; care and service plan and different statutes.

- Did you discuss the problems of the operation of the existing service provider? Did you consider improvement proposals?
  - A: Yes, see the newest tendering.
  - B: In the preparation for the tendering the problems during the previous contract period were surveyed. These problems help us to formulate the new request for quotation. For the service providers a seminar was organized some months prior the tendering. This seminar was notified in Hilma and the seminar was participated by more than 50 representatives of service providers. In the seminar the forthcoming tendering was discussed.

- Did you inform the potential service providers the strategy of the local authority?
  - A: A briefing
  - B: Not as such. In the documentation of the request for quotation the expectations of the city were informed (f.e.g. in the quotation the service providers introduced the business idea of their care unit) and the requirements were specified.

- Did you have in the procurement unit cross-functional meetings prior publishing the request for quotation?
  - A: Yes, 1-2 times; the participants being procurement, care specialists, the doctor of hospital services, the director for the elderly care.
  - B: In the work group preparing the tendering we had the substance specialists from the elderly and disabled care unit, a procurement specialist and a jurist. In the seminar for the service providers a dialogue with the service providers were held.

- Who participated in these meetings?
  - A: See above
B: See above

- Did you describe the service unambiguously?
  - A: Yes, the description of the service has sharpened from 2007 to 2012
  - B: Yes

- Did you define the roles of service provider and buyer clearly?
  - A: Yes, the service description
  - B: Yes, the service provider is in charge

- How did you examine the supplier market?
  - A: The market is familiar to us.
  - B: The service providers interested in this tendering were invited via Hilma to take part into the seminar for service providers.

- What information of the suppliers was collected?
  - A: Some service providers introduced themselves prior the request for quotation.
  - B: The tendering has been conducted twice earlier, thus we knew well the service providers in the market. I.e. own experiences and existing relations.

3 Procurement phase

a. Did you organize meetings with the potential service providers? Where these organized in private or as a public meeting?
  - A: One general briefing was held.
  - B: One general seminar for the service providers was held.

b. What subjects were discussed during these meetings?
  - A: The forthcoming tendering.
  - B: The tendering from the procurement unit’s perspective and the expectations of the city and definitions of policy in this procured service.

c. Who defined the procurement procedure?
  - A: Open procedure, the elderly and disabled care director
  - B: Open procedure, the elderly and disabled care director together with procurement specialists

d. Based on what grounds was the particular procedure chosen?
  - A: Several service providers
  - B: Appropriate procedure. The service concept was familiar, due to earlier tendering.

e. Who defined the selection criteria? On what grounds?
  - A: Lowest cost; director/manager, quality requirements specified to high level.
  - B: The elderly and disabled unit defined the selection criteria as lowest cost. Not all the customers benefit from the quality factors in the selection criteria.

f. How were different parties informed during the procurement process?
  - A: Well
  - B: Well, specific persons in charge controlled the process.

4 Procurement settlement phase

a. What collaboration and monitoring operations models were established?
  1. An incentive bonus and sanction models
     - A: No incentive bonus, but a sanction in the blanket agreement.
ii. A follow-up model for the agreement and quality, for example, the exploitation of the end-users’ experience during the agreement

iii. The termination procedure

iv. The procedure for notifying the defects

v. The procedure for arbitration
   o B: The contract stated how to complaint and how to define a sanction, in case the quality level is below the agreed. We had private negotiations with the service providers prior the beginning of the contract period. We organized audits in the service providers’ premises. The contract defines the procedure for the customer feedback.
   o The service level must fulfil the level specified in the request for quotation in the appendices, in the quotation and in this contract. In case the quality level of the service will decrease in any sector from the agreed the city is entitled unambiguity decrease the cost of the care day for all customers by 10 per cent from the date of the decreased quality until the service quality agreed has been restored. The city has the right to withhold the respective cost reduction (contractual penalty) from the fee to the service provider.
   o The quality of the care and service is monitored both based on customer and professional feedback and the producer commit itself to imminent measures in case of a quality deviation. The service provider is committed to measure customer satisfaction regularly at least every second year by asking the relatives and customers. Each customer feedback and relevant actions are delivered in writing to the city. The city reserves the right to audit or otherwise to verify the quality level of the service provider during the contract period. The service provider shall provide the city with information of the number of personnel, the use of personnel and customer feedback.
   o Possible dissents are tried to be settled primarily by mutual negotiations. In case an agreement is not achieved shall the district court in Vantaa settle the dispute. In case any of the contract party desires to discontinue the contract in the middle of the contract period the termination shall be made in writing latest six (6) months prior the desires termination date. The termination of the contract does not cause to the parties any financial consequences.

5 Post-procurement phase
   a. How did you train and guide the service provider for the job?
      o A: Procurement specialist group and quality coordination are inspecting.
      o B: The service providers’ seminar, private meeting and possible audits.
   b. How do you monitor the operation of the chosen service provider?
      o A: Quality coordinator and possible myself are organizing visitations. Report to the city and to the regional administration office. If the relatives are giving negative feedback, the issue will be discussed with the service provider. Additionally surprise visitations are made.
c. Have you had joint development projects with the service provider?
   o A: RAI etc. are made based on the contract.
   o B: The contract states: "The service provider undertakes to
     an interactive cooperation with the service procurer to
     secure and develop the service quality. The service provider
     is expected to have an active measure to develop the ser-
     vices. The cooperation discussions between the service
     provider and procurer will be held regularly."

  d. How did you communicate the agreement?
     o A: As normal
     o B: The blueprint of the contract as an appendice of the re-
       quest for quotation and private meetings. During these
       meetings the content of the contract was discussed.

  e. What kind collaboration you are having with the service provider?
     o A: 2 times a year a service provides seminar is organized
       (spring and fall). Service providers inform in these semi-
       nars of their service developments. Relative satisfaction
       survey was conducted in 2012.
     o B: Regular meetings and contacts. A good cooperation
       throughout the contract period brings good results.

Additional:
70 per cent of the housing service places for the elderly are procured from pri-
ivate service providers.
ARA (The Housing Finance and Development Centre of Finland), Valvira (Na-
tional Supervisory Authority for Welfare and Health) and Regional Administra-
tion Office are the operators in the housing service for the elderly.
Regional Administration Office: 10 per cent of the elderly can be placed in rooms
for two persons
Regional cooperation should be more coordinated.

Lohja

1  Procurement in the municipality/federation of municipalities
   • Does the municipality/federation of municipalities have a pro-
     curement strategy or procurement policy?
     o A: Procurement guidelines of Lohja town, approved by
       town board 20.5./20.6.2011, budgets, operational
       changes (major tendering), political program for the
       aged, including procurement strategy for services of the
       elderly (procured services are completing, service
       voucher trial of relative caring’s holiday). Procurement
       group (see procurement guidelines) has gathered irregu-
       larly. Annual procurement brunch with local entrepre-
       neurs.
     o B: Yes
     o C: Operation models not formalized. Political program
       for the aged (LOST)
   • Does the municipality/federation of municipalities have instruc-
     tions and consistent modus operandi for the procurement pro-
     cess?
     o A: Lohja town’s procurement guidelines, approved by the
       town board 30.5./20.6.2011. Adhere to procurement law
       in cases where the threshold value is exceeded. Develop-
ment of procurement place and intra. The work of procurement group; procurement decentralized to different functions, central administration is coordinating.

- B: Yes. Kari Mäntyharju
- C: Yes, procurement guidelines

- Did the budget of the municipality/federation of municipalities direct the procurement?
  - A: Yes, we procure based on allowances for the service need
  - B: Yes
  - C: Yes

2. The preparation phase of the procurement

- Who defined the need for service? Based on what grounds?
  - A: Procurement unit i.e. basic security function defined based on present and future service needs.
  - B: We did not have former tendering (in the past direct public procurement). Basic security director initiates. The strategy of elderly services 2001 -> 2010 -> definition of the service need.
  - C: Committee of the basic security and office-holders. Based on existing need and forecasts.

- Did you discuss the problems of the operation of the existing service provider? Did you consider improvement proposals?
  - A: Yes in the preparation stage of the procurement
  - B: Yes, f.e.g. who is responsible for the toilet paper.
  - C: In the past based on agreements by customer. Minimum criterion were formulated together with responsibility chart and blanket agreement forms.

- Did you inform the potential service providers of the strategy of the local authority?
  - A: No. Budget, resolution of the committee of social welfare to tender the service. Termination of the former procurement service contracts.
  - B: Yes
  - C: Included in the documentation.

- Did you have in the procurement unit cross-functional meetings prior publishing the request for quotation?
  - A: Inside basic security
  - B: Yes
  - C: -

- Who participated in these meetings?
  - A: Basic security director, procurement and substance specialists (4-5 persons)
  - B: Management of elderly care, basic security director, finance and a doctor
  - C: -

- Did you describe the service unambiguously?
  - A: The procurement subject including the description of the service and minimum requirements were illustrated in detailed.
  - B: We tried to illustrate
  - C: Yes

- Did you define the roles of service provider and buyer clearly?
  - A: Yes
  - B: Yes, in general
  - C: Yes

- How did you examine the supplier market?
A: Based on experience from f.e.g. neighboring municipalities. National negotiating procedure even though national threshold value exceeded.

B: Each producers desires to become suppliers (they wanted to get a reference close to Helsinki), our role was to obstruct. Some of the producers were familiar to us, some contacted us.

C: -

- What information of the suppliers was collected?
  - A: -
  - B: We acted back to front; we organized first the tendering, thereafter audited
  - C: -

3 Procurement phase
   a. Did you organize meetings with the potential service providers? Were these organized in private or as a public meeting?
      - A: No; the producers had a possibility to make enquires
      - B: No; Enquires by e-mail
      - C: No; general discussion by e-mail
   b. What subjects were discussed during these meetings?
      - A: Quotation related issues by e-mail liittyvä tarkennustyöt (sähköposti)
      - B: Procurement related issues
      - C: -
   c. Who defined the procurement procedure?
      - A: Committee for the social welfare decided. Open procedure suited best and this procedure has been used together with the restricted procedure.
      - B: Basic security director; open procedure
      - C: Open procedure. Specialist and committee for the social welfare decided the procedure.
   d. Based on what grounds was the particular procedure chosen?
      - A: Benchmarking with other municipalities.
      - B: Enables freedom to choose -> decision on the personal level
      - C: Based on the procurement law (?)
   e. Who defined the selection criteria? On what grounds?
      - A: Committee for the social welfare. Lowest cost. Quality was included in the minimum requirements. Benchmarking with other municipalities.
      - B: Basic security director. Quality criterion included.
      - C: Lowest cost. Town boards, committee and specialists. Included minimum requirements.
   f. How were different parties informed during the procurement process?
      - A: Well. Decision making in three stages (committee, board, council)
      - B: Town’s management group, committee, council made the final decision
      - C: -

4 Procurement settlement phase
   a. What collaboration and monitoring operations models were established?
      i. An incentive bonus and sanction models
         - A: No incentive bonus, sanctions based on delayed service and other breaches of contract, damages
B: No incentive bonus procedure
C: No incentive bonus procedure. We have a sanction model in place.

ii. A follow-up model for the agreement and quality, for example, the exploitation of the end-users' experience during the agreement
A: Contact persons, the monitoring procedures of the contract and quality are defined in the contract.

iii. The termination procedure
A: No general termination procedure. The grounds for cancellation of the contract are specified in the contract.

iv. The procedure for notifying the defects
A: In the contract

v. The procedure for arbitration
A: By mutually negotiating, finally in the procurer's lower court.

5 Post-procurement phase
a. How did you train and guide the service provider for the job?
A: The starting points are defined in the contract.
B: We met and discussed. General rule is that own production and procured production are trained together.
C: No orientation. During blanket agreement negotiations this was discussed. Visitations (by own specialists and by regional administration office). Location, cost, profile

b. How do you monitor the operation of the chosen service provider?
A: The starting points are defined in the contract.
B: Once a year plus surprise visits
C: Surprise visits by myself. Complaints from relatives.

c. Have you had joint development projects with the service provider?
A: Starting points defined in the contract.
B: In principal and in practice some projects may have been alive.
C: No development projects. Lohja informs the producer of good practices and vice versa.

d. How did you communicate the agreement?
A: -
B: Often service provider is active.
C: -

e. Which kind collaboration you are having with the service provider?
A: Starting points defined in the contract.
B: See above
C: See above

Additionally:
Some elderly persons desire to live in a room for two persons. This is against the recommendations by the regional administration office. What then is good procurement?
Karviainen

1  Procurement in the municipality/federation of municipalities

- Does the municipality/federation of municipalities have a procurement strategy or procurement policy?
  - A: No, procurement rule was established on 1.9.2013
  - B: Yes (?)

- Does the municipality/federation of municipalities have instructions and consistent modus operandi for the procurement process?
  - A: See above
  - B: Yes (?)

- Did the budget of the municipality/federation of municipalities direct the procurement?
  - A: Yes
  - B: Not entirely

2  The preparation phase of the procurement

- Who defined the need for service? Based on what grounds?
  - A: The contract was expiring and there was need for a new contract. A team including elderly service manager (RS), a doctor, a director, a jurist (external) and a procurement coordinator
  - B: The elderly service manager defined the service specification. A lawyer’s office was involved.

- Did you discuss the problems of the operation of the existing service provider? Did you consider improvement proposals?
  - A: Yes (the invoicing of toilet paper). New quality recommendations were noticed.
  - B: Long history -> problem areas have emerged.

- Did you inform the potential service providers the strategy of the local authority?
  - A: In a way.
  - B: The strategy of the federation of municipalities was not informed.

- Did you have in the procurement unit cross-functional meetings prior publishing the request for quotation?
  - A: Yes
  - B: With Lohja and concerning mental health services

- Who participated in these meetings?
  - A: Above mentioned work group
  - B: See above

- Did you describe the service unambiguously?
  - A: Yes
  - B: Yes

- Did you define the roles of service provider and buyer clearly?
  - A: Quite well
  - B: Yes

- How did you examine the supplier market?
  - A: The regional producers were well known, the national producers were familiar in general.
  - B: No direct contact to service providers.

- What information of the suppliers was collected?
3 Procurement phase
   a. Did you organize meetings with the potential service providers? Were these organized in private or as a public meeting?
      o A: Only one general briefing was held.
      o B: A general briefing.
   b. Which subjects were discussed during these meetings?
      o A: -
      o B: We presented the request for quotation.
   c. Who defined the procurement procedure?
      o A: The board of the federation of municipalities decided based on an expert. Open procedure with certain preconditions (distance maximum 60 km from the town where the customer is living).
      o B: The procurement coordinator (based on PTC Service’s proposal). An open procedure was chosen.
   d. Based on what grounds was the particular procedure chosen?
      o A: Based on legality and an expert opinion.
      o B: Based on an expert opinion.
   e. Who defined the selection criteria? On what grounds?
      o A: See above. Quality was specified into the request of quotation.
      o B: In cooperation.
   f. How were different parties informed during the procurement process?
      o A: Worked well
      o B: A specialist’ group with the lawyer’s office.

4 Procurement settlement phase
   a. What collaboration and monitoring operations models were established?
      i. An incentive bonus and sanction models
         o A: No incentive bonus, but a sanction in the blanket agreement (starting time)
         o B: No incentive bonus, but sanctions
      ii. A follow-up model for the agreement and quality, for example, the exploitation of the end-users’ experience during the agreement
         o A: Particular monitoring procedures (RAVA)
      iii. The termination procedure
      iv. The procedure for notifying the defects
      v. The procedure for arbitration

5 Post-procurement phase
   a. How did you train and guide the service provider for the job?
      o A: We pay support services only according to the usage. RS inspected the contract; RAVA -training was organized with the producer. The cooperation group of the sheltered homes meets annually twice. Customer satisfaction enquiry is organized every second year.
      o B: The review of the contract with the producer and discussion of the operational principles.
   b. How do you monitor the operation of the chosen service provider?
o A: Once a year together with surprise and monitoring visits.
  o B: The office-holder monitors; a surprise visit, an audit and a visit in case of a complaint.

c. Have you had joint development projects with the service provider?
  o A: -
  o B: Regular cooperation meetings twice annually. RAVA - trainings and medication trainings.

d. How did you communicate the agreement?
  o A: Standard channels (e-mail)
  o B: We had problems with this area. The control of blanket agreements was inadequate. We had problems with those bidders whose premises were not completed. We should have been able to sign the contract immediately.

e. What kind collaboration you are having with the service provider?
  o A: We are defining together a uniform invoicing form.
  o B: Cooperation meetings.

Additionally:
The more precise contract the easier to monitor. Municipalities are short of resources in this area.