

Lappeenranta University of Technology  
School of Business and Management  
Master's Degree Programme in Supply Management (MSM)

**Master's thesis - 2016**  
**Strategy formation for indirect spend**  
*Riku Parkkinen*

**1 st Supervisor/Examiner:** Professor Veli Matti Virolainen  
**2 nd Supervisor/Examiner:** Associate Professor Katrina Lintukangas

## **ABSTRACT**

<b>Author:</b>	Riku Parkkinen
<b>Title:</b>	Strategy formation for indirect spend
<b>Faculty:</b>	School of Business
<b>Master's Programme:</b>	Master's degree programme in Supply Management (MSM)
<b>Year:</b>	2016
<b>Master's Thesis:</b>	Lappeenranta University of Technology 97 pages, 16 figures, 4 tables and 3 appendixes
<b>Examiner:</b>	Professor Veli Matti Virolainen Associate Professor Katrina Lintukangas
<b>Keywords:</b>	Indirect spend, purchasing strategy, category management, spend analysis

The aim of this thesis was to examine the strategy formation in indirect procurement. Current literature in purchasing strategy has mainly focused on direct procurement whereas the strategy formation in indirect procurement has gained much less attention. Nevertheless, the weak economic times have been pushing companies to find savings from other places as well. The theoretical part of the thesis focused on three main subjects; indirect procurement, purchasing strategy and category management.

This thesis was a case study, which initiative arose from the company's need to develop their indirect procurement. The objectives of the empirical part were to identify current state of the indirect procurement and solve biggest issues. The analysis was based on multiple managerial interviews and a spend analysis from ten different countries. Based on these analyses and the theoretical findings a framework and recommendations for the case company was made.

## TIIVISTELMÄ

<b>Tekijä:</b>	Riku Parkkinen
<b>Otsikko:</b>	Strategy formation for indirect spend
<b>Tiedekunta:</b>	Kauppätieteellinen tiedekunta
<b>Koulutusohjelma:</b>	Master's degree programme in Supply Management (MSM)
<b>Vuosi:</b>	2016
<b>Pro gradu-tutkielma:</b>	Lappeenrannan teknillinen yliopisto 97 sivua, 16 kuvaa, 4 taulukkoa ja 3 liitettä
<b>Tarkastajat:</b>	Professori Veli Matti Virolainen Tutkijatohtori Katrina Lintukangas
<b>Avainsanat:</b>	Epäsuorat hankinnat, hankintastrategia, kategoriahallinta, spend-analyysi

Tämän tutkielman tarkoituksena oli keskittyä strategian luomiseen epäsuorille hankinnoille. Nykyinen kirjallisuus hankinta strategiasta on pääsääntöisesti keskittynyt suoriin hankintoihin, kun taas epäsuorien hankintojen strategian kehittäminen on saanut vähemmän huomiota. Kuitenkin, heikot taloudelliset ajat ovat pakottaneet yrityksiä hakemaan säästöä myös muista kohteista. Tutkielman teoreettinen osuus keskittyi kolmeen pääaiheeseen; epäsuoriin hankintoihin, hankintastrategiaan sekä kategoriahallintaan.

Tämä tutkielma sai alkunsa case-yrityksen halusta kehittää epäsuoria hankintojaan. Empiirisen osuuden tarkoituksena oli tunnistaa epäsuorien hankintojen nykyinen tila sekä ratkaista suurimmat ongelmakohdat. Analyysi perustui usealle johdon haastattelulle sekä kymmeneen eri maahan kohdistuneelle spend-analyysille. Näiden analyysien perusteella case-yritykselle luotiin viitekehys sekä suositukset tulevaisuutta varten.

## **ACKNOWLEDGEMENTS**

It has been a long journey but I have finally reached the point where I can put the last dot for this work and give recognition for the people who have helped and supported me during this project. First of all, I want to thank the case-company for giving me this interesting opportunity. I have always enjoyed solving real-life situations and could not have imagined better way to do my thesis than a case study. I would also like to thank the people within the company for supporting me and giving me ideas how to go on with the study. I felt really welcomed in the company and could ask help from anyone.

Special thanks goes to my supervisors Veli Matti Virolainen, who helped me greatly at the beginning of the writing process, and Katrina Lintukangas, who shared her knowledge about the spend analysis. I am also grateful for other professors and LUT as a whole for giving me good acquirements and capabilities to perform this type of a research.

Finally, I would like to express my deepest thanks to my family and friends. Without these people around me the journey would have been much harder. I appreciate people listening to my problems and giving the good old tap on the shoulder when I faced hard times.

## TABLE OF CONTENT

<b>1. INTRODUCTION.....</b>	<b>10</b>
1.1 BACKGROUND .....	11
1.2 RESEARCH PROBLEMS & OBJECTIVES .....	13
1.3 RESEARCH METHODOLOGY AND DATA COLLECTION .....	15
1.4 STRUCTURE OF THE STUDY & RESEARCH FRAMEWORK.....	18
1.5 DEFINITIONS.....	20
1.6 LIMITATIONS .....	21
<b>2. THEORETICAL PART .....</b>	<b>23</b>
2.1 INDIRECT SPEND .....	23
2.1.1 <i>Categories of indirect spend</i> .....	24
2.1.2 <i>Differences between direct and indirect spend</i> .....	25
2.1.3 <i>Reasons behind poor management in indirect spend</i> .....	26
2.1.4 <i>Maveric buying</i> .....	28
2.1.5 <i>Development of indirect procurement</i> .....	30
2.2 PURCHASING STRATEGY .....	32
2.2.1 <i>Data collection and Consolidation</i> .....	32
2.2.2 <i>Make or Buy decision</i> .....	35
2.2.3 <i>The size and geographic location of the supply base</i> .....	37
2.2.4 <i>Centralization, decentralization and hybrid</i> .....	38
2.2.5 <i>Standardization</i> .....	41
2.2.6 <i>Competitive strategy or collaboration</i> .....	42
2.2.7 <i>Purchasing consortia</i> .....	44
2.3 CATEGORY MANAGEMENT.....	47
2.3.1 <i>Traditional ways of categorizing</i> .....	49
2.3.2 <i>Criticism against the traditional styles</i> .....	52
2.3.3 <i>Creating categories</i> .....	53
2.3.4 <i>Prioritization of categories</i> .....	54
2.3.5 <i>Team formation</i> .....	55
2.3.6 <i>Category management process</i> .....	56
<b>3. EMPIRICAL ANALYSIS .....</b>	<b>58</b>
3.1 MANAGEMENT INTERVIEWS .....	58
3.1.1 <i>Indirect procurement is spread around the organization</i> .....	58
3.1.2 <i>Current practices in indirect procurement</i> .....	60
3.1.3 <i>The biggest challenges in indirect procurement</i> .....	65
3.1.4 <i>Thoughts about centralized purchasing unit</i> .....	67
3.1.5 <i>Summary of the management interviews</i> .....	68

3.2	SPEND ANALYSIS .....	70
3.2.1	<i>General analysis</i> .....	71
3.2.2	<i>Timespan analysis</i> .....	73
3.2.3	<i>Category based spend ratios</i> .....	74
3.2.4	<i>Supplier analysis</i> .....	77
3.2.5	<i>Summary of spend analysis</i> .....	78
<b>4.</b>	<b>RECOMMENDATIONS AND CONCLUSIONS .....</b>	<b>81</b>
4.1	FRAMEWORK AND RECOMMENDATIONS FOR THE CASE COMPANY .....	81
4.2	SUMMARY .....	86
4.3	FURTHER RESEARCH TOPICS .....	86
<b>5.</b>	<b>LIST OF REFERENCES .....</b>	<b>88</b>
<b>6.</b>	<b>APPENDICES .....</b>	<b>97</b>

**LIST OF FIGURES:**

*Figure 1: Research framework* ..... 19

*Figure 2: Spend analysis process* ..... 34

*Figure 3: Purchasing maturity and BU homogeneity matrix. (Rozemeijer 2000)* ..... 40

*Figure 4: Theoretical framework of purchasing consortia. (Tella & Virolainen, 2005)* .... 45

*Figure 5: Kraljic's purchasing portfolio model*..... 50

*Figure 6: Share of direct- and indirect procurement* ..... 71

*Figure 7: Procurement per country 2014 & 2015*..... 72

*Figure 8: Indirect spend per country in 2015*..... 72

*Figure 9: Category percentages in 2015* ..... 73

*Figure 10: Indirect spend time breakdown 2014-2015* ..... 74

*Figure 11: Total indirect spend ratios per country* ..... 75

*Figure 12: Corporate real estate spend ratios per country*..... 76

*Figure 13: HR & personnel related spend ratios per country* ..... 76

*Figure 14: ICT spend ratios per country*..... 77

*Figure 15: Travel spend ratios per country*..... 77

*Figure 16: Indirect procurement framework*..... 81

**LIST OF TABLES:**

*Table 1: The main categories of indirect spend and some indicative examples.....*24

*Table 2: Differences between direct and indirect procurement .....*26

*Table 3: Forms of Maverick Buying (adapted from Karjalainen et al., 2009).....*30

*Table 4: Main benefits and challenges of linking purchasing department in indirect procurement .....*39

**ABBREVIATIONS:**

PSM	Purchasing and supply management
MB	Maverick buying
TCO	Total cost of ownership
TCE	Transaction cost economics
RFP	Request for proposal
PO	Purchase order
IT	Information technology
RBV	Resource based view
MRO	Maintenance, repair and operation
R&D	Research and development
CEO	Chief executive officer

## 1. INTRODUCTION

This study is a Master's thesis from the field of Supply Management and is has been carried out in Lappeenranta University of Technology under Supply Management Department. This thesis deals with a topic that has, especially now, during the weak economic times, started to attract more and more interest in organizations. This thesis is a case study and the initiative for the subject arose from the company's need to develop their indirect procurement. It is a deductive study, comparing existing theory to practice. In order to find the solution, the theoretical part of the thesis is focuses on three larger themes that are: indirect spend, purchasing strategy and category management. In the empirical part, the findings from the literature are then compared to the practices of the case company. Current situation and practices of the company are examined through management interviews and spend analysis. In the final section of the study a future plan for the case company is developed. This chapter will further introduce the background, problems and objectives, research methodology, structure of the study and theoretical framework as well as definitions and limitations of the study.

A never-ending intense competition is constantly forcing companies to identify new ways to make their operations to be more efficient and to create competitive advantage. Purchasing and supply chain management has long been seen as the source of competitive advantage and purchasing function has been identified as strategic part of an organization (Ellram & Carr, 1994; Carter & Ram, 1996; Carr & Pearson, 1999). At the same time, most of the attention has focused on direct purchasing, whereas the procurement of indirect products and services has gained much less notice (De Boer et al., 2003; Joong-In & Shunk, 2004).

As companies focus on the strategies of direct procurement, indirect purchasing is only seen as a clerical function (Gebauer & Arie, 2001). Indirect purchasing is often thought as a necessary evil, which has been left completely uncontrolled. For this reason, few companies really know who purchases what, from whom, on what price and why. People might be buying same products from different suppliers with different prices. This will lead to growing managerial costs and loss of leverage potential of the company.

Indirect procurement is completely an area of its own and it should be managed differently compared to direct procurement. There have been some studies concerning the strategy formation in separate indirect items such as IT and facility services, however, there is a gap in research, which would handle strategy formation in a broader perspective. Thus, the goal of this master's thesis is to look into the special features of indirect spend and to identify how the strategy should be formed.

## **1.1 Background**

The first recognition of purchasing and supply management (PSM) goes all the way back to 1832, after which challenging times of supply – wars and economic recessions – have helped PSM to grow as an important field of research (Leenders & Fearon, 2008). Especially the economic recession in 1970s and the end of stable business life of many procurement departments forced organizations to find new ways to manage their external resources (Kraljic, 1983). At the same time, transaction cost economics (TCE) and the way supplier relationships should be organized, came to the attention of companies (Williamson, 1981). Since the beginning of 1990s, researchers changed the direction of PSM from functional and transaction to more strategic (Keough, 1993). The development of procurement is seemingly linked to the economic situation, that is, when companies are in the need of savings they look into procurement. By selling more companies can increase profit, but if the economic situation is bad and the products and services do not sell well the only way stay alive is to reduce costs where they can be reduced.

Traditionally PSM has focused on cost reduction and according to Van Weele (2014) the same tendency still remains today. Some papers argue that the added value gained from PSM mainly comes from cost reduction (Chen et al. 2004). On the other hand, many studies have shown that PSM could have a prominent role in achieving competitive advantage (Ellram & Carr, 1994; Carter & Ram, 1996; Carr & Pearson, 1999). In any case, the advantages of PSM for an organization is undisputed.

Nonetheless, most of the PSM research have focused on managing direct procurement of the company, whereas indirect spend have gained much less attention from the researchers (De Boer et al., 2003; Joong-In & Shunk, 2004). According to Cox et al. (2005) this might

be due to the fact that indirect procurement does not have a direct impact on competitive advantage or because it is not typically connected to business-unit performance (Porter, 1999). Indirect procurement is then left in a floating state meaning that if everything works there is no need to think about it any further. Companies might not understand the real value of the indirect spend when it is in the shadows of direct procurement.

Indirect spend covers all of the goods and services that are not used in the end product offered to the customers (Carter et al., 2003). The percentage varies between industries from 35 to 60 per cent (Carter et al., 2003), from which companies have managed to gain 10-15 per cent reduction without impacting the quality or the functionality of the products and services (Kapoor & Gupta, 1997).

During the past few decades, indirect spend have received increased attention from organizations, while some executive managers have understood the potential of cost savings (Gebauer & Arie, 2000; Carter et al. 2003). For example, technology companies such as IBM (Porter, 1999), Motorola (Gebauer et al. 2003) and service companies such as American Express (Kapoor & Gupta, 1997) have taken big steps in order to gain benefits in the area of indirect spend. Yet, many organizations have not used strategic sourcing techniques with their indirect spending (Payne & Dorn, 2011, 586) and also, some companies do not involve purchasing department in indirect procurement at all even if they had one (Sitar, 2011).

Cox et al. (2005) argue, that managing indirect spend plays an important role in every organization despite the industry. They also point out that poorly chosen strategies in indirect spend will have a damaging effect on overall performance. Common problems are: complicated, non-standardized and detached processes, procurement done by non-professionals without the help of procurement function, high amount of maveric buying and the fact that it usually is a budget driven spend rather than a value-driven spend (Gebauer et al., 2003; Sitar, 2011; Carter et al., 2003; Karjalainen, 2009; Porter, 1999). Issues leading to this poor management are: inadequate information, insufficient resources and improper techniques (Kapoor & Gupta 1997).

For over thirty years companies have been using portfolio models in order to create strategies for their spend categories. One of the most popular is a model created by Kraljic (1983), at the same time, these models have received quite a lot of criticism (Ates, 2014; Krause, 2009; Luzzini, 2012; Dubois & Pedersen, 2002; Pagell et al., 2010; Nellore & Söderquist, 2000) especially in the field of indirect procurement (Cox, 2015; Cox et al., 2005). Because of this criticism towards the traditional styles, this thesis will look for alternative options and focuses on a category management, which has originated from the field of marketing. The research about category management in purchasing is very scarce and only few studies exist (Trautmann et al., 2009; Heikkilä & Kaipia, 2009), in addition there are also some academic books that provide practical approach to the issue (O'Brien, 2015).

## **1.2 Research problems & Objectives**

The case company is a multinational consulting and engineering company with a headquarter in Finland. Net sales of the company were in 2015 over 500 MEUR, most coming from Europe. At the moment, the company employs about 6000 experts all over the world.

The case company do not have a separate purchasing function in place nor a purchasing strategy for their indirect spend. As it is a consulting company, most of the procurement is project related, where project managers are executing the procurement within their project budget. Thus, indirect procurement has received less attention during the years. Anyhow, the company is currently investigating their indirect spend and the desire to develop them is big. Currently, the indirect procurement is scattered all over the organization. There is a lack of overall understanding and management over indirect spend. The company now needs help to develop their indirect procurement, more specifically to identify and solve the biggest issues, how they can be affected, and what ways of control could the company take on global and local scale. These initiatives behind the thesis subject arose from the organization. The goal is to streamline the procurement and possibly create cost savings on the side.

The focus of this thesis will be on the strategy building, because a purchasing strategy is the foundation of any development activity in the field of purchasing. This rule applies also in the procurement of indirect goods and services (Iloranta & Pajunen-Muhonen, 2008). As mentioned earlier, there is no research about the strategy formation in a wider perspective for indirect products and services. Despite that, it has been argued that there are specific strategic elements suitable for all purchasing strategies (Ahtonen & Virolainen 2009). The strategic decisions should be based on the unique situation and the circumstances the organization is facing (Cox et al. 2004), thus the main research question will be:

- What is the current strategic level of indirect procurement within the case company, and how could it be developed in the future?

Compared to direct procurement, indirect procurement is more diverse and it contains more products and services. In the field of indirect procurement there are many stakeholders that are usually non-experts, the procurement is de-centralized, the relationships are subjective rather than objective, the function is thought as clerical rather than strategic, the demand is unpredictable, the unit prices are low and the extent of markets are very variable. (Gebauer & Arie, 2000; Gebauer & Arie, 2001; De Boer et al., 2003b; Carter et al., 2003; Payne & Dorn, 2011) Because indirect procurement is quite different compared to direct procurement, they should not be managed in the same way. For this reason, the supporting sub-question will be:

- What special characteristics of indirect goods and services need to be considered when forming a procurement strategy?

As previously mentioned, for the last 30 years the purchasing portfolio analysis presented by Kraljic (1983) has been the dominant categorization method in procurement. This method has gained a lot of praise and criticism during the years. However, the traditional ways of categorizing procurement items might not be suitable for indirect products and services, thus the second supportive sub-question will be:

- What is the proper way to manage indirect spend categories?

These three research questions will guide the direction of the thesis as it goes along. They also form the main chapters in the literature review; indirect spend, purchasing strategy and category management. The content of these pieces, as well as the used research method are discussed in the following paragraphs.

### **1.3 Research methodology and data collection**

This master's thesis is divided into two parts; a literature review and an empirical study. Research problem and objectives of the thesis will work as guidance for the whole work as they will define the elements of the literature review. The purpose of the literature review is to create a basis for the empirical part and to develop a framework to recognize potential development areas in the case company. It is built by using well known scientific publications and following their references to find as much information as possible. In addition, a systematic approach is used to identify all relevant literature that is published in the near future. In the search for material, following databases are used: ProQuest, EBSCO, Emerald Journals, ScienceDirect and SpringerLink.

The empirical part is a two-staged qualitative research with management interviews and descriptive numeric spends data. The point is to explore the current situation in the case-company and to compare it against theoretical findings. Finally, based on the comparison from literature review and empirical research, suggestions for the company are given.

#### *Research strategy: Case study*

Research problems are going to be examined through a case study, in which the problem is examined in a single-setting to understand the dynamics of the phenomenon (Eisenhardt, 1989). Because of its diversity, the case study is usually characterized as research strategy or research approach rather than method or methodology. The purpose of the case study is to examine one or more cases in which the definition, analysis and the solution are the main goals of the study. A case can be defined in multiple different ways: a system, an individual, a group, a training program in university or a specific project or development program in organization. It is important, however, that the case can be restricted from other context. (Eriksson & Koistinen 2014, 4-6) This thesis focuses only on a single case company rather than multiple different companies. More precisely speaking, it is focusing

on a development program of indirect procurement in that specific organization. The focus will be on analysing the current situation and comparing it to available research knowledge about the phenomenon. Also, in accordance with the characteristics of a case study, this thesis will generate a solution for the company.

### *Qualitative methods*

Case studies are considerably more often based on qualitative methods rather than quantitative, still both methods can be used (deMarrais & Lapan, 2004, 219). As pointed out earlier, qualitative methods are used in this study as well. There are multiple possible data collection methods that can be applied in a qualitative case study such as; interviews, observations, documents, statistics etc. It is recommended to use more than one data collection method in order to enrich knowledge about the case and to reach a reliable research outcome. (Eriksson & Koistinen 2014, 30-31)

One of the most common data gathering methods for qualitative research is to use interviews (Eskoja & Suonranta 1998, 86). Its purpose is to find out what the interviewees really think about the issue in hand, their thoughts, opinions, perspectives, or descriptions of specific experiences (deMarrais & Lapan, 2004, 53). Qualitative interviews are detailed discussions between the interviewer and the interviewee about the phenomenon being studied. Commonly, an interview guide is developed but it is not necessarily used as a standard protocol in every interview. Because each interviewee comes from different background their knowledge about the issue is unique thus the questions should be specified to fit each participant. (deMarrais & Lapan, 2004, 53) This is important specifically with indirect procurement, because people involved usually work in different parts of the organization and possess a varying set of knowledge. There are several types of possible interview methods, from which this thesis is going to use semi-structured theme interviews. These interviews are based on the interviewee's own ideas rather than pre-thought answers. The interview is open and thus gives room for further discussion and more precise questions. (Eskoja & Suonranta 1998, 86) This will give the interviewee the opportunity to answer broader questions on the basis of their own information. The role of the interviewer is to listen and to ask supplementary questions if necessary.

Besides semi-structured theme interviews, other methods are also used to increase the depth of the analysis and the reliability of the research. A numerical spend analysis will be conducted on the basis of spend data. Spend analysis have been seen as an important starting point for both purchasing strategy and category management process, which is the reason it is also incorporated into this thesis. The purpose of the analysis is to create a robust foundation for the strategy, find out the current status of indirect spend, and expose potential development areas.

The writing process took place in the headquarters of the case company. This made it possible to gather knowledge by observing the current practices of indirect procurement by taking part of the purchasing process. While working in the company some informal conversations with other employees have taken place. These conversations have been taken into account when forming a perception of the company's procurement. Finally, other relevant information such as procurement guides, regulations, process charts etc. were identified from the company intranet.

#### *Data collection*

A total of seven management interviews were conducted for the thesis between March 2016 and May 2016. The interviewees were selected on the basis that as broad understanding of the current state of the indirect procurement could have been made. For this reason managers from different functions were chosen. Six out of seven interviewees worked in Finland and the seventh interviewee worked in the UK. The managers in Finland were largely responsible of the procurement on a global scale whereas the manager in the UK were chosen in order to identify the practices on a local scale. Interview request were also sent to Switzerland, but they were never reached. A comprehensive list of the interviewees and accurate dates are set in Appendix 1.

The interviews started by introducing the background of the work and the interviewee. After that the interviews proceeded according to the interview questions presented in Appendix 2. The interviews in Finland were carried out in a peaceful negotiation rooms between the interviewee and the interviewer, without any outside distractions. The interview of the UK manager, on the other hand, was conducted by phone. Sufficient amount of time were scheduled for the meetings in order to go through all the themes with

care. They lasted approximately 30-50 minutes each. The interviews were transcribed in a more reasonable form and coded so that similar themes could have been highlighted from separate interviews.

The data for the spend analysis originated from a third party service provider, from which the case company outsources major part of its financial operations. This company had collected direct and indirect spend data from ten different European countries (Germany, Switzerland, Finland, Hungary, Italy, United Kingdom, Sweden, Norway, Austria, and Poland) from two years (2014 and 2015). They had also made some data categorization, data cleaning, and currency changes so that it would be in a more easily approachable form. That package gained from them contained eight different files, in which Hungary, Italy and UK were grouped together and the rest had their own files.

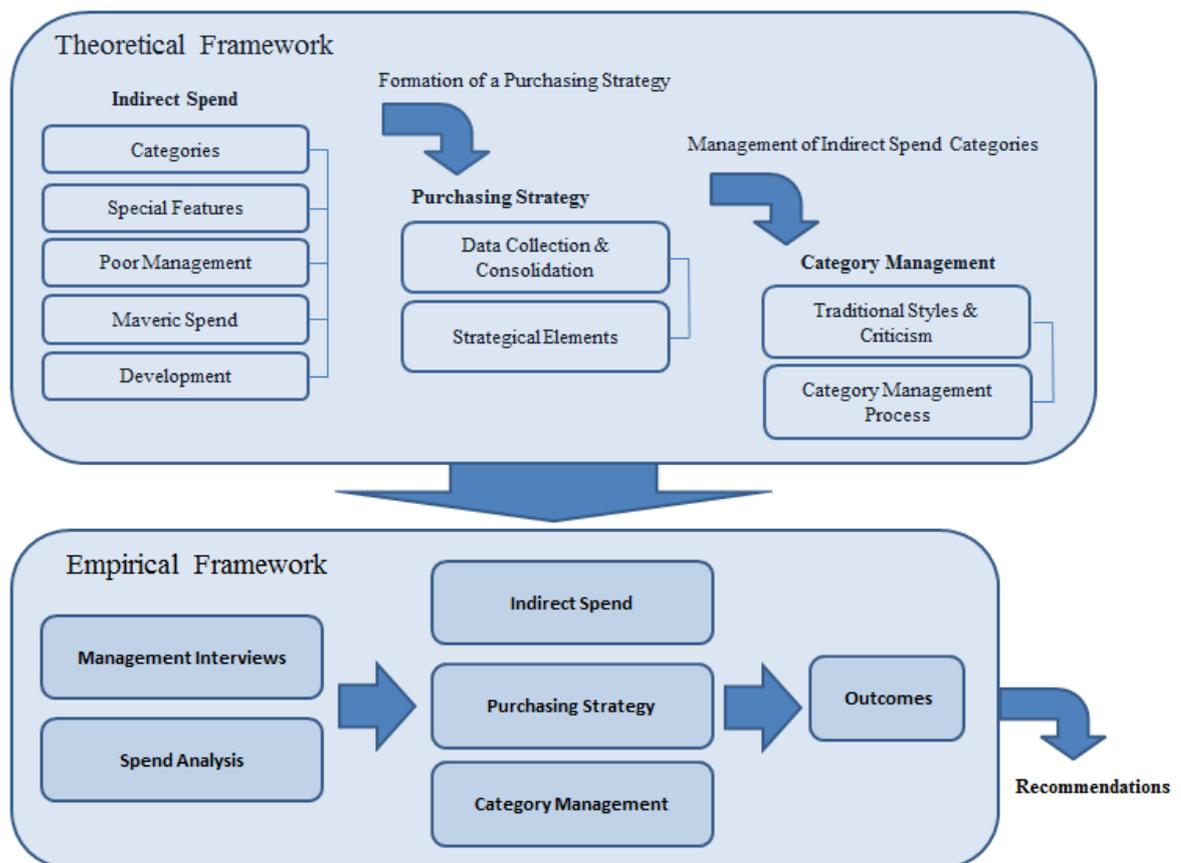
The first thing to do with the data was to combine it all so it would be more easily analyzable. The packages still had some differences, which is why they needed to be further organized. In addition, two countries (Finland and UK) had already started using the new ERP system at the end of 2015, which also created some differences between the files. After the classifications the data contained over 900 000 rows of invoice data.

#### **1.4 Structure of the study & Research framework**

The study proceeds in the following manner. The first section is the theoretical part of the study. It is divided into three distinct chapters, which follow the research framework presented in Figure 1.

The first chapter will explore the research concerning indirect spend. The main goal of this chapter is to identify the specific features of indirect spend in relation to direct spend. It tries to find evidence to the argument that the procurement of indirect and direct items is quite different and that they face different challenges. The chapter will also focus on the management of indirect spend. It will explore the main issues behind the poor management by finding out what problems other companies have had through existing case studies. This will help the analysis later in the empirical analysis because by recognizing what problems others have had in the same situation it will make it easier to recognized the problems in

the case company as well. Also, it will briefly explain the area of maverick spend, which is often seen as a huge problem with indirect procurement. Finally, the chapter will review the recommendations about the right way to manage indirect spend that are found in the literature. All in all, this chapter will work as a basis for the following chapter; purchasing strategy.



**Figure 1:** Research framework

The goal of the second chapter is to gather knowledge about the formation of purchasing strategy. It will start by identifying the importance of data collection in the strategy building process and explain the how the data should be analyzed and used. Distinct phases of the analysis are reviewed in order to help the empirical analysis later on. The following sections will explore the strategic elements of the purchasing strategy keeping in mind the finding in the previous chapter. Each strategic element will be described very carefully by exploring the risks and benefits associated with them but also trying to identify their suitability for indirect items.

The last theory chapter is going to explain what has been written about category management in purchasing in order to build basis for the third research question. The chapter will begin by identifying the traditional ways of categorization and the criticism they have faced during the years. It will explore the argument that these traditional ways are not suitable for the management of indirect items. Secondly, the chapter will focus on the actual category management processes.

The empirical part of the study will explore the specific features of indirect procurement within the case company. The aim is to find out how the indirect procurement is currently managed within the case company, what the strategic level of the procurement is and what might be the main challenges that the company is facing with their procurement. The empirical part will mirror the findings from the theoretical part in order to find recommendations for the case company.

## **1.5 Definitions**

*Indirect Spend:* The procurement is generally divided into two distinct dimensions; direct (production oriented) and indirect (non-production oriented) procurement. Indirect products and services are used in everyday operations, whereas direct materials are only used in manufacturing (Joong-In & Shunk, 2004). According to Gebauer & Arie (2001) both of these should be emphasized and managed differently.

There are many definitions for indirect spend, but the unifying factor for all of these definitions is that these goods and services are not directly linked to the finished products or services offered to the customers (Carter et al., 2003; Cox et al., 2005; Payne & Dorn, 2011). Some authors are using the concept of non-production related purchasing to reflect indirect spend. This definition refers to products and services that are not in the main operations of the organization (De Boer et al., 2003). In addition, the concept of minor procurement is also used (Haake & Seuring, 2009). From now on, this thesis is going to use the term indirect spend to refer to products and services, used in day-to-day operations, that are not directly linked to the finished products.

*Maverick Buying:* Maverick buying (MB) is an area of non-compliant work behavior, which many organizations suffer from (Karjalainen et al., 2009). This topic has been

studied very little despite the fact that people who carry out procurement are constantly faced with atmosphere that promotes dishonesty (Badenhorst, 1994). Maverick buying can be described as the “purchase of goods and services without using the company’s formally defined processes and authorized vendors (Angels & Ravi, 2007).

*Purchasing strategy:* According to Watts et al. (1995, 5) purchasing strategy can be defined as “the pattern of decisions related to acquiring required materials and services to support operations activities that are consistent with the overall corporate strategy”. The strategic decisions should be based on the unique situation and the circumstances the organization is facing (Cox et al. 2004). Many companies do not have a well thought strategy for indirect spend (Carter et al., 2003). According research by Cox et al. (2005) 15 per cent of the companies did not have any internal strategy and 11 per cent had not deployed any external strategies. Organizations without a robust strategy for indirect spend faced increased costs, impacts on quality and delivery and other factors such as uncontrollable supplier base (Cox et al. 2005).

*Category management:* The practice of segmenting the main areas of organizational spend on bought-in goods and services into discrete groups of products and services according to the function of those goods or services and, most importantly, to mirror how individual marketplaces are organized. Using this category segmentation, organizations work cross-functionally on individual categories, examining the entire category spend, how the organization uses the products or services within the category, the marketplace and individual suppliers (O’Brien, 2015, 6)

## **1.6 Limitations**

This thesis is going to focus on purchasing strategy formation for indirect products and services, whereas direct procurement is only used as a comparison. Some studies have focused only on some areas of indirect procurement such as IT or services, whereas this thesis is exploring all indirect items in the case company ranging from “straight-forward” office supplies to more complicated machines and devices.

It is important to speak about the context of the study because the approach of case studies is contextual. Context refers to the surroundings of the case, and can be defined broadly or narrowly (Eriksson & Koistinen 2014, 7). The context of this study is defined by the industry in which the case company operates in. The company is a consultancy firm which restricts the context to service industry. For this reason, the work is targeted for a service company that does not have a centralized purchasing function.

The purpose of case-studies is not to build generalizations, but rather to focus on the unique features of the case. Generalizations can be made when several studies of the same phenomenon are gathered together. (deMarrais & Lapan, 2004, 218) This study will focus on the unique features of the case and it does not try to create generalizations. The results will be influenced by multiple different factors such as the industry, the company, the maturity of procurement and other internal and external factors. Nonetheless, the thesis will provide a building block for further research within the same phenomenon.

The thesis looks into the elements of purchasing strategy with the special features of indirect spend. The research could be extended into many different directions, however, within the limits of the thesis, it would not be possible to explore all the possible subjects. Thus, the thesis is only going to focus on purchasing strategy formation and not on issues such as implementation of the strategy or strategy performance measurement. The thesis also leaves change management outside the study even though it is a very relevant subject when indirect procurement is being developed. The elements of category management are described in a broad manner. The category management process itself is a long process, which is why the descriptions of individual tools and activities are left outside the boundaries of this thesis.

## **2. THEORETICAL PART**

This chapter will present the current research and knowledge about indirect procurement, purchasing strategy and category management. Purchasing strategies have already been studied a lot by researchers and a lot of relevant information could be found around the subject. However, indirect procurement and category management have not gathered so much of interest. Because of the lack of research, few academic books are used to reinforce the theoretical content of the chapter. The findings of this chapter will work as a guideline in the empirical part later on.

### **2.1 Indirect spend**

Even though indirect spend have gained some attention from organizations, the lack of research is still conspicuous by its absence. There have only been two studies concerning the strategies for indirect products and services. There was a critical report by Carter et al. 2003 based on several case studies. It revealed the most important internal and external methods that companies use to identify, manage, and reduce their indirect spend. They also found several tactics the companies used with their indirect procurement. Cox et al. (2005) further continued the studies by analyzing 124 organizations to identify which strategies were mostly used at the time for indirect spend. These strategic elements are later discussed in the chapter 2.2.

On the other hand, de Boer et al. (2003a), another CAPS research (Fearon et al. 1995), and Sitar (2011) have focused on the issue of organizational design by exploring the role of purchasing function in indirect procurement. Still, majority of indirect procurement research have been exploring the connection between emerging technologies and indirect procurement (Gebauer et al. 2000; Gebauer et al. 2003; Joong-In & Shunk, 2004). But also, indirect items have been noticed in studies for other topics such as maverick spend (Karjalainen et al. 2009).

This chapter is going to identify the specific features of indirect goods and services. It will start by exploring the different range of products and services that are usually thought as indirect in organizations. After that, the differences between direct and indirect items are

defined in order to verify the argument that these two should not be managed the same. Finally the chapter will focus on the management of indirect procurement.

### 2.1.1 Categories of indirect spend

There are multiple different styles of categorizing indirect spend (Kapoor & Gupta, 1997; Carter et al., 2003; Iloranta & Pajunen-Muhonen, 2008, 366; Payne & Dorn, 2011), and the best solution depends on the organization and the situation. The categorization of indirect goods and services will be explored later in the chapter four, yet the main categories and some indicative examples are adapted from Iloranta & Pajunen-Muhonen (2008) in table 1.

*Table 1: The main categories of indirect spend and some indicative examples.*

<b>Group</b>	<b>Examples</b>
Facility & Infrastructure	Buildings Technical systems & services Maintenance & repair Energy Security Waste management Cleaning services
HR	Recruiting Travelling Accommodation services Lunch restaurant and catering Working clothes Health care Training and education Consulting services
IT & Data Transmission	Machines and devices Computers and software IT-systems Phones Support services Printers
Office Supplies	Office supplies Books and professional literature Packing materials Brochures and marketing material
Other Services	Courier services Marketing Legal services Communications

As we can see from the table 1, the categories of indirect spend are quite diverse. The items are ranging from small office supplies such as pens and papers to large items such as office buildings. Also the complexity of the products and services varies a lot. There are simple packing materials but also high-end IT machines and –systems. The next chapter will define the nature of indirect items in more detail comparing them to direct items.

### **2.1.2 Differences between direct and indirect spend**

One objective of this thesis was to find out the specific features of indirect spend in order to help the development of purchasing strategy. As noted earlier, the procurement of indirect goods and services should not be managed the same as direct goods and services. This chapter will compare these two spend types in the light of current scientific knowledge.

Compared to direct procurement indirect procurement is more diverse and it contains more products and services (Gebauer & Arie, 2001). Buyers typically spend a great amount of time preparing orders, managing queries and controlling invoices (Puschmann & Rainer, 2005) Due to this, there are a massive amount of operational work, which is usually shared between the central purchase department and with the end-users without any experience in procurement (Gebauer & Arie, 2000). As a result, procurement of indirect materials might take place all over the organization (De Boer et al., 2003b). On the other hand, direct procurement is usually linked to strategic business units (SBUs), and the spend is often managed by center-led teams (Carter et al. 2003). Also, direct procurement usually accountable to a Vice President of Supply Chain operations whereas indirect procurement might report to finance function (Gebauer & Arie, 2001).

One alarming factor is that, when non-professionals are buying indirect materials they usually prefer their own suppliers and make their own deals with the suppliers (Carter et al. 2003). Thus, over time, supplier relationships might even become increasingly subjective as stakeholders and sales representatives are working closely together (Payne & Dorn, 2011, 485).

Indirect procurement is usually budget-driven rather than value-driven, meaning that people might be buying because they have excess money in their budget and not because of the real value of the product or service (Porter, 1999). This might be because indirect procurement is seen as a clerical function rather than strategic function (Gebauer & Arie, 2001). Table 2 summarizes the main differences found in this chapter.

*Table 2: Differences between direct and indirect procurement*

	<b>Direct Spend</b>	<b>Indirect Spend</b>
<b>Amount of supplier</b>	Few	Many
<b>Amount of categories</b>	Few	Many
<b>Stakeholders</b>	Few, expert	Many, non-experts
<b>Location</b>	Centralized	All over the organization
<b>Relationship</b>	Objective	Subjective
<b>Reporting</b>	Vice president of supply chain	Finance function
<b>Perspective</b>	Strategic	Non-strategic
<b>Demand</b>	Predictable	Non-predictable
<b>Price</b>	High	Low
<b>Supply markets</b>	Global	Either global, regional or local

As presented earlier in table 1, indirect spend contains a broad variety of categories, ranging from “straight-forward” packing materials to more complicated machines and devices. The demand for indirect products and services is usually quite hard to predict since they occur in unregular basis (Gebauer & Arie, 2000). The unit prices for indirect items are usually quite low, the products and services are not strategically meaningful for the organization, and the overall costs are often left without attention because of insufficient data (Payne & Dorn, 2011, 583). Indirect spend is usually locally controlled and therefore it might be more problematic from the managerial point of view. Challenges may appear in segmenting the spend between separate functional areas (Carter et al. 2003).

### **2.1.3 Reasons behind poor management in indirect spend**

According to Kapoor & Gupta (1997) indirect procurement is often poorly managed because only a small amount of organizations have given sufficient amount of attention to them. Many large companies, such as Motorola, have suffered from relatively high cost of procurement and long cycle times caused by inefficient indirect spend (Gebauer et al.

2003). According to a case study the three biggest reasons for Motorola's inefficiency were:

1. *Buying process was paper-based.* Because of the non-strategic nature of indirect spend, no one had the control over that function. This resulted complicated, non-standardized and detached processes, mainly based on paper.
2. *The actual buying power was not leveraged properly.* Because of the decentralized nature of procurement department Motorola suffered from lack of internal visibility, low control over corporate contracts and insufficient knowledge about corporate spending. They had no information what was bought by whom. Purchases were made ad hoc, and many times different units negotiated with identical suppliers. For example, suppliers in office supplies were cut down from 300 to 1 in the development phase.
3. *The procurement was badly standardized.* Since no one had control over the indirect spend, procedures were managed independently. This resulted fragmentation, lack of control and poor optimization of the processes. (Gebauer et al. 2003, 134-135)

Kapoor & Gupta (1997) have made an broad case-study based on research about the issues behind bad management of indirect spend. They identified three noteworthy problems leading to poor management; inadequate information, insufficient resources and improper techniques. Next, these issues are discussed more closely.

Only a small number of companies really know what they are purchasing, the main reason for this is, that the information systems are badly designed. Organization databases have often thousand of codes and users, making the information base really confusing. Thus, knowledge about volumes, unit costs, pricing or quality is hard to get. (Kapoor & Gupta, 1997) Without knowing what is being bought by whom and how much it must be hard to manage the spend and create strategies. Data gathering and spend analysis is further discussed in chapter 2.2.1.

No more than 20 per cent of indirect purchases are approved and negotiated through a formal purchasing process. People responsible for these purchases often do not have necessary sourcing and negotiating skills or they are busy with other duties. This might lead to rushed deals and sometimes to undesirable quality, timing and price. Even when indirect procurement is done by experts they simply might have too much work to outsmart

thousands sales and marketing personnel from hundreds suppliers. (Kapoor & Gupta, 1997)

In the ideal world, information about markets would be easily available and suppliers would continuously fight for deals. Nonetheless, this is not always the case with indirect procurement, instead gathering market information demands major efforts. Purchasing function should locate alternative suppliers and issue request for proposals (RFP). Unfortunately this work is usually left undone. Many companies only keep an eye on their current deals and renew and revise them without even thinking about other options. (Kapoor & Gupta, 1997)

Changes in indirect spend could be challenging because of the politically sensitive tension around it. People who have worked with a certain spend category for a long time might feel that they should have the power over the category. The employees who participate in indirect procurement often think that they have accomplished superior deals and service levels that would not otherwise be reached from the markets. Challenging the status quo could end up really difficult. (Payne & Dorn, 2011, 522)

#### **2.1.4 Maveric buying**

Formal agreements are made to reduce suppliers, increase leverage and reduce costs. To achieve these benefits, contract compliance is essential (Karjalainen et al., 2009). Nevertheless, when indirect procurement is decentralized in an organization, procurement becomes “wild” and every function and employee will act as they want inside the boundaries of the budget (Iloranta & Pajunen-Muhonen, 2008, 370). According to Chowdhary et al (2011) the problem is that a large part of organizations do not have appropriate processes and guidelines to focus their demand to chosen suppliers.

When an organization suffers from maverick buying it is hard to get answers to the following questions, which are rather simple but still very important when it comes to developing procurement (Iloranta & Pajunen-Muhonen, 2008, 371):

- What are we buying, from whom, from where and how much?

- What are the prices and price levels we are buying?
- How do we outline the money spend for buying?
- How do we follow the procurement and for whom do we report?
- From where do we get the information concerning procurement?
- Why do we buy certain products from a certain suppliers?

Iloranta & Pajunen-Muhonen (2008, 371) have a quite general perspective on the challenges organizations may face when concerning maverick buying. According to them, maveric buying will cause a huge amount of overlapping work and inefficiencies. Also, it is typical for maverick spend that receiving products are not tracked in any way. This makes it even more difficult to get a sense of abnormalities such as partial deliveries, post-deliveries, returns or compensations. After all, the most important factor is the financial management. No one really knows what is bought and how much does it all cost. Maveric buying can also lead to problems later in the life cycle of the purchase (e.g. warranty, support services, maintenance and spare parts). (Iloranta & Pajunen-Muhonen, 2008, 371)

Karjalainen et al. (2009) focuses more on challenges concerning off-contract purchases. Their study argues that maveric buying can damage the company in many ways. To begin with, these off-contract purchases will usually lead to higher prices because the formal agreements are based on leveraging volume to gain discounts from selected suppliers. The off-contract purchase price might sometimes be cheaper, however, the total costs is usually larger due to transaction costs for ordering, invoicing and payment. Cost reductions in formal agreements are usually based on certain purchasing volumes. Large amount of maveric buying might prevent achieving these levels and, ultimately, achieving desired discounts. (Karjalainen et al. 2009)

**Table 3: Forms of Maverick Buying (adapted from Karjalainen et al., 2009)**

<b>Form</b>	<b>Description</b>	<b>Solution</b>
Unintentional MB	Lack of knowledge about purchasing processes and negotiated contracts	Provide information about contracts. Strong leadership is a must.
Forced MB	Practical reasons preventing preferred actions (e.g. lack of capacity with contracted suppliers)	Organizations must accept that there will always be forced MB to a certain degree
Casual MB	Employees are aware of the processes but still do as they please. Not feeling a need to change. Lack of guidance.	Educating employees about TCO. Strong leadership is a must.
Well-intentioned MB	Employees think they are Doing the best thing for the company while ignoring existing processes and contracts	Educating employees about TCO. Strong leadership is a must
Ill-intentioned MB	Employees are aware of the processes and able to use it, but still protesting new processes. Resistance to change/opportunism.	Align incentives to support correct behavior.

Table 3 summarizes the different forms of maverick buying according to Karjalainen et al. (2009). The form of maverick buying might be due to many different reasons such as lack of knowledge, lack of capacity with contracted supplier, lack of guidance or resistance to change. Each form of maverick buying should be dealt with a proper solution such as providing information and guiding employees.

### **2.1.5 Development of indirect procurement**

As mentioned earlier, there is a great improvement potential with indirect goods and services. Companies need to move from "wild" maverick purchasing into systematically

organized and controlled purchasing in order to increase the efficiency and the quality of the process. When professional purchasing perspective and -knowledge is extended to indirect spend categories, it is possible to gain substantial cost and operational savings. (Iloranta & Pajunen-Muhonen 2008, 372)

A purchasing strategy is the foundation of any development activities in procurement also in the procurement of indirect goods and services. The development of the purchasing strategy is the same for indirect and direct procurement. The most important thing in a strategy is to take advantage of the whole buying power of the organization, to reduce and unify the variety of items being purchased, and to systematically search for potential categorical savings in item prices and purchasing processes. (Iloranta & Pajunen-Muhonen 2008, 372)

One of the main goals in managing indirect spend is to increase the efficiency in managing both processes and costs. The biggest change the company must do is to implement a new managing and controlling model for their indirect spend. Usually, the starting point is that the procurement of indirect goods and services is highly decentralized in separate business units, departments, and groups. These units usually have their own budgets within which they operate in. Thus, it is crucially important to ensure that the managers of these units and support functions are committed for the developing a common management model and purchasing strategy. (Iloranta & Pajunen-Muhonen 2008, 372-273)

The development of indirect procurement aims to generate volume advantages and better prerequisites for managing supplier markets by centralizing the purchases of indirect items. These goals, in most cases, require a reduction in the number of suppliers. When the procurement is centralized to a fewer suppliers it is possible to gain different economies of scale and also it creates better conditions to exploit supplier collaboration. (Iloranta & Pajunen-Muhonen 2008, 375)

## **2.2 Purchasing strategy**

Strategic sourcing of indirect spend provides organizations spend visibility, objective decision making, and managerial tools to rationalize the time and efforts of an sourcing team. Visibility refers to business processes, operational issues and spend information that could otherwise stay unnoticed. Objectivity means transforming indirect spend from individual purchases to a series of coordinated actions. Ultimately, a well-defined strategic process grows into a managerial tool that will generate success. (Payne & Dorn, 2011, 583)

It is argued that a spend analysis is the basis for every purchasing strategy, which is why this chapter will begin with data collection and consolidation. It will identify the need for spend analysis and the way it should be performed. The following sections in this chapter are going to focus on the components of the purchasing strategy. Ahtonen & Virolainen (2009) argue that there are several crucial components of purchasing strategy that should be included in every strategy. These components are: make-or-buy decision, the size and geographical location of the supply base, competitive strategy or collaboration, centralization/decentralization and purchasing consortia (Ahtonen & Virolainen, 2009). Besides these components the chapter will also explore other elements such as standardization and hybrid model (combination of centralized and decentralized models) because these are highlighted in other academic literature concerning indirect procurement (Cox et al. 2005; Carter et al., 2003).

### **2.2.1 Data collection and Consolidation**

It is possible, that separate units within the organization are buying the same products or services from different (or even the same) suppliers at various price tags. By doing so, the organization loses its purchasing leverage. (Cox et al., 2005) Only a handful of organizations really know what and how they purchase. Due to this, procurement managers are making their strategies and decisions based on intuition rather than real knowledge. (AberdeenGroup, 2004) Every strategic sourcing project should start with a data collection, especially if the spend is supposed to be leveraged. It begins with gathering data from the databases and analyzing it to define potential development areas. (Payne & Dorn, 2011, 594)

The main purpose of spend analysis is to find out what is being purchased, what suppliers are used and who is buying (Monczka et al., 2011, 688). According to Marmaris & Pandit (2008) spend analysis can generate up to 25 per cent savings in procurement. These savings can come in many different ways such as (1) combining identical purchases; (2) supplier base reductions; (3) cutting down maveric spend; (4) reducing spend by other departments; (5) wider use of more efficient contracting methods; and (6) creating contractual methods to mitigate risk and enhance supply assurance (Monczka et al., 2011, 688). In addition, information on what have been purchased in the past will help the negotiations process with new contracts (Payne & Dorn, 2011, 707).

The types of spend data that are normally reachable are; purchase orders (PO), invoices, preferred supplier lists, supplier contracts, general ledger entries etc. (Chowdhary et al., 2011) Finding prominent data might end up being quite problematic because the management of indirect spend is often highly decentralized, especially with widely spread organizations. Also, huge amount of suppliers and products will make the process even harder (Payne & Dorn, 2011, 525).

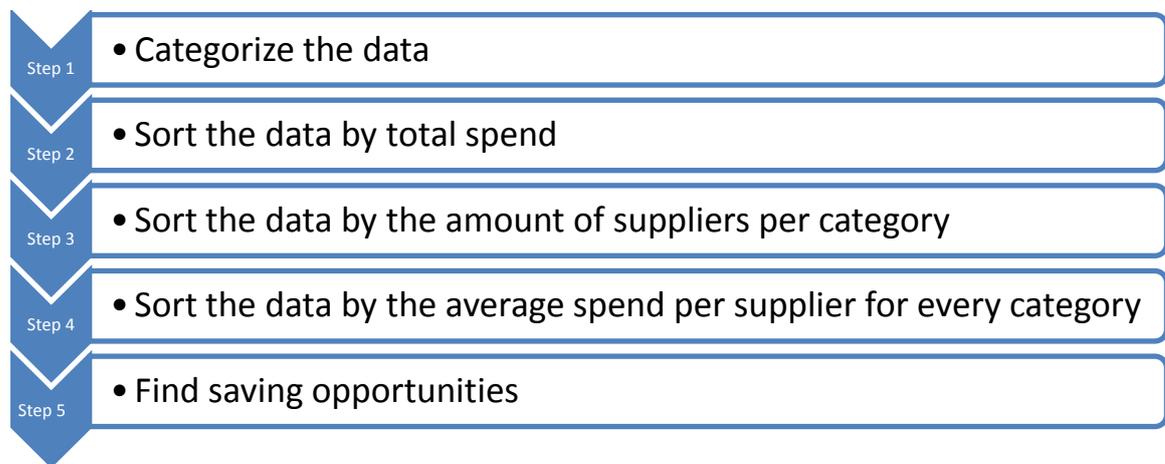
There are many different ways of how spend analysis can be made and there is no correct way to do it. Monczka et al. (2011, 199-200) offers a simple process (figure 3), how spend analysis can be conducted in any organization. It is required that the company has already collected a sufficient data to start with.

First step of the process is to categorize the data by commodity. The categories can vary from company to company but there can be found categories such as travel, IT, marketing, office supplies etc. After categorization, the total spend on each category should be calculated and categories should be arranged according to it. From this chart managers can instantly see which categories holds most of the spends and, therefore, have the largest opportunity for development. (Monczka et al., 2011, 199)

From the commodity sort, one should identify which categories has the largest amount of suppliers. After doing so, the categories should be sorted based on the results. If some

categories stand out with a large number of supplier it might indicate that some benefits could be achieved through supplier base reduction. (Monczka et al., 2011, 199)

Next step is to calculate the average spend per supplier for every commodity and sort the commodities based on the results. A low value in this chart would indicate that the company might be using too many suppliers in that category. Final step of the process is then to identify possible saving opportunities. (Monczka et al., 2011, 199)



**Figure 2:** Spend analysis process. (Monczka et al., 2011, 199)

The results gained from the analysis provided above is only a starting point of the spend analysis. There are a lot of other things that the organizations needs to pay attention to, such as previous contractual terms and conditions, quality levels, the scope of work, order-to-payment process, the shipping and receiving process, and an understanding of the relationship with existing suppliers. The best way to gain this additional context to the data is to perform end-user interviews and supplier interviews. (Payne & Dorn, 2011, 722)

The following sections will focus on the elements of purchasing strategy, these are; make or buy decision, the size and geographical location of the supply base, centralization, decentralization and hybrid model, standardization, competitive strategy and collaboration, and purchasing consortia.

### **2.2.2 Make or Buy decision**

For a long time companies have been relying on outsourcing as an attempt to increase their competitiveness (Gilley & Rasheed, 2000). The variety of definitions for outsourcing is particularly wide, ranging from specific outsourcing such as IT: “significant contribution by external vendors in the physical and/or human resources associated with entire or specific components of the IT infrastructure in the user of organization” (Loh & Venkatraman, 1992, 9) to a more wider perspective including all products and services that are purchased outside the company (Gilley & Rasheed, 2000), and further to a strategic outsourcing: “organizing arrangement that emerges when firms rely on intermediate markets to provide specialized capabilities that supplement existing capabilities deployed along a firm’s value chain” (Holcomb & Hitt, 2007, 466). This thesis is considering outsourcing as a strategic decision of an organization, thus relating on the last definition.

According to Holcomb & Hitt (2007) make or buy decision is based on transaction cost economics (TCE) and resource-based view (RBV). In TCE there are two alternative governance structure: markets and hierarchies, from which organizations should choose the most economical one (Williamson, 1979). The market option equals outsourcing whereas hierarchies refer to insourcing (Ahtonen & Virolainen, 2009). On the other hand, RBV focuses on the company capabilities in vertical integration decisions. This is based on the idea that companies perform similar activities with varying costs depending on their capabilities. (Argyres, 1996)

Outsourcing is superior when the levels of uncertainty and complexity are low, the possibility of opportunistic behaviour is minor, there are several potential suppliers to choose from, and transactions do not need any special investments. Insourcing, on the other hand, is preferred when uncertainty, the possibility of opportunistic behaviour, complexity and asset specificity are high, the amount of suitable suppliers is low, and the level of trust is insufficient. (Blomqvist et al., 2002)

According to Quinn & Hilmer (1995) the underlying strategic factor concerning make or buy decision is whether an organization can hold a competitive edge by performing an activity by itself. The managers should think about following questions: can we perform

this activity with less resources, can we perform it better or with some unique capability, on a continuing basis? The activity should not be outsourced if one or more of the above mentioned dimensions is critical to the customer and if the company is able to perform that function uniquely well. (Quinn & Hilmer, 1995).

There are many motives pushing companies towards outsourcing. According to Jennings (1997) outsourcing provides economies of scale, allows companies to focus on their specialized capabilities, increases leverage, and helps organizations to be more responsive. Outsourcing also increases flexibility while demand is volatile, it helps reduce uncertainty and transfer risk, and also provide economies of scale. These factors would eventually reduce overhead costs, production costs, and investments in facilities and equipment. (Holcomb & Hitt, 2007) In addition, Quinn & Hilmer (1995) point out that external markets could provide products and services with better quality without investing in workforce, processes or technology.

According to Adeleye et al. (2004) the risks concerning outsourcing are often ignored. Anyway, it is clear that outsourcing is not entirely risk free option (Ahtonen & Virolainen, 2009). Quinn & Hilmer (1995) have divided the main risks of outsourcing into three parts. The first concerns the loss of important skills and the development of wrong skills. The company might outsource something that seems minor and what later turns out to be strategically important. The supplier, on the other hand, could use this information to assist competitors or enter the markets by them self. Second, the company might lose the benefits of cross-functional interaction. Finally, the company might lose the control over chosen suppliers. Disagreements between byers and suppliers could then lead to problems. (Quinn & Hilmer, 1995)

Commonly outsourcing has been used particularly with indirect non-strategic goods and services (Jennings, 1997). This might be due to the fact that indirect products and services do not have the characteristics of high value and high importance to business performance (Cox et al. 2005). As previously observed, there are usually many suppliers available in the categories of indirect goods and services. They are often simple and the possibility for opportunistic behaviour is minor. Therefore, it could be argued that the preferred option for indirect goods and services would be markets. Despite that, it should be remebered that

every company and situation is unique and that the decisions about outsourcing should be carefully thought.

### **2.2.3 The size and geographic location of the supply base**

According to Ahtonen & Virolainen (2009) suppliers and supplier relationships are placed at the core of purchasing strategy. Therefore, decisions concerning the optimal size of the supply base have been in the minds of managers for a long period of time (Sarkar & Mohapatra, 2009). It has been universally agreed that the amount of suppliers should be reduced in order to gain a more easily manageable supply base. Nonetheless, the size of the supply base is largely based on the nature of the products and services provided (Kauffman & Leszczyc, 2005), so a common practice about the number of suppliers is difficult to give.

When a company is using several suppliers they are engaging themselves in a strategy called multiple sourcing. In this strategy, every supplier responds to the specific needs defined by the buying organization. This layout is pushing suppliers against each other which intensifies the competition and thus generates better prices. (Zeng, 2000) Increasing competition also results lower levels of uncertainty compared to single sourcing (Min & Galle, 1991). On the other hand, single sourcing lies on the idea of a company to reduce the number of suppliers to a minimum (Zeng, 2000). According to (Cox, 1996) the aim is to cut down transaction costs and economize without having to pay for integration. Finally, companies might be forced to sole sourcing which refers to a situation where different market factors (location, exclusive design, customer specification etc.) have built up an situation where the company can only use one supplier (Quayle, 1998).

Sarkar & Mohapatra (2009) have used three parameters when defining the optimal size of supply base. First parameter is concerned with the replenishment lead time. If a company is using single sourcing, and some problems (labour, financial technological, etc.) occur, the supply of the product or service would be delayd until the problem is solved or a new supplier is found. By using multiple suppliers these supply shortages could be easily covered. Secondly, the company should consider the costs associated with supply base. Using large supply base increases the amount of operating costs and prevents the company

from gaining price discounts. Also, managing a larger supply base is unefficient and requires a lot of from the managers. Small supply base, on the other hand, would increase the possibility of shortages and thus increase the costs. Finally, companies should consider the criticality of the item. Criticality should be thought as how much influence it has on the profit of the company. (Sarkar & Mohapatra, 2009)

Kauffman & Leszczyc (2005) point out that low-value commodity type products with only few attributes and price differences would not benefit from the use of several suppliers. Most of indirect goods can be thought as this kind of items. If supply disruption will occur, these products can easily be found from the markets and could be bought from other suppliers. Also, indirect products and services are not usually critical to the company thus the profit impact associated with the non-availability would not be significant. However, there are some exceptions with MRO (maintenance, repair and operation) items. For example, if a certain part of a machine is not available when needed, it could stop the whole production and therefore making it quite critical for the company.

Besides the size of the supply base, organizations should also consider the geographical location of their suppliers. As noted earlier, indirect items are bought globally, locally and regionally. According to Tunisini et al. (2011) local procurement could lead to knowledge and innovation development, flexibility of productions and delivery, and cost efficiency. On the other hand, global sourcing could lead to lower prices, better quality and better availability (Cho & Kang, 2001). According to Ventovuori (2007) the choice of geographical area is influenced by the proximity of different units and the availability of suppliers in the market. He also points out that the main reason for grouping separate units on a regional basis was the lack of suppliers that would be capable of providing services for all units in a broad area.

#### **2.2.4 Centralization, decentralization and hybrid**

Centralization refers to a situation where planning and decision-making is concentrated for one group or location. Reverse structure, where planning and decision making is spread around the organization is then called decentralized. Hybrid model is a combination of the two and in recent years more and more companies are adopting this strategy. (Trautmann.,

2009) According to De Boer et al (2003a) a freely organized approach might not be the correct strategy for indirect procurement because of large amount of money involved with it. As it is, forming a supply management structure and building up accountability for indirect spend might be a better answer (Carter et al., 2003).

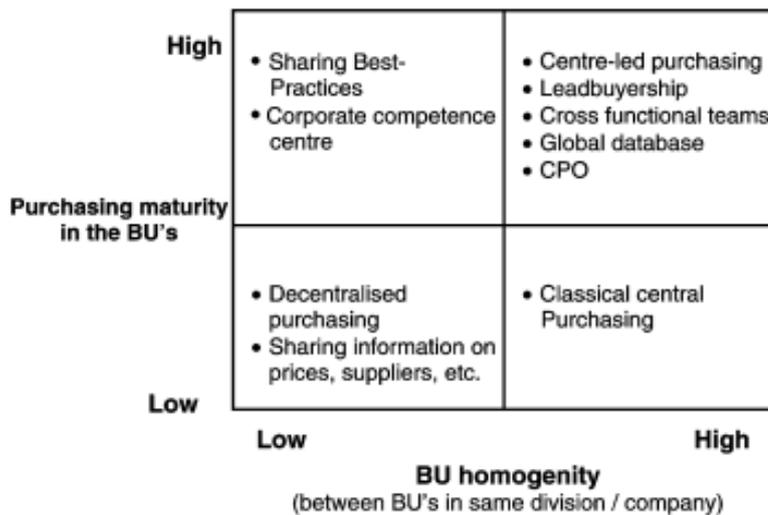
As noted previously, the purchasing function often has only a little control over indirect purchases. Anyway, it is found in the literature that by increasing the role of purchasing department in indirect procurement, major benefits could be achieved (De Boer et al., 2003a). De Boer et al. (2003a) have made a literature review concerning the subject and found different benefits and challenges (table 4) in linking purchasing department in indirect procurement. The benefits include among other things, cost savings, improved quality and product positioning, reduced cycle time and process efficiency. Challenges might be for example receiving acceptance, confidence and cooperation of the using department, gaining attention from management and problems gathering teams and other resources (De Boer et al., 2003a).

*Table 4: Main benefits and challenges of linking purchasing department in indirect procurement*

<b>Main benefits of linking purchasing department in indirect procurement</b>	<b>Main challenges of linking purchasing department in indirect procurement</b>
Cost savings	Receiving the acceptance, confidence and cooperation of the using department
Service and quality improvements	Gaining attention from management
Improved product positioning in the marketplace	Limited amount of procurement data
Reducing product or service cycle time	Problems with gathering teams and other resources
Better process efficiency	Competition between different business units or managers
Better control over costs	Emotional issues regarding how people want things to be done
Legal protection	
More carefully informed and prepared suppliers	

According to Rozemeijer (2000) the degree of centralization is affected by the level of maturity (professionalism) of the purchasing function and the business unit homogeneity (similarity of the procurement) (figure 3). If the procurement is alike and the purchasing maturity is low they suggest that the procurement is central led in order to leverage

volumes. If both homogeneity and maturity are high, central purchasing group will not work because decentralized groups would not accept it. Instead, cross functional teams are suggested. For high maturity and low homogeneity sharing best practices and information is the right way, whereas, if both homogeneity and maturity are low there are not much best practices to share. In this last quadrant decentralized purchasing with information sharing is suggested. (Rozemeijer 2000)



*Figure 3: Purchasing maturity and BU homogeneity matrix. (Rozemeijer 2000)*

Trautmann et al. (2009) have taken a category perspective about the centralization in global sourcing. They argue, that the selection of the centralization structure is highly dependent on the category what is being purchased. Because of this, they divided items into three categories based on the underlying motive behind global sourcing: economies of scale, economies of information/learning, and economies of process. They then provide the degree of centralization for each category. For example, items in the last category (office supplies, IT-consumables) should be bought decentralized in order to increase process efficiency whereas items in the economies of scale category (IT-hardware) should be bought using hybrid model. (Trautmann et al. 2009)

Increasing centralization and, thus adding more responsibilities to the purchasing department is important; yet controlling all the procurement activities might end up being an insuperable obstacle (Sitar, 2011). According to De Boer et al. (2003a) the creation of a

purchasing department that would be fully responsible for all indirect purchases should not be pursued because of organizational inefficiencies. Management should create a solid and credible framework for indirect procurement that is easy to understand and implement. This framework should guide people to self-organize but also, in certain situations, allow the involvement of purchasing unit. (De Boer et al., 2003a) More strategic activities such as long term contracting, preparation of purchase orders, supplier selections and supply base reductions should, however, be managed by purchasing department in order to achieve control, economies of scale and a uniform attitude towards suppliers (Sitar, 2011).

Carter et al. (2003) studied one global case company that had \$3.8 billion in indirect spend scattered all over the world. The company started to enhance its organizational structure and increase the role of purchasing unit. They formed a center led purchasing department for indirect spend along with the possibility for individual regions to carry out localized decisions. According to Carter et al. (2003) this structure could be a good way to organize indirect procurement in many large companies. For example, if the organization has many offices across the country it would be wise to find suppliers that offer nationwide service. But, this is not always the case because in some markets the company might end up paying more especially with products that have high freight costs in relation to total costs. (Payne & Dorn, 2011, 1449) By giving power to local units, some benefits could be obtained such as utilizing the local knowledge to have a better communication with suppliers and negotiate better prices with small local suppliers (Vesalainen, 2004).

### **2.2.5 Standardization**

The standardization of procurement can be conceptualized in three distinct dimensions: standardization of materials (i.e. replacing multiple products with a single product), standardization of processes (i.e. the level of standardization in global purchasing process), and standardization of purchasing staff (i.e. the degree of standardization in purchasing staff) (Quintens et al., 2006). This thesis is only going to focus on the first two dimensions as they have been identified as good practices in indirect spend (Carter et al., 2003).

Studies suggest that international sourcing could improve the performance of an organization (Samli & Browning, 2003). Sánchez-Rodríguez et al. (2006) further found

that global standardization in purchasing has a major positive impact on the organizational performance. It can help companies to stay in budgets, enhance the quality of products, get on-time deliveries and increase warehouse efficiency. According to Carter et al. (2003) standardization can help purchasing managers to save a substantial amount of time and help them to focus more on “non-routine” activities. Also, many other studies such as Quintens et al. (2006) found potential benefits with standardization. They found out that information sharing and the accumulation of knowledge will make it easier to categorize the materials and standardize the buying process (Quintens et al., 2006)

A major issues concerning globally standardized products is that how these products are eventually being purchased (Kotabe & Omura, 1989). One possible way to standardize the purchasing process is to use information technology (Quintens et al., 2006). According to Gebauer & Arie (2000) a recent trend in IT has been shift from complicated applications used with production-oriented purchasing to user-friendly applications suitable for indirect products and services bought by non-professionals.

By automating the requisitioning, routing, approval, and purchase order/release creation the company can save a great amount of time and money. Further, it could be possible to link e-catalogs (online list of products and services) to the purchasing systems, which would help to standardize the indirect products and services. (Carter et al., 2003) According to Gebauer & Arie (2000) this would tackle many objectives companies have when they are re-organizing their indirect purchasing process: eliminate procurement function as the “middleman”, reduce maveric spend, leverage purchasing power, gain better information and reduce supplier base. Gebauer & Arie (2001) later adds that online catalogs would provide up-to-date data and pricing information and it would replace paper and phone based processes with fast online ordering. Whereas, Sheng (2002) argue, that the benefits do not solely build up from direct cost savings, but also through improved efficiency.

### **2.2.6 Competitive strategy or collaboration**

According to Cox et al. (2005) the prevailing external strategy for indirect procurement seems to focus on long-term buyer-supplier relationships. Their research shows that 65.9

per cent of the companies used long-term external supplier relationships, whereas the second most used practices, short-term strategies, were only used by 29 per cent of the companies. Despite that, making decisions about supplier relationships is highly dependent on the concept of appropriateness. Taking into account the special features of indirect spend, long-term relationships might not be the best option. Because of low volumes and limited leverage in indirect procurement, a short term approach could be a better choice. (Cox et al., 2005)

Most companies have discovered that better quality, lower costs and time savings could be achieved by increasing supplier cooperation. For this reason, procurement departments strive to develop closer buyer-supplier relationships with their suppliers. (Moczka & Trent, 2005, 103) Organizations therefore no longer seek to compete against suppliers, but to develop a long-term relationship “alliance”, which aims to compete against other supply chains. These partner relations between companies have received much attention from corporate management as well as researchers. (Ploetner & Ehret, 2006) These relationships are based on win-win situation where both participants will gain and lose something (Spekman et al., 1998). Although the deeper supplier collaboration promises mutual benefits, these benefits are rarely understood in companies because of different interests between participants (Songini, 2001).

According to Vesalainen (2004, 47-55) the benefits of close cooperation can be divided into three parts; productional, logistical and product developmental. Production benefits are derived from the development of the physical exchange between the buyer and supplier. It is based on economies of scale, when the buying organization is moving most of its buying volume to one supplier. Logistical benefits, on the other hand, can be viewed from the perspectives of information flow and material flow. Transparency of information is the key factor in achieving efficiency in close relationships. Based on the information the participants get from the internal and external factors, they can make informed decisions. Also, material flow monitoring can be reduced when trust is high enough. The last benefit is based on the idea that suppliers in close relationship could take a bigger role in R&D (research and development) to improve quality, prevent schedule slippage and reduce prices. (Vesalainen 2004, 47-55)

Many organizations are building strong relationships with their suppliers while ignoring the possible risks (Corsten & Felde, 2005). In terms of success, it is important to take into account and recognize the downsides and risks of cooperation (Iloranta & Pajunen-Muhonen, 2008, 315). Although the aim of cooperation is to achieve mutual benefit, it is possible that the other participant behaves opportunistically collecting benefits at the expense of the other party. In close relationships, information exchange will increase significantly, which creates fear in many companies. Fear of opportunism and hiding information can potentially reduce the benefits derived from cooperation. (Moczka & Trent, 2005, 106) When the two participants sign an agreement there will be a dependency between them, which is a limiting factor regarding trade with other possible alternatives. (Iloranta & Pajunen-Muhonen, 2008, 316) According to Lyons & Krachenberg (1990) increased dependency could cause a significant risk.

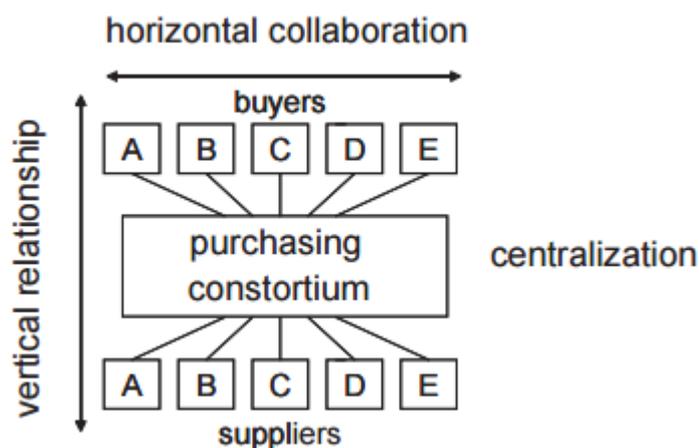
At the same time, traditional view aims to leverage the purchasing power in order to reach the lowest prices. Typical features include: many partners, supplier selection based on price, arm's length negotiations, short-term contracts and centralized purchasing. (Spekman et al., 1998) According to Kapoor & Gupta (1997) for a large portion of purchases, close buyer-supplier relationships are misplaced. These relationships are usually formed when the purchased goods/services are important for the buying organization and when there are different types of obstacles such as difficult purchase requirements and small amount of suppliers (Cannon & Perreault, 1999) or when relationships are strategically important and hard to manage (Spekman et al., 1998). As noted earlier, indirect products and services are not usually high value nor strategic. According to Cannon & Perreault (1999) more distant relationships are preferred when the purchase is less important, supplier markets are competitive and uncertainty is low. Despite the benefits of close relationships it could be argued that short term competitive relationships is a better choice for indirect goods and services.

### **2.2.7 Purchasing consortia**

As noted earlier, indirect spend usually consist of high volume and low value products. The buyer power with indirect products is quite low because it only covers a small part of supplier's sale. Due to this, even large multinational companies might find it hard to

negotiate discounts for their frame agreements. Nowadays, increasing number of organizations share their purchasing volumes, information and/or resources in cooperative consortiums (Schotanus et al., 2010) in order to gain more power in negotiations (Nollet & Beaulieu, 2005).

Purchasing consortia is quite widely defined in academic literature. It can be referred to communal buying, partnership purchasing, group sourcing, combined buying, and the list goes on. It seems that different terms are used in different situations depending on the industry, independence of the members and formality of the cooperation (Essig, 2000). This thesis is going to use the term purchasing consortia, which can be described as "horizontal cooperation between independent organizations that pool their purchases in order to achieve various benefits" (figure 4) (Tella & Virolainen, 2005, 162).



**Figure 4:** Theoretical framework of purchasing consortia. (Tella & Virolainen, 2005)

Advantages, which are normally gained from purchasing consortia, are lower purchasing prices, higher quality, lower transaction cost, reduced workloads, reduced (supply) risks, and learning from others (Schotanus & Telgen, 2007). The benefits can also sometimes go beyond the intended outcomes. In some cases, the collaboration have expanded to cover also information technology, human resources, banking and payroll (Johnson F. P., 1999). Tella & Virolainen (2005) point out that typically the benefits of purchasing consortia are quite similar to the centralized procurement. After all, it is not completely problem-free option. Johnson (1999) identified six different areas of difficulty in consortia purchasing:

coordination costs, uncertainty, standardisation and compliance, free riding, governance and declining cost savings.

Schotanus & Telgen (2007) argue that in most cases the advantages of consortium purchasing are higher than the disadvantages. Nevertheless, purchasing consortia can be considered as quite controversial. Theoretically the concept appears to be very tempting and achievable, but in practice many possible adversarial points appear. When companies are setting up consortia they should carefully examine certain strategic factors which play an important role in the success of the whole system. These are, for example, defining the criteria of how items are chosen and how the consortium is to be managed. (Ghaderi & Leman, 2013)

There are two ways to manage purchasing consortia. One is a cooperative structure, in which the procurement is divided between participants. The other, is a third party structure where a detached company performs the procurement process in accordance with the limits set by the participants. (Nollet & Beaulieu, 2005)

Nollet & Beaulieu (2005) have identified a five step strategic questioning for companies to make decisions about whether to participate in consortium or not. The first question concerns the benefits. Companies should explore the possible benefits case by case. What are the potential price reductions? What about administrative costs? Or utilisations costs? Some products and services can generate better savings than others, thus, companies should think about which of them are best suited for consortia purchasing. (Nollet & Beaulieu, 2005)

Question two is about how the purchasing consortia could affect the markets in long-run. Because of the power of large consortias, smaller suppliers might be forced to exit the markets or to merge with bigger companies. For this reason, in the long run, the only alternative for the group is to make contracts with oligopolies. Dealing with oligopolies would definitely harm the group as they would now be the ones setting the prices. (Nollet & Beaulieu, 2005)

The third question concerns the size of the consortium. One of the main reasons for consortium is to gain more power for the negotiations in order to gain better prices. Nollet & Beaulieu (2005) studied multiple health case purchasing consortiums in Quebec (Canada), one in USA and one in France. They found that especially the Canadian consortiums were not large enough to have a real negotiating power to deal with global suppliers. (Nollet & Beaulieu, 2005)

Next, companies should think about the characteristics of the members. If other companies in the consortium are working in the same markets, the possibility of opportunistic behavior should be taken into consideration. Organizations should consider what kind of information is shared with others and what kind of protection mechanisms are set. After all, working with other procurement professionals could help people to discuss and tackle common problems. (Nollet & Beaulieu, 2005)

The last question companies should ask themselves is that, who really profits from the savings. When the cost savings are one of the most important factors in purchasing consortium, organizations should know who really benefits from them. This question is perhaps more important to public enterprises, since gained saving could affect the upcoming budget. However, private companies could think about how large suppliers benefit from the additional economies of scale. (Nollet & Beaulieu, 2005)

### **2.3 Category management**

The items that companies purchases consist of very different groups of products and services that are purchased from very different markets (Iloranta & Pajunen-Muhonen, 2015, 104). According to Payne & Dorn, 2011 (733) separate categories must be identified in order to maximize the benefits in indirect spend. Within each category, purchasing managers can then point out different purchasing strategies (Schiele et al., 2011), and further tactical levers to support the category strategy (Hesping & Schiele, 2015). O'Brien (2015, 6) defines purchasing category management as follows:

“The practice of segmenting the main areas of organizational spend on bought-in goods and services into discrete groups of products and services according to the function of

those goods or services and, most importantly, to mirror how individual marketplaces are organized. Using this category segmentation, organizations work cross-functionally on individual categories, examining the entire category spend, how the organization uses the products or services within the category, the marketplace and individual suppliers”.

The category management in purchasing was initially started by Kraljic (1983), who discovered that products and services should be categorized by supply markets rather than technical characteristics. For example, old purchasing category “machines and devices” could have included only computers and telephones, whereas new category “IT & Data Transmission” would cover much broader range of products and services under same supply markets. During the last 30 years, however, the research about category management in purchasing have been stagnating even though it is a common practice in many companies (Heikkilä & Kaipia, 2009).

Heikkilä & Kaipia (2009) have made a research, which is one of the few articles focusing completely on purchasing category management. The study examined seven companies in order to find out how they are forming their purchasing categories and how it is related to organizing their PSM function. They identified several motivational factors for category management among case companies, these were: economies of scale, centralization of PSM, and improving skills and capabilities of PSM. They also identified that the ways of forming and managing categories varied a lot from company to company.

On the other hand, Trautmann et al. (2009) studied organizational design aspects in global sourcing and identified three contingencies that had a major role in integration of global sourcing: (1) category characteristics, (2) supply environment and (3) interdependence of the purchasing units. The focus was on integrated managerial decision making among separate units across the globe. They argue that in order to bring benefits in global sourcing, organizations must focus on category-level perspective because integration is based on categories.

There is also one academic book written by Jonathan O’Brien (2015) that focus completely on category management in purchasing. O’Brien is the CEO of the international purchasing consultancy with over two decades of experience working with corporate

procurement. His book provides a step-by-step practical guidance for managers to implement category management within their organizations. It is based on several case studies and years of experience O'Brien have acquired.

This chapter will first start by introducing the Kraljic's purchasing portfolio model and some other traditional categorizing methods that can be found from the literature. It has been argued that this traditional style might not be the best option for indirect procurement (Cox, 2015; Cox et al., 2005). For this reason, this chapter will examine the criticism that the models have received during the years. After that, the chapter will focus on category formation and -prioritization and lastly team formation and the actual category management process.

### **2.3.1 Traditional ways of categorizing**

In 1983, the Harvard Business Review published an article named "Purchasing must become supply management" written by Peter Kraljic (1983). This article indicated that purchasing could have a major effect on the profit of a company. During the last 30 years, the purchasing portfolio analysis, presented in this paper, has been the mostly used method in purchasing category management. According to Nellore & Söderquist (2000) this model is all about optimizing the way different capabilities of suppliers are used. This optimization is based on the total cost of the item and the value gained from obtaining them (Dubois & Pedersen, 2002). Turnbull (1990,7) also point out, that "the portfolio concept is a useful managerial tool for enforcing a discipline in the allocation of the company's limited resources to an optimal combination of business operations which will maximize long-term returns at given level of risk".

This model is a simplified way of collecting data, forecasting future supply scenarios, identifying possible options, and developing individual supply strategies. According to this method, managers are advised to analyze the complexity of the supply markets (high/low) and the importance of the purchased item (high/low). Compared to previous techniques, which only focused on internal dimensions, Kraljic's matrix also considers external dimensions. (Kraljic, 1983)

The complexity can be defined in terms of availability, amount of suppliers, competition, make-or-buy opportunities, and storage risk and substitution possibilities. The importance, on the other hand, can be analyzed by the volume, percentage of total purchase cost, or impact on product quality or business growth. These analyzed items are then divided in to 2x2 matrix (figure 5). Each of these quadrants represents a distinct category, for which guidelines can then be pointed to. The idea behind all this is to minimize the supply risk and to take advantage of the whole buying power. (Kraljic, 1983)

<b>Leverage</b> <ul style="list-style-type: none"> <li>- Low complexity / many suppliers</li> <li>- Low value / critical / abundant items</li> <li>- Short-term cost leverage &amp; bidding</li> </ul>	<b>Strategic</b> <ul style="list-style-type: none"> <li>- High complexity / few suppliers</li> <li>- Low value / critical / scarce items</li> <li>- Long-term collaboration / strategic impact</li> </ul>
<b>Non-critical</b> <ul style="list-style-type: none"> <li>- Low complexity / many suppliers</li> <li>- Low value / non-critical / abundant items</li> <li>- Short-term functional efficiency</li> </ul>	<b>Bottleneck</b> <ul style="list-style-type: none"> <li>- High complexity / few suppliers</li> <li>- Low value / non-critical / scarce items</li> <li>- Ensure short-term availability</li> </ul>

**Figure 5:** Kraljic's purchasing portfolio model

The categories are called: strategic items, bottleneck items, leverage items and non-critical items. Strategic items need to be in the center of an attention. Managing these items need great amount of detailed market data, supply and demand information, cost curves and, competitive intelligence. Usually long-term supply relationships are recommended. Bottleneck items also require high-level attention. Medium/good supply/demand forecasts, market data, inventory costs and maintenance plans are preferred. Control of vendors and securing item availability are recommended actions. Leverage items require medium-level attention; reliable supply/ demand forecasts, medium-term planning and accurate vendor data. The recommended strategy is to fully exploit the buying power. Non-critical items only needs low level attention, a good overview of the markets and short-term demand forecasts. Standardizations, monitoring/optimization and efficient processing are recommended. (Kraljic, 1983)

Kraljic's model is by no means, the only purchasing portfolio model in academic literature. Olsen & Ellram (1997) highlighted the role of supplier relationships in their purchasing portfolio model. Their categorization is twofold. First, they recommend to categorize the items according to strategic importance of the items and by the difficulty of managing the purchase situation (similar to Kraljic's model). Secondly, they advice companies to use another matrix in order to analyse their supplier relationships. This is based on supplier attractiveness and the strenght of existing relationships. After these categorizations they provide further guidelines how to work with separate categories. (Olsen & Ellram, 1997)

Bensaou (1999), on the othe hand, focuses on the power-dependence between buyer and supplier. In this 2x2 matrix the type of relationship is divided by buyer's specific investments (high/low) and supplier's specific investments (high/low). These quadrants differ in three areas: product characteristics, market characteristics and supplier characteristics. Although, Kraljic's (1983) model did not focus on the power-dependence it had the same characteristics already 30 years ago. For example, he advised to "exploit buying power" when possible and "diversify" in order to move in better situation. Caniëls & Gelderman (2007) identified relative powers and total interdependencies in the Kraljic's matrix. They found out that strategic items had supplier dominance and highest interdependence, bottleneck items had supplier dominance and moderate interdependence, leverage items had buyer dominance and moderate interdependence, and non-critical items had balanced dominance and lowest interdependence.

As it can be seen, all of these portfolios have similar characteristics and action proposals. Seems like the amount of similarities is greater than the amount of differences between these models. At the same time, it is easy to understand why these porfolio models are so popular among purchasing managers. They are all quite easy to use and understand. Managers can easily get practical advices on how to manage different item groups and different relatinships. Even though these models have gained a great amount of attention it is not all positive attention. The following chapter is going to focus on the criticism laid agains them.

### 2.3.2 Criticism against the traditional styles

It has been noticed in academic writings that because of growing variety of purchases and increased outsourcing the traditional ways of categorizing might no longer be the most appropriate way of managing procurement (Ates, 2014). In a case study of 124 companies from different industrial sectors, it was shown that only a few companies were using the traditional methods with their indirect spend (Cox et al, 2005).

Already for some years, companies have been expanding the content of the traditional models because they have been criticized for only focusing on a handful of purchasing strategies (Krause et al., 2009), limited amount of contingencies (Luzzini et al., 2012), and by having a strong reliance on power-dependency (Dubois & Pedersen, 2002). According to Gelderman & Van Weele (2005) firms are already pushing the limits of Kraljic model by introducing multiple distinct strategies inside the four quadrants. For example, firms pursuing sustainable supply chain management (SSCM) have been using the strategies of strategical quadrant for suppliers of leverage items (Pagell et al., 2010). Cox (2015) calls this phenomenon "cherry-picking" and points out that it is alarming when managers are either using strategies that are theoretically incorrect, or that the theory itself is faulty. He and other researchers at International Institute of Advanced Purchasing and Supply (IIAPS) argue that, in this case, the theory is faulty (Cox, 2015).

According to Nellore & Söderquist (2000) one problem with the portfolio model is that after the categorization it does not provide enough explanations of how each category should be managed. They also point out that the classifications are only based on estimations of the parameters which are intended to measure. Finally, they criticize these models of giving strategies that are contradictory and independent as they should be complementary. Cox (2015) also argues that the model is over-simplified, and for example the tactics that are suggested to be used for strategic goods could be used effectively used in any other quadrant as well.

Dubois & Pedersen (2002) further point out, that it is not enough to analyze only two dimensions (internal/external) in order to detect important aspects of buyer-supplier

relationships. For example, by only defining the high/low importance of the purchased item it will only result a general understanding of the real value (Cox, 2015).

### **2.3.3 Creating categories**

According to Trautmann et al. (2009, 58) “a category encompasses a group of similar items that are required for specific business activities of the firm”. When the spend should be segmented into categories O’Brien (2015, 26) underlines the role of individual marketplaces, as seen on his definition of category management earlier in chapter 2.3. In other words, he argues that the categories should be based on the boundaries set by the market, whereas Trautmann (2009) clearly has more internal view of the issue.

According to O’Brien (2015, 26) market boundaries come in many forms and all markets have them. These boundaries are determined by several factors such as: size, location, form, scale, types of participants, types of goods or services, generic choice, and restrictions (O’Brien 2015, 26-27). O’Brien (2015, 29) also points out that the category must be big enough in order to achieve opportunities and small enough to make sense to deal with. He refers to travel management in organizations. Many companies might choose “travel” as a category, however, there is no marketplace for travel as a whole, thus the actual marketplaces are “flight tickets”, “accommodation” etc.

Heikkilä & Kaipia (2009) studied the formation of categories and underlined the role of different hierarchical levels of the categories. They found out that companies divide items into main categories and sub-categories in multiple different ways. One important factor affecting the number of categories in each level was the availability of capable persons. For example, one company had 60 categories at the highest hierarchical level and zero categories in the second highest category level, whereas another company had three categories at the primary level and 20 categories at the second.

A spend analysis can be used to define categories. When the data is available, it is suggested that the Pareto principle is used to organize it. The categorization should focus on the 80 per cent of the spend which usually comes from 20 per cent of the suppliers. The spend can then be classified into three segments; categories, non-addressable, and rest of

spend. The first segment “categories” is the one in which the category management process should focus on. Non-addressable spend refers to categories that are impossible or very difficult to influence, these include: rents, taxes, and other governmental charges. (O’Brien 2015, 25)

#### **2.3.4 Prioritization of categories**

Trautmann et al. (2009) divided their case studies into three segments based on the factor that drives them to global sourcing. These drivers were: economies of scale, economies of information and economies of process. The first refers to pooling volumes, reducing supply base, standardization and synchronization. Economies of information is about sharing knowledge on suppliers, new technologies, markets, internal users, applications etc., whereas economies of process refers to find a new general way of working, joint training and development (Faes et al., 2000). Hard saving gained from economies of scale usually captures the attention of top management, nonetheless, other issues such as security of supply and process efficiency should also be considered important (O’Brien, 2015, 33). Smart & Dudas (2007) studied European-based airline service companies and identified that MRO products, commodities and indirect goods and services were the most preferred groups when companies launched their pooling initiative. They also noticed that routine and leverage items (after Kraljic) could have great potential for pooling.

Whether it is hard savings from pooling or increasing process efficiency that the company wants, in order to focus limited resources correctly they should carefully choose the categories in which to focus on. Opportunity analysis is a valid tool for this purpose. It is a macro-level analysis that identifies which categories and sub-categories have the biggest potential or which are easiest to influence. In the beginning of the category management process it is done for the main categories, however, during the process it should be repeated for sub-categories as well. Firstly, the categories are divided in a 2x2 matrix by the ease of implementation and by potential benefits in order to gain a quick classification of the categories. Secondly, the scale of opportunity should be defined by the price flexibility in the market and by the category maturity. Finally, the categories to focus on, should be chosen by combining these two analysis. (O’Brien, 2015, 73-81)

### 2.3.5 Team formation

Cross-functional sourcing teams are becoming a more and more popular way of dealing with purchasing activities in companies (Driedonks et al., 2014). Category management is greatly dependent on teamwork across the organization, because without the acceptance of the wider organization a new strategy will most likely fail (O'Brien, 2015, 59). In addition to this, Johnson et al. (2002) point out that the purpose of these teams is to gather knowledge and resources needed to complete purchasing related projects. According to O'Brien (2015, 59) category teams should consist of representatives from separate business functions, which have something to do with the category, and a team leader who could be for example a purchasing category manager. Heikkilä & Kaipia (2009) found that the category manager usually works full-time with the project whereas the representatives only work part-time. This can create some challenges in team management. Therefore, the success of the project is highly dependent on resources given to the team, strong team leadership, and the commitment of the team members (Heikkilä & Kaipia, 2009).

O'Brien (2015, 60) further divide the teams into core-teams and sub-teams. Core-team members consist of a leader and representatives who are chosen to the project by their knowledge of the items in the category, interest in the category, combination of skills, ability to bring change in the company or their position in the company. They should be able to commit time to the project, have support from their managers, be capable of acting as a messenger for the rest of the unit, and be strong enough to bring new ideas to the table. The size of the core-team should be between three and eight. Too many participants will make it hard to progress and too few would result insufficient resources or a situation where some relevant functions is not fully represented. (O'Brien 2015, 104)

Sub-teams can be formed in a situation where the project is so big or it covers large geographical area that many people want to participate. These teams would then focus on specific defined activities pointed to them by the core-team. There should also be sponsors, facilitators and stakeholders outside these teams to work in a supportive position ensuring the progress of the process. (O'Brien 2015, 60)

Heikkilä & Kaipia (2009) identified that the categories in the case companies had relatively high value and covered large portion of their spend. Thus, the teams usually remained stable and new categories were added if needed. On the other hand, O'Brien (2015, 82) has a process view on the category management meaning that there is a possibility to change team members in some stages of the process. Different stages requires different sets of skills or authority in the company. O'Brien (2015, 105) highlights the implementation stage as a point where it could be wise to change members in order to make the strategy happen, because even the finest strategy that could bring substantial savings is useless if not implemented correctly.

In order to make the team successful, a sufficient amount of resources should be pointed to it (Englyst et al., 2008). Trent & Monczka (1994) studied the critical success factors of sourcing teams. Their study revealed that one of the biggest factors affecting the team performance was resource availability. They recognized that time availability, service and help from others (outside the team), and budgetary support were the least available resources. At the same time, they realized that the least available resources mentioned above were actually the ones which had the greatest impact on the effectiveness of the team. (Trent & Monczka, 1994)

### **2.3.6 Category management process**

Development processes in organizations have gained some negative publicity because of unsuccessful projects with perished investments and performance issues (Patnayakuni & Ruppel, 2006). According to Driedonks et al. (2014) the degree of formalization has a positive influence on the effectiveness of the cross-functional teams because clear procedures and structured leadership reduced ambiguity about tasks, responsibilities and authority. They identified that when team achievements must be implemented and followed by others in the organization the structure of the process becomes especially important. Faes et al. (2000) studied global purchasing synergies and found out that the case companies used a number of "tools" to organize their synergies, these were; formalized regular meetings, formal rules of conduct, delegation on responsibilities, good planning, and visibility of results. Besides formalization Patnayakuni & Ruppel (2006)

highlights the role of knowledge exchange in a collaborative manner in different phases of the process.

There are possibly as many ways of managing different spend categories as there are companies. O'Brien (2015, 124) provides an practical process-view practice, which is based on several activities in a defined order. It is based on experience rather than scientific facts, however, it is in line with the best practices defined above. On the other hand, studies such as Heikkilä & Kaipia (2009) and Trautmann et al. (2009) have a different approaches on category management. They consider management as a continuum where category managers and cross-functional teams take care of categories on a longer time frame.

In O'Brien's (2015, 83-89) five step process the company will go through initiation, insight, innovation, implementation and improvement stages with separate workshops organized at important points of the process. The duration of the process depends upon several issues such as resources, category, complexity of the category, size of the category, number of people involved etc. There are some tools and activities that every category management process should go through plus some additionalities which are used if needed. The process should be thought as a circular with a starting-point and an end-point and it is important that the process can be repeated when needed because the world, markets and organizations are in a constant state of change. (O'Brien 2015, 83-93)

### **3. EMPIRICAL ANALYSIS**

This chapter will focus on the indirect procurement of the case company by analyzing the collected data. The chapter is divided into two parts. The first part is based on the management interviews conducted in the case company. The second chapter is based on the spend data from the case company, from which a manifold descriptive analysis is performed.

#### **3.1 Management interviews**

The purpose of the management interviews is to find out the current strategic level of the indirect procurement in the case company in order to identify the future development opportunities. This chapter will begin with identifying how the procurement of indirect products and services are distributed within the organization. After that, the current practices of indirect procurement are reviewed unit by unit to identify the strategic elements of the procurement. Current challenges of indirect procurement as well as the attitudes towards centralized purchasing unit are also reviewed. The final paragraph concludes the finding of this chapter.

##### **3.1.1 Indirect procurement is spread around the organization**

Indirect procurement is highly scattered around the case company. There is not any kind of purchasing function in the company; instead the procurement of indirect goods and services is divided into areas of responsibilities. This means that different business functions have a responsibility over certain indirect spend categories pointed to them. These responsible support functions are; human resource (HR), information technology (IT), facilities, legal, communication and financial support. Each of these functions has their own global managers. There is also a travel department, which is basically a part of HR function but is managed by a global travel manager. In addition to global functions, separate countries have their own support functions that perform local and regional procurement of indirect goods and services. There are still exceptions; some countries and units do not have all of these functions in place and the procurement is done by secretaries and other employees.

Approximately 20-30 per cent of the indirect procurement is managed on a global scale, however, a large part of the indirect procurement is carried out regionally or locally. There should be some cooperation on a regional level; however, it is also common, that different offices within the same country are acting individually without any systematic functioning. One exception is Switzerland, where all the indirect procurement, from five separate offices, goes through one person. Due to this local approach in many categories, there is not a clear understanding of how indirect procurement is managed in different countries. The case company does not have anyone who would have a comprehensive idea of what is happening in indirect procurement on a broad scale.

Before going deeper into the analysis, it is important to clarify who is buying what. The rest of this chapter will introduce the responsibilities of the above mentioned support functions focusing on the functions, which have the largest spending. In addition, travel is considered as a function of its own.

IT department is responsible of IT purchases that include; computers, docking stations, peripherals, software licenses, network devices, network services, servers, datacenter services, support services and software maintenance. IT department is divided into global IT organization, that negotiates global deals for the whole company, and local IT service delivery managers who are responsible of local purchases. This department has a certain budgeted cost per employee, which should cover the standard hardware package for everyone. Nevertheless, if someone has special needs that goes beyond this standard package IT department is there to help with the procurement.

The global travel manager is responsible of global travel insurances, crisis management services, travel agency deals, and several hotel chain, airline and car rental deals. As in IT, there are also local travel managers, however, not in every country. Travel management seems to vary a lot from place to place. For example, in Finland, Switzerland and Germany a major part of the operational purchasing is done by secretaries whereas in Sweden employees buy their own flights and accommodations.

HR department purchases everything concerning employee's training including individual courses, lecturers, and programs. They also purchase a large part of different services such as occupational health care services, compensation and benefit services, and recruitment services. On top of that, they are responsible of car leases.

The last department dealt here is the facilities department. They are responsible of many real estate services (security, cleaning maintenance etc.) but also copying devices, office supplies, coffee machines and vending machines. Their procurement basically consists of everything related to facilities and used services.

Some countries might have organized the procurement slightly differently, for example car leases in Switzerland are at the responsibility of facility. Despite that the procurement goes, for the most part, as described above.

### **3.1.2 Current practices in indirect procurement**

There is not any global purchasing strategy for indirect procurement within the case company nor do individual functions seem to have any written strategy for their purchases. During the years the case company has grown through buying smaller businesses all over the world. This has led to a situation where many offices have their own ways of doing things, and because of many successful years there have not been a need to change this. As long as everyone stays in their budget they can freely operate as they see the best. Separate countries have their own guidelines of how indirect procurement should be performed (specifying need, tendering, neutrality, contracting and surveillance) but there are not any company wide regulations. The interviews revealed that different functions have managed their procurement quite differently, for this reason this chapter is going to introduce the current practices unit by unit.

#### *IT*

On the basis of the interviews, it can be pointed out that IT purchases are thought most strategic when compared to other indirect purchases. Even though they do not have a written strategy in place, the chief information officer (CIO) states that: "We have a clear understanding about what we are doing and what we are buying, whereas in the past

everyone bought what they wanted”. Some years ago IT purchases were made locally while now global IT organization has been focusing on standardization, global operation, and service outsourcing. The motivators for harmonization have been the ability to reduce costs in IT support and to exploit the whole purchasing volume. For example, 15% savings were achieved with computer docking stations only by standardization and by centralization.

The supplier base in IT purchases is kept as small as possible and the geographical distribution area as wide as possible. They do not want to commit into any volume and they do not want to buy the products for themselves. Most of the IT procurement is made through one trading partner who also maintains a safety stock for them. Other suppliers, which the company has made deals with, send their products to this one trading partner. Eventually, the trading partner distributes the products globally to various offices. Behind all this, there is an IT catalog in the corporate intranet that is connected to the trading partner’s systems. Employees can make their IT purchases through this catalog, and if the needed product is not found, couple of smaller suppliers is used with the help of IT department. The products in the catalog are highly standardized. Product selection depends on the employee's real needs and they must always be approved by the manager.

Price, availability of products, quality, delivery performance, and the supplier’s enthusiasm to cooperation are the main pillars in supplier selection. The case company is not a mega size corporation and it is still spread all over the world, so one key factor is to work with suppliers who want work with them and who are able to supply in a global area. As the CIO present it: “We would rather be a big fish in a small pond than a small fish in a large pond”. Competitive bidding is seen as a good thing, but the relationships are usually long-term. New suppliers are always eager to show what they have, yet old suppliers have a massive advantage in the tendering process. This confrontation is rarely utilized as well as it could be.

The relationships are, for the most part, arm’s length, except for one outsourced service provider who is helping them to go through a large ERP system change. At the beginning of this process the relationship has been very strategic, however, in future the situation may be very different and the type of the relationship might change.

### *Travel*

Major part of the operational procurement in travel is pointed to secretaries, other responsible people, and employees themselves. The case company has a global travel policy, which applies to every employee. This policy works as a guideline of how people should travel, how tickets and accommodations should be bought, who and when business class flights can be bought etc. Priorities of the policy are to increase cost competitiveness while ensuring traveller safety. The main points are:

1. To reduce unnecessary travel through utilization of e.g. internet, phone and video conferencing.
2. To use travel arrangement with lowest logical cost.
3. To strengthen the relationships with preferred suppliers in order to optimize costs.

With the exception of few countries, the case company has managed to centralize the procurement for one travel agency, through which flights and accommodations are reserved. Multiple airline and hotel chain frame agreements are implemented into this system annually. Also, the preferred order is applied.

There are not any strategic partners in the field of corporate travel. The agreements they have are usually renewed on a yearly basis. Contracts are made at both global and local levels. For example, there is only one global car rental deal while in the case of accommodation there are multiple local agreements. Suppliers are chosen according to markets.

Hotels are quite well centralized, for example in Finland the vast majority stays in one particular hotel. Generally, hotels reserved according to the preferred order given in the travel agency's reservation system. Regarding airline companies, they have not set any preferred options that everyone should be using, even though the travel manager has proposed this idea several times. She states that: "The decision should come from way higher, requiring management involvement and their example". The problem with the airline companies is that they are not ready to give anything if you are not ready to give something back e.g. a certain volume. The company has already stopped making contracts

with a number of airlines since they did not have any real content. If the flights were more centralized they could have much greater bargaining power.

Individual contracts are also made for bigger projects. In a situation where a lot of people are travelling to a specific destination for a certain period of time it is easy to achieve good discounts. For example, the case company gained 1000 free hotel nights just by centralizing the accommodation for a project. In one large project, the case company even teamed up with its stakeholders in a form of purchasing consortium to create leverage and to gain discounts. Eventually, however, all companies ended up with their own agreements. According to the travel manager, during the six years when she has been working in the company she has not received any queries about project related flights and accommodation. Usually the information about these projects comes from somewhere else than from the project manager itself, and in the worst case, the information reaches the travel manager only after the project has already ended.

At the moment, the travel procurement can be considered rather “wild”. Certain preferences are made but in the end choice of what companies are used can be made quite freely. Few years back, the tax authorities became interested in the workers' flight points. Earlier, these points determined the choice of flights and hotels quite a lot, and to some level they still do. According to the travel manager, it is harder to standardize the choices in corporate travel because it is quite personal and emotional thing for many people. Quite often there are some personal benefits involved in traveling, whether it is flight points or annual Christmas vine festival in the hotel premises.

### *HR*

HR procurement is both global and local. For example, compensation and benefit services are centralized to one person in Finland and they cover the whole globe. Also, there are a lot of global recruitment tools and education services in use. Nevertheless, most part of the procurement concerning HR is managed locally or regionally. According to the senior vice president of human resources there should be regional cooperation between offices regarding different categories. However, she also points out that this is the type of an organization, in which individual exceptions always emerge somewhere. She says: “Some practices may be old history, based on the way things have always been done“. The

procurement in HR is quite unrestricted. There is some standardization in car leases but they are also on a regional level.

HR function seems to have a positive attitude towards outsourcing. A lot of services are bought externally but some of them are seen so deeply tied to a specific person that they are kept in house. One example of this is the health care services in the headquarters in Finland. The service provided in-house is thought to be a lot better than it perhaps would be when outsourced and, through the experience of many years, a certain person brings extra value to the company by recognizing the specific risks involving their operations. For example, the employees travel a lot and the health care personnel need to have deep knowledge related to the risks involved with it.

Also in HR, suppliers will go through a tendering process in every two to three years; however, the old suppliers are rarely changed. According to the interviews there is no professional procurement in HR department and, consequently the prices are not engaged into necessary stress. The senior vice president of HR state that: “I think that there are a lot of places where we could be more demanding towards the suppliers in terms of cost savings”.

### *Facility*

The facility procurement is quite unstructured and it varies a lot from country to country and office to office, depending on how various places have had the time and willingness to put an effort to it. Separate offices have the responsibility and freedom to manage their own procurement concerning their facilities. This is not necessarily a bad thing because many procurement objects in this category, for example cleaning, waste disposal, facility maintenance, repair and other services could be best to manage on a local scale for a specific need. However, with a category like office supplies, it would be easy to bundle the procurement together on a regional level at least, and achieve process efficiency and price discounts. Some countries, such as Finland and Switzerland, have taken steps towards centralization. In Finland, there is only one deal with an office supplies supplier, through which all different offices within the country can purchase from, and in Switzerland all the procurement goes through one person. But in UK, for example, different offices do not seem to cooperate with each other at all.

Facility procurement in Finland has been under development during recent years. They have done tendering processes, efficiency enhancing and centralizing. One practice has been, as the global facility manager calls it: “invoice killing operations” where the company has been trying to cut down the amount of invoices in order to reduce the amount of work and to increase efficiency. For some suppliers they have managed to reduce the number of invoices to one aggregate invoice per year. They have also been trying to find saving opportunities from different categories by moving from largest to smallest category by category.

### **3.1.3 The biggest challenges in indirect procurement**

In the interviews, the participants were asked about the biggest challenges concerning indirect procurement within their category. Some issues emerged already during the previous questions as a result of their own analysis without even asking them. This chapter will present the most important challenges.

One of the largest challenges that emerged in the interviews was the fact that indirect procurement is highly uncontrolled. After the business acquisitions, there are a lot of different ways of working between offices and there is a lack of a holistic management over the indirect procurement. A lot of these practices are based on the ways things have always been done. Moreover, on the ways things have been done before the business acquisitions.

The case company has had a lot of successful years in the past and there have not been the need to use time to develop indirect procurement as long as everything works and every country stays within budget. According to the senior vice president of HR, some employees might still think that there is a never-ending money pit somewhere, which the company can use to buy whatever it needs. However, the hard economic times are also having an effect on the case company and saving opportunities are now searched from everywhere.

One particular issue concerning the uncontrolled nature of the indirect procurement is the difficulty to find these saving opportunities. As the head of facilities states: “I strongly believe that there are opportunities but no one has been able to present them”. When no one is responsible of the spending as a whole it is probably hard to show the opportunities. The procurement is only a small part of the work of the managers and they do not have the time to put too much effort to it. A lot of responsibility is given to local offices who are buying ad hoc for their own needs.

Another issue that arose in the interviews was the lack of internal communication and the difficulty to drive changes in the company. The challenge is to find out the right level of centralization. Which are the things that should be managed on a local level and which are the things that have the economic and business reasons for centralization? As one of the interviewee said, the main problem here is that how to get different units to really use the suppliers with which frame agreements are made, and how to control maverick spend. The lack of internal communications could be a crucial factor in the implementation. Some interviewees found it very frustrating even to make their frame agreements because they are rarely used. As previously noted, the lack of internal communication also goes other way around. For example, the travel manager would be more than happy to hear about large projects from project managers in order to gain better deals with airline companies and hotel chains, however, this rarely happens.

Some interviewees raised the fact that they have not had sufficient amount of relevant spend data, which could be used as a background for their decisions. They also pointed out that if some kind of data have been available, it have been in a form which would have been too hard or time consuming to analyze.

One challenge, which was already mentioned in previous chapter, is that even though suppliers go through competitive bidding process, old suppliers are rarely changed. The interviews also revealed that in many cases the company might be a little shy to haggle over prices. During the years some relationships might have become subjective and conversations about prices are not held. In addition to these, many processes and ways of doing things in different functions are tied into specific persons. One challenge is that if these key persons leave the company the processes and methods would most likely leave

with them. The maturity of the procurement could be developed in some areas. As one interviewee said, defined processes do not guarantee good results but it would guarantee repeatability.

#### **3.1.4 Thoughts about centralized purchasing unit**

As noted earlier, indirect procurement in the case company is quite widely distributed and they do not have a purchasing function or even a specific person who would have a broad understanding about what is being bought, from whom and how much. Surely there are people in different countries and different offices that probably have this knowledge but in order to gain benefits from the whole buying power a wider perspective should be introduced. The interviewees were asked about what they think about centralized purchasing unit and what benefits and disadvantages it might bring to them. This chapter will present the main positive and negative issues about centralized purchasing function that arose in the interviews.

Generally the idea of centralized purchasing function raised positive feelings among the interviewees. Many of them thought that it would help different functions with their procurement but also it would bring benefits for the whole company. One issue that arose in many interviews was that a sourcing function that would think about the purchasing concepts and processes would surely raise the maturity of the procurement. As the chief of IT put it: “Harmonization of the processes and documentation (on a certain level) linked to people who are faithful to it can provide better result”. Different elements of the request for proposal (RFP) and request for information (RFI) -processes would be fulfilled and the company’s real needs could be better achieved.

The purchasing unit could also question the old habits “the ways thing has always been done” and bring out some new ideas and working methods. Some interviewees were hoping tighter standardization and more centralization in indirect procurement and said that the procurement function could bring justification for this kind of action. Another benefit that was also seen was that the procurement function could streamline the operations in a way that the information would stay in one place. One interviewee had even wondered why they did not have this kind of function or a certain manager who could

support the procurement and pick up “low hanging fruits”. The interviewees saw the possibility of pooling volumes and creating cost savings even at the regional level.

Although, the support for centralized purchasing function was high and its possibilities are recognized some downsides also emerged. Many interviewees were worried that the purchasing function would go too far in some areas. They were afraid that the purchasing process would get too long and complicated and it would include too much bureaucracy. Another issue that emerged was money. Some thought that the purchasing function would only think about the cost savings at the expense of other factors. They highlighted the fact that everything should be in balance and the people in the function, if it would be formed, would understand it.

### **3.1.5 Summary of the management interviews**

The indirect procurement in the case company includes a large variety of different products and services ranging from simple office supplies and security services to globally managed IT systems. This is not anything unusual as indirect procurement is commonly more diverse and it contains more distinct products and services compared to direct procurement (Gebauer & Arie, 2001). The products are not categorized in any way in the case company, but they are divided into areas of responsibilities. For this reason the procurement of these items is widely scattered all over the organization.

There are global functions and local functions sharing the responsibility over the spending. Around 20-30 per cent of the indirect procurement is made globally, but there should also be some regional cooperation between offices. One good example of global procurement is the IT hardware, which is fully bought through two global operators. Nonetheless, each country may not have all support functions, such as local travel function, which is why the procurement is done by other people, such as secretaries, assigned to the job. These findings are similar with other researchers, such as De Boer et al. (2003b), who argue that the procurement of indirect materials might take place all over the organization, and with Carter et al. (2003), who worries about the non-professional nature of indirect procurement.

The operating model that the case company is using, is closest to the hybrid model explained in chapter 2.2.4 with the characteristics of category perspective presented by Trautmann et al. (2009). The level of centralization is highly dependent on the category, for example, the global IT department have clearly defined the limits on what is being purchased and from whom, whereas, in the area of facility procurement different countries and units can work as they prefer. Although different countries and units are free to make certain purchases independently, they still need to make the purchases within the budget they are given. This indicates that the indirect procurement in the case company is budget-driven rather than value driven, the same kind of approach has also been noticed in other studies (Porter 1999). Gebauer & Arie (2001) argue that this might be due to the fact that indirect procurement is thought as clerical function rather than strategic function. This could also be true with the case company as the procurement is usually done ad hoc, without a purchasing strategy guiding the decisions.

With a few exceptions, the case company has a very positive attitude towards outsourcing. They do not have any global guidelines about it, but the aim is to outsource everything that is possible. This type of an approach is very common in indirect procurement (Jennings, 1997), and no wonder because the benefits of it are undeniable as presented in chapter 2.2.2.

It seems that most of the relationships is kept as arm's length rather than strategic, however, they might still be long term because suppliers that have been proven good are rarely changed. According to Cox et al. (2005) this is the most popular way of working, eventhough long-term relationships might not be the best option. Possible cost saving opportunities and specific capabilities of other suppliers might be left unnoticed if the same partner is used year after year, in other words, the benefits of arm's length relationships are then lost.

Several other challenges also arose in the interviews. Some of the issues were identical with the other two case studies which were discussed in chapter 2.1.3. So far, the case company has not seen the need to focus on their indirect procurement that broadly because everything have been working well and different units have stayed within their budgets. One of the biggest issues was the fact that indirect procurement is highly uncontrolled and

there is not anyone being responsible over the spend as a whole. Saving opportunities are then hard to find as managers have also other things to do in their calendars. Also, one obstacle for finding savings have been the lack of relevant spend data. Without knowing who is buying what and from whom it is hard to identify leverage potentials. According to AberdeenGroup (2004) the lack of data might lead to a situation where strategies and decisions based on intuition rather than real knowledge.

There are a lot of non-standardized and detached processes based on the ways things have always been done, and on top of that, these processes are mainly in the minds of certain people. According to Kapoor & Gupta (1997) This might lead to rushed deals and sometimes to undesirable quality, timing and price. On top of that, if these key persons leave the company the knowledge and processes goes with them.

The case company also lacks a strong internal communication within indirect purchasing matters, which creates three types of problems.

1. Driving change is hard and it takes a lot of time
2. Some leverage potentials might stay unnoticed
3. There is a lack of control over maveric spend

Changes in indirect procurement can be particularly hard because people might have worked with particular category for years and have the feeling of ownership (Payne & Dorn, 2011, 522). Without good communication and proper techniques, planned savings might not be met because the change is not received well.

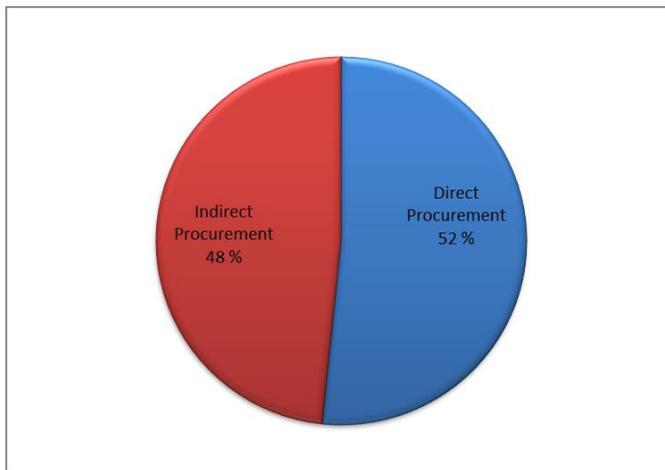
### **3.2 Spend analysis**

This chapter will explore the invoice data gained from a third party service provider. It will start by general spend analysis followed with time span analysis, spend ratio analysis and supplier base analysis.

### 3.2.1 General analysis

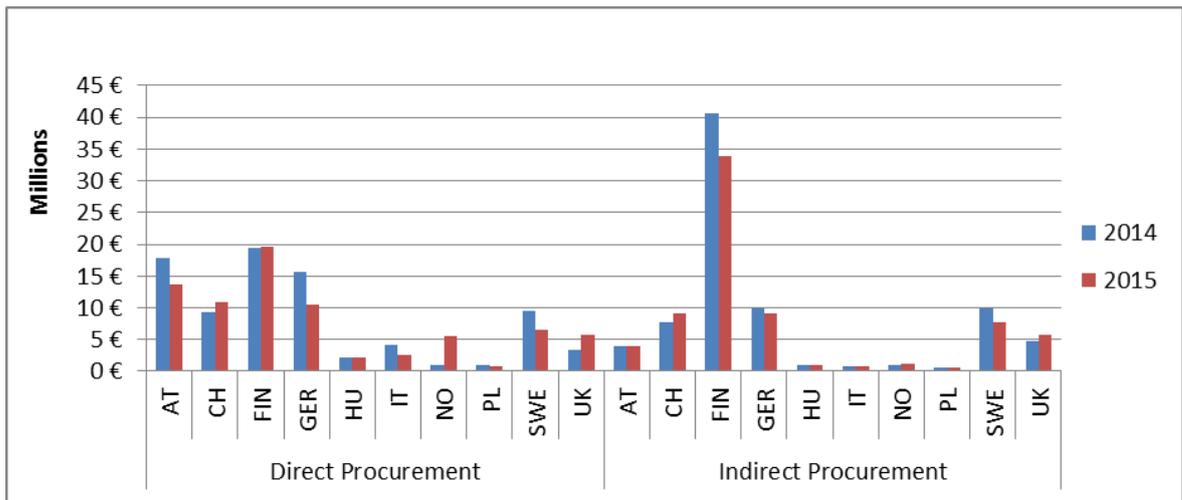
In order to obtain understanding of the current state of the indirect procurement within the case company, a general analysis was made. This chapter will identify the amount of indirect procurement in the case company and how have the procurement been changed during the analyzed years. It will also present how the procurement is divided between different countries and between different categories in order to locate the most favorable places of development. The main figures are presented in the chapter; however, more detailed breakdowns are put in to the appendices.

Figure 6 show that the indirect procurement at the case company covers nearly half of all procurement. As noted earlier the usual percentage of the indirect spend is around 35-60%. It is not surprising that the percentage at the case company is at the upper end, because it is a service company and they do not have much material procurement.



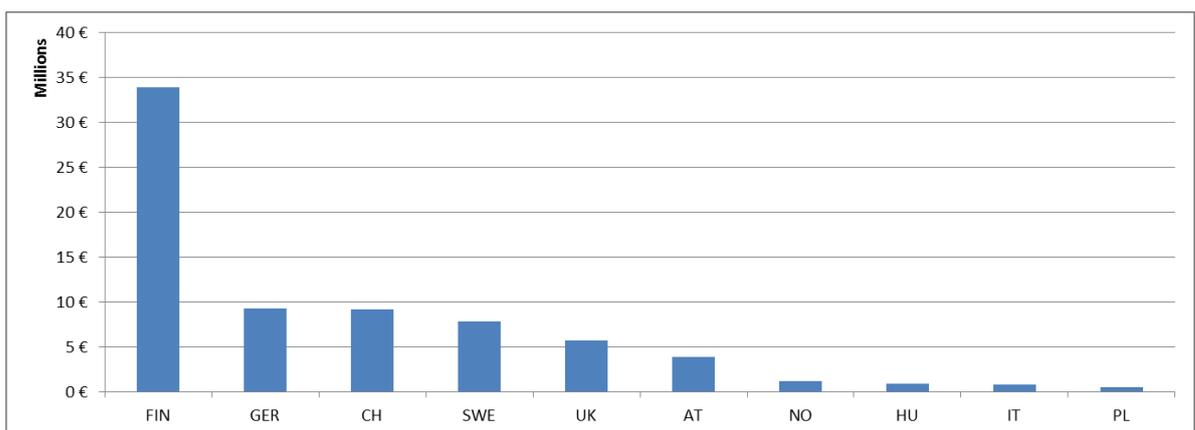
**Figure 6:** Share of direct- and indirect procurement

Figure 7 indicates that there have been slight decreases in both direct and indirect spend between the years 2014 and 2015. Country level analysis shows that the changes differ a lot from country to country. Direct procurement has decreased most in Austria, Germany and Sweden whereas in Norway and UK it has increased. Indirect procurement has decreased most in Finland and Sweden whereas in UK and Switzerland the numbers have gone slightly up. Large decreases in Finland might be due to the fact that some business units have been sold during the past few years. Altogether, direct procurement has fallen 6.5 percentages and indirect procurement has fallen nearly 9 percentages.



**Figure 7: Procurement per country 2014 & 2015**

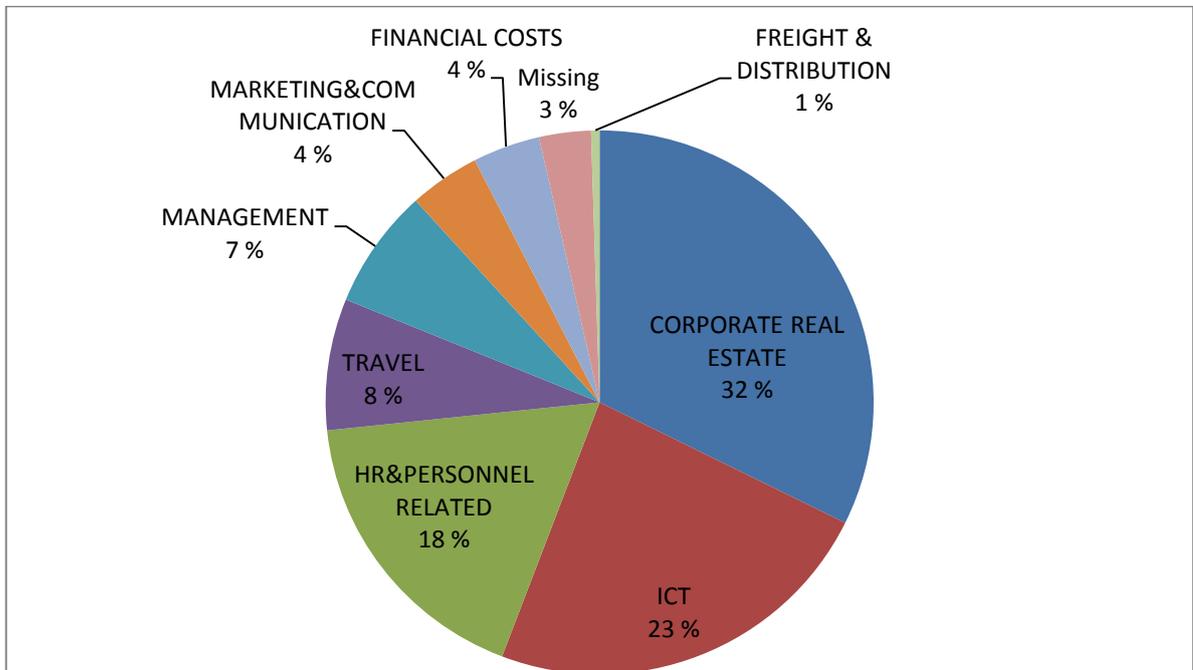
The greatest amount of indirect spend can be directed to the case company's homeland Finland (figure 8). This number is slightly increased by the fact that most of the ICT procurement is centralized to Finland. Payments from these ICT costs are charged from other countries as internal management fees, which also include other combined payments. These internal costs are, however, excluded from the data. Germany, Switzerland and Sweden all have about ten million euros worth of indirect procurement yearly. UK and Austria have about five million indirect spend yearly, and the last four countries Norway, Hungary, Italy and Poland set around one million and under.



**Figure 8: Indirect spend per country in 2015**

The largest indirect spend categories in the case company are corporate real estate, ICT, HR & personnel related, and travel (figure 9). These categories cover up to 81 per cent of

the total indirect spend. The remaining 19 per cent comes from management, marketing & communication, financial costs and from spend that have not been categorized.



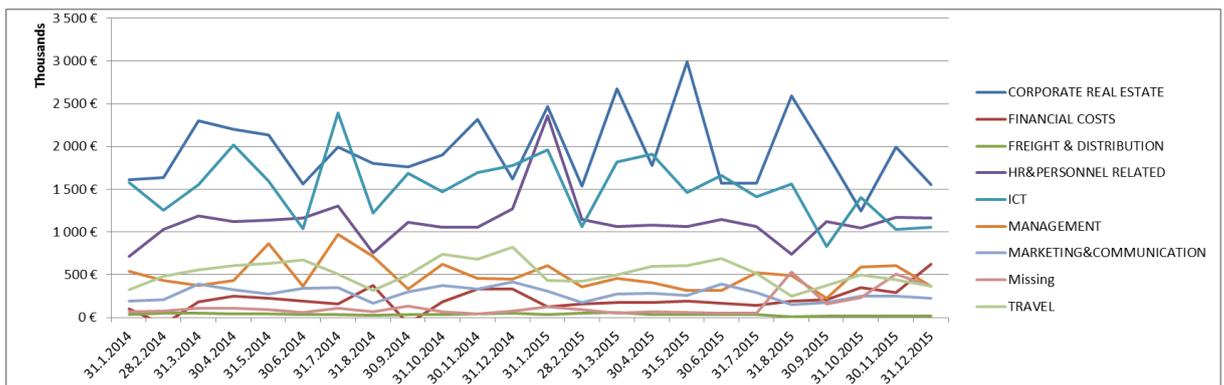
**Figure 9:** Category percentages in 2015

Major part of the corporate real estate spend comes from office rents and only 26 per cent of the spending is composed of procurement related to facilities management, such as repairs, heating, cleaning, security, office supplies etc. ICT spend consists of IT output based services (41%), hardware (18%), software (16%), network and telecommunication (15%), data center (7%) and non-categorized spend (3%). The largest sub-category in HR & personnel related spend is leased cars with 29 percentage of the whole category, followed by health & benefit (22%), learning and development (14%), recruitment (9%), and others (24%). Nearly 50 per cent of the travel spend comes from flights and accommodation, whereas other half of the spending consist of car rentals, daily allowances, employees own car travel mileages etc.

### 3.2.2 Timespan analysis

Although, indirect procurement might be seen as budget driven rather than value driven. Figure 10 shows that for most categories the procurement is relatively steady throughout

the year. The largest variations can be seen in the corporate real estate category, although a deeper examination shows that these major fluctuations are caused by rent payments and not, for example, to purchase office supplies in order to fill the budget. In addition to this, a few spend spikes can be seen. The first is placed on July 2014 and it is caused by ICT. A closer look to the category shows that there were multiple sub-categories (hardware, software, IT output base services and IT data center) on the rise at the same time. However, these increases happened in the middle of the budgeted year so the reason for these is probably something else than spending the excess money from the budget. Another spike took place in January 2015 and it was caused by HR & Personnel related spend category. Further analysis show that the rise in the spending originated from health and benefit expenses in Sweden.

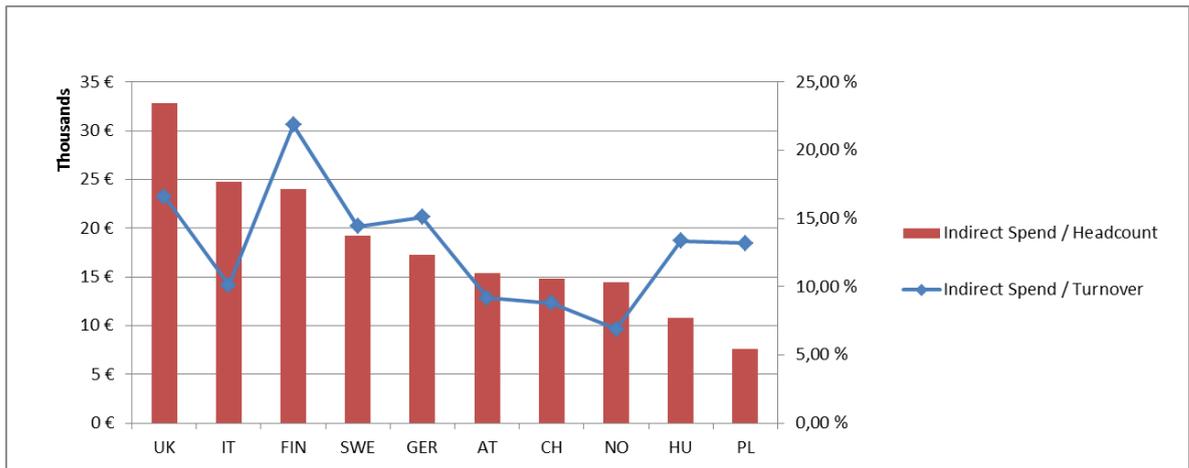


**Figure 10:** Indirect spend time breakdown 2014-2015

### 3.2.3 Category based spend ratios

In order to find out whether or not some countries are spending more money than other countries the spend must be proportionated to the size of the business. As previously noted, the size of the procurement between different countries varies a lot. These ratios allow for a more accurate comparison between them. This chapter will compare the size of the procurement to turnover and to number of employees in each country. Headcount is calculated by the average number of employees in each country, whereas the turnover is the exact turnover in that specific country's operations. The analysis will begin by analyzing the total indirect procurement, after which the largest four categories are analyzed one by one.

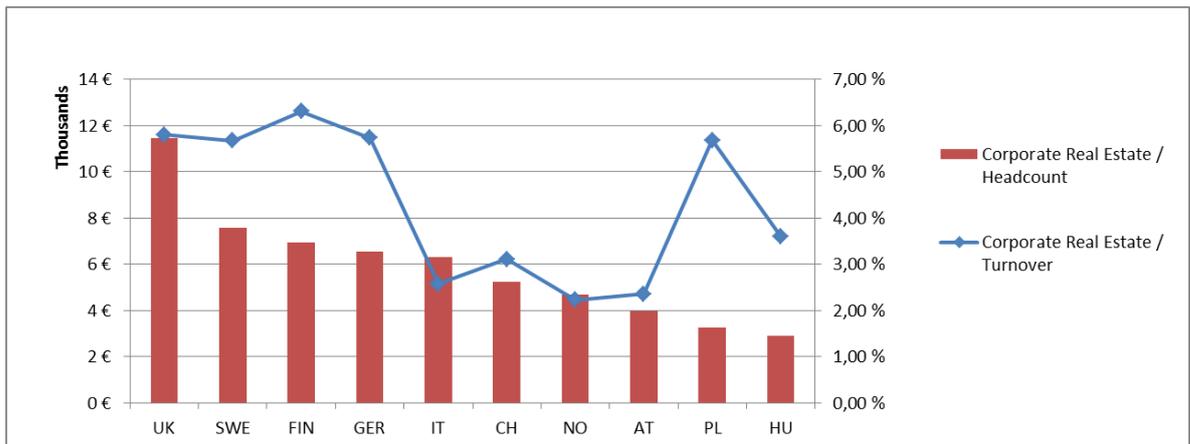
Figure 11 illustrates that UK, Italy and Finland are the largest spenders when indirect procurement is compared to the number of employees. When the spend is compared to turnover Italy settles under the average whereas Germany and Sweden rise up. Hungary and Poland have the lowest indirect spend / headcount ratios, however, compared to turnover they settle to the average.



**Figure 11:** Total indirect spend ratios per country

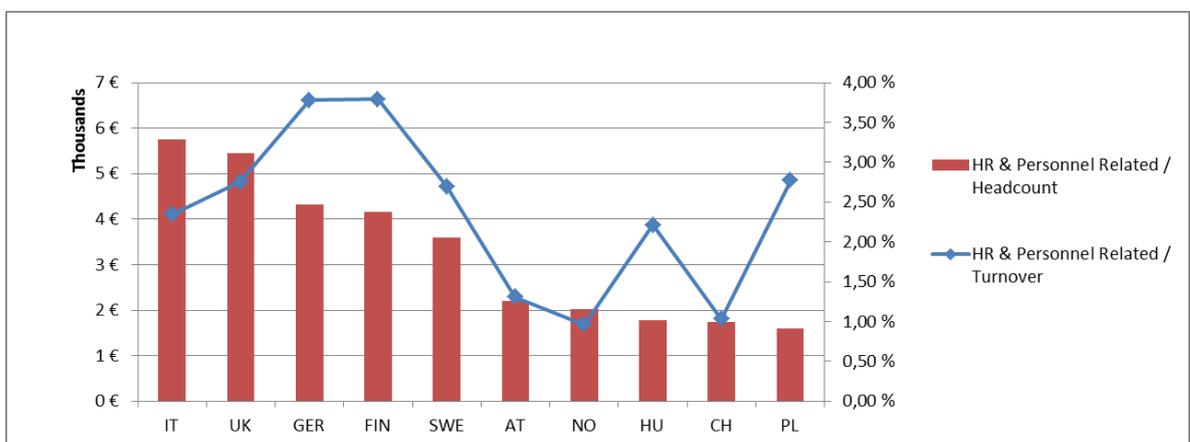
However, it must be noted that the parent company, located in Finland, do not have a turnover, but has global procurement. This increases the spend/turnover ratio in Finland meaning that it would be wiser to use spend/headcount ratio when comparing it to other countries. Also, most of the ICT procurement is centralized to Finland and the costs are collected from other countries as internal management fees, which are removed from the data. This would also increase the numbers in Finland and give somewhat incorrect ratios.

When corporate real estate spend is compared to headcount UK has considerably higher spend than other countries (figure 12). The average corporate real estate/headcount ratio is about 5000, which means that UK is spending over two times the average value. UK also remains among the other top four countries (Sweden, Finland, Germany, Poland) when the costs are compared to turnover.



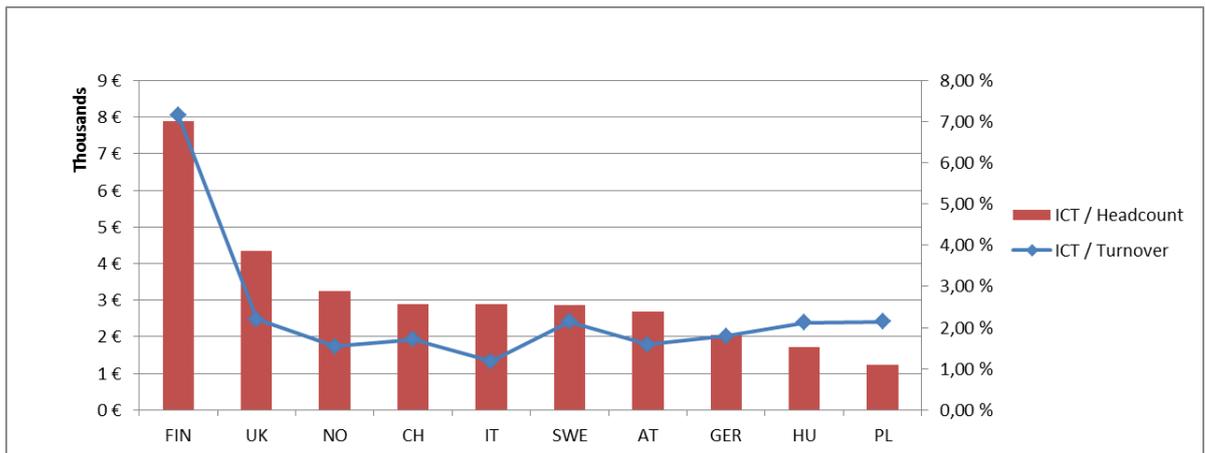
**Figure 12:** Corporate real estate spend ratios per country

HR & personnel related spend is highest in Italy and UK when the numbers are measured with headcount (figure 13). Next come Germany, Finland and Sweden with over one thousand euros lower consumption per employee. Nevertheless, the spend/turnover ratio is highest in Germany and Finland, and also surprisingly high in Poland, which has the lowest spend/headcount ratio.



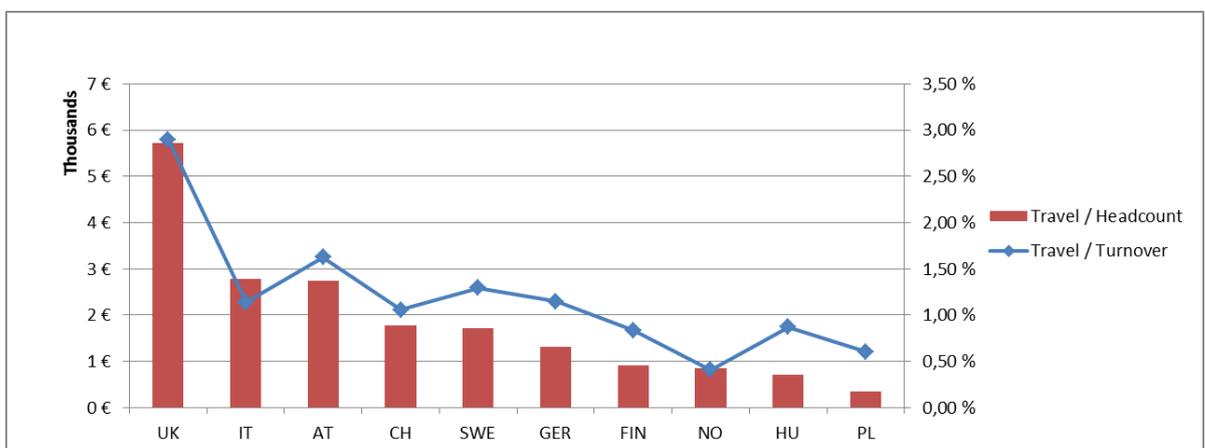
**Figure 13:** HR & personnel related spend ratios per country

As pointed out earlier, most of the ICT procurement is centralized in Finland, which increases the spend ratios because internal costs are excluded from the data. Despite that, the remaining local ICT procurement is quite stable between the countries (figure 14). UK has slightly higher spend/headcount ratio, but otherwise no remarkable differences can be seen.



*Figure 14: ICT spend ratios per country*

As we can see from the figure 15, the amount of money spent in non-project related travel varies quite a lot between the countries. Largest travel spend country, with both indicators, is UK. It has almost three times the average spend. The second place is shared between Italy and Austria again with both indicators. Least amount on money spent in travel is in Poland, Hungary, Norway and Finland all having fewer than 1000 euros per employee.



*Figure 15: Travel spend ratios per country*

### 3.2.4 Supplier analysis

Next step of the spend analysis would be to count the amount of suppliers in each category and calculate the average spend per supplier in order to find the categories where there might be too many suppliers. However, the data used in this thesis contains a lot of purchases made by employees, and in many times the employees name is marked as the

supplier. This type of accounting creates hundreds of additional supplier names to the data, which makes it impossible to calculate the average spend per supplier or to compare the values between countries. All of the main categories included this type of markings, so the analysis could not be done for even single categories. For this reason, supplier analysis at the sub-category level was made for each country by hand

The travel category has the highest amount of “employee-as-supplier” markings. Another thing with this category is that if the travel expenses are paid with the company card there would be the name of the credit card company as the supplier. This makes it impossible to investigate what suppliers are being used and whether or not the preferred suppliers are used. This type data should be gathered from the credit card company, but still there would be some spend that would not be included in this data as the employees use their own cards to make the purchases as well. There are also a lot of “employee-as-supplier” markings in HR & personnel category, especially within leased cars and benefits & compensations sub-categories.

The sub-category level supplier analysis shows that the number of suppliers in many categories is quite high. It is not uncommon that there is one main supplier, from which most of the products or services are bought but also several other suppliers, from which even single items are bought. In the smallest countries (Norway, Italy, Poland & Hungary) the supplier bases are quite well organized. There are of course some sub-categories, where the amount of suppliers rises relatively high. For example, categories such as management services & consultation, office supplies and other office expenses have quite large amount of suppliers. In the remaining countries the amount of suppliers rises high in almost all of the sub-categories. Sub-categories under ICT seem to be in the best shape. However, categories such as software applications and software applications maintenance have relatively high amount of suppliers.

### **3.2.5 Summary of spend analysis**

Indirect procurement covers roughly half of the 150 million euro annual spend in the ten analyzed countries. Although, this number also includes office rents the spend is so large it cannot be ignored. The amount of indirect procurement has slightly fallen from 2014 to

2015, especially in Finland. This might, however, be due to the fact that some parts of the business have been sold in recent years.

The future development activities should focus on the biggest spenders, which are Finland, Germany, Switzerland, Sweden UK and Austria. Each of the remaining five countries have indirect spend only around 500 thousand to one million euro, from which office rents cover a large part. The largest categories are corporate real estate, ICT, HR & personnel related, and travel covering up to 81% of the total spends. Again, future activities should focus on these categories to find the best saving opportunities.

Even though indirect procurement might be seen as non-strategic and budget driven, the time span analysis shows that there is no reckless spending at the end of the budget period. Few cost spikes could be identified, however, they are in the middle of the budget year and do not seem to repeat in the examined period.

The category based spend ratios indicate that UK is the biggest spender in almost every category, even when measured with both indicators. In some categories the difference between UK and other countries is enormous. For example in corporate real estate category the headcount ratio is two times the average and in travel category the headcount ratio is almost three times the average value. These numbers show that there could be development needs and saving potential in the indirect procurement in UK, however, this might also be due to higher price levels in UK. Nevertheless, the reasons should be examined in order to possibly find saving opportunities.

Finland seems to be spending a lot when the turnover ratios are being observed, however, due to the previous mentioned reasons it would be wiser to look at the headcount indicator. These columns show that Finland is placed slightly above average to the same place with two other larger countries Germany and Sweden. Finland stands out with low travel expenses and high ICT, which, however, is due to centralized purchasing.

Small countries, other than Italy, have managed to keep their indirect spend in a low level. Also, Switzerland, which has five offices around the country have the same kind of spend

structure as the smaller countries. This might be due to the fact that all indirect procurement in Switzerland is centralized to one person.

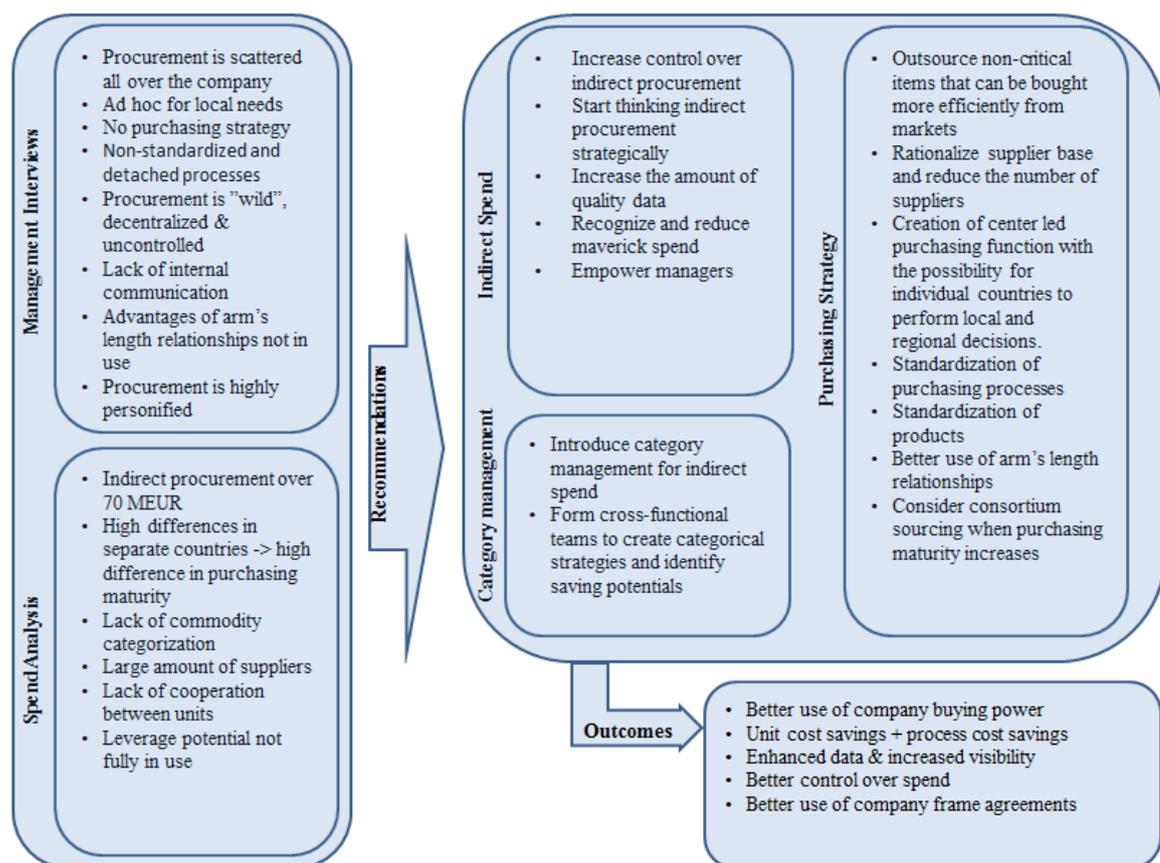
The smaller countries have also managed to keep their supplier bases small. Bigger countries with more units have many more suppliers. Even though these unit should have some cooperation according to the management interviews the spend analysis prove something else. Nevertheless, some deficiencies in the data brought challenges in the supplier analysis. Because of the “employee-as-vendor” markings an accurate analysis of the supplier bases and comparisons between countries were not made. In order to find out further saving potential a throughout data cleaning should be made.

## 4. RECOMMENDATIONS AND CONCLUSIONS

This chapter provides a conclusion of the research. It will start by introducing a framework and recommendations for the case company. The second chapter will conclude what have been done in the thesis and the final chapter will present proposals for future research.

### 4.1 Framework and recommendations for the case company

This chapter will conclude what have been found in the research and provide future recommendations for the case company. An indirect procurement framework for the case company is presented in figure 16.



*Figure 16: Indirect procurement framework*

A starting point for the case company would be to develop a purchasing strategy for their indirect procurement. The purpose of the strategy is to start using the whole buying power of the company in order to bring cost savings through economies of scale. In addition to

this, cost savings could be achieved through reducing and standardizing the items being purchased as well as managing the purchasing processes. To make this new strategy to work the company must change the way indirect procurement is managed with a new managing and controlling model by defining the responsibilities and authorities. The model and the strategy must be supported by the units and management of the support functions in order to make it work.

The strategic level of the indirect procurement within the case company is highly dependent on the category. For example ICT category has gone through huge amount of strategic development during the past few years. The procurement have gone from local ad hoc purchasing to globally centralized and managed category with standardized products and processes and small suppliers base. The spend analysis confirm the findings from the management interviews. Globally managed sub-categories in ICT usually had relatively small amount of suppliers, however, in locally managed categories such as software applications and software applications maintenance the amount of suppliers rises. It could also be seen that the spend between different countries in ICT were quite stable.

With a few exceptions, the case company already pursues to outsource everything that is not in the core of their business. It could be argued that the right way to do is to outsource non-critical items that can be bought more efficiently from the markets. This should be the starting point of the purchasing strategy.

The development of indirect procurement strives to create economies of scale by taking advantage the whole buying power of the organization. This usually means reductions in the supplier base. Reductions would not only bring leverage possibilities but it would also make the supplier base easier to manage. At the moment the supplier bases within the case company are large and fragmented, which increases the operating costs and prevents gaining price discounts. There is a lack of clear understanding of who is buying what and from whom. The idea of a spend analysis is to resolve this; nevertheless the data used in this thesis had some shortcomings. More about the data is discussed later in this chapter. Nevertheless, small countries seemed to have managed to keep their suppliers bases in some kind of order whereas the larger countries seemed to have much wider and messier

supplier bases. A recommendation for the case company would be to clean up the supplier bases and categorize the suppliers in order to find saving possibilities.

The case company should also think about the choice of geographical location of the supply base. The choice is highly dependent on the proximity of the units and the availability of suppliers. The possibilities for global and regional sourcing should be considered at the category level.

The procurement is currently highly dependent on the people, meaning that the maturity of the procurement goes hand in hand with the knowhow and availability of the time of the person doing the procurement. The procurement is mainly done by non-professionals who might not have appropriate sourcing and negotiating skills. Also, the procurement is not their main duties and they are usually busy with other tasks. There are some country level guidelines; however the company lacks a global purchasing policy and processes. Different levels of procurement maturity were also discovered in the spend analysis. The money spent in different categories varied greatly between the countries.

A creation of a fully centralized purchasing function might not either be the best solution for indirect procurement. The company could form a center led purchasing function with the possibility for individual countries to perform local and regional decisions. This have been recognized as a good model in other case studies (Carter et al. 2003). In addition to this, there should be solid and credible framework for indirect procurement in order to guide people to perform the procurement tasks individually. According to the interviews this kind of a function would be welcomed. It was thought that it would standardize the processes but also help the organization to get rid of the old habits. With common processes and frameworks the quality of the procurement would not be so much dependent on the people and the knowledge would stay in the company even though key persons would leave.

Besides standardizations of processes, standardization of products is another way to bring cost savings. At the moment ICT is the only category where strict product standardizations have been made. As a result, huge savings have been gained in this category. In the future the company could bring this type of standardization to other categories as well. To help

the standardization of products other e-catalogs could be brought to the company intranet. These catalog would reduce maverick spend, leverage the purchasing power, provide better information, and increase the efficiency through streamlining the process. Another thing would be to introduce purchasing software, through which all indirect procurement would be made. There are multiple easy to use cloud based purchasing softs for indirect procurement that would bring many advantages for the company.

The supplier relationships are mainly arm's length but they are usually long term. According to the interviews suppliers go through tendering processes cyclically, however, this competitive situation between old and new suppliers is rarely used as well as it could be. Old suppliers are many times given a massive advantage and because of this potential cost saving opportunities might stay unreached. The company should take advantage of the arm's length relationships and start being more aggressive in the price negotiations.

The case company has tried consortium purchasing once without a success. Even though consortium purchasing is considered to have more advantages than disadvantages it is quite controversial. The maturity of the procurement in the case company might not allow this type of procurement in the near future as it takes a lot of time and effort to make it work. If the procurement is getting developed and, for example a purchasing function is formed, consortium purchasing could be a possibility after some years.

In order to create categorical strategies the case company should incorporate category management in their indirect procurement. This would help the company to identify category level possibilities and ease the management of separate categories. Based on the interviews, it has been really hard and time consuming to make changes in the company and to get separate units to use the chosen suppliers. Through global cross-functional teams the creation and implementation of new ways of working will be much easier.

One problem that arose in the interviews was that the managers felt they did not have sufficient amount of quality data, from which to make decision. This was also noted while making the spend analysis. A good spend visibility is the starting point of any development activities in procurement, especially when new strategy is being formed. In order to find saving possibilities there must be a good visibility over all procurement. With this visibility

company can combine identical purchases, reduce supplier bases, cut down maverick spend, reduce spend by other departments, use wider and more efficient contracting methods and mitigate risks and enhance assurance.

As pointed out earlier the purpose of spend analysis is to find out who is buying what, from whom and on what price. The data used in this analysis included some shortages, which are:

1. It was not always clear to whom the purchases actually belonged to. As some of the procurement has been centralized and the costs are collected as internal fees it was not clear who is buying what.
2. Even though the procurement could be pointed to individual business units there was not information about who actually did the purchase.
3. There were many universal categories, which would need further categorization in order to clarify what is really being purchased. Categories such as “other personnel related spend”, “other office expenses”, “meetings and negotiations”, “other services”, “recruitment” just to name a few. These categories usually covered large amount of spend from large supplier base making it impossible to combine identical purchases and reduce the amount of suppliers.
4. Most of the times when an employee makes a purchase the name of the employee are marked as the supplier. This creates countless number of additional suppliers in to the data and makes it impossible to find the actual suppliers, calculate accurate supplier spends, and to make comparisons between different units and countries.

It is clear that the needs of a finance function and the needs of the spend analysis differs quite a lot. Data based on invoices is not as accurate as is needed for spend development and follow-up. Finance function wants to make as few categories as possible in order to make the process easy, whereas spend analysis would need as precisely defined information about what is being bought as possible. Companywide purchasing software would tackle this problem by providing on time accurate knowledge of what is being bought. However, if the company is not willing to incorporate this time of a system it should at least increase the amount commodity categorization in some categories in order to find leverage potentials.

## **4.2 Summary**

The main purpose of this thesis was to find out the current strategic level of the indirect procurement within the case company and how could it be developed in the future. This was the main research question of the thesis. The focus was to determine what specific features of indirect procurement could affect the strategy building and what would be the optimal way of dealing with indirect spend categories. These issues worked as sub-questions by supporting the main research question. A comprehensive literature review was made to straighten out the current knowledge behind the research subjects and to help the empirical analysis. The theoretical part of the thesis was divided into three distinct chapters according to the research questions. First part focused on indirect procurement to identify the variety of product categories with it, the specific features of indirect procurement, the management of indirect procurement, and off contract purchasing related to it. The second part revealed the importance of a spend analysis in strategy building and the main elements of purchasing strategy. The last chapter focused on category management by identifying the traditional ways of categorizing, category building & prioritization, team formation and the actual category management process.

A two stage empirical analysis was conducted in order to find solutions for the research questions. This empirical analysis was made in a form of a case study, focusing on a single organization to provide analysis and solutions. A total of seven interviews were made in order to get an understanding of the current state of indirect procurement within the case company. The interviews were coded in a reasonable form and analyzed in the first chapter of the empirical part. The second chapter focused on the spend data gained from a third party service provider. Several different analyses were conducted in order to bring basis for future directions. Finally the empirical analysis was compared to the theoretical findings and a framework for the case company was made. This framework provided future recommendations for the case company and possible outcomes of the development activities.

## **4.3 Further research topics**

In order to create generalizations about the strategy formation in indirect procurement there should be multiple case studies like this. It would be interesting to see similar case studies,

like this thesis, in the future and to see the similarities and differences between them. The future research could also examine the benefits of development activities in indirect procurement. Future topics could be for example the benefits of centralization in indirect procurement, or the benefits of standardization in indirect procurement.

The development activities in indirect procurement might end up being hard to execute because of the sensitivity linked to it. Future research could also examine the change management in indirect procurement, which has been left completely out of this thesis.

## 5. LIST OF REFERENCES

- AberdeenGroup. (2004). *Best Practices in Spending Analysis: Sure for a Corporate Epidemic*. Boston, Massachusetts: AberdeenGroup, Inc.
- Adeleye, B. C., Annansingh, F., & Nunes, M. B. (2004). Risk management practices in IS outsourcing: an investigation into commercial banks in Nigeria. *International Journal of Information Management*, 24(2), 167-180.
- Ahtonen, A.-K., & Virolainen, V. (2009). Supply strategy in the food industry—value net perspective. *International Journal of Logistics: Research and Applications*, 12(4), 263-279.
- Angels , R., & Ravi, N. (2007). "Business-to-business e-procurement: success factors and challenges to implementation. *Supply Chain Management: An International Journal*, 12(2), 104-115.
- Argyres, N. (1996). Evidence on the role of firm capabilities in vertical integration decisions. *Strategic Management Journal*, 17(2), 129-150.
- Ates, M. A. (2014). Purchasing and Supply Management at the Purchase Category Level: strategy, structure and performance. Doctoral thesis. *Erasmus Universiteit Rotterdam*, 1-209.
- Badenhorst, J. A. (1994). Unethical behaviour in procurement: A perspective on causes and solutions. *Journal of Business Ethics*, 13(9), 739-745.
- Bensaou, M. (1999). Portfolios of buyer-supplier relationships. *MIT Sloan Management Review*, 40(4), 35-44.
- Blomqvist, K., Kyläheiko, K., & Virolainen, V. (2002). Filling a gap in traditional transaction cost economics: Towards transaction benefits-based analysis. *International Journal of Production Economics*, 79(1), 1-14.
- Caniëls, M., & Gelderman, C. J. (2007). Power and interdependence in buyer supplier relationships: A purchasing portfolio approach. *Industrial Marketing Management*, 36(2), 219-229.
- Cannon, J. P., & Perreault, W. D. (1999). Buyer-Seller relationships in Business Markets. *Journal of Marketing Research*, 439-460.
- Carr, A. S., & Pearson, J. N. (1999). Strategically managed buyer–supplier relationships and. *Journal of Operations Management*, 17(5), 497-519.

- Carter, J. R., & Ram, N. (1996). Purchasing and supply management: Future directions and trends. *International Journal of Purchasing and Materials Management*, 32(4), 2-12.
- Carter, P., Beall, S., Rosetti, C., & Leduc, E. (2003). *Critical Issue: Indirect Spend*. [www.caresearch.org](http://www.caresearch.org): CAP.
- Chen, I. J., Paulraj, A., & Lado, A. A. (2004). Strategic Purchasing, Supply management, and Firm Performance. *Journal of operations management*, 22(5), 505-523.
- Cho, J., & Kang, J. (2001). Benefits and challenges of global sourcing: perceptions of US apparel retail firms. *International Marketing Review*, 18(5), 542-561.
- Chowdhary, P., Ettl, M., Dhurandhar, A., Ghosh, S., Maniachari, G., Graves, B., & Tang, Y. (2011). Identify and manage procurement savings using advanced compliance analytics. *Proceedings of the IEEE International Conference on e-Business Engineering*.
- Corsten, D., & Felde, J. (2005). Exploring the performance of key-supplier collaboration: An empirical investigation into Swiss buyer-supplier relationships. *International Journal of Physical Distribution Logistics Management*, 35(6), 445-461.
- Cox, A. (1996). Relational competence and strategic procurement management: Towards an entrepreneurial and contractual theory of the firm. *European Journal of Purchasing & Supply Management*, 2(1), 57-70.
- Cox, A. (2015). Sourcing portfolio analysis and power positioning: towards a “paradigm shift” in category management and strategic sourcing. *Supply Chain Management: An International Journal*, 20(6), 717-736.
- Cox, A., Chicksand, D., Ireland, P., & Daves, T. (2005). Sourcing Indirect Spend: A survey of Current Internal and External Strategies for Non-revenue-generating Goods and Services. *Journal of Supply Chain Management*, 41(2), 39-51.
- Cox, A., Watson, G., Lonsdale, C., & Sanderson, J. (2004). Managing appropriately in power regimes: relationship and performance management in 12 supply chain cases. *Supply Chain Management: An International Journal*, 9(5), 357-371.
- De Boer, L., Ebben, M., & Pop-Citar, C. (2003b). Studying purchasing specialization in organizations: a multi-agent simulation approach. *Journal of Purchasing and Supply Management*, 9(5), 199-206.

- De Boer, L., Holmen, E., & Pop-Sitar, C. (2003a). Purchasing as an organizational design problem: the case of non-product-related items and services. *Management Decision*, 41(9), 911-922.
- Driedonks, B., Gevers, J., & van Weele, A. (2014). Success factors for sourcing teams: How to foster sourcing team effectiveness. *European Management Journal*, 32(2), 288-304.
- Dubois, A., & Pedersen, A.-C. (2002). Why relationships do not fit into purchasing portfolio models—a comparison between the portfolio and industrial network approaches. *European Journal of Purchasing & Supply Management*, 8(1), 35-42.
- Eisenhardt, K. (1989). Building theories from case study research. *Academy of management review*, 14(4), 532-550.
- Ellram, L. M., & Carr, A. (1994). Strategic purchasing: a history and review of the literature. *International Journal of Purchasing and Materials Management*, 30(1), 9-19.
- Englyst, L., Jørgensen, F., Johansen, J., & Mikkelsen, O. (2008). Commodity team motivation and performance. *Journal of Purchasing and Supply Management*, 14(1), 15-27.
- Essig, M. (2000). Purchasing consortia as symbiotic relationships: developing the concept of “consortium sourcing. *European Journal of Purchasing & Supply Management*, 6(1), 13-22.
- Faes, W., Matthyssens, P., & Vandenbempt, K. (2000). The pursuit of global purchasing synergy. *Industrial Marketing Management*, 29(6), 539-553.
- Fearon, H. E., & Bales, W. A. (1995). *Purchasing of Nontraditional Goods and Services*. CAPS research.
- Gebauer, J., & Arie, S. (2000). Emerging technologies to support indirect procurement: two case studies from the petroleum industry. *Information Technology and Management*, 1(1-2), 107-128.
- Gebauer, J., & Arie, S. (2001). Gebauer, J., & Segev, A. (2001, January). Changing Shapes of Supply Chains-how the internet could lead to a more integrated procurement function. *Supply Chain Forum: An International Journal*, 2(1), 2-9.
- Gebauer, J., Haacker, D., & Shaw, M. J. (2003). *Global Non-Production Procurement at Motorola: Managing the Evolving Enterprise Infrastructure*. New York: KLUWER ACADEMIC PUBLISHERS .

- Gelderman, C., & Van Weele, A. (2005). Purchasing portfolio models: a critique and update. *Journal of Supply Chain Management*, 41(3), 19-28.
- Gelderman, K., & Van Weele, A. J. (2000). New perspectives on Kraljic's purchasing portfolio approach. Proceedings from the ninth international annual IPSERA conference. *London, Canada*, 291-298.
- Ghaderi, H., & Leman, Z. (2013). Horizontal collaboration in purchasing: A successful case from small and medium enterprises (SMEs). *African Journal of Business Management*, 7(10), 750-753.
- Gilley, K. M., & Rasheed, A. (2000). Making more by doing less: an analysis of outsourcing and its effects on firm performance. *Journal of management*, 26(4), 763-790.
- Haake, H., & Seuring, S. (2009). Sustainable procurement of minor items—exploring limits to sustainability. *Sustainable Development*, 17(5), 284-294.
- Heikkilä, J., & Kaipia, R. (2009). Purchasing Category Management—From Analyzing Costs to a Proactive Management Practice. *18 th IPSERA Conference Supply Management—Towards an Academic*, 1-18.
- Hesping, F. H., & Schiele, H. (2015). Purchasing strategy development: A multi-level review. *Journal of purchasing and supply management*, 21(2), 138-150.
- Holcomb, T. R., & Hitt, M. A. (2007). Toward a model of strategic outsourcing. *Journal of operations management*, 25(2), 464-481.
- Iloranta, K., & Pajunen-Muhonen, H. (2008). *Hankintojen johtaminen*. Jyväskylä: Tietosanoma Oy.
- Iloranta, K., & Pajunen-Muhonen, H. (2015). *Hankintojen johtaminen*. Helsinki: Tietosanoma.
- Jennings, D. (1997). Strategic guidelines for outsourcing decisions. *Strategic Change*, 6(2), 85-96.
- Johnson, F. P. (1999). The pattern of evolution in public sector purchasing consortia. *International journal of logistics: Research and applications*, 2(1), 57-73.
- Johnson, F. P., Leenders, M. R., & Fearon, H. E. (1998). The influence of organizational factors on purchasing activities. *International Journal of Purchasing and Materials Management*, 34(2), 10-19.
- Johnson, P., Klassen, R., Leenders, M., & Fearon, H. (2002). Determinants of purchasing team usage in the supply chain. *Journal of Operations Management*, 20(1), 77-89.

- Joong-In, K., & Shunk, D. L. (2004). Matching indirect procurement process with different B2B e-procurement systems. *Computers in Industry*, 53(2), 153-164.
- Kapoor, V., & Gupta, A. (1997). Aggressive sourcing: a free-market approach. *MIT Sloan Management Review*, 39(1), 21-31.
- Karjalainen, K., Kemppainen, K., & van Raaij, E. M. (2009). Non-compliant work behaviour in purchasing: an exploration of reasons behind maverick buying. *Journal of business ethics*, 80(2), 245-261.
- Kauffman, R. G., & Leszczyc, P. T. (2005). An optimization approach to business buyer choice sets: How many suppliers should be included? *Industrial Marketing Management*, 34(1), 3-12.
- Keough, M. (1993). Buying your way to the top. *The McKinsey Quarterly*, 3, 41-63.
- Kotabe, M., & Omura, G. (1989). Sourcing strategies of European and Japanese multinationals: a comparison. *Journal of International Business Studies*, 113-130.
- Kraljic, P. (1983). Purchasing must become supply management. *Harvard business review*, 61(5), 109-117.
- Krause, D., Vachon, S., & Klassen, R. (2009). Special topic forum on sustainable supply chain management: Introduction and reflections on the role of purchasing management. *Journal of Supply Chain Management*, 45(4), 18-25.
- Leenders, M. R., & Fearon, H. E. (2008). Developing Purchasing's Foundation. *Journal of Supply Chain Management*, 44(2), 17-27.
- Lintukangas, K., Kähkönen, A.-K., & Virolainen, V. (2013). The antecedents of supply strategy. *European Business Review*, 25(5), 396-410.
- Loh, L., & Venkatraman, N. (1992). Determinants of information technology outsourcing: a cross-sectional analysis. *Journal of management information systems*, 9(1), 7-24.
- Luzzini, D., Caniato, F., Ronchi, S., & Spina, G. (2012). A transaction costs approach to purchasing portfolio management. *International Journal of Operations & Production Management*, 32(9), 1015-1042.
- Lyons, T., & Krachenberg, F. (1990). Mixed Motive Marriages: What's Next for Buyer-Supplier Relations. *Sloan Management Review*, 31(3).
- Marmaris, H., & Pandit, K. (2008). *Spend analysis, the window into strategic*. Forth Lauderdale: J. Ross Publishing.
- Min, H., & Galle, W. (1991). International purchasing strategies of multinational US firms. *Journal of Supply Chain Management*, 27(1), 9.

- Moczka, R., & Trent, R. (2005). *Purchasing and supply management*. Manson: South-Western.
- Monczka, R., Handfield, R., Giunipero, L., & Patterson, J. (2011). *Purchasing and supply management*. Manson, OH: South-Western Cengage Learning.
- Nellore, R., & Söderquist, K. (2000). Portfolio approaches to procurement: Analysing the missing link to specifications. *Long Range Planning*, 33(2), 245-267.
- Nellore, R., & Söderquist, K. (2000). Portfolio approaches to procurement: Analysing the missing link to specifications. *Long Range Planning*, 33(2), 245-267.
- Nollet, J., & Beaulieu, M. (2005). Should an organisation join a purchasing group? *Supply Chain Management: An International Journal*, 10(1), 11-17.
- O'Brien, J. (2015). *Category management in purchasing: a strategic approach to maximize business profitability*. London: Kogan Page Publishers.
- Olsen, R., & Ellram, L. M. (1997). A portfolio approach to supplier relationships. *Industrial marketing management*, 26(2), 101-113.
- Pagell, M., Wu, Z., & Wasserman, M. (2010). Thinking differently about purchasing portfolios: an assessment of sustainable sourcing. *Journal of Supply Chain Management*, 46(1), 57-73.
- Patnayakuni, R., & Ruppel, C. (2006). Managing the complementarity of knowledge integration and process formalization for systems development performance. *Journal of the association for information systems*, 7(8), 545-567.
- Payne, J., & Dorn, W. R. (2011). *Managing Indirect Spend*. New Jersey: John Wiley & Sons.
- Ploetner, O., & Ehret, M. (2006). From relationships to partnerships - new forms of cooperations between buyer and seller. *Industrial Marketing Management*, 35(1), 4-9.
- Porter, A. M. (1999). Taking Control of "indirect" Corporate Spending. *Purchasing*, 127(3), 55-60.
- Puschmann, T., & Rainer, A. (2005). Successful use of e-procurement in supply chains. *Supply Chain Management: An International Journal*, 10(2), 122-133.
- Quayle, M. (1998). Industrial procurement: factors affecting sourcing decisions. *European Journal of Purchasing and Supply Management*, 4(4), 199-205.
- Quinn, J. B., & Hilmer, F. G. (1995). Strategic outsourcing. *McKinsey Quarterly*(1), 48-70.

- Quintens, L., Pauwels, P., & Matthyssens, P. (2006). Global purchasing strategy: Conceptualization and measurement. *Industrial Marketing Management*, 35(7), 881-891.
- Ramsay, J. (1996). The case against purchasing partnerships. *Journal of Supply Chain Management*, 32(4), 13-19.
- Rozemeijer, F. (2000). How to manage corporate purchasing synergy in a decentralised company? Towards design rules for managing and organising purchasing synergy in decentralised companies. *European Journal of Purchasing & Supply Management*, 6(1), 5-12.
- Samli, C., & Browning, J. (2003). Developing competitive advantage: international sourcing as a strategic tool. *Journal of global Marketing*, 16(4), 35-52.
- Sánchez-Rodríguez, C., Hemsworth, D., Martínez-Lorente, A. R., & Clavel, J. G. (2006). An empirical study on the impact of standardization of materials and purchasing procedures on purchasing and business performance. *Supply Chain Management: An International Journal*, 11(1), 56-64.
- Sarkar, A., & Mohapatra, P. (2009). Determining the optimal size of supply base with the consideration of risks of supply disruptions. *International Journal of Production Economics*, 119(1), 122-135.
- Schiele, H., Horn, P., & Vos, B. (2011). Estimating cost-saving potential from international sourcing and other sourcing levers: Relative importance and trade-offs. *International Journal of Physical Distribution & Logistics Management*, 41(3), 315-336.
- Schotanus, F., & Telgen, J. (2007). Developing a typology of organisational forms of cooperative purchasing. *Journal of Purchasing and Supply Management*, 13(1), 53-68.
- Schotanus, F., Telgen, J., & de Boer, L. (2010). Critical success factors for managing purchasing groups. *Journal of purchasing and supply management*, 16(1), 51-60.
- Sheng, M. L. (2002). The impact of Internet-based technologies on the procurement strategy. *Proceedings of the 2nd International Conference on Electronic Commerce*.
- Sitar, C. P. (2011). Optimizing purchasing management of non-productions-related goods and services. *The annals of dimitrie christian university*, 134-140.

- Smart, A., & Dudas, A. (2007). Developing a decision-making framework for implementing purchasing synergy: a case study. *International Journal of Physical Distribution & Logistics Management*, 37(1), 64-89.
- Songini, M. (2001). Supply chain ROI is Elusive. *Computer world*, 35(1), 1-65.
- Spekman, R. E., Kamauff, J. W., & Myhr, N. (1998). An empirical investigations into supply chain management: A perspective on partnerships. *International journal of physical distribution logistics management*, 28(8), 630-350.
- Tella, E., & Virolainen, V.-M. (2005). Motives behind purchasing consortia. *International Journal of Productions Economics*, 93, 161-168.
- Trautmann, G., Turkulainen, V., Hartmann, E., & Bals, L. (2009). Integration in the global sourcing organization—An information processing perspective. *Journal of Supply Chain Management*, 45(2), 57-74.
- Trent, R., & Monczka, R. (1994). Effective cross-functional sourcing teams: Critical success factors. *International Journal of Purchasing and Materials Management*, 30(3), 2-11.
- Tunisini, A., Bocconcelli, R., & Pagano, A. (2011). Is local sourcing out of fashion in the globalization era? Evidence from Italian mechanical industry. *Industrial Marketing Management*, 40(6), 1012-1023.
- Turnbull, P. (1990). A review of portfolio planning models for industrial marketing and purchasing management. *European Journal of marketing*, 24(3), 7-22.
- Van Weele, A. J. (2014). The Future of Purchasing and Supply Management Research: About relevance and Rigor. *Journal of Supply Chain Managemen*, 50(1), 56-72.
- Watts, C. A., Kim, K. Y., & Hahn, C. K. (1995). Linking purchasing to corporate competitive strategy. *Journal of Supply Chain Management*, 31(2), 2-8.
- Ventovuori, T. (2007). Elements of sourcing strategy in facilities management services - decision category and choices. Doctoral thesis. *Helsinki University of Technology Construction Economics and Management*, 1-81.
- Vesalainen, J. (2004). *Katetta kumppanuuteen. Hyöty ja sen jakaminen asiakas-toimittaja-suhteessa*. Helsinki: Teknologiaiinfo Teknova Oy.
- Williamson, O. E. (1979). Transaction-cost economics: the governance of contractual relations. *The journal of law & economics*, 22(2), 233-261.
- Williamson, O. E. (1981). The Economics of Organization: The Transaction Cost Approach. *American Journal of Sociology*, 87(3), 548-577.

Zeng, Z. A. (2000). A synthetic study of sourcing strategies. *Industrial Management & Data Systems*, 100(5), 219-226.

## 6. APPENDICES

### Appendix 1: The list of interviewees

Interview no.	Date	Interviewee
1	24.3.2016	Head of Facilities
2	5.4.2016	Manager. Procurement & Travel
3	6.4.2016	IT Service Delivery Manager
4	12.4.2016	Chief Information Officer
5	14.4.2016	Group Travel Manager Senior Vice President Human resources
6	21.4.2016	resources
7	12.5.2016	Office Manager

### Appendix 2: Interview questions

- 1.) How indirect purchases are divided in the organization?
- 2.) What are the responsibilities of different units?
- 3.) What are the current practices in indirect procurement?
- 4.) What are the biggest challenges in indirect procurement?
- 5.) Have indirect procurement been developed in recent years? If yes, how?
- 6.) Is there any cooperation between different units/countries? If yes, what?
- 7.) What do you think about centralized purchasing unit in indirect procurement?

### Appendix 3: Procurement 2014-2015

