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Tactical sourcing, fast lane for medium value purchases

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ABSTRACT

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Medium value purchases make up a vast portion of organisations' purchases. Medium value purchases differ from large purchases that the purchases value is smaller and quantity higher. They are not managed efficiently if they are managed as large purchases. However, they should not be managed as small purchases as they have savings possibilities that are not obtained with a process that is designed for small purchases.

This study offers a solution for medium value spend management. The solution is *tactical sourcing*. The tactical sourcing is designed for Tieto Corporation's need and it was influenced by Six Sigma methods and tools.

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Ilari Rantatalo

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1 INTRODUCTION

Supply management is an important part of a company's operations. In manufacturing organisations it is essential for day to day operations. In service organisations it is important as it affects quality and profitability. One of the most important parts of supply management is strategy. Strategy creates the goals of the organisations procurement. However, day to day actions and choices compose how procurement will actually perform. In this sense the supply management capabilities will boil down to the purchasing, procurement process or anything that the organisation calls what happens between a purchase request and the relaying of the order to a supplier.

The topic of this thesis is tactical sourcing. Tactical sourcing is a purchasing process that is designed to fill a certain gap in organisations procurement. In general the larger purchases of goods, items and services have a strong supporting network of information. Furthermore, small purchases have applications for an easy, efficient and effective process. Tactical sourcing has been planned to fill the gap between these two realms of purchases. The target of the thesis is a find what is important in medium value purchases and what kind of process should be in place to handle these purchases. In this thesis it is done to Tieto Corporation and the final application will primarily suit the situation and need of Tieto.

In this thesis tactical sourcing has been viewed through theory and empirics. In the theory part supply management and its many aspects have been discussed for reference. In the empirical part the case company has been presented and a feasible tactical sourcing process has been introduced.

1.1 Background and goals

The background and the starting point of the research have operational roots. The current corporate strategy of Tieto emphasizes the importance of procurement. One of the next steps the procurement of Tieto is taking is

development to a more mature organisation and continuing reaching its set of ever demanding key performance indicators. As the procurement organisation is quite young and it is developing fast it was found that concentrating more on medium spend could possibly help in achieving the goals. This is due to that in certain cases the current processes have a gap resulting in that some purchases are seen to be managed in a way that can be improved.

As theory cannot straight and in itself answer this in the case of Tieto this study was initiated. The goal of the research is to find out how to manage successfully Tieto's medium value spend. The result of the study will be process specifications suggestions and a tactical sourcing process. The tactical sourcing is a process that is designed by taking into account current theoretical finding, the situation and demands from Tieto. This discussion creates the recommendations for the results. A figure presenting the discussion framework is presented below.

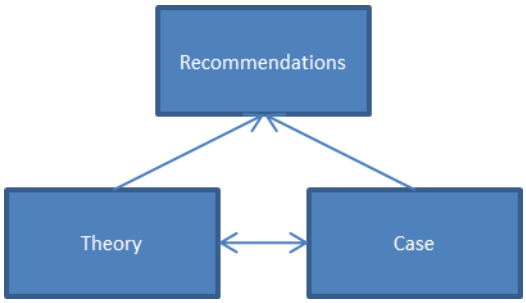

Figure 1 - Relationships of themes

1.2 Research questions

The goal of the research can be formulated into a research problem. The research problem can be stated as following: there is gap in the procurement process of the case company leaving room to improve the process of medium

value spend. How should this gap be filled? The problem is specified into the following research questions:

- How can medium value spend be managed?
- How could medium value spend be managed in Tieto?

The first question is a theoretical one. The answer to that will be found in the current supply management literature. The second question concentrates on the case company. Answering it requires the answers from the first research question, combined with the empirical findings from the case organisation. The research questions and other results of the study will be discussed in the last chapter named summary and conclusions.

This research was conducted as a case study. Thus the case study methodology is referred while conducting this study. An important part of this study is the Six Sigma methods as they have influenced how this study was planned and executed. The results of the study were formed through a series of interviews that verified the need for medium value spend management. This was followed by workshops that collected information from process partners. The information was then refined on how to fill the requirements. From the requirement the most important were assessed with a concept comparison and that revealed what are the most important factors for tactical sourcing. The methodology of this study is presented in more detailed in chapter three.

1.3 Theoretical framework

The management of medium value spend is not a simple question. The management of multiple cases can be done through processes. Processes have inputs and outputs. First when we are thinking of a process we need to think what we want from the process, thus what are the organisational requirements for it. Linked to the requirements is what kinds of purchases do we want to handle in this process to gain the wanted benefits. Do we want to

use this process for high value high risk purchases or completely something else? The identification and classification of wanted purchases is vital. (Gadde and Håkanson 1993, 13 - 20; Bensaou 1999; Olsen and Ellram 1997; Zsidisin et al. 1999, 2003; Harland et al. 2003; Caniëls & Gelderman 2005)

The organisational requirements have aspects from purchasing strategy and organisational goals. However, it should be noted that organisational buying behaviours influences how the purchases decisions are made. If a proper process is in place, it does not help anyone, if it is not used and accepted because maverick buying is present or if the process artefacts are created afterward to make the purchase look rational. (Ellram and Carr 1994; Carr & Smeltzer 1997; Kraljic 1983; Karjalainen et al. 2008; Angeles and Nath 2007; Kulp et al. 2006; Thompson et al. 1998; Robinson, et al, 1967; Bonoma 1982)

Related to purchasing behaviour is the purchasing process. Theory suggests multiple different kinds of purchasing processes that have different aspects to the process. The processes are formed from process steps that are leading to a good purchasing result. (Kakouris and Polychronopoulos 2006; Ghingold and Wilson 1998; Joong-In and Shunk 2004; Lilien and Wong 1984; Gonzales-Benito 2002; Subroto 2002)

The final major theme affecting the tactical sourcing process is the purchase characteristics. When a purchase enters this process it is classified and evaluated. However, should the purchasing process be the same even if the purchase is a service or an item? (Zeithaml et al. 1985; Lovelock and Gummesson 2004) The theoretical background of the thesis is presented in the figure on the next page.

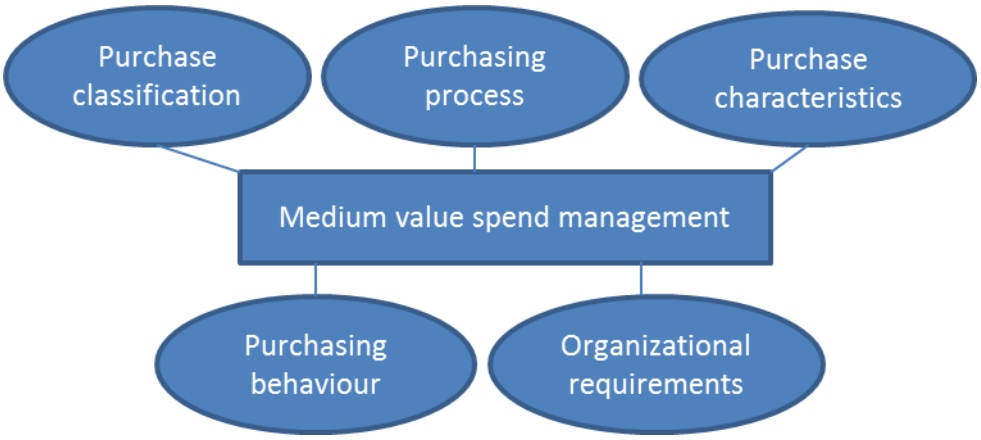

Figure 2 - Theoretical background

1.4 Structure of the report

First is this chapter, the introduction. The subject and idea of tactical sourcing are presented. In addition, the main concepts are introduced and the research goals and problems are stated.

The second chapter is titled supply management. It forms the theoretical foundation of this study, and it is divided into three subchapters. These chapters discuss the procurement strategy, supply classification and the purchasing process. Procurement strategy chapter concentrates on procurement strategy on a high level. The supply management chapter discusses different supply classification criteria. The framework of the purchasing process chapter explores what affects the purchasing process within an organisation. The affecting effects vary from the items versus services comparison to maverick buying.

In the third chapter explains the methodology of the study. It is divided to case study exploration, Six Sigma and how the information was gathered. In there the methodology shown in the introduction is explained in more detail.

Fourth chapter dives into the world of core of the topic. At the beginning the case company and its operations are explained. Procurement of the case

company is looked in more dept. The introduction is followed by the gap for improvement in the organisation. When the topics foundation is laid tactical sourcing applicable purchases are explored. This is followed by the tactical sourcing process and its measurement. Additionally, the implementation of tactical sourcing is also discussed.

The last chapter is titled summary and conclusions. In that chapter the study is summed up and the research gap is given an answer and the research problems are answered. Furthermore, the possible theoretical findings are discussed and further research is called for.

2 SUPPLY MANAGEMENT

Supply management can be viewed in multiple and in a vast variety of ways. The following chapter will introduce the backbone of theory used in this research. In this paper the supply management is looked from top down. First, procurement strategy and its links to other corporate strategies are explored. It is linked to the operations of organisations and it relates the research topic to the organisational strategy. This is followed by supply classification which is an important part of supply management as classifications enable different kinds of analyses and strategies for varying purchases. Furthermore, in this section different parameters for supply classification are presented. Finally, the theoretical purchasing process is presented and dissected to explain each phase's value to the organisation and its users. The purchasing process is explored in a holistic way. The differences of goods and services are discussed. Organisational purchasing behaviour is taken into account to understand the purchasing decisions properly. To understand the difficulties of the purchasing process, maverick buying and its reasons are included.

2.1 Procurement strategy

Ellram and Carr (1994) have noted that procurement can influence profitability only when it's done in a strategic level. When purchasing or procurement strategy is discussed, strategy can be seen as a certain specific action that purchasing function has option to take in order to achieve its objectives. (Carr & Smeltzer 1997) The options can be with what suppliers are operated with, how to operate with the suppliers or what kind of relationship to engage with the supplier (Kraljic 1983). Procurement strategy can also set goals for ethical and environmental issues (Murray 2000). Historically the relationship between purchasers and suppliers has been seen as a competition with elements of a zero sum game. However, this varies on the relationship between the purchaser and the supplier. (Virolainen 1997)

Figure 3 - Strategic planning (Carr & Smeltzer 1997)

When creating a strategy three organisational levels need to participate. These are the corporate, the business unit and the functional level (Carr & Smeltzer 1997). Corporate level is the level that decides in what businesses the organisation should be in. Business level decides how to compete on the selected business. The third and operational level tackles the integration of the functional activities and taking the corporate strategy into functional decisions. Furthermore, it should be noted that both the internal and the external environment of the organisation affect planning. The organisation has to estimate changes in the environment to be able to operate successfully. When considering purchasing the environments of the suppliers have to be taken into account. (Carr & Smeltzer 1997) Figure representing this relationship of strategic planning levels is presented above. Virolainen (1997) furthermore separates procurement strategy in to three levels. These levels are competition-related strategy, procurement system related strategy and performance-related strategy.

Procurement strategy boils down into classification and decisions made with the specific classes. Kraljic (1983) has presented a two-by-two matrix that can be used to differentiate purchases into classes and manage those classes appropriately. This matrix is presented in figure 4 Kraljic argues that the

company’s need for supply strategy depends on two factors. These are the strategic importance of the purchase and complexity of the supply market. The strategic importance is explained on a high level and the factor includes value added, total costs and profitability. The second factor is complexity of supply market and it views the purchases by their scarcity, entry barriers and other market situations. These two factors can be merged and used to determine the strategy of the company, by using the quadrant specific strategies. Analysing purchases with these factors enables tailoring strategies to each quadrant, which again enables the leveraging of their characteristics.

The four strategies in the Kraljic (1983) matrix are the following: purchasing management, materials management, sourcing management and supply management. All of the strategies have their own characteristics. The strategies and the types of purchases are explained below.

Purchasing management is applicable to purchases that are low in complexity of supply market and low in importance of purchasing. This strategy emphasizes efficiency in the purchasing process as it produces the most value to the purchasing organisation. The purchases are not business critical and there is a vast supply of them in the market. Typically these items are commodities or in some cases materials for manufacturing.

Materials management is valid when the importance of purchasing is high and the complexity of supply market is low. The strategy in these cases is leveraging the purchasing volume and the key parameter is price of the purchase. The focus of this strategy is in low cost and efficient handling of purchases. Typically there are multiple suppliers that are located near the users.

Sourcing management is a suitable strategy when the complexity of supply market is high and the importance of purchasing is high. In this strategy the focus is in bottleneck items and the aim is in cost management and maximising the reliability of short term availability. The rarity of the purchase

is mainly caused by production based scarcity. The typical suppliers for this quadrant are mainly globally operating new suppliers with new technology.

Supply management is the chosen strategy when the complexity of supply market and importance of purchasing are both high. The rarity of the purchase increases the complexity as there is a natural scarcity of the purchase. The focus is in strategic items and one of the reasons to the complexity is the natural scarcity of the purchase. The purchases have significant importance to the business and the main focus in this category is to enable long term availability. Typically the suppliers are established and well known globally operating suppliers.

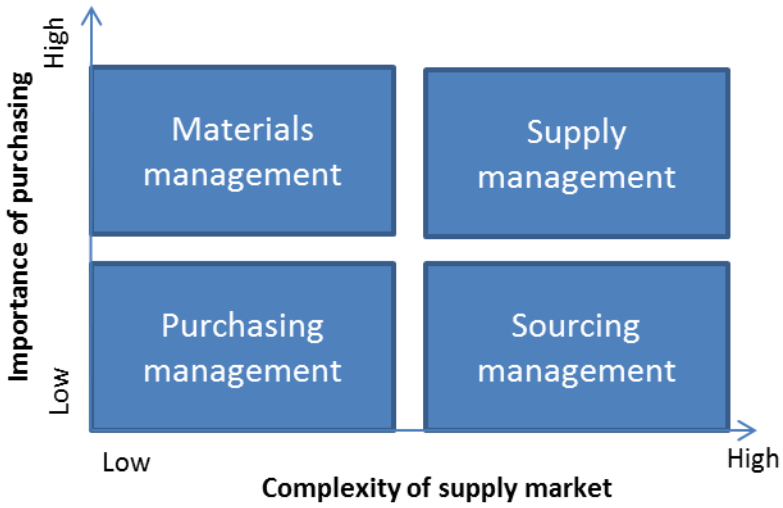

Figure 4 - Kraljic matrix (1983)

2.2 Supply classification

To be able to analyse and differentiate the purchases organisations make a set of criteria is required. This is where supply classification comes in. According to Kraljic (1983) organisations' purchasing strategy depends on two factors. The first factor is the strategic financial impact of the purchase and the second is the complexity of the supply market. Other authors have suggested other ways to classify supply which vary from different complexity perspectives to the effects of the suppliers brand on purchasing organisations

operations. (Fisher 1976, 29 - 33; Lung 2007; Elliott-Shircore and Steele 1985; Olsen & Ellram 1997).

When applying supply classification certain precautions should be taken. Classification criteria like effects of image, procurement risk, or other abstract measures may be extremely difficult and thus the recommendations given by these measures should be used with care. (Gelderman & Van Weele 2003) In addition, when choosing and defining the criteria the measurer should be positive the chosen criterion and the factors associated with it are related in a meaningful way. (Nellore & Soéderquist 2000)

The supply classification criteria can be sorted in six categories that are usability class, financial impact, strategic importance, procurement risk, supplier relationship and the complexity of purchase. All of them provide a different aspect to the purchase. The classification criteria are explained in the following subchapters. A summary of the supply classification criteria is depicted below.

Table 1 - Supply classification criteria

Criteria	Description
Usability class	Classification done by type Gadde & Håkansson 1993, 13 - 20, Iloranta & Pajunen-Muhonen 2008, 135 – 137
Financial impact	Purchases are classified through its cost, profit or other monetary impact Kraljic 1983, Burt 1989
Strategic importance	Purchases are classified by their assumed long term impact Olsen and Ellram 1997, Bensaou 1999
Procurement risk	Classification is done in the perspective of the potential problems Zsidisin et al. 1999, 2003, Harland et al. 2003, Kraljic 1983, Van Weele 2005, 149
Supplier relationship	Classification criteria come from supplier relationship Caniëls & Gelderman 2005, Olsen & Ellram 1997, Cox, 2001, Dubois & Pedersen 2002
Complexity of purchase	Purchases are grouped according to their technical complexity Fisher 1970, 29 – 33, Van Weele 2005, 37

The simplest way to classify supplies is to classify them to groups by their technical or other properties. Technical properties can be anything from colour or how the item or service is used. Gadde and Håkanson (1993 13 - 20) have found five classes that purchases can be classified according to their use. The groups are devices, components, processed material, maintenance and services. Another and a higher class perspective to this type of classification is ranking them according to their financial use. This kind of ranking can be: direct, indirect and investment purchases. (Iloranta & Pajunen-Muhonen 2008, 135 - 137)

A typical way to classify purchases is to look at their financial impact. The main aspect of the financial impact is how much the purchase impacts the organisation's profits. However, direct profit is not the only perspective to financial impact: the financial impact can be explored in the following questions. "How much is the purchases spend?" asking how much is used on the current purchase or the substitutable purchases, "How much is the profit per purchase?" (Kraljic 1983) and "how much of bad quality costs come from the purchase?" (Burt 1989)

Strategic impact is an important aspect of supply classification. With supply classification insights can be gained about the purchase's long term effects. Olsen and Ellram (1997) take into account how does the purchase bring benefits for the final offering to the customer and how much added value it brings. In addition, the authors recommend taking into account spill over effects of the purchase, including the effect of other purchases that affect the prices of items from the same supplier.

Bensaou (1999) has introduced two ways to categorise purchases in strategic manner. First of them is to categorise suppliers with the investment size the purchaser commits to the supplier. Investments can include purchasing organisations investments to equipment and machinery, modifications to the process to fit the supplier's products and training of personnel to be able to

realize the benefits of the supplier. Bensaou (1999) also notes that investments to modifications can lead to a vicious circle, which demands more and more investments in the future. The other perspective introduced by Bensaou (1999) is to look at the supplier's investments to the supplier-purchaser relationship. These investments can be capacity and warehousing. Additionally, they can be changes to the supplier's ERP system to be compatible with the purchasing organisation.

According to Olsen and Ellram (1997) competence and image factors of the supplier relationships should be considered when assessing the purchase. By competence it is meant how close the purchase is to the core competence of the company. Additionally, development of the competence should be understood. When purchasing the accumulation of technology and knowledge should be taken into account in the purchasing organisation. The authors have additionally presented an image perspective that is related to corporate responsibility as environmental and security factors are mentioned. Thus, supplier's image and the criticality of it to business have to be considered to understand the whole strategic effect of the purchase.

Procurement risk means the potential difficulty of the purchase in the future. Zsidisin et al. (1999, 2003) have a narrow definition of the risk and they limit it to the potential of quality variance in received items. Harland et al. (2003) suggested that purchasing risk is a negative effect on the resource that the organisation uses. Procurement risk is emphasized in products which are limited in their nature. Furthermore, measurement of procurement risk is difficult, because situations that lead to high supply risk may appear precipitously.

The procurement risk can be categorised in five classes. They are disruption, price, inventory, technology and quality. Disruption relates to the event that there is an interruption in the delivery and what are the alternatives in that situation. The risk related to the price arises from the price variation and

especially to the event that the supplier raises the price. Inventory risk means the reliability of wanted inventory levels. Technology risk is the risk related to the technology used by the supplier and its effects on the purchaser. The final risk class in procurement risk is quality risk. It is defined by implications of the supplier's quality. (Treleven & Schweikhart 1988) The risks are summarised in a table below.

Table 2 - Classes of procurement risk adabted from Treleven & Schweikhart 1988

Procurement risk	Effect
Disruption	Interrupted deliveries
Price	Price variation
Inventory	Inventory levels
Technology	Suppliers technological choices
Quality	Unwanted quality

Procurement risk is related to the complexity of supplier network and as the supplier network grows in complexity the procurement risk increases. Procurement risk can be measured with short and long term availability and structure of the market (Van Weele 2005, 149). Procurement risk is affected by the number of suppliers, competitive demand, make-or-buy decisions and substitute options. (Kraljic 1983)

Purchases can be classified by measuring and grouping factors of the supplier relationship. These factors include division of power between the supplier and the purchaser (Caniëls & Gelderman 2005) and the technological and commercial competence of the supplier. (Olsen & Ellram 1997) Power division is an important perspective what looks at the dyad gains of the transactions is important. (Cox 2001) It is difficult to evaluate the supplier relationship precisely by revenue and spend. Evaluation is difficult because the supplier relationship can affect the organisation in many ways other than a purchasing case. (Dubois & Pedersen 2002)

Fisher (1970, 29 - 33) has presented a classification category that is based on the analysis complexity of the purchase. When assessing the complexity of the purchase it should be taken into account how the purchase affects the

organisation. (Van Weele 2005 37). According to Van Weele (2005) the purchase and its complexity may affect the organisation when completely new systems or machines are procured which's use require organisational change. The change can vary from personnel training to variety of process changes.

2.3 Framework for the purchasing process

Strategy contributes to the success of the organisation on a higher in some sense a philosophical level. In order to get tangible results and benefits the strategies have to operationalize. This is where the purchasing process comes in. The idea of the purchasing process is to represent how the purchasing happens in the organisation. In this chapter we will look at what the literature has to bring to purchasing processes and what are the key points of the process. The most important elements and relations are shown in the picture on the next page.

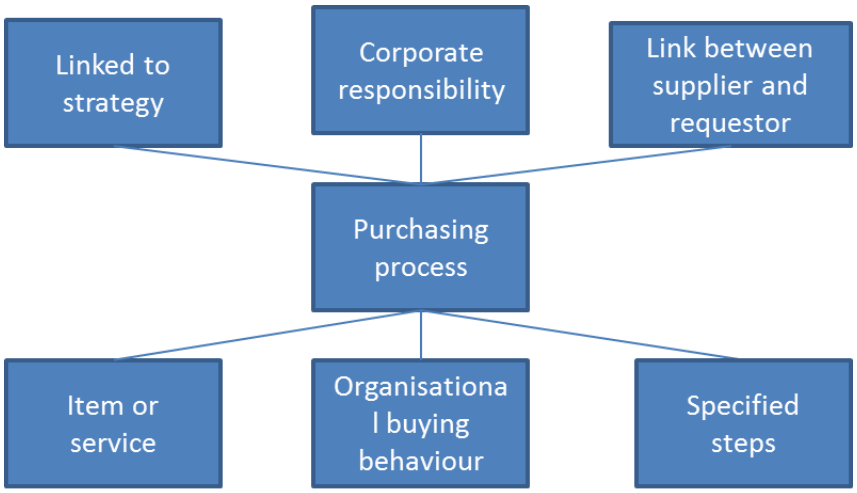

Figure 5 - Purchasing process framework

Purchasing process is the interface between the requestor and the supplier. The key aspect or purchasing is that there are multiple relationships that have to be taken into account, making it a multistage decision process (Grønhaug and Venkatesh, 1991). In this process the need is transformed into

specifications, the supplier is selected, negotiations are conducted with the potential suppliers, and finally, if the negotiations are successful, a purchase order is placed to seal the purchase. This is the body of the process: however, the transaction and relationship is monitored and evaluated after the main part of the process is complete. Multiple authors have presented different kinds of applications for different situations. However, the focus of the process stays the same even with the different perspectives. (Polychronopoulos 2006; Ghingold and Wilson 1998)

One of the most important aspects of the purchasing process is the purchase itself. Authors distinguish two kinds of purchases: goods and services. This seems to have a significant impact on purchasing process and it should not be the same and the knowledge required by the buyer should be different. (Smeltzer & Odgen 2002).

2.3.1 Goods and services

The main perceived differences between items and services are the unique service features which differentiate goods from services. (Zeithaml et al. 1985; Lovelock and Gummesson 2004) These features are Intangibility, Inseparability, heterogeneity and perishability. Intangibility means that one cannot touch services and the material used in the service does not itself produce value in itself. Inseparability means that the service is produced and utilized at the same time. Heterogeneity means that the quality of the service may vary highly as services in general require humans to perform it. Last feature is perishability services cannot be stored. These features differentiate goods from services in their usability.

There is another perspective on the relationship of services and items. There are a few instances that can be called only service or good (Johnstone et al, 2008). Vargo and Lusch (2004B) define services as "*the application of specialized competences (skills and knowledge), through deeds, processes, and performances for the benefit of another entity or the entity itself (self-*

service)" This implies services can be supplied directly or indirectly. (Vargo and Lusch 2004A) This perspective stems from the end use of the product. (Shostack 1977) When looking services from this perspective everything can be seen as a service. This might lead to important differences between goods and services are not being noticed. (Stauss 2005)

The differences and similarities between goods and services have implications on the purchasing process. The four unique service features make purchases more complex and demanding to procure. Intangibility makes evaluating of services difficult before and after purchase. Inseparability creates conflicts in responsibility. Heterogeneity may cause quality issues. Perishability forces the users to estimate the future needs of the service. (Van der Valk and Rozemeijer 2009) These impacts have been presented in the table below.

Table 3 - Impact of unique service features in purchasing process (Van der Valk and Rozemeijer 2009; Zeithaml et al. 1985; Lovelock and Gummesson 2004)

Unique service feature	Meaning	Impact for purchasing process
Intangibility	Value of service is immaterial.	Evaluation of service quality is difficult
Inseparability	Services are supplied when they are produced.	Conflicts in responsibility
Heterogeneity	There may be a large variance in quality in services.	Quality issues
Perishability	Services may not be stored	Need of future has to be estimated appropriately

These features have one thing in common and that is the specifications. Service purchases should be specified properly in order for the purchase to match the needs and to minimise risks. In the specification members and opinions from different sectors of the organisation can and should be taken into account to improve purchase. Furthermore, the process should not be the same as with good purchases (Smeltzer & Odgen 2002).

The main problem areas in service purchase process are: specification, service level definition and performance evaluation (Van der Valk and

Rozemeijer 2009). When services are purchased the needs of the requestor have to be quantified. In the case of services this quantification is difficult when comparing to goods (Fitzsimons et al. 1998).

Ultimately it has been observed that the required service specifications are not as exhaustive as goods specifications (Smeltzer & Odgen 2002). Creating good specifications has been found to be difficult for purchasers (Jackson 1995; Van der Valk and Rozemeijer 2009) This may create friction in the process, because if the specifications are not created properly it will become increasingly difficult to perform the future steps in the purchasing process. It will make especially the negotiation of service levels more difficult, making the service level agreement not as useful as it could be. However, creating specifications for services is not easy. (Van der Valk and Rozemeijer 2009) To counter this effect some purchasing organisations have creates supplier programs for specific services (Sieweke et al 2012). The creation might be a multistep process created in the dyad between the purchaser and the supplier. As a difference to goods purchase the operational details have to be agreed as the supplier and purchaser will be working together in order for the service to be supplied (Van der Valk and Rozemeijer 2009).

Two steps are suggested to be in the service purchase process. The assurance of the specifications, the specifications should be as complete and accurate as possible. The specifications can be created by taking into account the quality of service. (Parasuraman et al 1985) The purchasing company should in addition improve the specifications with the suppliers during the process. These steps should be taken as early as possible to increase optionality. This can be seen as service development what can bring challenges to the participating organisations (Johne & Storey 1998). The purchaser and the supplier cooperate to create a service. This customised service may in some cases only be used in this relationship. The benefits are that the customised service leverages the core competences of both organisations. (Van der Valk and Rozemeijer 2009)

2.3.2 Social responsibility

There are multiple ways of defining of the social responsibility of an organisation (Dahlsrud 2008). The definition of social responsibility can be seen a moral obligation going beyond the legal requirements (Kilcullen and Kooistra 1999). When an organisation purchases anything it takes a social and ethical position (Drumwright 1994). For the purchasing process to be socially responsible and feasible external stakeholder demands should be taken into account (Clarkson 1995). To operationalize social responsibility proactively Maignan et al. (2002) suggest the following actions. Social responsibility should be incorporated to the goals of the procurement organisation. The organisations social responsibility includes that it should be communicated educated and monitored by the purchasing organisation. Furthermore, the results should be taken into the knowledge of external social responsibility stakeholders. Thus corporate responsibility is something that is taken into account in all of the actions that the organisation participates in.

2.3.3 Organisational buying behaviour

Organisational buying behaviour domain describes how organisation makes its buying decisions. In general it can be divided into three parts the group of individuals that make the buying decisions also known as the buying center, how the buying decision is made and what affects the participation in the buying center and the decision making process. (Barclay & Bunn 2006)

In order for the purchasing process to be effective decisions have to be made. The decisions are made in certain parts of the purchasing process and they generally require participation of multiple people from different parts of the organisation (Johnston and Lewin, 1996). The people who participate in this process are called the buying center (Robinson et al. 1967). The buying center includes all of the people who formally or informally are in any way involved in making the buying decision (Lau et al. 1999). In some cases the

most influential person to affect the purchase is not positioned in the purchasing department and their overall status in the organisation may be surprisingly low (Bonoma 1982). In a purchasing process new information can be leveraged and used to steer the purchasing process. (Dawes and Downing 1998)

The purchasing decision process may vary from company to company. The differences can be described by three elements: participation, formalization and centralization (McCabe 1987) Participation stands for involvement by different personnel of the organisation. In an organisation that participation is high multiple employees from different parts of the organisation participate in the purchasing process. Formalization refers to the existence of formal rules and procedures. In a formal organisation there are multiple rules and names procedures for purchasing. Centralization refers to the hierarchy of authority. In a centralised organisation the decisions are made by a small number of decision makers.

Johnston and Levin (1996) have described in their risk continuum how risk affects the purchase process. In this model as the risk increases the buying centers size and complexity will increase. This is because that more personnel with different backgrounds and organisational interests will take part in the purchasing process in its multiple stages. When the risk increases the buying center has to have the authority to make the purchase. When this is not the case, the buying center recommends actions to the appropriate manager. As the risk increases the personnel with a higher skill level will participate in the buying group. Additionally, difficulty of the purchase will motivate members especially those who the purchase affects directly. When the risk is higher, purchasers will prefer proven solutions or products. In this case the cost will play a lesser role and it will not be a criterion unless there are multiple bidders with the same capabilities. In addition, when the risk increases search for supportive information will be active and the sources will be extensive.

When the decision process advances information from other organisations which have been in a similar situation or other external consultants may also be used. Where there are multiple people there is also conflict. The risk of conflict increases when more departments with different incentives and mind-sets participate in the process. When the outcome of the purchase is important a bargaining strategy is preferred and the negotiations with the suppliers will focus on collaboration and information exchange. (Johnston and Levin 1996)

When the risk increases improvised and singe use purchase processes may be used. When the size of the buying center increases and as the outcome is uncertain role stress will be increased. In situations where the purchasing risk is high interfirm communications between the buyer and the seller will increase its importance. When the interfirm communications have a positive history perceived risk decreases. Additionally, personal communications increase information transfer and cooperation cutting down the perceived risk. (Johnston and Levin 1996)

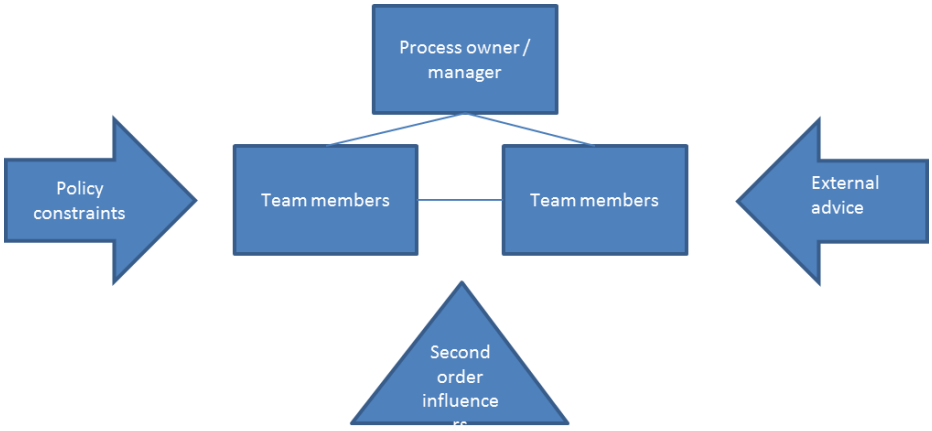

Figure 6 - Process-driven procurement model. Adopted from Thompson et al. (1988)

Thompson et al. (1998) have illustrated how organisational buying functions in a process orientated environment in their process-driven procurement model. In their research they found that in the current purchasing process orientated approach is emphasized and there are some differences when

comparing to Johnston's and Levin's (1996) research. In process orientated environment buying centers are grouped as buying teams that have power to make the purchase decision. However, in lower value, less complex purchases non-formal buying centers may exist. The skill level and education of buying teams are good as they are motivated to find the best supplier. In the buying teams proven products and their after service and fit are the most important measures. In a case where there are two suppliers with the same offering it does not seem create a competitive situation as the supplier is chosen based on other criteria. During the information gathering personal sources are utilized first and only after that literature or other impersonal sources. The reputation of the selling company is an important qualifying criterion. In a process orientated organisation problem-solving approach is preferred over the bargaining approach. Purchasing teams are not required to use ad hoc approach to the purchases as there are generally formalizations in place. Purchasing teams also reduced role stress as the team formation reduces friction. When deciding on a new supplier with no significant history professionalism, trust, leadership, personal and cultural capability have been found important for the evaluation of the supplier.

Barclay and Bun (2006) have identified two purchasing process heuristics, structuring decisions and downgrading decisions. Structuring decisions means the purchasers phase when the decision is made. This can be done in pre, mid, or post the purchase. Structuring enables usage of different kinds of knowledge and knowhow of the purchaser. Downgrading means lower levels of procurement activities are conducted by the decision maker that are expected.

2.3.4 Maverick buying

When an organisation buys it has a certain set of rules, policies and processes. Parts of the purchases can be described as maverick buying. Maverick buying can be characterised as not compliant purchasing, what

could utilize an existing purchasing process (Angeles and Nath 2007) Maverick buying has two kinds of negative consequences: they increase purchasing costs and reduce the leverage that the company could potentially have (Karjalainen et al. 2008). In some cases twenty to thirty percent of unrealised purchasing savings are due to noncompliance facilitated by maverick buying (Kulp et al 2006)

Karjalainen et al. (2008) have identified five forms of maverick buying. These are unintentional, forced, casual, well-intentioned and ill-intentioned maverick buying. All of these forms have different manifestations and forms. Unintentional maverick buying is the result of personnel not being familiar with the purchasing processes or the contracts of their organisation. Lack of purchasing leadership is one of the cases where employees do not have the appropriate knowledge. Forced maverick buying is the result of employees not being able to use the preferred supplier or the ordering process as it is seen complicated and not suitable for the purchase. Casual maverick buying happens when employee utilizes the officinal process but in some cases buys maverick, depending on the situation and personal benefit. Well intentioned maverick buying means an employee feels purchasing does not bring any value and their purchasing skills are better than the procurement unit's. When conducting well intentioned maverick buying it is used due to the lack of procurement and especially the knowledge of total cost of ownership and perceiving contract terms. The final form of maverick buying is ill-intentioned maverick buying what stems from opportunism and resistance to change. The varieties of maverick buying are summarised below.

Table 4 - Summary of maverick buying adapted from Karjalainen et al. (2008)

Unintentional	Purchasing rules are not known
Forced	Purchasing process is not seen as suitable for the purchase
Casual	Purchasing process is sometimes not used
Well-intentioned	Purchasing process is not seen to bring value
Ill-intentioned	Resistanse to change

2.3.5 Purchasing process steps

As the base we will use the purchasing methodology presented by Kakouris and Polychronopoulos (2006) and Ghingold and Wilson (1998). The methodology is in principle a process presented by them. This process is in line and comparable with other authors' perception that purchasing process in general consists of four phases: information, negotiation, settlement and after-sales. (Joong-In and Shunk 2004) The framework purchasing process is shown in figure 7.

The first phase is the initiation where the needs are identified and the idea of the purchase is honed by the stakeholders. In this stage the specifications for the purchase will be perfected. Benefits, costs risk and plans will be drafted and the feasibility of the purchase is assessed.

Figure 7 - Purchasing process applied from Kakouris and Polychronopoulos (2006) and Ghingold and Wilson (1998).

The second phase is the planning; where the supplier selection criteria will be selected. The main criteria are price, quantity, delivery and service. (Verma & Pullman 1998) Furthermore, the bidding process is designed to get the required answers. Also, a list containing all of the suppliers that are invited to tender is composed and the requirements are communicated to the suppliers as clearly as possible.

After the planning phase qualification phase follows, in here the suppliers are qualified against the chosen criteria. In the end of this step there is a shortlist of applicable suppliers. This can be done by first listing all acceptable suppliers and then trimming this list even further.

In the winning phase the best supplier is chosen and the purchase is awarded to that supplier. The chosen supplier has to show the ability to be superior in

performance compared to the other supplier. The approval should also be taken into account, as in some cases the purchase is approved from the different departments of the organisation (Lilien and Wong 1984)

The last parts of the process are monitoring and review to see that the supplier is performing into the standards and the agreed contract. This is an important phase as it verifies the performance of the supplier and it allows the development of the purchaser supplier relationship. In some cases negotiations are needed to solve issues. The process is depicted in figure 7.

Purchasing process is not a generic process. Every organisation has different needs and objectives. Majority of organisations use purchase orders to keep track of their purchases. Purchase orders give better cash flow and increase transparency. However they have large overhead costs and when the size of the purchase the relative overhead cost is higher additionally the smaller the purchase is the more ad hoc it is required. (Parikh and Joshi 2005) Having the same transaction costs for smaller and larger purchases is not optimal. (Croom 2001) In general the purchasing process can be categorised in two ways: the purchasing process for larger purchases and small purchases that can utilize the procurement cards (Subroto 2002).

The border between the purchases is whether purchase orders are an effective way to manage the purchases. (Gonzales-Benito 2002) Larger purchases make up the bulk of a company's purchases. Their volumes and monetary value is high, they can be planned in advance and generally they are not required urgently. This leads to typical purchasing process being planned for the needs of large purchases.

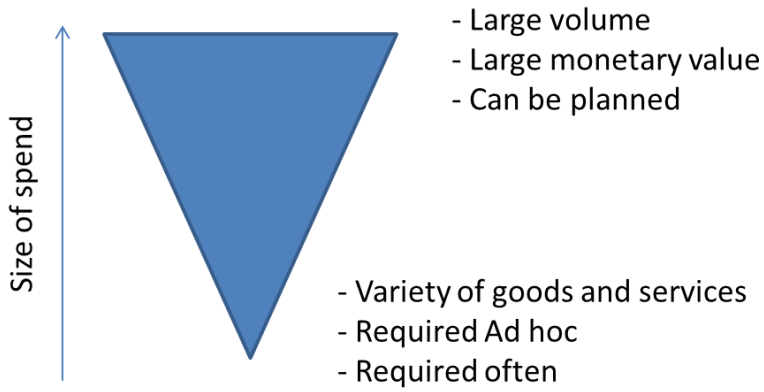

Figure 8 - Large and small spend characteristics (Parikh and Joshi 2005)

The counterparts of large purchases are the small purchases. Smaller purchases differ from the larger ones in several ways. They have low volume, low spend and there is a large variety of them. Typically they are not complex and they are required soon or immediately. When applying the typical purchasing process with purchase orders to smaller purchases some problems arise. If applied to smaller purchases the purchases will not be handled in the most efficient manner, there are purchasing delays, the error rate is higher and vendor participation suitable for smaller purchases. The inefficiencies means that smaller purchases purchasing process should be different from the larger purchases. (Parikh and Joshi 2005) The large and small purchases characteristics are visualized in figure 8.

3 METHODOLOGY

In this chapter the methodology used in this study is explained and discussed. Additionally, the process of the study and its elements is presented here. As Six Sigma methodology and tools have been used in this case Six Sigma and its implications are also discussed. The Six Sigma elements and how it affected and how they were used in this study are presented in the Six Sigma chapter. Also in this chapter is presented the theory of a case study. At last the information how the data was gathered is presented.

3.1 Case study

This study was made to a company because of that the research problem is practical. Additionally generalisation of the results was not a goal of this study. The research problem and the goals of the research imply that this is a case study. Case study is one of the most common research methods in business administration research. In a case study one or maximum a few cases are chosen and the aim is to collect as detailed and intensive information as possible. (Hirsjärvi et al. 2009, 134). The case can be chosen by the researcher according to certain specified criteria. Case studies are a critical part of business administration knowledge base. Cases can be compared to clinical reports from medical science. (Koskinen et al. 2005, 154 - 157)

This research has been conducted using triangulation qualitative research methods and qualitative methods. Qualitative research can be identified from research collecting method, lack of hypothesis and pre-determined sample. Qualitative differs from quantitative research by that the risible measurements are not measureable. (Eskola & Suoranta 1998 15 - 20) One way to describe qualitative research is to describe it as a journey of research. The objective is to understand the subject. (Hirsjärvi et al. 2009) The qualitative elements

come from the Six Sigma elements and they are explained in the following chapter.

3.2 Six Sigma elements

The research loosely followed the design for six sigma paradigm. Six Sigma can be defined as follows "*Six Sigma is an organized and systematic method for strategic process improvement and new product and service development that relies on statistical methods and the scientific method to make dramatic reductions in customer defined defect rates.*" Linderman et al (2003)

Six Sigma processes create knowledge spans from the use standardised tools and methods. Linderman et al (2003) The design for six sigma process has the following steps that are called ICOV. The letters come from Identify requirements, characterise the design, optimise the design and verify the design. In requirement identification the customer requirements are collected and prioritized. Characterize design phase the critical to qualities are turned into process function requirements. Optimize the design the optimal model is found. Finally the last phase validate the design the design is validated.

In this study the identify requirements the project was defined and the stakeholders identified. Also, their requirements for the tactical sourcing process were drafted.

In the characterize phase the Quality function development workshops were carried out with the stakeholders. Critical to quality factors were identified and How to fill them was brainstormed. Finally they were ranked and the most fulfilling how's were identified.

Optimise the design. In optimise the design phase the most important hows were ranked with a high and a low value. The values were used to create concept processes and the stakeholders assessed the processes against the criteria given us by the corporate strategy. This enables us to see which how's had the most impact on the results.

This study does not go to the validate design phase. However, the optimise phase created a final concept process that had captured the mist significant how's and how to do them. With that and the parts found from the theory a process was drafted and recommendations can be given about its pilot.

3.3 Information gathering

In this research primary sources are interviews, workshops and documents from the case company. However, due to confidentiality not all sources that would benefit the reader to understand the complex and chancing case company could be presented. Due to the confidentiality the webpages and other publicly available information about of the company were used to describe and to give the reader a better understanding about the case company. In the following chapters the information gathering is described. The research was formulated from the identified need from the organisation.

The information for this research was gathered in multiple stages. First all applicable category managers were interviewed and the possibility of tactical sourcing was discussed during these meetings tactical sourcing applicable purchases were identified on a high level.

In the second phase workshops were held to get the process partners news for the tactical sourcing process. This included members that presented category management, requestors, procurement and business. After this service requirements were brainstormed and a list of them was created.

Finally the needs and wants were assed against each other and ranked accordingly. A follow up interview of category management section was carried out.

The information about the case company was collected from discussions that lead to internal documents and the company's internet page. The information about the case company description was collected after the workshops and the interviews.

4 TACTICAL SOURCING

Tactical sourcing chapter is the essence of this study. Tactical sourcing and its background will be presented and discussed. In this chapter the case company will be introduced. This chapter is divided into sections that will be presented shortly. First the case company is presented. After that the need for tactical sourcing is described. Next, the purchases are analysed and tactical sourcing applicable purchases are presented. After, the purchases are known process for tactical sourcing is explored. For the process to function properly and to ensure future development process measurement and indicators are looked at. Finally the tactical sourcing implementation steps fitting the case company are looked at.

4.1 Case company

Tieto Corporation is a global operating IT service company. Tieto aims to contribute to a better future by developing enterprises and society with information technology. Tieto is a publicly traded company in the Nasdaq Helsinki and Stockholm exchanges. Tieto has operations that include product development businesses and delivery centres in Europe, Asia, North America and Australia. In year 2013 the revenue of Tieto was 1,6 billion euros and has 14 000 employees. (Tieto A 2014). The headquarters of Tieto are located in Helsinki Finland.

Tieto provides a variety of IT and product development services. The services vary from different industries, spanning from the public sector, to manufacturing logistics and financial services. The services available are application development, management, enterprise applications and testing services. Tieto provides product development for the semiconductor industry. Product development is provided also for mobile and consumer devices. (Tieto B 2014)

Tieto's competitive strategy culminates into three factors. The first is to expand to provide full life-cycle IT services, which will be reinforced by investments in consulting and system integration capabilities. The second is the reinforce industry expertise. This will be achieved through current customer relationships and understanding their core processes better. Thirdly and finally Tieto will focus on markets where it can be one of the top three IT-service providers. This means concentrating in Finland and Sweden and developing the business in new market areas. (Tieto C 2014)

In 2013 the revenue of Tieto was 1 607 Million euros and the EBIT was 85 million euros. The financial goals of Tieto are to achieve a 10% EBIT margin, EPS growth of over 15%, minimum of 50% dividend of net result and a net debt lover than 1,5. Tieto creates shareholder value by growing profits and a steady cash flow what results in a better shareholder return larger than comparable corporations. The financial information of the year 2013 are presented in the table below. (Tieto D 2014)

Table 5 - Tieto financial information (Tieto D 2014)

Measure	2013	2012
Net sales, EUR million	1 607	1 825
Operating profit (EBIT), EUR million	85,7	68,3
Operating margin, %	5,3	3,4
Operating profit excl. one-off items, EUR million	141,2	138,8
Operating margin excl. one-off items, %	8,8	7,6
Return on equity, 12-month rolling, %	12,0	5,5
Return on capital employed, 12-month rolling, %	16,8	13,2
Gearing, %	3,0	4,5
Equity ratio, %	49,3	46,9

Tieto is organised in a matrix organisation. The matrix model is the chosen model because it provides a simplified customer interphase that focuses to the industry expertise. There are four industry groups and three service lines. The industry groups are financial services, Public, healthcare and Welfare, Manufacturing, Retail and logistics and Telecom, Media and energy. The service lines are consulting and system integration, managed services and

industry products. Product development services operate out of the matrix. The organisation is shown on the picture below. (Tieto E 2014)

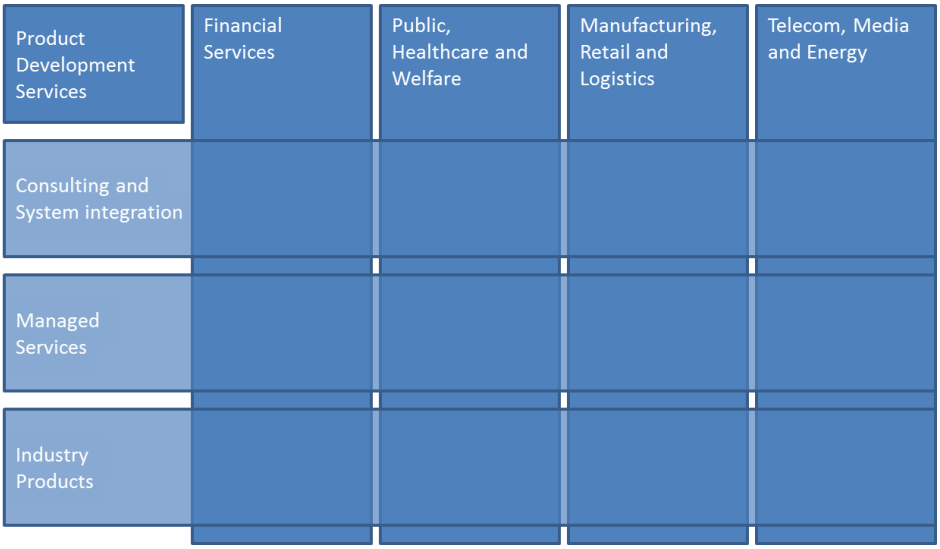

Figure 9 - Tieto organisation structure

The history of Tieto starts in 1968 with the name of Tietotehdas. In the early years the company operated a computer centre for its owners. However, also It systems were development and maintained primarily for the Union Bank of Finland. In the 1970s number of customers increased and new technology was introduced. During this time the customer base of the company broadened to multiple sectors and the company was organised in that perspective. (Tieto F 2014)

In the 1990s the company grew quickly through acquisitions mergers and alliances. At that time there were also changes in the company name. It changed from Tietotehdas to TT Tieto and finally to Tieto. In the end of the millennium Tieto Merged with Enator and the company name was changed to TietoEnator. Year 2009 was year of change. In that year the organisation was changed to a matrix that consisted of country organisations, industries and global service lines and changed its name to Tieto. (Tieto F 2014)

4.2 Procurement at Tieto

Tieto procures a variety of different items, goods and services. Due to the nature of the business majority of the purchases are services that are related to customer projects. Other major purchases include facility management related goods and services and travel. When looking at the more tangible purchases hardware and software purchases are significant.

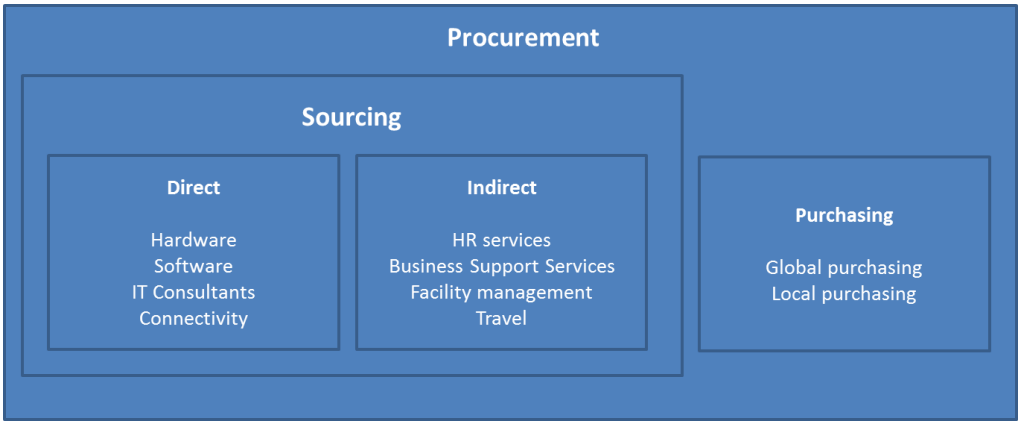

Figure 10 - Tieto procurement organisation

Procurements role in tieto is to identify and capture sustainable savings for business and support functions of Tieto. Procurements aim is to contribute to Tieto's financial result. The organisation is divided into sourcing and purchasing. Sourcing contributes to total cost efficiency in purchases by managing and developing Tieto's supplier base. The focus of purchasing is to ensure an efficient handling of requests and receiving purchases needed. The procurement organisation is presented in the above picture. The roles inside procurement are presented in the table below.

Table 6 - Procurement tasks

Sourcing
Selects, manages and develops best suppliers to meet Tieto's and customer requirements
Purchasing
Ensures a compliant and efficient way to request items and services

The internal measurement of procurement is done key performance indicators. However, the most important ones are the savings, compliance and quantity of suppliers. Savings measures the amount of savings the processes generate. The savings are calculated with the company's savings calculation instruction. Generally this is done by comparing the actual realized cost to the baseline calculated in the beginning of the sourcing process. Compliance is an important metric on procurement process and leaderships success. Compliance measures the amount of purchases that are going through the proper channels. As the compliance increases there is less maverick buying and the purchasing is better under in control. The third process measurement is the quantity of suppliers. The quantity of suppliers is significant for the organisation as each supplier causes administrative costs to the organisation. The reduction of suppliers cuts down the administrative costs associated with the number of suppliers and concentrates the volume to preferred suppliers.

Sourcing is divided into direct sourcing and indirect sourcing. They both are managed by their own teams. Direct sourcing handles all of the categories are related to customer deliveries. Majority of the purchases are related directly related to a project or a delivery. Indirect sourcing handles of purchases that that are used to support the organisation. All of the categories have a responsible category manager. Direct sourcing is divided into hardware, software, IT consultants and connectivity. Indirect sourcing is made up from HR services, business support services, facility management and Travel.

There are two processes that are associated in purchasing in Tieto. They are the sourcing process and the purchasing process. Sourcing contributes to the sourcing function as its goals are to reduce totals cost. However, levels of quality, service and technology should be at the same level or improve. The Second objective is to utilize the market forces and tailor the sourcing strategies to support Tieto corporate strategies better. The third objective is to

affect the organisations way of working to allow reduced total costs of goods and services. The sourcing process has a recommended minimum value to for the projects value.

Sourcing process is used in the high value and high business impact cases and it is carried out by sourcing personnel. The sourcing process breaks down into six phases. They are demand analysis, supply analysis, sourcing strategy development, negotiations, supplier selection and implementation. The process and its steps are depicted below:

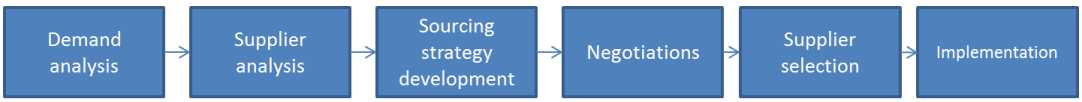

Figure 11 - Tieto sourcing process

In demand analysis the project is defined and a baseline is calculated for the purchase. The purchase and its needs are defined and discussed with the stakeholder.

Supplier analysis phase analyses the supply marker and assessed what kinds of suppliers and solutions it offers for this case. After the assessment a supplier portfolio is generated.

Sourcing strategy development phase creates a plan how to proceed with the suppliers and negotiations. It starts by creating a sourcing strategy. After it is sourcing approaches are planned. Then the proposal is improved and finalised. The sourcing strategy development phase ends in a review gate. In this review gate the plans are assessed by the stakeholders and they are approved or sent again to create sourcing strategy sub phase. When the plans are agreed the process proceeds to the next step.

The next step is the negotiation phase. It starts with managing the request for proposal (RFP). Request for proposal is an invitation send to suppliers to ask them to send a tender on the wanted goods or services. In here the request for proposal is created and sent to the chosen suppliers. After the suppliers

have answered, a second review gate is conducted. Now the results are assessed. If the stakeholders agree that there are quotes that can be accepted it is continued to the next step. If there are no potential quotes the process goes back to the manage RFP phase and a new RFP is conducted. After, approving the RFP results suppliers are preselected and further qualifications for the preselected suppliers are conducted.

Supplier selection is the next phase. The final quotes are received from the suppliers and the negotiations are finished. The third and final review gate assesses the suppliers once more. If any of the quotes is found suiting for the need the review gate is approved and the contract is signed. When this is not the case the process returns to the supplier pre-selection.

The final of the formal process is the implantation. At the beginning an implementation plan is created. When it is finished the implementation plan is carried out.

Purchasing process is used in low value purchases. The main elements are the creation of the purchase request, assessing the purchase and the suppliers, creations of the purchase order and sending it to the supplier.

Before the actual purchase process starts the person with the need submits a purchasing request and then the request is approved by the requestor's manager. After the approval the purchase goes to the purchasers. In a case that the request is in the case company's catalogue the purchase order is send automatically to the supplier. If this is not the case the buyer assesses the purchase and the suppliers. After the assessment a supplier is selected and the purchase order is created and sent to the supplier.

Figure 12 - Tieto purchasing process

4.3 Gap for improvement

When looking at the procurement process a certain gap can be found. The sourcing processes main target is larger purchases what is strategically important. The sourcing process is designed to handle a small quantity of important agreements or purchases. On the other hand purchasing process handles small value purchases. The purchasing process goal is to be fast and have the requested item or service as fast as possible to the requestor.

This raises some questions. What happens to medium value purchases? Should they be handles straightforwardly with purchasing or should the more thorough sourcing process be used? If they would be done using the sourcing process they would use the strategic sourcing resources and hinder the sourcing process in general. Additionally, using the sourcing process for fast purchases is invalid because the process and the tools are not designed to handle a vast number of cases.

In a case company the medium value purchases are handled by the purchasing process. The handling of them would be fast and efficient. However, in this case the fitting of it to the category strategy cannot be guaranteed. Additionally, the total cost of ownership and fulfilling the actual need will also be difficult as purchasing process does not have these measures build in. The sourcing and purchasing processes and their value fit are presented in the picture next page.

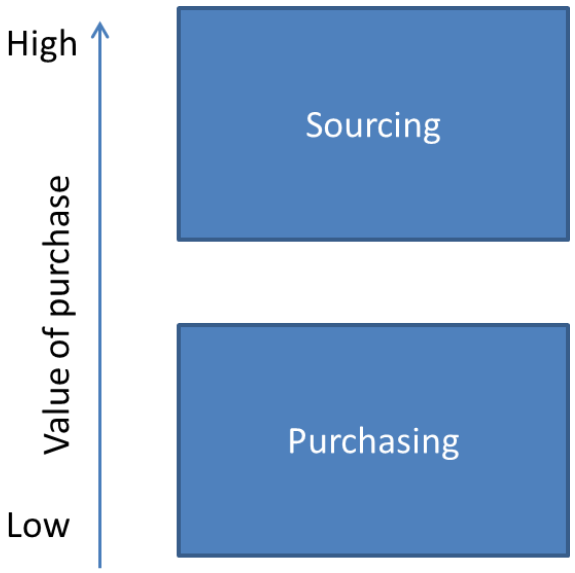

Figure 13 - Relation of sourcing and purchasing

When looking at the medium value purchases they differ from the lower value counterparts. When looking at the lower value purchases as a group the number of suppliers' increases and the size of invoiced decrease. Medium value purchases are not generally required instantly, although there are some expectations. Other aspect is the complexity of supply market. The complexity of the supply market is not related to the value of the purchase. In some cases in the same value purchases can be in different place in supply market complexity.

To fill the gap a tactical sourcing process could be taken into place. Tactical sourcing could be a process that has parts from the sourcing process and parts from the purchasing process. This would enable a process that brings benefits when comparing to the current situation. The process would be faster and still have elements that increase competition, reduce total cost and are more suitable for the requestor. The potential fit of tactical sourcing is depicted below:

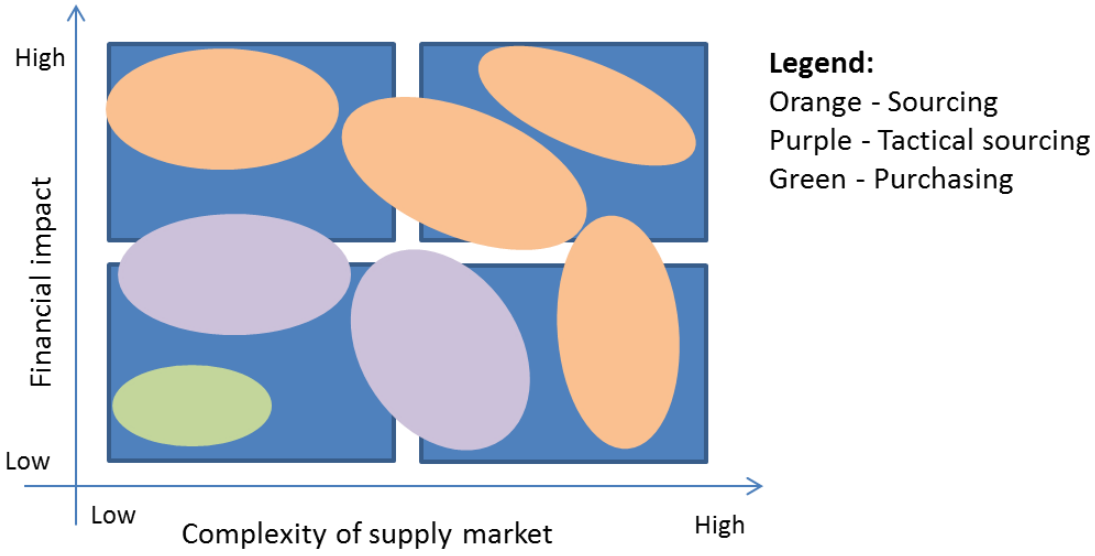

Figure 14 - Fit of tactical sourcing

To fill the gap tactical sourcing should have the following elements, the speed of the service should be fast enough. The speed is an important factor as if it does not delay the requests it would not bring drawbacks to the requestors when comparing to the current situation. This would increase the service and then affect the compliance. It should also have sourcing elements that enable savings in order to generate savings. Tactical sourcing should also follow category strategy and bring benefits to category coordination.

4.4 Tactical sourcing applicable purchases

The idea of tactical sourcing was discussed with the category managers. In all of the studied categories tactical sourcing potential was found. The items and services varied from consulting to different kinds of only once required items with medium monetary value.

Tactical sourcing is about an efficient and effective process to handle medium value spend with speed and sourcing process. To be able to accomplish this certain decisions have to be made in what kinds of purchases are applicable for the process. For tactical sourcing to be successful a set of criteria is required.

4.4.1 Tactical sourcing criteria

The main criteria for tactical sourcing rise from that the tactical sourcing purchase should be able to be done with minimal category knowledge. The risk and financial impacts of the purchase should be moderate at maximum. When using the supply classification classes from the literature review we can group the purchases and create a criterion for purchases that the process will bring most benefit. The tactical sourcing criteria are shown in figure 15.

Usability class can be used as a first tier ranking of the purchases. In this case the class is “applicable for tactical sourcing”. This class can be used to sort the categories that have preliminary been identified as having potential for tactical sourcing. For example these can include categories that have in build complexity in the agreement drafting process or some other part. Thus, they become too complex and too time consuming for the tactical sourcing process.

The second tier tactical sourcing criteria are more case sensitive. When a purchase is applicable for a class it does not mean that the tactical sourcing process can be applied. First the financial impact of the purchase has to be suitable. When looking at the purchases in monetary terms they should be smaller than the cases that the category managers handle. Additionally, there should be potential savings or benefits for using this process. Thus in the terms of financial impact tactical sourcing process is limited to medium value spend.

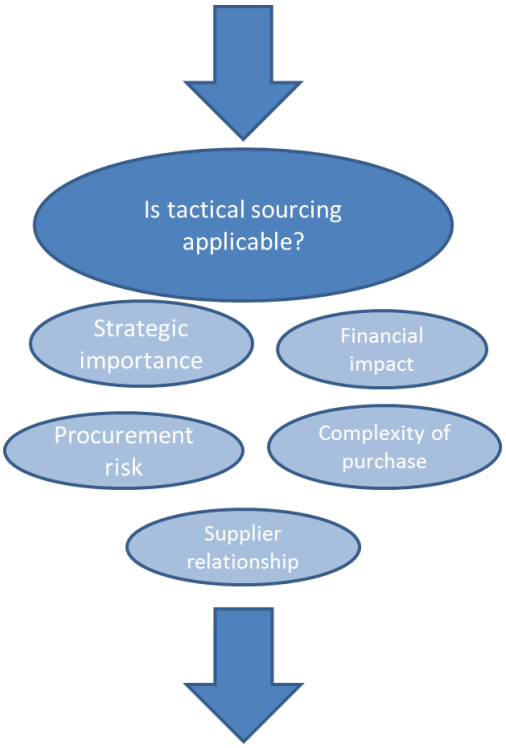

Figure 15 - Tactical sourcing criteria

Financial impact is a criterion that will scale and give an approximate picture of the purchases. The other perspective taken into account is strategic importance. When strategic importance increases the long term impacts are the key. Thus it is required that the options are evaluated, contracts are negotiated and the decision is made in the appropriate level to ensure that the long term implications are visible and under control. Thus tactical sourcing should be limited to low and medium levels of strategic importance.

Complexity of purchase is the second most narrowing supply classification criteria for tactical sourcing. When the complexity increases the time of handling of the purchase increases as a more thorough examination of options is required. Also knowledge requirements increase and category specific knowledge might be needed when complexity increases to be able to carry out the purchase.

Supplier relationships give many new aspects. Tactical sourcing can be used when the supplier is new. When the supplier has specific competences or skills that are required later it will increase the strategic importance. The most important aspect if there has been a decision that nothing should be purchased from the supplier due to escalation in on other case.

When assessing the purchase and it impacts it should be noted whether the purchase is required only once or for an extended period of time. This affects the procurement risk. This classification goes in hand to hand with strategic importance in many cases. However, this might not be always the case. When procurement risk is perceived high and it is a continuous need tactical sourcing should not be used. Thus tactical sourcing should be applied only when procurement risk is low to medium.The following chart summarises when tactical sourcing can be applied.

Table 7 - When can tactical sourcing be applied

Classification	When is tactical sourcing applied?
Usability class	When purchase is in appropriate category
Financial impact	When financial impact is medium at maximum
Complexity of purchase	When purchase is medium complexity at maximum
Strategic importance	When strategic importance is medium at maximum
Procurement risk	When procurement risk is medium at maximum
Supplier relationship	When tactical sourcing can be used

4.4.2 Tactical sourcing examples

When looking at the categories in larger perspective differences can be found. Software cannot be tactical sourcing in this case as the knowhow required to make the purchase is too specific, also the supplier negotiations and legal perspective creates complexity that makes these purchases not applicable for the tactical sourcing process. Because of this software can be ruled out of more thorough inspection.

Hardware has more potential to tactical sourcing. There are small to medium value purchases that could benefit from the process. Furthermore the

purchases are not too complicated to be handled without deep category knowledge. Example tactical sourcing case would be a medium value purchase to a specific need. This could be monitors for meeting rooms.

HR services have potential for tactical sourcing as there are many purchases that have low complexity. When looking at the characteristics of the purchase there are different kinds of trainings from different suppliers that are only used for a few times. An example purchase would be a special one-off training to a set of managers.

Business support services have many purchases and events with have low complexity and medium value financial impact. The purchases in a supply classifications sense are alike with HR services. There are different kinds of consultants and events that are unique in nature. An example would be production for a marketing event.

Facility management has multiple different kinds of purchases that are have medium value spend. These kinds of purchases include special interior decoration, cables and equipment that is needed in order to the facilities to suit their users. As an example, tactical sourcing purchase would be planning for an interior decoration in an office. The tactical sourcing examples have been collected and summarised in the table above.

Table 8 - Tactical sourcing examples

Category	Example of tactical sourcing purchase
Hardware	Special monitors
HR services	One-off training for management
Business support services	Production for marketing event
Facility management	Interior design planning

4.5 Tactical sourcing process

Tactical sourcing will manifest itself in a process when all of its aspects have been explored. In the following paragraphs it is explored what is actually

expected and required from the tactical sourcing process. Furthermore ways to fulfil the requirements are explored. Finally the both will be combined in a quality function development (QFD) tool and their priority will be ranked. After we know the priorities the process can be designed and measurement for it can be planned. Finally suggestions for implementation can be discussed.

4.5.1 Tactical sourcing process requirements

Tactical sourcing's aim is to improve the procurement processes of Tieto. However, there are multiple stakeholders to that process. When exploring the current sourcing process and organisation can be found within the organisation. In this case they are called process partners. The process partners are business, procurement, category management and requestors. Procurement is a process partner due to definition tactical sourcing is part of procurement and it is hoped to help it to achieve its goals. Business is a similar process partner and tactical sourcing should be able to support them intermediately.

Procurement and business are process partners that create the skeleton of the process and the performance needs come from them. Business is linked to procurement through general strategy and business influences the general procurement. These two affect the foundations of tactical sourcing. However, the immediate and day to day stakeholders in tactical sourcing are category managers and the requestors. Due to that tactical sourcing has to make choices that may be significant to the category manager they are structurally linked to each other. Category manager creates the category strategy and tactical sourcing operationalizes the strategy in the tactical sourcing applicable purchases. The fourth and final process partner in tactical sourcing is the requestor. The requestor is the actual customer of the process. However, in tactical sourcing the requestor may be needed to participate in the process in many ways. As the tactical sourcing purchases may be

completely new purchases. The relationship between the process partners, supplier and the tactical sourcing process are depicted below.

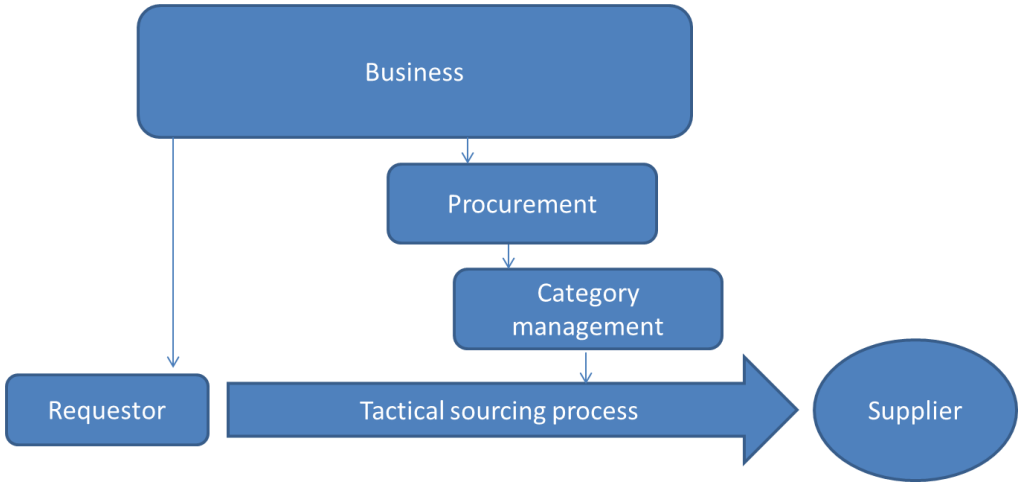

Figure 16 - Tactical sourcing process partners

The requirements for tactical sourcing were collected in multiple workshops from the different stakeholders. The requirements were ranked from one to five. Ranking five means the factor is important and ranking of one means that it's not important.

The requirements of procurement and business are directly linked to the strategy and goals of procurement. The most important one was creation of savings. The next most important ones are fast response to business needs and internal customer satisfaction. These two requirements are related mainly to the quality of the service and they show the service orientation of procurement. For a procurement process the increase or assurance of compliance is built in and it is the next requirement. There are some more requirements that are not as important as the previous ones. The decrease of category managers workload and increase of savings visibility and measurement are requirements but not as important as the previously stated. The least important need is the increase of procurement knowhow of the stakeholder.

The requirements of category managers are linked to the procurement strategy. However, there are operational and management issues that need resolution in order for the process to be functional. The most important requirements are that the category manager has to know how the category is managed. Also the roles and responsibilities of the process have to be clear. The next most important requirements are the compliance of Tieto minimum requirements. Furthermore it is required that the process has to be simple for the process partners. In the moderate importance range the requirements are that the personnel should have category knowledge and the stakeholder relationship and treatment should be good. There are three further requirements that were not ranked as important. These are that the process should have an escalation path to allow appropriate actions to be taken. The process should also be tailor able for efficient handling of different purchases. Also there should be an assortment of key performance indicators that are aimed for coordination and info sharing.

The requirements of purchase requestors are related to the final user. The most important requirement from the requestors was that the quotes and different options should be easily comparable. In the aspect of importance this requirement is follow by the requirement that the process should not increase workload by the process requiring inputting of the same data or information in two different systems. The requestors also want that the process is flexible and different kinds of purchases are handled accordingly. Moderate importance level requirement is the ease of use and participation of the process. Less important requirements are that the purchase and process match need and the tailoring of the process. Also the possibility of reporting of tender and order status reporting was ranked low. The least important requirement was the easy to end process.

4.5.2 Meeting the requirements

For the process partners' needs to be fulfilled accordingly the process has to have service requirements to fulfil the requirements. A list of potential service requirements was generated in a workshop. The generated service requirements can be sorted into three classes according to their function. These classes are task, service and reporting classes.

The task class consists of different tasks that are done within the process and what have impact on the outcome for the process partners. The tasks class affect the quality of the purchase process internally. The task class consists of the following service requirements.

- Checking if current suppliers can supply the new need
- Finding suppliers
- Checking agreements
- Implementing supplier
- Renewing agreements
- Following of actual invoice payment terms
- Handling the formalities of opening of new suppliers
- Negotiates prices
- Light tendering
- Correct classification of purchases

The service class is made of requirements that affect the perceived personal service of the process. They are related how the stakeholders should be contacted and how the communication should be handled. The class includes the following requirements.

- Single point of contact
- Answers supply and procurement questions
- Informing / agreeing stakeholder of process
- Language of service

- No need to fill information to eProcurement or other systems
- Supporting with tools and ways of purchasing
- Online information of current tactical sourcing situation
- Standard times for responses.
- Non anonymous service
- Communication of process
- Helping stakeholders if problems or issues with suppliers
- Standard stakeholder communication
- Standard process

Reporting class has requirements that are orientated to reporting especially to the category manager. The requirements vary from meetings to verification of compliance especially the code of conduct.

- Contact with category manager
- Verification of compliance
- Collects feedback from stakeholders
- Weekly meetings with tactical sourcing and category manager

The idea of the service requirements is to probe what of them would actually be useful in the final tactical sourcing process. Not all of them will or even should be implemented in the final process.

4.5.3 Results of quality function development

When positioning the process partner needs and wants with the service requirements we have to two axis of the quality function development. In the following paragraphs the most important and pictures the quality function development matrixes are shown and analysed to extract the important aspects of the process. The most important service requirements are the following:

- Answers supply and procurement questions
- Checking if current suppliers can answer the need
- Finding suppliers
- Negotiates prices
- Implementing supplier
- Helping stakeholders if problem
- Collects feedback from stakeholder

4.5.4 Impact of most meaningful parts design of experiment results

The QFD lead the way to the most significant perceived part of the tactical sourcing process. In order to gain a deeper understanding how they affect the end results a DOE was carried out. The seven most impactful how's were chosen and quantified with low and high values. The values are presented below.

Table 9 - Low (-1) and High (1) values for critical to quality.

Level	Critical to quality factor and values
	Checking if current suppliers can supply the new need
-1	Check supplier pages / catalog
1	RFI suitable suppliers
	Finding suppliers
-1	Do basic search for supplier
1	Extensive new supplier search
	Negotiates prices
-1	Ask for second set of prices.
1	Negotiate contract as a whole
	Answers supply and procurement questions
-1	Points to procurement corner and other sources
1	Answers questions
	Helping stakeholders if problems or issues with suppliers
-1	Only escalate to category manager
1	Try to find root cause, then discuss with CM if appropriate
	Collects feedback from stakeholders
-1	Send surveys to stakeholders
1	Discuss pros / cons of the case with stakeholder
	Implementing supplier
-1	Inform stakeholders about purchase / agreement
1	Help in implementing process and check supplier status

The processes were scored from -10 to 10. With the following scoring: -10 meaning a significant negative impact, 0 no impact and 10 significant positive impact. The normal was current situation. The concept processes were analysed by Minitab. The pictures presented are screenshots from Minitab. A two level factorial design for seven factors were created in 1/8 factorial form. The results were analysed statistical significance and factorial plots were created. The results are shown in the next sections.

The first most important critical to quality factor was the checking is current suppliers can supply the new need. It was divided into two levels. The low level is checking the current preferred suppliers' internet pages if they supply the product in question. The high value was sending a request for information (RFI) to the possible suitable suppliers.

The second in the most important list was finding new suppliers who can fit the purchases specifications. The low value is to do a basic search from industry pages and recommendations. The high value is a more extensive search for new suppliers.

The third factor was negotiates prices. The low value was to ask for new prices. The high value was to negotiate the contract as a whole conducting a cost breakdown.

Next factor is answering supply and procurement questions. The low value is to point to the procurements intranet pages. The high value is to answer the asked questions in person.

The fifth was helping stakeholders with problems and issues with the supplier the low value was just to escalate the problem to the category manager. The high value is to try to find a root cause to the problem and try to find a solution.

The sixth was collecting feedback from stakeholders. Low value was asking feedback from the completed cases. The high value is to discuss the case with the stakeholder.

The last factor on important list was implementing supplier and informing about it. The low value was informing stakeholders about the purchase information or the agreement that has been made. The high value was to help with the actual implementation process, and to check supplier status.

The processes were ranked by four sourcing personnel. Ranking was done in terms of savings increase, compliance improvement and supplier quantity improvement.

First when looking at the savings perspective it can be seen that there are only two how’s what affect the outcome. These are negotiates process and finding new suppliers. All of the results are presented in the figure next page.

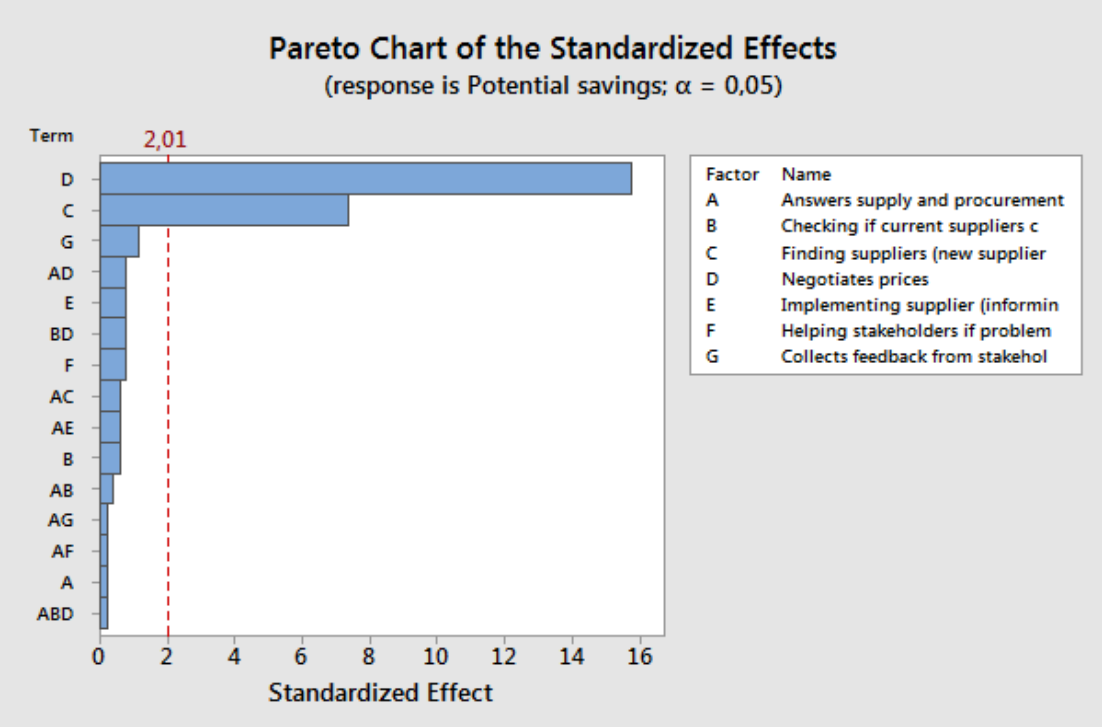

Figure 17 - Most important how's effects on potential savings

Now it can be seen that these two how's have impact on the result and that the other how's do not have a significant impact on the wanted outcomes. This leaves us with one more question. Should the process be used with their high or low value? In the next figure how's effect on the process results is presented. From the figure we can see that the high value brings us more savings than the low value. Finding new suppliers increases savings from approximate 3,5 to approximate six when moving from the low value to the high one. Negotiating prices increases the savings from approximate 2 to approximate seven when moving from the low value to the high.

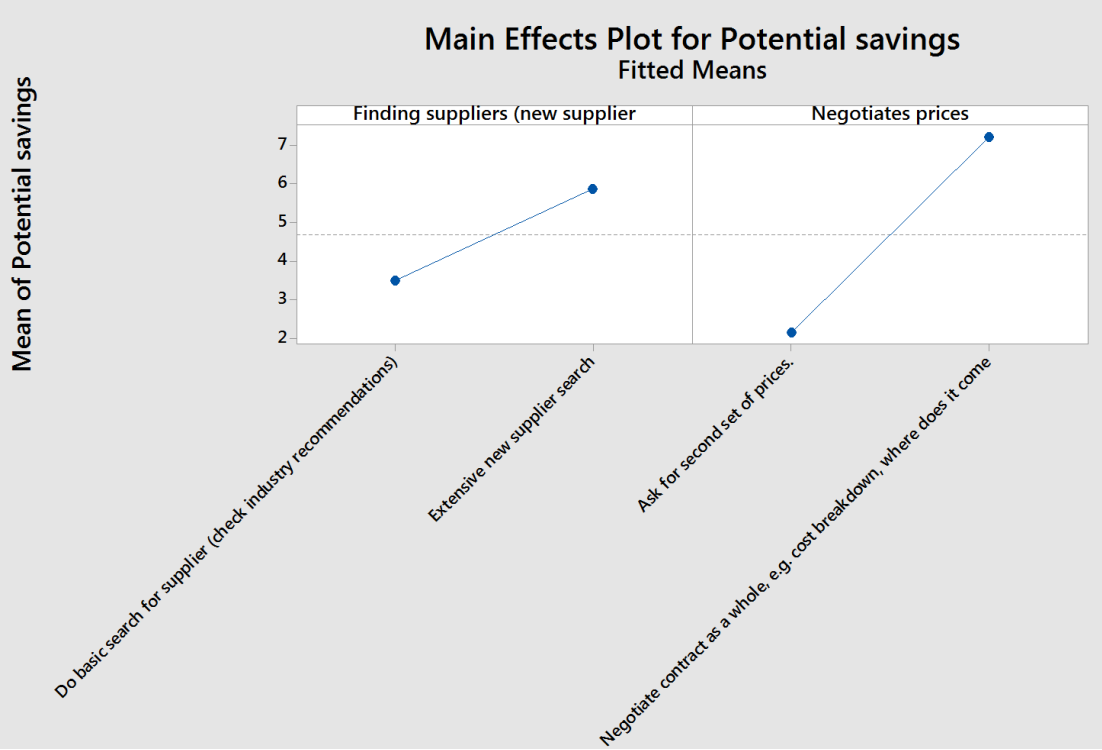

Figure 18 - Meaningful how's effects for potential savings

In the following figure is presented the meaningfulness of the how's to the compliance improvement. Two of the how's have statistical importance and the others or their combinations are not statistically meaningful. These two are the implementation of supplier and negotiation of prices.

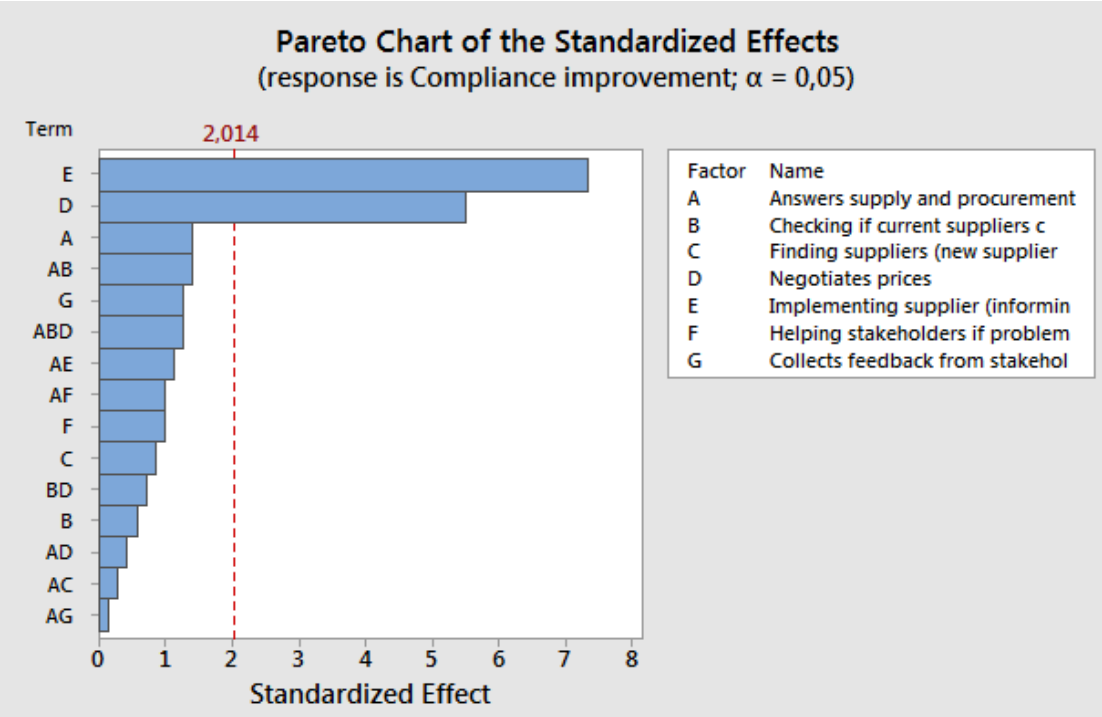

Figure 19 - Most important how's effects on Compliance improvement

In the following figure the way how the two how's impact the compliance improvement is shown in the graph. Price negotiation is seen to increase the compliance improvement from approximate three to approximate 5,5 when moving to the high value from the low one. Supplier implementation after awarding the purchase is seen to improve compliance from approximate 2,5 to approximate 6 when moving to the high value from the low one.

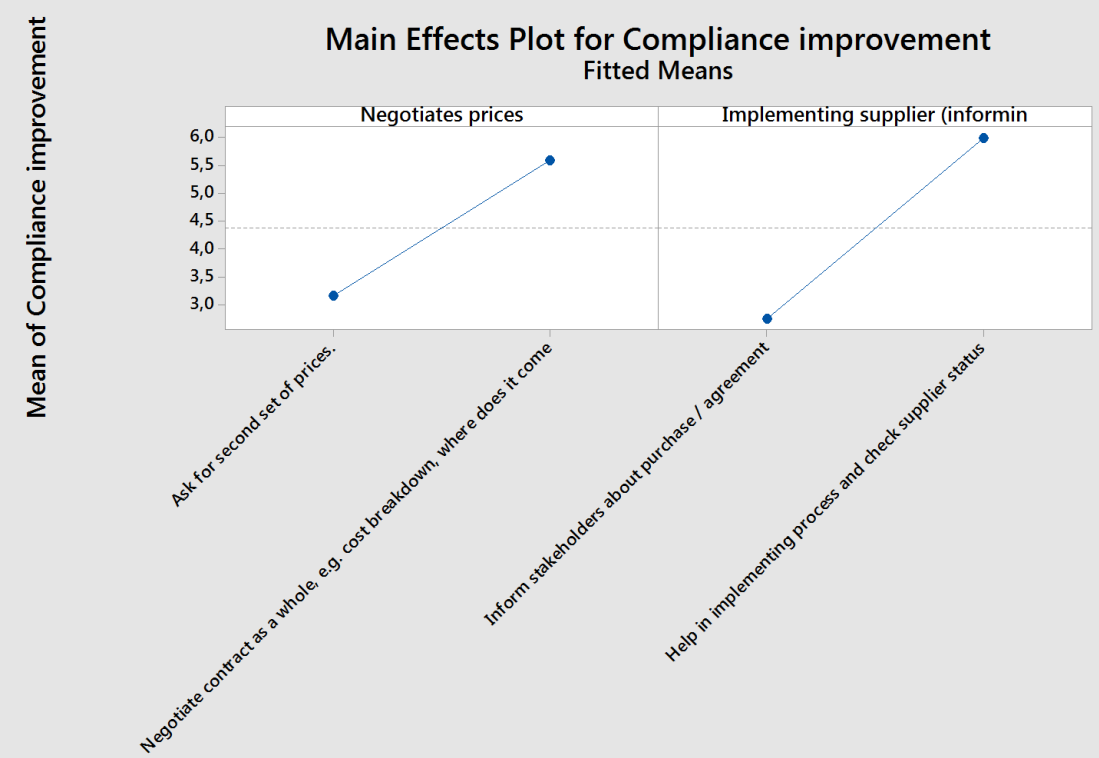

Figure 20 - Meaningful how's effects for compliance improvement

The third and final factor the process were assessed was supplier quantity improvement. Supplier quantity improvement means the decrease of number of suppliers as it is one of procurements goals in the case company. In the following figure the how's and their significance is presented in this aspect. The most significant how was price negotiations. It was followed by helping stakeholders with procurement related problems. Furthermore the collection of feedback from stakeholder was found to have significant impact of supplier quantity improvement.

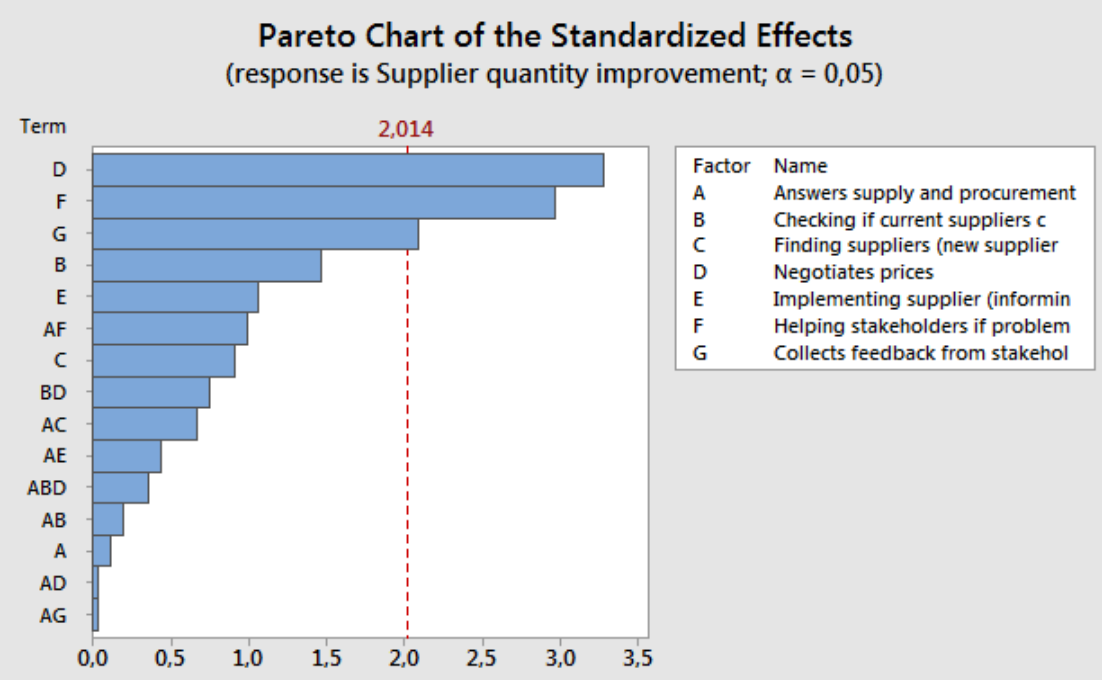

Figure 21 - Most important how's effects on Compliance improvement

The impact of the level changes is shown in the next figure. Negotiates process raises supplier quantity improvement from approximate 1 to approximate 3,5. Helping stakeholder with problems raises it from approximate one to approximate 3,5. Collecting feedback from stakeholder raises supplier quantity improvement from approximate 1,5 to approximate 3.

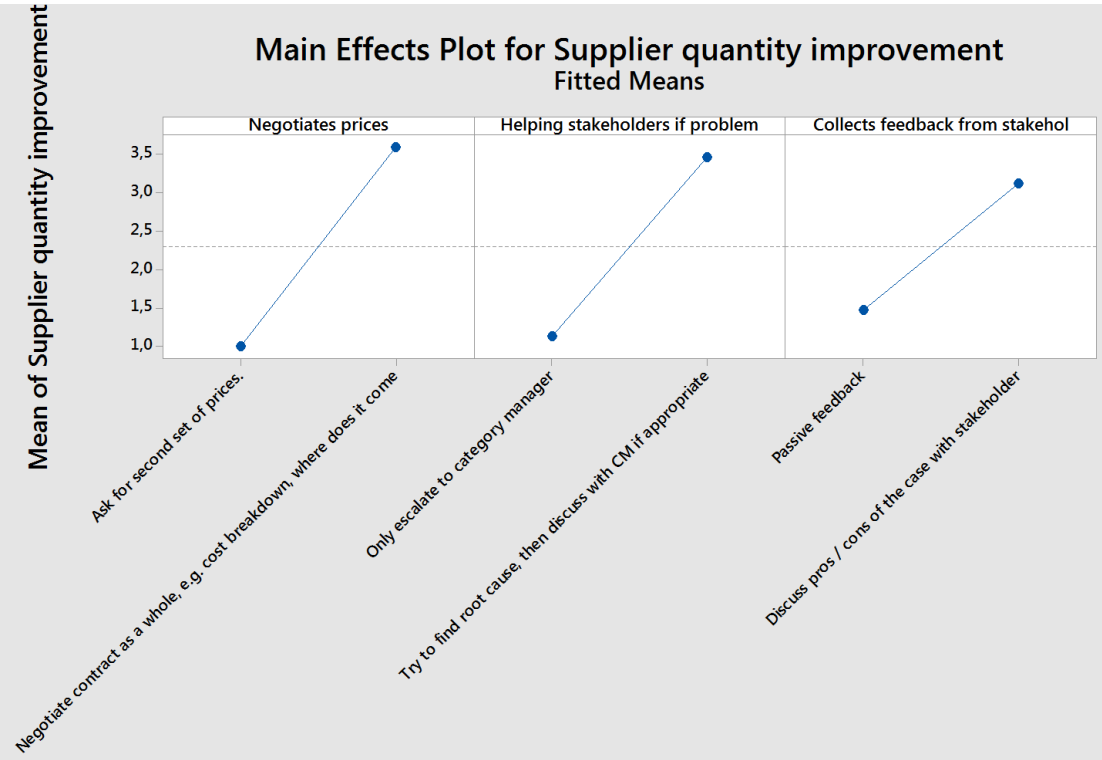

Figure 22 - Meaningful how's effects for compliance improvement

When looking at the impact of the how's the most significant how was negotiates prices as it has an impact of multiple points to all of the wanted factors. Finding new suppliers had impact to potential savings. Implementation supplier had also impact to compliance improvement. Finally Helping stakeholders with problems and collecting feedback from stakeholder have impact on the supplier quantity improvement. The factors gave the most benefits on the high level. The significant factors and how's are presented in the table below.

Table 10 - Most significant factors and their impact on result when changing level

Factor	Potential savings	Compliance	Supplier quantity	Maximum output on level
Finding new supplier	2,5			High
Negotiates prices	4	2,5		High
Implementing supplier		3,5		High
Helping stakeholders			2,5	High
Collecting feedback from			2,5	High

4.5.6 Principles of the process

The design of experiments results tell us what is important in the process. However, in order to be functional the process has to be mapped as a whole. The frame of the process can be taken from the theory. The practical process is depicted below.

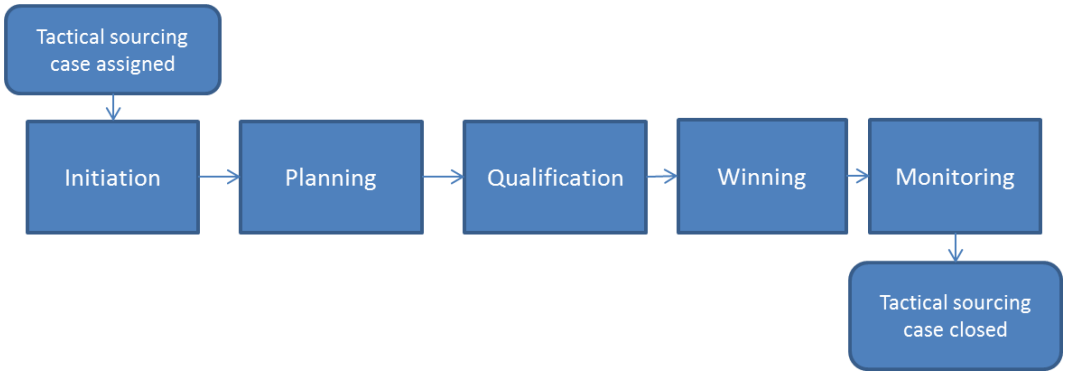

Figure 23 - Tactical sourcing process in practice

The process starts from the assignation of the process to the tactical sourcing process. This assignation is done either by purchasing or category management. The tactical sourcing case is assigned to the process if either qualifies the tactical sourcing criteria.

When there is enough capacity in the process the tactical sourcing goes to the initiation phase. First the case is received and then re-assessed against the tactical sourcing criteria. After it has been verified that the case can be handled by tactical sourcing a preliminary roadmap for the process is drafted. When this is finished the stakeholder is contacted and informed that the tactical sourcing process has started and the preliminary roadmap is presented.

The next phase is planning. The actual requirements are identified and discussed with the stakeholder. The baseline for the purchase is calculated. An important aspect of this phase is to bring procurement thinking and the open the stakeholder's eyes to new alternatives. When the needs have been

identified a sourcing strategy can be selected. Next the supplier long list is created. First the current suppliers are searched and then possible new suppliers are added to the list.

The third step is the qualification. Quotes are asked from the long list suppliers. After the quotes are received the quotes are assessed by price and quality, and ranked with the stakeholder. Additionally, a cost comparison is created that takes into account the total costs of the purchase. This creates the supplier shortlist that is used in the negotiation phase.

The winning phase constitutes mostly of awarding the order and negotiations. At the beginning of this phase the suppliers contacted and asked to send a new quote that fits better the stakeholder's needs. The new quotes are optional as in some cases they are not required if the first qualification had enough information. Furthermore the pricing and product or service characteristics are discussed and negotiated in more detail. After the final quotes are received they are compared again and the purchase is awarded with the stakeholder. After the purchase has been awarded the final savings calculation are created and reported. However, the process step does not end here. The supplier is also implemented to the ERP system and the category manager and other interested parties are informed of the purchase.

The final process step is monitoring. It is monitored to see if it fulfils the needs and that the supplier acts accordingly. After it has been monitored the case is closed.

In the previous parts of the text the tactical sourcing and its elements were described in detail. However, there will be cases that the previous tactical sourcing process will be too heavy or it will have unnecessary steps. In this kind of cases the tactical sourcing process can be tailored. When looking at the qualifications savings, compliance and quantity of suppliers are the critical factors of the process output. Also it should be noted that the requestor should get the goods or service that fits his or her requirements. These

criteria create another requirement of the process. In order to be able to track these certain reporting is needed from the process steps.

When taking these steps into account the most lightweight tactical sourcing process should consists of reporting of what has happened in the process. Furthermore depending on the case the four requirements should be taken into account. In a case that there are fewer than three suppliers because of a certain monopoly situation the qualification step can be skipped and moved straight to the negotiations and winning. However, this can be done only in rare cases as if it's used too often it will ruin the foundations of the process.

4.6 Tactical sourcing measurement

Tactical sourcing is a process and processes have a variety of aspects that can be measured. However, only the most important and significant aspects should be measured and analysed. This is due that the idea of measurement is to be beneficial to the process. As discussed above in the tactical sourcing tailoring the most important aspects of outputs are savings, compliance improvement, supplier quantity, fulfilling stakeholder needs and reporting. However, this is not the everything that should be measured in the scope of tactical sourcing. Processes are more than their outputs, in the process itself the fulfilment of the most important factors should be measured and analysed.

In tactical sourcing the most important process tasks are negotiating prices what affects all of the output variables expect reporting, finding new suppliers, implementing suppliers, helping stakeholders and collecting feedback. When talking about the tactical sourcing process there are also inputs that affect the process. In tactical sourcing it is the cases that are handled to the tactical sourcing process. This also presents that in the process the preliminary and secondary assessment should be measured in when assessing the process. The factors are presented in the figure below.

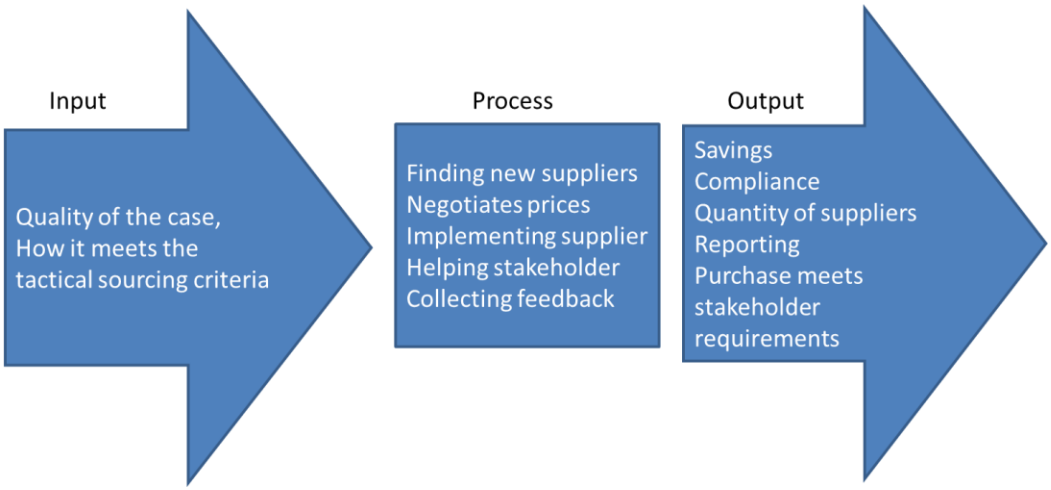

Figure 24 - Process metrics

The quality of the cases is important the end result as if cases that are too complex or high in value the tactical sourcing process cannot handle them accordingly. Too demanding cases may be too taxing for the process delaying other cases. Additionally, tactical sourcing should not make strategic or too long lasting decisions about purchases or contracts as the assessment of long lasting effects of large magnitude is not a tactical sourcing competence. Quality of the case can be measured with the perceived fit of the cases to the tactical sourcing in retrospect.

The process measurement can be done by measuring the accomplishment of the most important and impactful factors in the process. These can be measured by their quality and whether they have been done to their specifications.

The outputs measurement is straightforward. The three measurements from strategy (savings, compliance and quantity of suppliers) can be measured by certain intervals. Savings calculations will provide evidence of savings: Number of cases will show compliance in a case perspective and it also should increase compliance as a whole. Quantity of suppliers can be measured whether the purchases have been allocated to our current

suppliers and in a larger perspective does the number of suppliers decrease. Measurement of reporting success can be seen whether reports of the cases are submitted and do they fit the standards that are set for the tactical sourcing reporting. Finally the most important factor is that whether the purchase fits the needs of the requestor and stakeholder. This can be measured by collecting feedback and assessing whether the amount of maverick buying is decreasing.

4.7 Implementation of tactical sourcing

In the past chapters the tactical sourcing has been described and it's most significant factors identified. It seems that tactical sourcing has potential. However, the blueprint to tactical sourcing in is currently only on paper. In this chapter the implementation of tactical sourcing is discussed.

The current situation to start tactical sourcing is positive as there is a gap between purchasing and sourcing in a process sense. When looking the organisation tactical sourcing can be fitted under sourcing as the processes, tools and metrics are overlapping with the current sourcing organisation. Implementation of tactical sourcing would need working resources and instructions to be able to operate.

When looking at the stakeholder and business perspective their current way of working is not changed. In the tactical sourcing implementation as the cases are conveyed through from the current stakeholder contacts.

Tactical sourcing process should start from a cherry-picking and pilot viewpoint. Only cases that bring the best improvements to the criteria should be taken into the process. Other cases should be handled as they are being currently handled. When experience is gained from using the process then more cases can be used. Additionally, the tactical sourcing reporting can be used use fulfil and standardise the local purchasing processes.

5 SUMMARY AND CONCLUSIONS

In this study the goal was to understand how can medium value spend be managed in general and in the case organisation. In the summary and conclusions chapter these questions are answered by giving an answer to the research questions. After this the validity and reliability of the research are evaluated. Additionally, future research questions are raised.

In the beginning of this study a research problem and questions were set. The research problem is represented next. The research problem was there is gap in the procurement process of the case company leaving room to improve the process of medium value spend. How should this gap be filled? The problem was defined into the following questions.

- How can medium value spend be managed?
- How could medium value spend be managed in Tieto?

In the following chapters an answer is given to fill the gap of the research problem. As the problem was divided into research questions they are also answered.

5.1 Management of medium value spend

The first research question was how medium value spend can be managed. Theory suggests that medium value spend can be managed by a sourcing process that fits the needs and requirements of the organisation. This can vary from organisation to organisation but in general it requires the classification of purchases. An important question is what medium value spend is. The lower limit of medium value spend can be seen where the purchasing process becomes too cumbersome and expensive that a process that does not require individual purchase approvals is required. In addition, to this there are other criteria that can be used with the spend criteria. This is necessary because spend that has a certain value does not mean that it can

be managed always in the same way. Theory suggests six perspectives including the spend factor when analysing the purchase. They are usability class, financial impact, strategic importance, procurement risk, supplier relationship and complexity of purchase. All of these variables contribute to the decision with what kind of strategy or a process should the spend be managed. The way spend is actually managed depends on the organisational goals and of the organisation itself. There is no single solution that fits all cases.

The six previously mentioned criteria are on an abstract level. When thinking more of the operational situation new challenges arise. A greatly academically discussed question is the difference between items and services. Medium value spend can be divided into purchases that are between goods and items or services. In current literature the line between them is a vague one and the line seems to change between organisations. The main conclusion that the scientific discussion of items and services brings to the medium value spend management that the specifications of services is more difficult and emphasis should be put on defining service requirements properly.

Purchasing is a process that is heavily dependent on the culture and attitudes of personnel. A major aspect to beneficially manage medium value spend is to manage as large portion of them as possible. The attitudes and actions of the employees contribute to this. In an organisation that does not have a positive attitude towards purchasing maverick buying might appear. When looking at purchasing maverick buying brings significant drawbacks to the organisation and hinders the management. However, creating a purchasing process that takes into account how maverick buying behaves it can be reduced.

The question was how medium value spend can be managed. In the last chapters the theoretic elements have been described. To have a better

picture what that is a look at the theoretical framework should be taken. The theoretical framework is depicted below. The picture answers the first research question. Medium value spend can be manages by a purchasing process that classifies the purchase to medium value spend. The process also takes into account the purchasing behaviour, thus reducing maverick buying. The process also takes into account organisational requirements and classifies the needs to the appropriate processes.

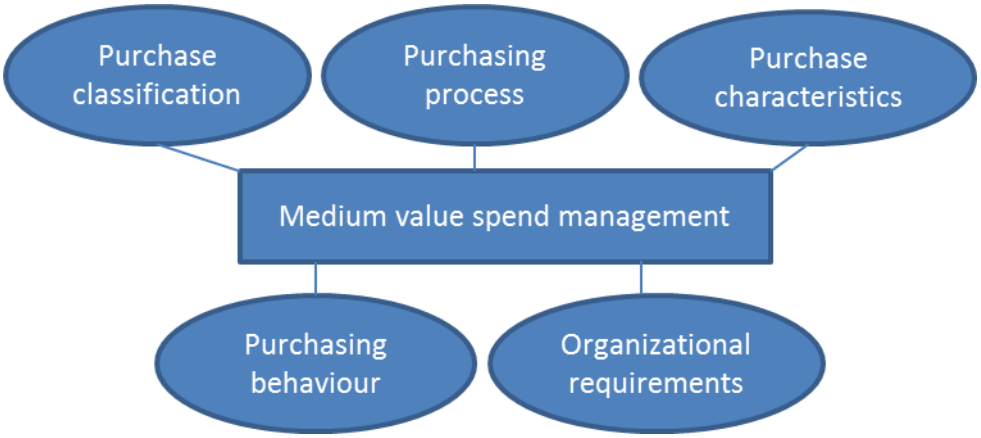

Figure 25 - Management of medium value spend

5.2 Management of medium value spend in Tieto

The second research question was How could medium value spend be managed in Tieto? Medium value spend in Tieto could be managed by a process called tactical sourcing and the current sourcing process. Tactical sourcing is a sourcing process that is designed to handle medium value spend with certain criterion. Tactical sourcing takes into account the special requirements that Tieto has for those kinds of purchases. Tactical sourcing was created by the help of requestors, and sourcing personnel to be able to handle the purchases in the best possible way. Tactical sourcing takes into account all of the process partners needs and reacts to them accordingly.

The most significant part of tactical sourcing and management of medium value purchases in Tieto are the requirements for it. These are savings,

compliance and quantity of suppliers. The better these are met the better the medium value spend is managed. There are two alternative requirements. These are the fulfilment of requestors need and reporting during the process.

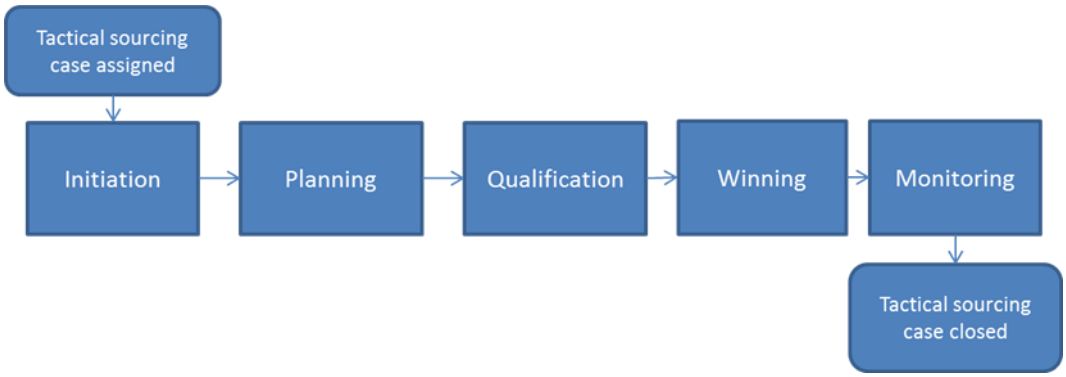

Figure 26 - Tactical sourcing process summary

The tactical sourcing process is depicted above. The process starts when a sourcing case that fits the tactical sourcing description is assigned to the process. After it the requestor is contacted and requirements are selected. When this is done suppliers and their tenders are assessed. When an appropriate tender is found the supplier is awarded the purchase. In this point the savings are reported. After this the case is monitored and closed.

There are three ways that the tactical sourcing is measured which are savings, compliance and quantity of suppliers. Savings means the savings generated by the process, compliance the amount of maverick buying and quantity of suppliers the number of active suppliers.

Tactical sourcing is a process that handles medium value purchases. Tactical sourcing is designed to the case company Tieto corporation's needs. It is designed to handle purchases that are low values in the current sourcing process perspective, but still have savings opportunities. The process can be applied to items and services alike.

In order for a purchase to fit tactical sourcing there are certain criterion that is must fulfil. The first has been mentioned before, that the purchase has to be

under certain value but still generate savings when using this process. The other criterions have to do with the complexity of the purchase.

When looking at the process there are five factors that affect the results of the process most. The most important is price negotiation. Price negotiation affects potential savings and complains significantly. The other meaningful tasks are finding new suppliers, implementing suppliers, helping stakeholders and collecting feedback from them.

5.3 The gap in the procurement process

The research problem was there is gap in the procurement process of the case company leaving room to improve the process of medium value spend. When looking at the gap that is currently left by the procurement processes. Tactical sourcing and the sourcing process should be used to fill it. The current sourcing process can handle the purchases that have are more complex. Tactical sourcing can be used to other medium value purchases. When tactical sourcing would be used the performance of the organisation would increase. In the concept assessment phase it was found that the utilization of tactical sourcing would have a significant impact on the three procurement measures. Tactical sourcing would free time in the organisation for the category and sourcing managers to have more time to spend on larger cases. Tactical sourcing would increase visibility of medium value purchases and create a meters for its success and clarify the handling of such cases.

5.4 Theoretical findings

The goal of this research concentrated on the medium value spend and the case organisation. The theoretical contribution of the study is low. However, still the study discusses with current theory and notifications can be made. When conducting the assessment of purchases the factors that were suggested in the theory were found useful. The notification that negotiations were found to be the most impactful to the success of the purchase cannot be

generalised in any way as the study concentrated on the current and potential tactical sourcing situation making.

When the tactical sourcing and its concept is drafted the difference of items and services is noted. However, in this case and in the tactical sourcing process the differentiation of them is not found significant. However, the notification of that the specifications are an important aspect of the purchase should not be overlooked. This also may come from that the organisation is used to purchase services.

In the process aspect this study explores the purchasing process from a medium value aspect. The majority of the purchasing processes presented in theory concentrated on the high level of the process. This study goes in the less presented lower level and gives one a normative case for the tactical sourcing process.

5.5 Research limitations

This research was conducted as a case study and the goal was to determine how medium value spend should be managed. The scope was in the following categories: business support services, HR services, hardware and facility management. The research is limited to one specific case. Thus, the results are not planned to be generalized. The results of the study are suggestions for a process and recommendations for current processes. This study does not look into purchases of a manufacturing company and in that context the results of this study may be invalid. Additionally, the results of the study are dependant of current strategies, goals and market situation. Thus the results may necessarily be applicable in the future as is.

5.6 Further research

The only outcome of this study was not the suggestions on Tieto’s medium value spend management. While creating the process new questions

emerged. These can be divided into two areas. The first are the questions that are straight related to the case company. The scope of this study was to create a suggestion for tactical sourcing hence they could not be pursued. The most major question and what affects the future of tactical sourcing is how should the tactical sourcing be implemented? As the organisation is large and operating internationally a specific roadmap has taking account cultural and change management aspect has to be created.

The second portion of questions lay in the theoretical questions. The questions are related to procurement leadership. Maverick buying is a concept that can hinder any organisation how should the maverick buying reasons to be tackled.

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