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LAPPEENRANTA UNIVERSITY OF TECHNOLOGY

School of Business

Master's Degree Program in Supply Management

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REORGANISING PURCHASING ORGANISATION – CASE METSÄ WOOD

Master's Thesis 2016

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ABSTRACT

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Title: Reorganising purchasing organisation – Case Metsä Wood
Faculty: School of Business
Major: Supply Management
Year: 2016
Master's Thesis: Lappeenranta University of Technology
142 pages, 15 figures, 8 tables
Examiners: Professor Veli Matti Virolainen
Professor Katrina Lintukangas
Keywords: Centralization, Coordination, Organisational design, Purchasing, Strategy

The purpose of this study is to investigate how a global company should organise its purchasing operations. The theoretical framework of this study consists of organisation structures, management and coordination, purchasing organisational design, capabilities and outsourcing. The research is a qualitative case study and the used method was theme interview. Four global large scale companies were interviewed for this research in order to gain knowledge about how other companies have organised their purchasing functions and to gather their best practices. Interview results and theoretical framework were compared in order to test the theoretical framework and to create a detailed framework about how to organise purchasing operations in a global company.

As a result a 14 point model about effective purchasing operation organisation for a global company was created. This model includes all the key determinants which should be considered when organising the purchasing operations. The results show that the organising decision should be always in line with company and purchasing strategies. Strategic purchasing operations should be centralized and operative tasks decentralized.

TIIVISTELMÄ

Tekijä:	Jussi Koskinen
Tutkielman nimi:	Hankintaorganisaation uudelleenorganisointi – Tapaus Metsä Wood
Tiedekunta	Kauppätieteet
Maisteriohjelma:	Hankintojen johtaminen
Vuosi:	2016
Pro gradu -tutkielma:	Lappeenrannan teknillinen yliopisto 142 sivua, 15 kuviota, 8 taulukkoa
Tarkastajat:	Professori Veli Matti Virolainen Professori Katrina Lintukangas
Hakusanat:	Keskittäminen, Koordinaatio, Organisaatiosuunnittelu, Hankinta, Strategia

Tämän tutkimuksen tarkoitus on tutkia miten kansainvälisen yrityksen tulisi organisoida hankintaorganisaationsa. Tutkimuksen teoreettinen viitekehys koostuu organisaatorakenteista, johtamisesta ja koordinaatiosta, hankinnan organisoinnin suunnittelusta, kyvykkyyksistä sekä ulkoistamisesta. Tutkimus on laadullinen tapaustutkimus, jonka tutkimusmetodina on käytetty teemahaastattelua. Tutkimusta varten haastateltiin neljää suurta kansainvälistä yritystä. Haastatteluiden avulla saatiin kerättyä parhaita käytäntöjä sekä tietoa siitä miten muut yritykset ovat organisoineet hankintayksikkönsä. Teoreettista viitekehystä ja haastattelutuloksia verrattiin toisiinsa, jotta viitekehystä voitiin testata. Vertailun ja testauksen pohjalta rakennettiin tarkka malli siitä miten kansainvälisen yrityksen tulee organisoida hankintatoimintansa.

Tutkimuksen tuloksena luotiin 14 kohtainen malli tehokkaasta hankintatoiminnan organisoinnista globaalissa yrityksessä. Malli sisältää määäävät tekijät, jotka tulee ottaa huomioon hankintatoiminnon organisoinnissa. Tulokset osoittavat, että organisointipäätökset tulisi aina olla yritys- ja hankintastrategian mukaisia sekä strateginen hankintatoiminta tulisi keskittää ja operatiiviset tehtävät tulisi hajauttaa.

ACKNOWLEDGEMENTS

I would like to thank my supervisor Professor Veli Matti Virolainen for his advices and support for this thesis.

I am highly thankful to Ismo Somero and Jarmo Toikka from Metsä Group and Jani Riissanen from Metsä Wood who have given me this opportunity to introduce into the company and conduct this research for Metsä Wood's purchasing organisation.

I would also like to thank each of the interviewees for giving a valuable input for this research. Their experience and wide knowledge about purchasing has helped tremendously to complete this research.

Especially I would like to express my gratitude to my wife and my family who have supported me throughout my studies in Lappeenranta University of Technology.

In Helsinki 7th of April 2016

Jussi Koskinen

TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	Research gap and research problem	1
1.2	Research questions and research objectives.....	2
1.3	Limitations.....	3
1.4	Previous research and research method	3
1.5	Research structure.....	4
1.6	Key Concepts.....	6
2	ORGANISATION THEORY – SUCCESS WITH ORGANISATION STRUCTURE, DESIGN & MANAGEMENT	8
2.1	Organisation structure and models	9
2.2	Level of centralization in business functions	16
2.3	Organisational management: coordination and control, culture and incentives.....	18
2.3.1	Coordination and control	18
2.3.2	Incentives as a management tool	22
2.3.3	Organisation culture	24
3	PURCHASING AS A COMPANY’S KEY VALUE CONTRIBUTOR.....	27
3.1	Background and benefits of purchasing	28
3.2	Purchasing Strategies	31
3.3	Purchasing’s organisational design.....	36
3.4	Purchasing’s role in organisation and its relation to other business functions 40	
3.5	The level of centralization in purchasing organisation.....	42
3.5.1	When to centralize purchasing	46
3.5.2	Benefits of (de-) centralization	50
3.6	Purchasing tasks and task division within the organisation.....	53

3.7	Purchasing capabilities	58
3.8	Outsourcing the purchasing function as a future direction of purchasing	61
3.9	Theoretical Framework	66
4	METSÄ WOOD PURCHASING	71
4.1	Metsä Group's Purchasing	72
4.1.1	Metsä Group purchasing strategy	74
4.2	Metsä Wood & Purchasing's current situation	74
4.2.1	Metsä Wood strategy	75
4.2.2	Metsä Wood purchasing strategy and goals	76
4.2.3	Key statistics of Metsä Wood purchasing	78
4.2.4	Metsä Wood Purchasing organisation	79
4.2.5	Problems in Metsä Wood Purchasing	81
5	RESEARCH METHOD	84
5.1	Theme interviews as a research method in qualitative case study	84
5.2	Planning of interviews and interview themes	88
5.3	Interview process	91
5.4	Reliability and validity of the research	93
6	ANALYSIS OF INTERVIEWS	95
6.1	Metsä Board	95
6.2	Metsä Fibre	102
6.3	Posti Group	109
6.4	ABB Group	117
6.5	Analysis between interviews and theoretical framework	125
7	CONCLUSION	136
7.1	Managerial recommendations	138
7.2	Further research topics	142
	LIST OF REFERENCES	143

LIST OF FIGURES

Figure 1. Research structure

Figure 2. Functional organisation structure

Figure 3. Divisional organisation structure

Figure 4. Matrix organisation structure

Figure 5. Coordination and control models

Figure 6. Strategic purchasing's impact on competitive advantage and profitability

Figure 7. Decentralized and centralized organisation models

Figure 8. Hybrid purchasing organisation

Figure 9. Purchasing task division within the organisation

Figure 10. Theoretical framework

Figure 11. Organisation of Metsä Group

Figure 12. Metsä Group Purchasing organisation

Figure 13. Metsä Wood Organisation & Purchasing's roles

Figure 14. Current purchasing organisation of Metsä Wood

Figure 15. Framework of effective purchasing organisation

LIST OF TABLES

Table 1. Sourcing strategies' pros and cons

Table 2. Factors affecting on purchasing centralization decision

Table 3. Pros and cons of (de-) centralized purchasing organisation models

Table 4. Generally required purchasing capabilities and skills

Table 5. Buyer profiles, responsibilities and required skills

Table 6. Metsä Wood Purchasing KPIs

Table 7. Key facts about case company theme interviews

Table 8. Comparison of interview results

1 INTRODUCTION

Purchasing has developed in past few decades from operative buying to a strategic function of companies. The value of purchasing has been acknowledged in companies which has led to a growing interest towards organising purchasing operations. (Arnold 1999, 167; Karjalainen 2011, 87.) In manufacturing environment 50 to 70 per cent of potential value and profit are determined in purchasing operations (Zeng 2000, 219). Due to the huge potential of purchasing operations companies have a growing interest towards developing and reorganising their purchasing. One of the key question around organising strategic purchasing function is whether purchasing is centralized or decentralized. (Iloranta & Pajunen-Muhonen 2013, 318; Karjalainen 2011, 87.)

This thesis is a case assignment for the company Metsä Wood. The background for this thesis comes from Metsä Wood's need to develop its purchasing organisation from decentralized purchasing towards centralized led purchasing. The need to develop organisation comes from the difficulties to control and lead purchasing with current organisation and way of operating. Metsä Wood's purchasing is widely divided to manufacturing plants where is no dedicated purchasing staff thus employees do purchasing operations along with their own work. This has led to a situation where leading the purchases to a certain direction is difficult. Manufacturing mills' compliance to Metsä Wood purchasing strategy has also proven to be challenging. For example maverick buying is occurring and approved vendors with negotiated frame agreements are not used and synergy benefits are lost.

1.1 Research gap and research problem

This research is a case study and therefore research gap is merely the need of case company. However there is a lack of academic research and literature regarding the purchasing organisation and how purchasing should be organised. The changing business environment and organisational culture towards purchasing operation places pressure to reorganise purchasing as a strategic function. This research will

provide new research data to the literature of organising purchasing in manufacturing environment and more precisely in forest industry. The research problem of this thesis is to figure how a global company and more precisely the case company Metsä Wood should organise its purchasing operations in order to be more efficient and to get purchasing operations under control.

1.2 Research questions and research objectives

The aim for this thesis is to study what is the optimal way to organise purchasing operations and organisation in a global company. This problem derives from the organisation's need to better manage purchasing and operate it in a more efficient way. This research will also give an overview to other companies' purchasing organisation and their Chief Procurement Officers' (CPO) vision of how purchasing should be organised.

The main research question for this research is:

- How to organise purchasing operations in a global company?

In order to answer to the main research question overall organisation theory should be examined and define what are organisations' company and purchasing strategies, how companies are organised for example do they centralize or decentralize operations and lastly how the companies are being managed. The sub-research questions are following:

- What are the key determinants of organising the purchasing operations?
- How should responsibilities and control be divided in purchasing operations?
- What kind of benefits can be obtained with effectively organised purchasing operations?

Organising needs for a global company can be defined by answering to these questions above. The end result of the research is to give Metsä Wood a proposal how the company should reorganise their purchasing in order to be more effective.

1.3 Limitations

Reorganising company's function is a long-term process which needs its own project from planning to the final implementation, monitor and continuous development. Due to the large size of the project this research is focused only in studying the correct model of purchasing organisation. Implementation, monitor and further development of the proposed organisational changes are limited out of this research. These subjects would need strong focus on change management theories which could be an independent thesis subject as such.

This research is also limited to focus on reorganising case company's Finnish local purchasing organisation. Metsä Wood has purchasing operations also abroad, mostly in United Kingdom. However purchasing operations and its focus are heavily centralized in Finland and most of the purchasing activity is occurring in Finland. For this reason, sourcing operations abroad are not analysed.

1.4 Previous research and research method

There is some previous literature about organisation design and about centralization decision but the literature about in depth single case studies is somewhat scarce. This research is trying to give a common overview of how a global company should organise its purchasing. Also the research provides an in depth case analysis of the organisation should be done in case company Metsä Wood and how the purchasing has been organised in case interview companies.

The aim of this research is to understand the optimal way of organising purchasing operations. Therefore research method is selected to be qualitative case study which is based on qualitative case interview data. The purpose is to benchmark other companies' best practices and to get business life's purchasing professionals'

views of how to organise purchase operations. Empirical interview data is gathered from four companies' purchasing leaders. Companies were selected from both manufacturing and service industries in order to get wider understanding and views of how purchasing would be beneficial to organise in different situations. Interviews were conducted in the beginning of 2016.

1.5 Research structure

Research structure for this research is presented in the figure 1 below. The structure was formed in order to effectively organise the research project.

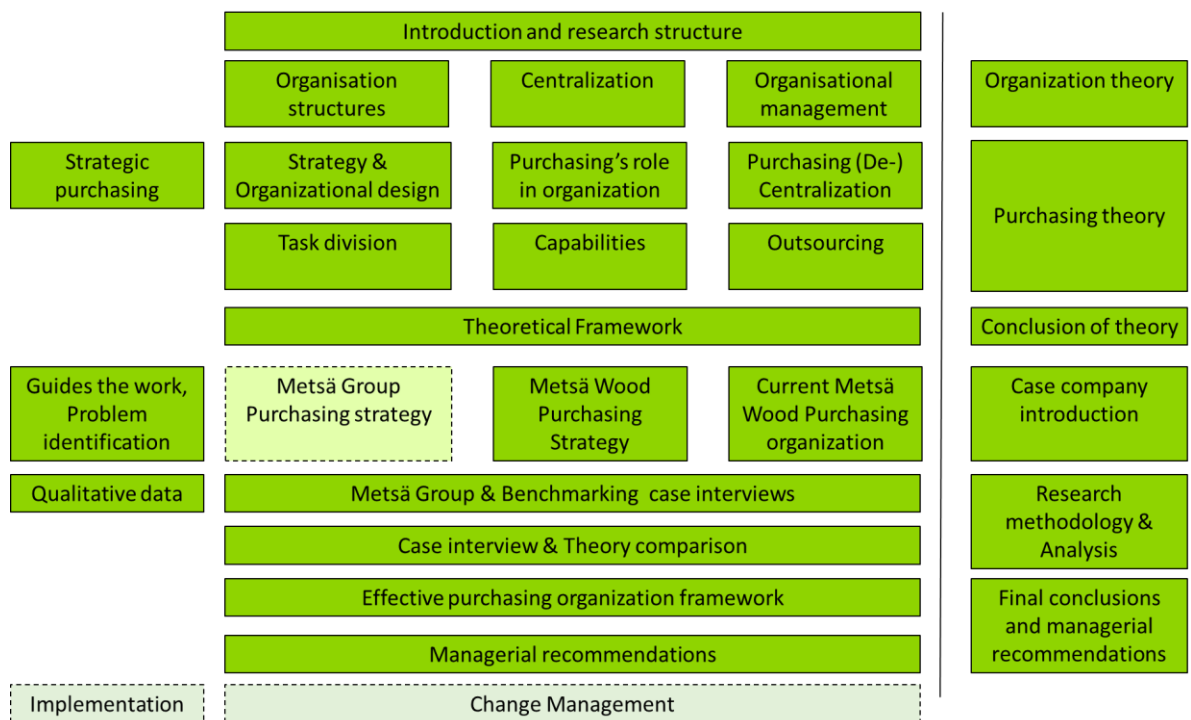


Figure 1. Research structure.

The research starts from introduction which includes presentation of the research gap and research problem, research questions and objectives, limitations, previous research and research methods. Theoretical part of this research is divided into two parts. First general organisation theory is presented. This part includes issues such as general organisation structures, centralization and management. The

organisation theory part is important to understand in order to investigate more precisely the purchasing organisations. The second part of theory is purchasing theory. In this chapter purchasing strategies and purchasing organisational design are presented. Purchasing organisational design works strongly as a key driver for the rest of the purchasing issues which are related for example to centralization, task division and organisational roles. These two theory parts are concluded into a theoretical framework which gives the theoretical viewpoint of what issues are involved in an effective purchasing organisation. After theoretical part the case company Metsä Wood is presented.

Metsä Group's and Metsä Wood's purchasing strategies are defined because strategies are the driving forces in organisational design. The organisation has to be in accordance with the company's purchasing strategies but also with corporate's overall strategy thus it is important to shortly present and analyse the strategies in case company introduction.. The current situation of case company's organisation is also analysed. Major problems and hindering causes are identified from current organisation in order to develop managerial recommendations for the Metsä Wood about how to organise their purchasing.

The research continues by describing the research methods and the research process. Here also the validity and reliability of the research are analysed. The research method in this research is theme interview. The interviews are analysed by each interviewed company. After this the interviews are concluded together and compared with theoretical framework. Through the comparison the final framework and answer can be given to the research question of how to organise purchasing operations in a global company. Managerial recommendations are finally given about how Metsä Wood should organise its purchasing operations. The given implementations are should then be implemented into Metsä Wood's organisation but this stage has been limited out of this study.

1.6 Key Concepts

Organisational coordination is the control of organisation with different procedures, rules and organisational hierarchy. Coordination deals with two main issues, the level of formalisation and level of centralization within the company. (Dessler 1976, 142; Burton et al. 2011, 167.)

Organisational design is a process where a company assesses and selects the formal system and structure of communication, responsibilities, level of authority and control, labor division and coordination of operations in order to achieve goals set to the organisation or unit (Glock & Hochrein 2011, 149; Monczka et al. 2009, 155; Quayle 2006, 54; Tirimanne & Ariyawardana 2008, 163).

Outsourcing is a purchasing strategy where a company is moving a part of its operation or function from in-house and buying it from an external supplier in order to achieve cost reductions and free resources. All other functions than those which are a company's core competences or bring competitive advantage can be outsourced. (Parry, James-Moore & Graves 2006, 436, 437; Quayle 2006, 4.)

Procurement outsourcing occurs when a company realizes that procurement is not one of their core competences thus company outsources some parts or all of its purchasing function to a third party logistics provider (3PL) which operates purchasing on behalf of the company (Boyd, Tokman & Richey 2009, 333; Fernández & Kekäle 2007, 167).

Purchasing term is mostly considered to mean operative purchasing such as making orders. Strategic purchasing activities are usually referred as procurement or sourcing (Iloranta & Pajunen-Muhonen 2013, 49 – 51). However the term “purchasing” has been used in Metsä Group for a long time and it has always been related to the whole activities that the purchasing or sourcing organisation is conducting. The term in Metsä Group's company language is including the operative tasks such as order making and also strategic tasks for example bidding and

negotiations. Because of this reason the term purchasing in this research means strategic sourcing or procurement.

Purchasing (de-)centralization is determined as the level of authority, power and responsibilities concentrated within the organisation or purchasing unit. In centralized purchasing organisation purchases are done by a specialized purchasing department whereas in decentralized purchasing organisation purchasing activities are by plants or by separate business units. (Karjalainen 2011, 88.)

Strategic purchasing is a company's key function which supports the corporate strategy in a proactive way and long-term oriented supplier base management. (Knoppen & Sáenz 2015, 124; Driedonks, Gevers & Van Weele 2014, 288). Its key activities are identifying, selecting and managing suppliers (Driedonks et al. 2014, 288; Zeng 2000, 219). Thus strategic purchasing also includes activities such as conducting supply market research, negotiating with suppliers, making contracts, measuring suppliers, co-developing operations with suppliers and developing purchasing's processes and systems (Monczka et al. 2009, 8).

Supply management is a broader concept from strategic purchasing and it includes all activities in the logistical chain from raw materials to final customers (Knoppen & Sáenz 2015, 124). Supply management emphasises the strategic planning of the supply process from identifying, acquiring, accessing, positioning and managing company's current and future needs of resources which it needs in order to create value and achieve its objectives (Monczka et al. 2009, 8; Quayle 2006, 4).

2 ORGANISATION THEORY – SUCCESS WITH ORGANISATION STRUCTURE, DESIGN & MANAGEMENT

A company's business idea, strategies and goals are the focus point of management. These factors are the core which define how the company should be organised. The top management has to align strategic focus areas and make or buy decisions. These decisions determine what functions are made in-house and what kind of human resources are needed for these functions. Each company has its individual structure and organising the company includes following decisions:

- What processes and tasks are needed in order to fulfil business strategy?
- In what kind of business units and responsibility the tasks are divided into?
- How the tasks and responsibilities are divided between personnel
- How to organise and ensure sufficient cooperation and coordination between different organisational parties?

Answers to these questions are forming the structure of company's organisation. The structure is describing to which kind of sets functions and tasks are divided within the organisation. (Viitala & Jylhä 2010, 195.) In order to answer these questions above organisational design is needed. Organisational design represents the organisation's structure in an overall macro level and its subcomponents. Successful organisational design is one of the most important issues for overall business success. (Nikolenko & Kleiner 1996, 23.) Organisational design is a formal way to design how to organise the company.

Organisation designing and redesigning are one of the management's key tasks. Successful organisational design is highly dependent on the quality of design process. Design should be a creative process where the organisational structure and functions are designed. Deciding an organisational chart or structure is not enough when designing new organisation. (Visscher & Visscher-Voerman 2010, 713.)

In next sub-chapters some of the key issues of organisational design are analysed in general level. First the meaning of organisational structure and its different models are analysed. After this the level of organisational centralization is analysed because it is strongly related to selection of organisational structure. Organisational culture, coordination and management are also analysed. Organisational design is analysed more precisely from purchasing organisational design perspective in chapter 3.3.

2.1 Organisation structure and models

The definition for organisational structure is that it is the sum of all the different ways in which the work is divided into different tasks and how the coordination among these tasks is achieved (Martínez-León & Martínez-García 2011, 542). Organisations are not only consisted from the hard components such as people, teams and departments but also from the soft relational aspects of the organisation. The organisational structure is a fundamental issue of capturing the essence and core of the company activities and the soft aspects are defining the relations between hard components. (Singh 2009, 953; Wang & Ahmed 2003, 52.)

Organisational structure includes the internal relationships, communications and authority within the company. The two critical components of the organisation's structure are formal authority lines and communication, the data and information flow along these lines of authority. This is due to the reason that the organisational structure is heavily impacting on the nature of human interactions in the company and how the information is flowing and shared within the organisation. It also influences on the collaboration in internal level and the collaboration with external stakeholders. In addition organisation structure impacts on the management and coordination methods, power allocations and responsibilities, and levels of organisation complexity and formalisation. (Martínez-León & Martínez-García 2011, 543; Singh 2009, 954.) Because of these reasons organisational structure can either impede or facilitate company's ability to learn, adapt, change, innovate new and to improve its ability to create value additional value to the customers (Martínez-León & Martínez-García 2011, 543).

Organisation structure is the core of the company due to its power to affect the whole organisation. It is an enabler of business and a foundation of a company. Without a properly organised and managed business organisation large companies could not operate properly and would easily be in a disorganised and chaotic situation. (Martínez-León & Martínez-García 2011, 542, 543; Viitala & Jylhä 2010, 195.) If the organisational structure does not support the company's business idea and strategy, it may cause the organisation to be bureaucratic and slow responsive operations which are disrupted often. (Viitala & Jylhä, 2010, 195). The choice of correct organisational structure is an important factor in the company's success (Enderwick & Ronayne 2004, 55). In the growing knowledge economy where capabilities and knowledge are used to create value, the organisation structures have to be agile, flexible and able to adapt in order to capture the opportunities that lies in the business environment (Singh 2009, 954). Organisational structure is also a key driver for changes because the structure creates the foundation for all organisational processes and decisions (Wang & Ahmed 2003, 51).

In this chapter the basic theory of what makes a good organisation is presented. The chapter first presents the idea of organisational design and its importance to the whole company. After that some basic organisation structures are presented. The chapter continues by analysing how organisational culture, authority and responsibility relationships, management and coordination practices are impacting on organisation's success. Lastly the issues of centralization or decentralization of business functions in organisations is analysed. This chapter will give an insight of what factors are impacting within the organisation and how they are impacting. This top level's knowledge is needed in order to design the purchasing organisation in more detailed level.

As said before every company has its individual organisation model but there are some usual ways of organising the company. The three common organisation structure models are: functional, divisional and matrix organisations. (Martinsons & Martinsons 1994.) The first organisational structure defined by Martinsons & Martinsons (1994) is a functional structure which can be seen as the traditional way of organising the company. In this structure the operations are organised under the

top management to their own specialised units such as marketing, sales and purchasing. (Martinsons & Martinsons 1994, 24; Singh 2009, 955; Viitala & Jylhä, 2010, 200, 201; Burton, Obel & DeSanctis 2011, 64.) The effectiveness of this structure is based on the clear division of labour. This organisation structure is usually favoured in small and medium sized businesses rather than in large enterprises. (Martinsons & Martinsons 1994, 24; Singh 2009, 955.) In the following figure 2 an example of functional organisation chart is demonstrated.

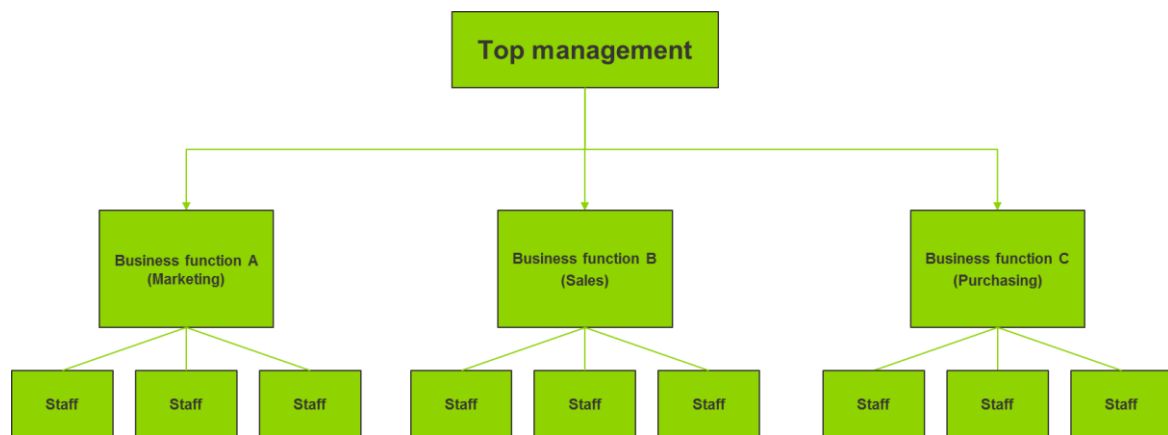


Figure 2. Functional organisation structure (Martinsons & Martinsons 1994, 24; Singh 2009, 955; Wang & Ahmed 2003, 55).

It is characteristic for functional organisation structure that it has a clear hierarchy lines. The decisions are made in hierarchical chain from top to bottom. Different departments are separated rigidly and the work is divided into specialized departments. The power is centralized and there is strong management of activities which is coordinated by using vertical linkages between each hierarchy level from top to bottom. Usually the top management controls organisation's planning, decision making, problem solving and management activities. The level of formality is also high in functional organisation structure. There is not lot of individual freedom of action thus activities are guided by many rigid and bureaucratic procedures and rules set by higher hierarchy levels. Also communication between functions is formalised and the knowledge sharing and flow can be restricted. (Wang & Ahmed 2003, 54, 55.)

While the functional organisation structure may offer strong control over the activities and clear division of labour there are also negative sides related to this structure model. As mentioned above the information flow between functions and authority lines is hindered by rigid bureaucracy and procedures. (Wang & Ahmed 2003, 55.) Lack of communication leads the functions to be too isolated and eventually the functions become siloed. The individuals within siloed functions do not appreciate or understand the other function's actions and purpose. This leads to coordination problems and it greatly hinders the communication and cooperation between different functions which again leads to inefficient operations. (Martinsons & Martinsons 1994, 24; Singh 2009, 955.) As the organisation size grows these negative sides of functional organisation grows alongside and their impact increases. The organisation's efficiency decreases and the level of control decreases. Functional structure is well suited for an organisation which is operating in stable environment where tasks are repeated frequently with high volumes and the aim is to operate efficiently and with precision. (Burton et al. 2011, 65.)

Negative sides of functional structure have impacted on the development of more decentralized organisation structures such as divisional structure which aims to achieve efficient control. (Wang & Ahmed 2003, 55) The divisional organisation structure is usually used when the organisation's size grows and the organisation is starting to diversify their product or service lines (Martinsons & Martinsons 1994, 24; Singh 2009, 955). Figure 3 below demonstrates the divisional organisation structure.



Figure 3. Divisional organisation structure (Martinsons & Martinsons 1994, 24; Singh 2009, 955, 956).

In this structure the company is dividing the organisation into separated business units which are based on different product or service lines or to different markets. The operations are divided into smaller units in order to have better control. Each unit is then operated in functional structure which means that each unit have its own functions such as marketing, purchasing and sales. The units can have shared corporate resources in to some extent, for example shared research & development unit. Otherwise the units are independent and they have freedom to create their own strategies in order to achieve corporate level goals. Thus the corporate strategy and corporate level goals are guiding the entire organisation and all units. The benefit of this organisation structure is flexibility. Since units are divided according to product line or markets and the units have freedom to choose their own strategies each unit is much more flexible and can better adapt to market conditions and changes than functional structure. (Burton et al. 2011, 66; Martinsons & Martinsons 1994, 24, 25; Singh 2009, 955, 956.)

However the divisional structure creates lots of duplicate work because each unit have the same functions in its own organisation and only a little resources are shared in corporate level. Due to duplicated work the overhead costs are high in each unit which again causes the operations easily to be inefficient. (Burton et al. 2011, 67; Martinsons & Martinsons 1994, 25.) As in functional structure the divisional structure's problem is that the units can easily be siloed and not caring

about other units. If the units are too focused only to themselves it is difficult to create unified corporate image which leads to coordination problems and loss of control of the units. (Singh 2009, 956.)

The matrix organisation structure is usually used to mitigate the negative sides of functional and divisional structures and to bridge the gap between these two structure models. Matrix organisation emerged in 1970's and since then it has been a popular organisational structure. (Singh 2009, 956). In the matrix organisation the control has been divided into two parts, vertical and horizontal linkages. The vertical linkages can be for example business units or project teams and the horizontal linkages for example functions. The aim is that there is equal balance of power and control between both linkages. (Wang & Ahmed 2003, 56.) Figure 4 below illustrates an example from matrix organisation.

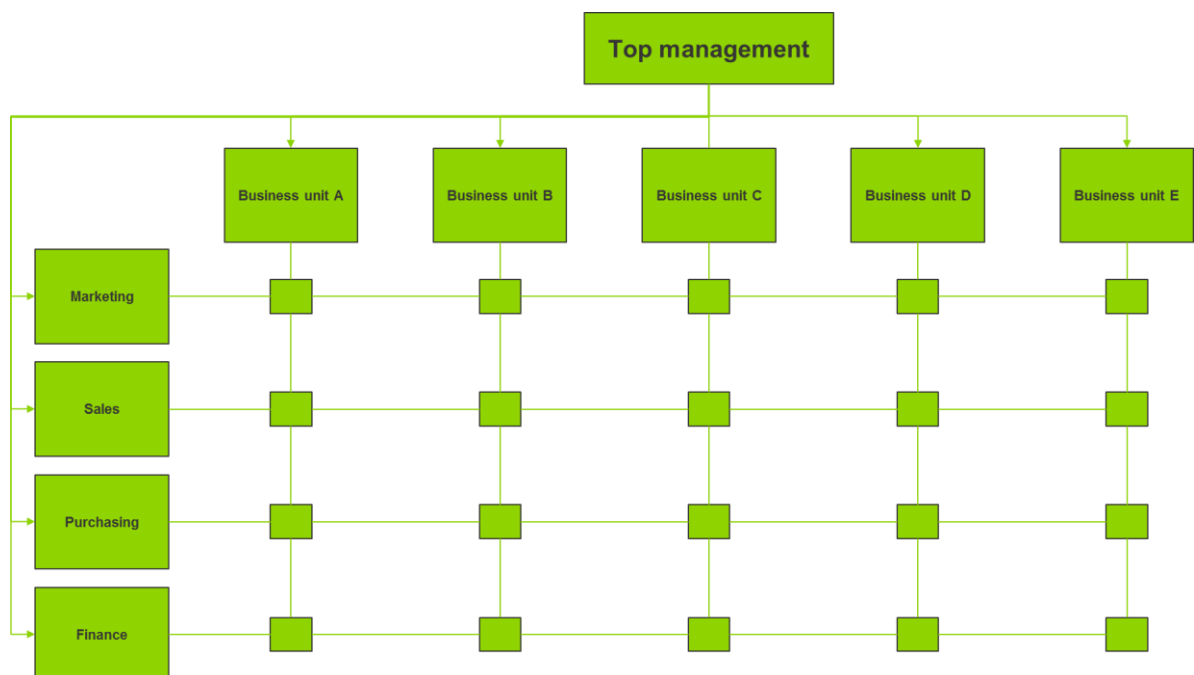


Figure 4. Matrix organisation structure (Burton et al. 2011, 68, 69 ; Martinsons & Martinsons 1994, 25; Singh 2009, 956; Wang & Ahmed 2003, 56).

The matrix structure is often seen as a flexible solution which is easily adjustable to different organisational needs (Burton et al. 2011, 69; Wang & Ahmed 2003, 56). The horizontal, functional lines are used to gain high level of specialisation to the

organisation while the vertical, divisional lines are used to focus on more specific markets or products. Each member in the matrix organisation structure is responsible for one functional and one divisional line. The problem with matrix structure is that the two lines of responsibilities and line of control can be ambiguous which causes struggles over power and loss of accountability. If there are not clearly specified procedures and rules the unclear organisational situation will lead to decreased effectiveness and efficiency. (Martinsons & Martinsons 1994, 25; Singh 2009, 956.) Ambiguous organisational situation is also confusing employees and makes the employees choose whether to be loyal for functional or divisional departments. This leads directly to decreased working morale and job satisfaction. (Martinsons & Martinsons 1994, 25.)

Process organisation can be seen as a horizontal part of matrix organisation. In functional and divisional structures the operations or activities are seen as silos or boxes of different tasks, in process organisation the activities are seen as process specific flows of tasks. (Viitala & Jylhä 2010, 201.) Process organisation structure is based on process flows rather than on individual functions. This structure is developed in order to better adapt to strongly competitive, complex and rapidly changing global business environment. Process organisation consist of different cross-functional work teams which are created around the critical processes. (Nikolenko & Kleiner 1996, 24.) These process specific teams are operating as a process flow throughout the organisation. An example of process organisation could be a supply chain team which is responsible for supply chain process from start to end, from order to delivery. The dedicated team is responsible to fulfil efficient and functioning service to the end-customer. (Viitala & Jylhä 2010, 201.) Process organisation does not require as much managerial control as functional organisation since their operations are guided by customers' needs which requires flexibility and higher level of autonomy (Nikolenko & Kleiner 1996, 24).

In addition to the four organisational structures presented above Singh (2009) presents also modular and hybrid structures. The idea is to extend normal concept of horizontal cooperation and coordination beyond normal organisation structure. In modular structure the organisation can outsource some of their major processes to

internal or external companies. The organisation will operate and coordinate their core competences but outsources other non-core activities. Outsourced activities are coordinated from small headquarter type organisations but the decision making power and control of the activity is within the partner company who is using their own resources to operate outsourced activity. The hybrid structure aims to combine characteristics from functional, divisional and modular structures. In the hybrid structure the best practices of each structure are combined in order to create an organisation which matches to the company's current strategy. The hybrid model is very flexible structure which makes it well suited for rapidly changing business environments. (Singh 2009, 956.)

Large and complex enterprises have usually problems in creating satisfactory mix of organisation structures which are capable of delivering accountability, strong coordination and synergy between units with good working motivation. Deciding the correct way of organising may be difficult since each structure model has its own negative sides. For example divisional structure easily leads to silo thinking whereas matrix structure can easily be too internally focused and it lacks the accountability and initiative ability. (Cambell & Strikwerda 2013, 4.) However, even though the company has selected a certain organisation structure it doesn't mean that it would be a permanent structure. The structures are dynamic factors which are changing themselves over time with the new organisational conditions such as grown number of employees. Organisation structure can be also constantly modified on purpose in order to enable the organisation to better react on facing changes of the business environment. Structures should not be considered as uniform condition of organising the functions thus each function's individual needs and requirements have to be taken under consideration and develop modified structures according to their needs. (Martínez-León & Martínez-García 2011, 543.)

2.2 Level of centralization in business functions

The level of centralization is referring to the degree of control and decisions activities and responsibilities are concentrated within the company (Holtzhausen 2002, 325; Pleshko 2007, 54). High level of centralization means that the decision power is in

top management and low level of centralization means that the power is divided within organisation (Pleshko 2007, 54, 55). The level of centralization is directly related to the question of organisation structure. For the past decades there has been a trend moving from centralized, highly controlled and vertically integrated businesses, into a decentralized and divisional organisation. The key driver for decentralizing has been the need for managing business environment changes more effectively and to be more efficient in market competition. (Mukherji 2002, 499.) According to Singh (2009) fast decision making at every organisation level in the company requires decentralized organisation structure. Decentralized structure increases employees' working motivation due to increased decision making power but decentralization can hinder innovativeness within the organisation if units are not cooperating together (Singh 2009, 957.) It should be noted that the decision of centralising or decentralising organisation structure should always be in line with the company strategy. In effective organisation the strategy will lead to a certain organisation structure but the organisation structure never leads to effective strategy. (Holtzhausen 2002, 325.)

As organisations grow and become more complex the question whether to decentralize operations emerges (Campbell & Strikwerda 2013, 5; Holtzhausen 2002, 325). Companies will reach the size after which it is not any more efficient to centralize all decisions. The quantity or range of decisions becomes too large to manage centrally thus creating bottlenecks and making decision process inefficient. (Campbell & Strikwerda 2013, 5.) In centralized organisations there is also a high level of bounded rationality. It means that centralized organisation's managers have limited capabilities to influence and manage large organisation thus operating inefficiently. (Holtzhausen 2002, 325.) The solution has been to move from functional towards divisional organisation structure (Campbell & Strikwerda 2013, 5; Holtzhausen 2002, 325). However divisional decentralized organisation structure does not fit for the complex companies which can't divide their business easily for example by geographical location or markets and create individual business units. The matrix organisation model has been used to overcome the problem of decentralization and to balance the control with business. (Campbell & Strikwerda 2013, 5.)

Organisation's centralization in general level is not reviewed here more precisely since the issue is reviewed from purchasing organisation's centralization perspective more throughout in chapter 3.5.

2.3 Organisational management: coordination and control, culture and incentives

In this chapter the organisational management is discussed. The viewpoint for discussion is the organisational design. The chapter starts by analysing different organisational coordination and control models. One element of management and organisational design is to decide rewarding policy for the organisation. The incentive policies as management tool are analysed next. An important part of the organisation's success and wellbeing is organisation culture. It is analysed after the incentives.

2.3.1 Coordination and control

After the company has designed the organisational structures and processes the next step is to design coordination and control activities. Coordination and control are referring to methods which are used to integrate separate organisational structures and to support organisational responsiveness to given tasks and environmental changes. (Burton et al. 2011, 165.) Coordination is about managing the interdependencies between the performed activities which are needed to achieve goals (Simatupang, Wright & Sridharan 2002, 291). The importance of organisational coordination increases as the organisation size grows and the organisation structure becomes more distributed. (Burton et al. 2011, 167.) Effective coordination is needed in order to develop company's competitive advantages into profitability (Simatupang et al. 2002, 289).

According to Dessler (1976) the classical view of coordination is that it is about using different procedures, rules and organisational hierarchy to control the organisation (Dessler 1976, 142). More precisely coordination is based on two basic issues: level

of formalisation and level of centralization. The level of formalization is what Dessler (1976) has described about using set of rules and policies in order to manage the way of working. A simple way of coordinating is to have high level of formalization which means that company has applied strict and detailed rules which are communicated and trained to organisation's members. Some rules can be also included into the organisation culture as a tacit knowledge which is passed on to organisation's members. The rules are defining how the work is done, who is responsible of the work tasks and what are the constrictions. The level of centralization is another part of the coordination. (Burton et al. 2011, 167.) High level of hierarchical coordination and centralization can be hindering the organisation's flexibility thus centralization is often preferred in standard and stable business environment (Burton et al. 2011, 168; Dessler 1976, 143).

Stability of the organisation's situation is impacting on the coordination style being used. If the organisation's problems are routine type and they are recurring often the coordination should be "by plan". This means that the coordination is based on pre-established rules or programmes which are guiding what should be done, what activities to perform and when. On contrast in the situations where the changes are rapid and the problems are novel each time the coordination should be "by feedback". This means that the coordination system is based on perceiving deviations and collecting feedback from all parties that are involved into the situation and through this process deciding the solutions for the problems. (Dessler 1976, 142.)

However coordination is not just about rules how to work. Coordination includes also liaison manager roles who are acting as a link between different parts of organisation. These kind of liaison officers are improving the effectiveness of internal integration. Regular meetings, once a week or month, between different departments' directors or liaison persons will facilitate coordination (Burton et al. 2011, 167; Dessler 1976, 143). Coordination systems also include code of conducts, organisational culture's work behaviour, committees and informal rules (Burton et al. 2011, 167).

Burton et al. (2011) have divided coordination systems into five models according to the level of centralization and formalisation. These coordination and control models are: family, machine, market, clan and mosaic models. (Burton et al. 2011, 169). Figure 5 below demonstrates how the different models are positioning between formalisation and centralization.

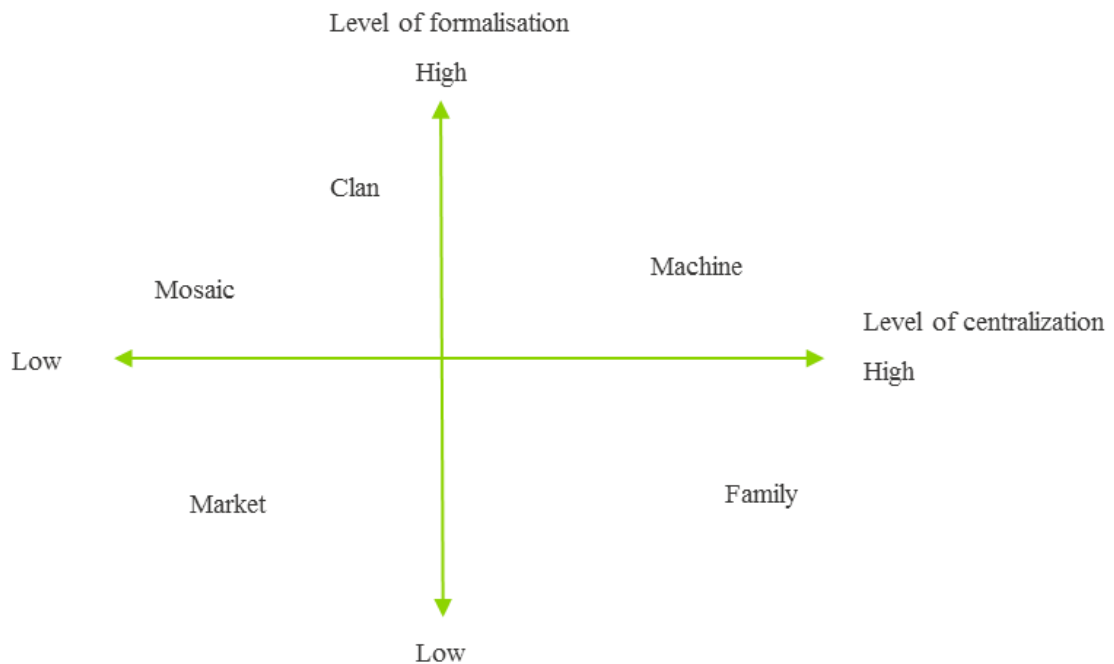


Figure 5. Coordination and control models (Burton et al. 2011, 169).

In the family model level of centralization is high but formalisation is low. The control is informal but management is hierarchical and centralized. This model is usually used in small organisations such as start-up companies or small family businesses. The system is relying strongly on the top management or organisation's leader. Model can be effective if both the leader and the employees are competent and there is a high mutual loyalty. (Burton et al. 2011, 169.)

In the machine model both level of centralization and formalisation are high. There are well defined rules and policies about how to work and the organisation is lead centrally from headquarters or other centre of power. The model leans towards hierarchy but it is not inefficient. The model favours for example Just-in-Time (JIT)

and Lean Six Sigma models for controlling. Machine organisation relies strongly on information and data processing to coordinate organisation. The negative side of this model is that it may hinder flexibility and creativity within organisations. (Burton et al. 2011, 170, 171.)

Market model is emphasising low level of formalisation and centralization. The model is focusing on using effective information sharing to coordinate operations rather than using formalised rules. In market coordination model there are various control methods across different units because it is difficult to create standardised systems in informal and decentralized environment thus units are free to decide control methods themselves. This model is effective for organisations which seek innovativeness. For an outsider the model may seem chaotic but for a member of the organisation the model is clear. The downside of this model is that the units may not perform equally well with their own control systems and there may be too different ways of working between units thus the systems can be in conflict with each other. (Burton et al. 2011, 171, 172.)

Highly decentralized and formalised companies can use either clan or mosaic coordination and control models. These models have same characteristics but still differentiate from each other. The clan model is more focused on strong formalisation and lower level of decentralization. Strict written common norms and values are used to coordinate the work throughout the organisation. Even though the norms are the same across the decentralized units, a unit can still have freedom to take different actions within the limits of the common norms in order to meet the various customer needs. Organisation members work together as a strong community towards common values and goals. It is important that managers communicate the norms and values effectively to employees in order to create common culture of working. Mosaic coordination model is focusing more on decentralization than in formalisation. The rules and norms vary between units and it is not even a goal to have common standards. However the various rules are tried to keep as coherent whole. Working with this model is flexible since the units can have their own control systems but it is difficult to make organisation wide changes

for example to a certain process since the units are so independent and used to their own way of working. (Burton et al. 2011, 172 – 173.)

It should be remembered that the organisational coordination and management is strongly related to business strategies thus the coordination should always be align with strategies. There are three organisational levels involved into the process of strategic management: corporate, business unit and functional levels. The first, corporate level, defines in what field of business the company should be in and the business unit level focuses on how the company should compete within the chosen field of business that they are operating. The functional level strategy is focused firstly on how to integrate company's functional activities together. Secondly the functional level is also focusing on how to integrate corporate and business unit strategies with the functional strategies how to ensure that the strategies are align when functional environment faces changes. (Carr & Smeltzer 1997, 200.)

2.3.2 Incentives as a management tool

Incentives are one way of managing and coordinating the organisation. Incentives are supporting the organisation to achieve its goals. Designing the incentive models is part of organisational design. (Burton et al. 2011, 191.) Incentives are tools for coordinating peoples' behaviour and decision making towards wanted directions. They define how the individuals or group of employees are rewarded or penalised for their decisions. (Burton et al. 2011, 191; Simatupang et al. 2002, 297.) Incentives can be for example based on monetary benefits such as bonuses and salary raises and other benefits. However incentives can be also based on various subjects as long as organisation's members accept the rewards, perceive them to be motivational and in line with the common rewards policies within the organisation. Incentives can be for example praises from manager, recognition from organisation, promotion or title changes. (Burton et al. 2011, 191, 192.) However incentives can lose their meaning if they become expected. Monetary pay for performance type bonuses can lose the characteristic of incentive if it is assumed that the bonus is always received. Because of this it should be thought how long the incentive really motivates employees. (Burke 2014, 353.)

Conflict of interest occurs easily if incentives are leading into a situation where personal gain is tried to achieve but the total profitability reduces due to personal interests. Usually the traditional incentives models are focused on local and short-term personal goals which may promote personal goals over common goals (Simatupang et al. 2002, 298.) Incentive alignment is needed to ensure that the wanted actions are the same actions which are rewarded. If incentives are misaligned it will lead into conflicts where certain actions are measured for example because they are just easy to measure but do not support the wanted actions. (Burton et al. 2011, 191; Simatupang et al. 2002, 298.)

Usually incentives are trying to control either the employees' behaviour or measure the results. When designing an incentive model it is important to decide whether rewards are behaviour or result based and is the target group wide or individual for each person. Burton et al. (2011) have identified four different incentive models: personal pay, skill pay, bonus-based and profit sharing. The first personal pay model rewards from individual's behavioural actions. Skill pay is the most widely used incentive. Usually normal salaries are based on person's skill level such as education and job experience. The idea in this model is that people would utilize their skills in order to follow rules or job descriptions carefully. Bonus-based incentive model is strongly based on individual results that are measured. The aim is that the employee will strive to achieve any goals set by the company in order to get good results and receive the bonus rewards. This is most commonly used as additional reward besides the skill based incentive. The last model is the profit-sharing which is group based incentive model. The idea is same as in bonus-based model, measuring results, but in this model employees are rewarded based on effective collaboration with other group members. Profit-sharing model's aim is to enhance team work in order to achieve targets. This model suits well for an organisation where it is difficult to control group's behaviour. The important part in this model is that members must have feeling that an individual can also make difference to the results. If this doesn't realize the shared responsibility will turn into nobody's responsibility. (Burton et al. 2011, 195 – 199.)

2.3.3 Organisation culture

Organisation culture can have huge impact on company and its performance. For organisation it is important to understand where the culture is affecting and to identify their culture's characteristics in order to impact on it. Organisation culture is seen as organisation's climate, rituals and way of doing things. More detailed definition is that the culture is group of basic assumptions about how members of the organisation should act within the group and how the group acts with external parties. The assumptions are defining how organisation's members are perceiving, feeling and thinking about problems. These assumptions derive from organisation members' own experiences and the members feel that assumptions are valid and worth of teaching to the new members of organisation. (Smith 2003, 249.) Organisational culture is representing the beliefs and values which are indicating behavioural norms and how organisation is functioning (Uzkurt, Kumar, Kimzan & Eminoglu 2013, 96). Organisational culture has been defined also as organisation's widely shared core values, collective understanding or shared belief system. In general the organisation culture deals with the shared values about the characteristics of a work environment (Helms & Stern 2001, 415).

In literature there are many different ways of categorizing different organisation culture types. One way is to categorize the culture to four classes: clan, market, adhocracy and hierarchy cultures. Clan culture is focusing on teamwork and cooperation whereas market culture is goal achievement and competition orientated culture. Adhocracy culture promotes innovation within organisation. Hierarchy culture aims to stability within organisation. (Uzkurt et al. 2013, 96.)

Organisation culture has a great impact on organisation and it is seen as one of the main drivers for improved long term performance. Alongside with the performance the organisation culture impacts also to productivity, job satisfaction, working morale, employee commitment and turnover and to innovation capabilities. (Uzkurt et al. 2013, 93; Smith 2003, 249.) It also impacts on the information and knowledge transferring within the organisation (Lee, Shiue & Chen 2016, 463). One reason which supports the organisation culture's importance is that the culture is one of the

key factors that is keeping the organisation together (Smith 2003, 249). It creates common standards for working behaviour and by that it reduces employees perceived uncertainty about what kind of behaviour is expected within the organisation. Organisation's current culture is overall strongly affecting on the company's failure or success within the next decade. (Smith 2003, 249; Helms & Stern 2001, 416.)

Even though the organisation culture is seen as one company wide culture which is creating the norms and standards for working behaviours it should be noted that especially in decentralized and geographically widely dispersed organisations the members of the organisation are perceiving the culture differently thus creating sub-cultures. The main differences in perceived organisation culture derives from cultural dimensions such as ethnic origins, age groups and gender but also from organisational position, mostly from the business unit that the person is working in but also partly from the hierarchical position of the person. Thus each individual's personal opinions and orientations have significant impact on the culture which means that the culture is never monolithic. However it is extremely difficult to unite all the perceptions as one culture. Thus it should be acknowledge that sub-cultures are likely to exist within the organisation and the focus should be to try to make it as coherent as possible. A company should identify the different sub-cultures within their organisation and customize communication to each sub-culture group. (Helms & Stern 2001, 425 – 427.)

In order to change the organisation culture, the company has to understand it first. The organisation has to identify what kind of artefacts such as logo's and symbols, beliefs and values there are in the organisation. As there is sufficient understanding about current culture the company can start to change it. Values are the most difficult part to change thus the culture change should be started from changing the behaviours. New culture that is expected from employees should be openly communicated to the whole organisation. After that the managerial level should be trained to new behaviours thus managers can be as example to others and they can communicate the new behaviours to others in the organisation. The degree of use of the new behaviours should be measured and there should be an incentive and

appraisal model that would support the wanted behaviour. By changing the behaviours in this way the attitudes and practises start gradually change and the new culture is adopted. However it should be noted that changing organisation culture is long and difficult process which requires the top management's support. (Burke 2014, 253, 254.)

One important part of organisation culture is the role of intrapreneurship within the organisation. Intrapreneurship is the level of internally orientated entrepreneurship like behaviour and orientation. This means that employees within the organisation are acting as entrepreneurs and they are actively developing the organisation. Intrapreneurship orientated organisations are focusing on finding new opportunities and continuously and proactively develop and innovate new whereas non-intrapreneurship orientated organisations are more focused to manage existing business and structures. (Antoncic & Antoncic 2011, 592; Buekens 2014, 581.) Intrapreneurship related actions can be focused on for example to finding new business opportunities, innovating new products or services, innovating new processes or technology and renewing the organisation structures. Intrapreneurship orientation can affect considerably to the company's performance, development, growth opportunities and job satisfaction. (Antoncic & Antoncic 2011, 591.)

In order to promote the intrapreneurship orientation in the organisation the management need to give enough freedom to the employees to innovate and have influence. (Antoncic & Antoncic 2011, 592; Buekens 2014, 584). Management style is shaping the employees behaviour which means that management has the responsibility to create conditions for intrapreneurship behaviour. The management style should be promoting, accepting and implementing the ideas presented by employees and management should also provide needed resources for employees to innovate. (Haase, Franco & Félix 2015, 910.) Successes should also be rewarded. In order to have incentives to innovate the employees should receive benefits such as praises, promotions and bonuses from new successful innovations and ideas. (Antoncic & Antoncic 2011, 592.)

3 PURCHASING AS A COMPANY'S KEY VALUE CONTRIBUTOR

In the increasingly competitive business environment companies are constantly trying to seek new competitive advantages. The importance of purchasing as a source of competitive advantage is increasingly been noticed in companies as well as in research. Purchasing organisation is nowadays seen as a strategic function instead of just operative buying unit. (Monczka, Handfield, Giunipero & Patterson 2009, 5, 6; Karjalainen 2011, 87; Ates, Wynstra & van Raaij 2015, 204.) This is largely due to the fact that purchasing has huge potential to create value and to increase efficiency and profitability. For example comparing purchasing to sales which has long been companies' first priority, purchasing can achieve more value with less effort. All savings made in purchasing impacts directly to company's profitability but from sales' revenue only the sales margin have impact. (Iloranta & Pajunen-Muhonen 2013, 25; van Weele 2010, 14.)

In manufacturing companies 50–70 % of turnover is used in purchases which reinforces the purchasing operation's importance and role as a value creator for companies. (Iloranta & Pajunen-Muhonen 2013, 21; Knoppen & Sáenz 2015, 123; Monczka et al. 2009, 7; Zeng 2000, 219). Also external resources, suppliers, represent 80 % of company's total resources and internal processes only 20 %. This makes purchasing and especially supplier base management critically important for companies. (Iloranta & Pajunen-Muhonen 2013, 27.) This chapter includes overall review of purchasing and its development throughout past decades. Different purchasing strategies are briefly introduced since strategies forms a basis for organising the purchasing. The chapter continues by defining what is organisational design in purchasing and what different options there are to organise purchasing, keeping the topic of whether to centralize or decentralize purchasing in a key role. Future's visions of organising purchasing are also reviewed. Purchasing capabilities and tasks are also shortly analysed in order to identify what is needed in a functioning purchasing organisation.

3.1 Background and benefits of purchasing

Purchasing has developed from clerical operations into a strategic part of a company thus the strategic aspects started to become more frequent only until 1990s. (Knoppen & Sáenz 2015, 123; Monczka et al. 2009, 6). Before that companies generally couldn't utilise or didn't realize purchasing's potential. The function was just to buy the correct products with correct specifications in time. Purchasing was seen as a mandatory cost of making business. (Paquette 2004, 1, 2.) The strategic aspects in purchasing started to emerge from companies' need to be more flexible and capable to offer modified products, services and processes for customers. This agility required companies to rely more on their suppliers which led purchasing to focus more on supplier base management, quality of products, technology and logistics. Increased opportunities in global sourcing, for example China's emerge as a global low-cost competitor, pushed purchasing responsible persons to think purchasing operations from a more strategic point of view. (Monczka et al. 2009, 6.) However according to International Purchasing Survey (IPS) almost half of the purchasing professionals feel that purchasing is not in a strategic position in their organisation (Knoppen & Sáenz 2015, 124).

Even though the importance of strategic purchasing and noticing of it has increased tremendously in past few decades, still the old ways of working hinders purchasing operations and results gained from it. The problem is a reactive and passive way of working. There are many reasons for companies to conduct reactive purchasing. Firstly insufficient reporting is major problem. Bad reports have only very few detailed information. Accounts Payable may register costs by supplier level but the key fact, what was purchased, is usually missing. These kind of operative, high-level reports won't offer needed information for purchasing managers to really understand from what their purchasing is consisted of. (Iloranta & Pajunen-Muhonen 2013, 83, 84; van Weele 2010, 68, 69.) This leads into situation where purchasing operations are difficult to plan and many possibilities are not seen (Iloranta & Pajunen-Muhonen 2013, 84).

Second reason is too decentralized purchasing where different units purchase same goods thus synergy benefits are not realized and negotiation power is not used. Purchasing is done by non-professionals alongside other tasks and purchasers don't have time to specialise in purchasing or supplier base management. (Iloranta & Pajunen-Muhonen 2013, 84; van Weele 2010, 69.) This leads into situation where units can pay different prices from same products, order quantities that are small which results into high amounts of delivery costs and the range of products is wide which makes product maintenance difficult. Unprofessional staff can also be prepared inadequately for negotiation and the more well prepared suppliers have advantage in the negotiation situation. Competition between organisation functions is also causing problems to purchasing. Possible synergy benefits are lost when different parts of organisation such as marketing and product development are competing with purchasing thus they should be closely cooperating. Other reason for reactive purchasing is a bad supplier base management and market research. Lots of possibilities are lost when purchasing don't know how to get the best of their suppliers, what is available in the markets and don't have enough courage to change suppliers for better ones. (Iloranta & Pajunen-Muhonen 2013, 85 – 87.)

In order to get rid of the these hindering problems company has to develop purchasing from reactive into proactive function. The main issue is to change the way of reacting to the change. Reactive purchasing is acting after the change is done but proactive purchasing is trying plan in advance and lead the change. The core of actions is to utilize supply markets as effectively as possible. Finding new sources of supply, innovation and additional value from suppliers is important. (Iloranta & Pajunen-Muhonen 2013, 95.) This requires a strategic aspect to supplier relationships. Company should aim to build long-term partnerships where suppliers are full-service providers and they are involved at early stage in design processes. (Monczka et al. 2009, 18.) Supply chain should be as cost effective and competitive as possible. Suppliers' performance should be monitored and constantly challenged to create additional value. Other key issues to develop purchasing into proactive operation are to integrate purchasing into corporate strategy, to create inter-relations with purchasing and other company's functions. (Iloranta & Pajunen-Muhonen 2013, 97; Monczka et al. 2009, 18; van Weele 2010, 71.) Also one of the

most important parts is to constantly develop purchasing capabilities and purchasing personnel. Most important abilities that purchasing professional should know are: 1. supplier base management 2. TCO (total cost of ownership) analysis 3. conducting purchasing strategies 4. measuring and analysing suppliers 5. make market analysis. (Monczka et al. 2009, 19.)

Cost savings are most often seen as purchasing's main or only contribution for the company. However besides cost savings, strategic purchasing impacts to the profitability of a company in many ways. Successful supplier selection and strategic partnership built with the supplier can impact in product quality, company's brand, technology, processes and working capital (Iloranta & Pajunen-Muhonen 2013, 25; Monczka et al. 2009, 8). Figure 6 demonstrates how strategic purchasing can leverage company's competitive advantages and increase profitability.

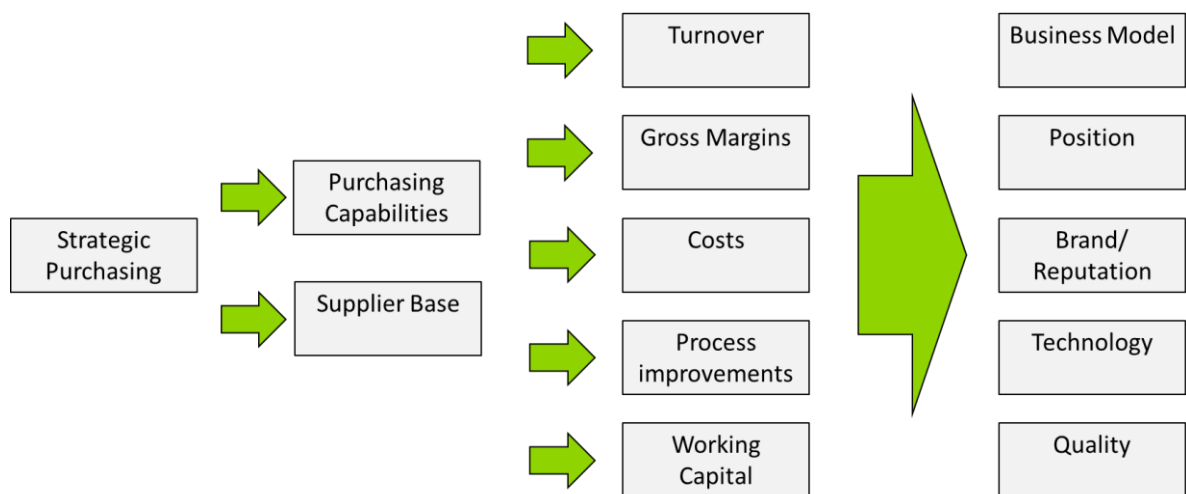


Figure 6. Strategic purchasing's impact on competitive advantage and profitability (Iloranta & Pajunen-Muhonen 2013, 25 – 27).

By acquiring and using purchasing capabilities and cooperating actively with supplier base, the company can achieve benefits that are shown in the figure 6 above. Turnover may increase just because of the fact that a component supplier may be well-known for its quality and because of this customer's perceived value from the whole product increases. This leads into better brand and reputation which increases sales. By collaborating with suppliers company can also reduce its costs

by concentrating purchases to key suppliers and co-designing more cost efficient products. Increased sales and lower costs will improve gross margins and increase profitability. Company can also negotiate longer payment terms with suppliers in order to release working capital. (Iloranta & Pajunen-Muhonen 2013, 25 – 27.) With cooperation company can also acquire new technology from suppliers which will increase product quality and may reduce prices (Iloranta & Pajunen-Muhonen 2013, 26; van Weele 2010, 53). New innovative technology can open new positions in markets and give competitive advantage in current markets. By reshaping business processes for example applying Just in Time (JIT) principles in deliveries will increase supply chains' efficiency. New processes, products and technology opportunities can even open new business model possibilities for company. (Iloranta & Pajunen-Muhonen 2013, 26, 27).

3.2 Purchasing Strategies

As purchasing gets more attention in companies the focus on sourcing strategies and implementing them to the companies' corporate and operating strategies is increasing (Quayle 2006, 27; Zeng 2000, 219). In order to have effective corporate strategy the purchasing aspects has to be taken into consideration. If the company doesn't have strategy for getting the right materials and services in right terms and from reliable suppliers who can add value into the company's business, the corporate strategy can't be effective. (Quayle 2006, 27.) Company's competitive advantage is increasingly relying into the ability of creating superior purchasing strategies within a complex supplier networks (Svahn & Westerlund 2009, 173). Long-term purchasing strategy forms a framework which can be used for operational purchasing decisions. (Quayle 2006, 28.) Strategies also guide company's processes and practises and have major impact on performance (Ates, Wynstra & van Raaij 2015, 205).

While considering the purchasing strategy, there are some key questions that company should define. These questions are whether to make or buy, number of suppliers being used, total value of spend, who are company's top suppliers by spend, what are key products by spend and what low value items are critical for

operations'. These questions are forming a ground for purchasing strategy. (Quayle 2006, 27, 28.) Thus make or buy decision is important part of purchasing strategy, according to Svahn & Westerlund (2009) the recent studies are showing that companies are simultaneously making products and services in-house and buying them from outside suppliers. Therefore the question should be focused on issues such as who are the key collaborative partners in supply activities and how optimal purchasing strategy should be selected in a supply network environment. (Svahn & Westerlund 2009, 173.)

Purchasing strategies can be categorized in different levels. According to Virolainen (1998), strategies can be divided into two main categories. First ones are competitive strategies and second ones are partnership strategies. First implies that purchasing company is creating competition between suppliers. The second one is opposite strategy which is seeking collaborative partnership with suppliers. However in order to success, purchasing company should use both strategies since purchased items are different and require different sourcing means. (Virolainen 1998, 686.) Ates et al. (2015) and Zeng (2000) have categorized purchasing strategies into three sections: multiple sourcing, single sourcing and dual or parallel sourcing (Ates. et al 2015, 205; Zeng 2000, 219). In addition Zeng (2000) has used a fourth category, global sourcing (Zeng 2000, 219). Multiple sourcing means that company is purchasing the same item from multiple different suppliers and it can be categorised as competitive strategy (Virolainen 1998, 686; Zeng 2000, 220). This strategy is used to protect company from suppliers' opportunistic behaviour by having alternative suppliers available (Lindgreen, Révész & Glynn 2009, 149). The strategy is driving suppliers to compete with each other, push the prices down and increase buyers power over the suppliers. It also gives flexibility to the operations by reducing uncertainty regarding the deliveries. If one supplier is not able to deliver items, the company has several other suppliers to back up the delivery. (Quayle 2006, 41; Svahn & Westerlund 2009, 174; Zeng 2000, 220.) The outcome of this strategy is that company has a large supplier base and contracts are usually short-termed (Zeng 2000, 220).

Single sourcing is opposite strategy where purchasing company is using only one supplier and is trying to achieve partnership with the selected supplier. This strategy shows very strong loyalty and partnership between buyer company and supplier. The benefit of single sourcing is cost savings. Buyer company can reduce its supplier base. Also administrative costs of managing one supplier are lower than in multiple sourcing with large supplier base. Buyer can also consolidate its purchasing volumes to one supplier which leads into economies of scale and the company can negotiate better purchasing conditions. Close partnership can also improve communication and cooperation between parties which can result into better quality. (Zeng 2000, 220, 221; Faes & Matthyssens 2009, 246.) The major drawback of a single sourcing is that the buyer company is too depended from the supplier. Dependency will increase switching costs dramatically and restrict the buyer company's flexibility because supply disruptions can stop production and cause major problems. (Ates et al. 2015, 206; Zeng 2000, 220, 221; Faes & Matthyssens 2009, 246.) Single sourcing can also restrict the buyer company because the company loses knowledge of market alternatives and is not able to acquire new technology which leads into decreased innovativeness (Ates et al. 2015, 206; Faes & Matthyssens 2009, 246; Quayle 2006, 41). According to Ates et al. (2015) single sourcing strategy is best suitable for innovative technology business environment where expertise is needed (Ates et al. 2015, 206).

The solution offered for the dilemma of choosing between multiple or single sourcing strategy is dual or parallel sourcing strategies. Both strategies' goal is to overcome the drawbacks of both multiple and single sourcing strategies. (Ates et al. 2015, 206; Faes & Matthyssens 2009, 246.) Competition created in multiple sourcing may drive the strategy into dual or parallel sourcing (Faes & Matthyssens 2009, 246; Virolainen 1998, 686; Zeng 2000, 220). On the contrary objectives in single sourcing are driving strategy towards partnership sourcing where both buyer and supplier are strongly committed to the relationship, sharing information and risks and seeking win-win situation (Virolainen 1998, 680, 686). Dual sourcing is a hybrid model from multiple and single sourcing where the buyer company is using two suppliers. Usually one is the main supplier with most of the spend and the other is used as a back-up supplier. (Zeng 2000, 222; Faes & Matthyssens 2009, 246.) In dual

sourcing suppliers cooperates not only with buyer company but also with each other. In parallel sourcing strategy, the company is using only one supplier to a specific product category especially if the product is strategically crucial for business. However at the same time the company is using several suppliers for conventional products and each supplier is specialised in one product category. This way buying company is keeping competition open in the similar type of product categories and buyer can push selected suppliers to constantly develop and improve their performance. (Svahn & Westerlund 2009, 174; Faes & Matthysens 2009, 246.) Parallel sourcing also eases buying company's comparing between suppliers (Svahn & Westerlund 2009, 174). Zeng (2000) argues that dual sourcing strategy is best suitable for assembly type of manufacturing (Zeng 2000, 222).

Last sourcing strategy is the global sourcing strategy. This strategy is relying on using global supply markets in order to utilize resources as effective as possible (Virolainen 1998, 679; Zeng 2000, 222). Arnold (1999) defines global sourcing as a company's overall strategic orientation towards securing profit base by operating in international supply markets and extending purchases to global supply base (Arnold 1999, 167). The need for global sourcing has increased tremendously due to increased global competition (Bals & Turkulainen 2015, 1). The key to overcome threats of fast growing global competition is to reinforce supply management activities and to seek new international supply markets in global scale (Arnold 1999, 167). The new purchasing environment that is opened via global sourcing, offers new possibilities but also new threats. Usually global sourcing is seen to bring significant cost benefits compared to local suppliers. Low cost country suppliers can compete with price and purchasing company can gain cost benefits by switching into foreign supplier. Large supplier companies can also ensure better availability of products. Purchasing company can also access to a new technology that will improve quality. These benefits will improve company's competitive situation in the markets. However using foreign suppliers and operating in a global environment will bring new threats and increase uncertainty. Delivery delays or disruptions can be longer, quality assurance difficult, cultural differences can cause issues and supplier's country may have trade barriers. Also uncertainty related to country's political, economic, legal, environmental and social issues can be high. (Zeng 2000,

222, 223.) Table 1 below concludes the benefits and problems of each four (single, multiple, dual/parallel and global sourcing) strategies.

Sourcing strategies				
	Single sourcing	Multiple sourcing	Dual/ Parallel sourcing	Global sourcing
Pros	Cost savings	Increased flexibility & low switching costs	Increased flexibility	Global supply base offers new possibilities
	Improved communications	Reduced uncertainty regarding supply disruptions	Close relationships with suppliers	New or better technology
	Relationships stability	Increased power over suppliers	Possible competition open which pushes suppliers to improve their performance	Lower prices & cost efficiency
	Improved quality through co-operation	Suppliers' competition pushes prices down	Rather low switchin costs	Improved competitive position
	Supplier base reduction & reduced administration management costs		Reduced uncertainty regarding supply disruptions	Better availability
	Economies of scale through spend consolidation		Eases supplier comparison	
	Improved purchase conditions			
	Improved delivery plannign & warehousing due to one supplier making deliveries			
Cons	Too high dependency for both parties	Large supplier base & administrative costs	Compromise between single- and multiple sourcing	Delivery delays and disruptions
	Increased switching costs	Short-term contracts		Quality assurance
	Decreased innovativeness	No commitment in relationship		Problems caused by cultural differences
	Major difficulties caused by disruption in delivery	Longer sourcing process due to large amount of suppliers		Uncertainty related to supplier's country's political, economical, environmental, social & legal issues
	Loss of flexibility & new technology			Trade barriers such as tariffs
	Loss of market knowledge			

Table 1. Sourcing strategies' pros and cons (Ates et al. 2015, 206; Faes & Matthyssens 2009, 246; Quayle 2006, 41; Svahn & Westerlund 2009, 174; Zeng 2000, 219 – 223).

Even though companies have many alternative sourcing strategies from which to choose from as Virolainen (1998) states and Ates et al. (2015) agrees that companies should use various strategies for different purchases. Ates et al. (2015) suggests that even though company uses overall purchasing strategy, it should also use purchasing category specific strategies. For example using multiple sourcing strategy for products such as raw material where the focus is on cost efficiency and single sourcing strategy on products that need intense collaboration with the supplier. (Ates et al. 2015, 205.)

No matter what kind of purchasing strategy or strategies the company is going to create and select the most important issue is that the strategies are in align with the corporate and business strategies and the selected purchasing strategies fulfils the needs of businesses (Cohen & Roussel 2005, 20; González-Benito 2007, 902). This fit of the business and purchasing strategies is called strategic alignment (González-Benito 2007, 902; Narasimhan & Das 2001, 597). Well-integrated purchasing strategy has significant effect on business performance and it is supporting businesses to achieve the goals set in the business strategies. The ability to well-integrate purchasing strategy to business strategies can be seen as a core competence. (Narasimhan & Das 2001, 597.) Carr & Smeltzer (1997) states that corporate and functional, in this case purchasing strategies, have to be aligned in order to have strategic purchasing (Carr & Smeltzer 1997, 200). If the company has lots of different strategies the drawback is that many different alignments might make operations very inflexible. The result is that every part of organisation is only following their own strategy regardless of their actions' impact to other units' strategies. (Iloranta & Pajunen-Muhonen 2013, 145.) In order to successfully integrate the strategies together it is vital that purchasing is strongly involved in business strategy creation and implementation. Thus purchasing can relate purchasing plans, practices and goals to be aligned with business strategies. (Narasimhan & Das 2001, 598.)

3.3 Purchasing's organisational design

Since purchasing should be a key function in a company and majority of company's costs are from product and service purchasing it is crucial to decide how to organise purchasing function. The company should design how to organise purchasing activities and tasks in order to utilize supplier networks and to optimize total costs. (Iloranta & Pajunen-Muhonen 2013, 317.) Purchasing's organisational design can either hinder or promote purchasing. It effects greatly on the outcome of purchasing performance and through that to the performance and success of the whole company (Monczka et al. 2009, 155).

Organisational design is a process where a company assesses and selects the formal system and structure of communication, responsibilities, level of authority and control, labour division and coordination of operations in order to achieve goals set to the organisation or unit (Glock & Hochrein 2011, 149; Monczka et al. 2009, 155; Quayle 2006, 54; Tirimanne & Ariyawardana 2008, 163). It is a key part of purchasing strategy and policy decision and it supports the selected strategy and therefore purchasing's management should focus on developing functioning purchasing organisation (Quayle 2006, 53, 54). Effective organisational design is a source of competitive advantage and a prerequisite for effective operations in an business environment where global competition is growing rapidly and customers are becoming more demanding. Organisation structure defines authorities and responsibilities and determines the available resources and task allocation within the members of the organisation. Therefore structuring a functioning organisation is vital for efficient operations and task completion. (Glock & Hochrein 2011, 149, 154.)

Glock & Hochrein (2011) have identified six structural variables that should be taken into account in the process of designing purchasing organisation. These variables are: 1. Standardization 2. Specialisation 3. Configuration 4. Involvement 5. Formalization 6. (De-) Centralization. (Glock & Hochrein 2011, 155.) *Standardization* refers to the level that organisation has standardized its processes, products and personnel (Glock & Hochrein 2011, 155; González-Benito 2002, 872). Standardized processes are usually efficient and standardized products decrease the amount of different materials required to produce products. (Glock & Hochrein 2011, 155.) It also reduces the need for specific personnel and equipment assets which according to TCE (Transaction Cost Economics) theory, causes company to be vulnerable to opportunistic behaviour of other parties. (González-Benito 2002, 872). Standardized product purchases can also often be bundled together in order to achieve economies of scale (Trautmann, Bals, & Hartmann 2009, 196).

Specialisation describes the way how labour is divided within the organisation. Tasks should be divided either by functions or objectives. In function based division the tasks are divided into simple operative tasks which can be easily perform efficiently. The functional division is favoured in situation where is not many

interdependencies between different tasks and the efficiency is tried to increase by specialising into few activities. Operative tasks can be efficient to divide into functional model. In objective based model the tasks are divided into a group of interconnected tasks which reduces problems with different parties of the organisation. It is beneficial in the situation where tasks are highly interconnected and the efficiency is sought by multitasking. Objective based division can be used in strategical tasks. (Glock & Hochrein 2011, 156; Lau, Goh & Phua 1999, 576.) *Configuration* is about the authority in the organisation and the structures caused by authority. High level of authority means that the organisation has strong hierarchical structure such as many different departments and positions. (Glock & Hochrein 2011, 156.) Configuration also refers to a purchasing organisation's physical position in the whole organisation. The position has a great impact on purchasing organisations decision making and influencing power. (Glock & Hochrein 2011, 156; Monczka et al. 2009, 156.)

The fourth variable *involvement*, is divided into lateral and vertical involvement. The first one measures how many functions or departments in the company are involved in purchasing activities. As the lateral involvement increases, the amount of knowledge and information also increases thus the level of uncertainty is reduced. Vertical involvement measures how many different hierarchical levels are involved into purchasing. Usually there are many hierarchical levels involved into purchases that are complex and there are uncertainty related to the purchase. High level of vertical and lateral involvement improves purchasing organisation's quality of decisions since there are more information available and more authority, the more there are people involved in purchasing. (Glock & Hochrein 2011, 156 – 157.)

Formalization refers to the level of rules, policies and guidelines used to control the purchasing organisation. The organisation can increase formalization by making new rules which are guiding decision making process, roles and authority relations, communications, information processing, norms and sanctions. High level of formalization helps to ensure that the purchasing actions are conducted professionally and in a standardized way. This is due to the reason that operations are guided by strict rules how to operate, search and select suppliers. (Glock &

Hochrein 2011, 157; Lau et al. 1999, 576; Perner, Werr & Biachi 2014, 841.) By following these rules and policies company should be able to select the most cost efficient and reliable supplier thus reducing uncertainty and risk of supplier's opportunistic behaviour. Properly conducted, formalization can greatly increase purchasing processes' efficiency (Perner et al. 2014, 842.) However too high levels of formalization can delimit employees too much and reduce their working motivation (Glock & Hochrein 2011, 157). The last variable is *(de-) centralization*. In research it is most commonly used variable to analyse purchasing's organisation and it is also the main focus of this research. Due to this reason centralization and decentralization are reviewed more throughout as their own subjects in chapter 3.5.

Organisational design is a complex process (Quayle 2006, 54; Tirimanne & Ariyawardana 2008, 163). It is not just about designing an linear organisation chart thus it is a about creating complex network where patterns of coordination and interaction of human resources, technology and tasks are designed (Tirimanne & Ariyawardana 2008, 163). It should be remembered that because of the complexity of the process there is no one correct way of organising purchasing that could be applied in all situations. Thus organisational design should always be designed individually according to the company's situation and needs. (Quayle 2006, 54.)

Cohen & Roussel (2005) states that organisational change includes three phases: determining the organisation structure, defining responsibilities and roles and finding the correct persons with right capabilities. However this process doesn't necessarily mean that company should completely reorganise its organisation by creating a new department and making new executives for the department. Thus the change requires that everyone within the organisation has a clear understanding about their roles and responsibilities and different parts of the organisation are cooperating. Still in large organisations consolidation of departments can be beneficial. (Cohen & Roussel 2005, 101, 102.)

The next chapters are dealing with the issues related to the organisational design and its six main themes. The next chapter will underline the issue of purchasing's role in a company which is related into the configuration. The literature review then

continues on analysing different organisational structures between centralization and decentralization. These chapters are related to standardization, formalization and centralization. Specialisation and involvement are then analysed in chapter which is discussing about purchasing capabilities and task divisions.

3.4 Purchasing's role in organisation and its relation to other business functions

Purchasing's importance in organisations has gradually increased over time and the function has become more as a strategic function. (Knoppen & Sáenz 2015, 123). Alongside the position of purchasing has changed in the organisations. Purchasing organisation's physical position and reporting role in corporate hierarchy are important because these are usually indicators of power and status relations in the organisation. (Monczka et al. 2009, 156.) Purchasing executives' level in hierarchy and reporting responsibilities should be aligned with other major corporate functions (Knoppen & Sáenz 2015, 124; Monczka et al. 2009, 156; González-Benito 2007, 914). For example if purchasing's highest executive is managerial level person who reports for example to production, the function lacks credibility and importance comparing to a purchasing which is led by senior vice president who reports to a company's top management. (Monczka et al. 2009, 156.) In order to gain required level of authority within the company, purchasing needs top management's recognition for their operations (Cousins, Lawson & Squire 2006, 778; Knoppen & Sáenz 2015, 123; van Weele 2010, 281). The top management has a vital role for changing organisation's attitude towards purchasing. Top management gives a mandate for purchasing to operate and it should follow that purchasing's decisions and operations are respected in the company. (Cousins et al. 2006, 778.) If however the top management of the company regards purchasing as an operational function the purchasing has low organisational status and authority (van Weele 2010, 281). Thus the current trend is that purchasing is lifted higher in organisational hierarchy and the trend is that purchasing's importance increases. (Monczka et al. 2009, 156.)

Besides top management's mandate and support, there are couple of reasons that are impacting to the purchasing's role within the company. History has probably the

strongest impact. Since purchasing's importance has been started to acknowledge in companies only a short time, there is still a lot of misconceptions and change resistance towards purchasing which naturally hinders the purchasing operations. (Monczka et al. 2009, 157.) The field of industry that the company is operating in is also impacting on purchasing's organisational status. Usually in manufacturing industry purchasing has strongly focused on direct material purchases. Purchasing organisation has had low importance and it has operated under the management of production organisation. (Iloranta & Pajunen-Muhonen 2013, 332.) However usually in industries with high purchasing spend the top management realizes the importance of purchasing thus lifting purchasing's organisational status. The level of complexity of purchased goods is impacting on the organisation since regular routine items are easy to procure and the operations don't require capabilities and resources like purchasing a complex services or high technology items. Also purchasing's potential influencing ability has a strong effect on position. If purchasing doesn't have real potential to create value and savings for example due to low purchasing volumes, or very simple purchasing portfolio, it will not get a high status on organisation hierarchy. (Monczka et al. 2009, 157; van Weele 2010, 281). According to van Weele (2010) also company's financial position and dependency on supplier markets are influencing on purchasing's position. Though financial position pushes company to cut costs and make savings which increases purchasing's importance. Also if the company has to strongly rely on its suppliers the purchasing's role here is significant. (van Weele 2010, 281.)

It is clear that it is important for purchasing organisation to have a strong position in company's hierarchy in order to be respected as a strategic function. However similarly important is to have functioning relations with other internal business operations and stakeholders. Usually when purchasing organisations are started to develop from an operational function focusing on direct material purchases towards a strategic function purchasing is taking responsibility from indirect purchases such as IT, marketing and facilities purchases. This can cause conflicts between the organisation's other functions since they may have different interests. Before businesses have controlled their spend themselves but now purchasing is controlling the usage of money, selecting suppliers and other purchasing terms.

(Iloranta & Pajunen-Muhonen 2013, 332.) Other functions are reluctant to give control and decision making power to the purchasing organisation. Marketing and other functions usually have seen purchasing as only a buying service that makes purchase orders thus leaving all strategic decisions to the businesses. This leads easily into a situation where businesses are trying to exclude purchasing out of the decision making by not informing purchasing about the ongoing projects. Due to this reason purchasing organisation is usually involved in a too late stage of projects and the task is to just make orders. However purchasing should be involved throughout all the stages of the project in order to really create value. (Knoppen & Sáenz 2015, 127.)

In order to integrate purchasing with other business functions the top management's role arises again to create and support positive internal orientation towards purchasing. The company should support purchasing to build strong interconnected ties with other functions. Purchasing should be involved already in the development process of product and technology strategies and company should create mixed strategy development teams. (González-Benito 2007, 914; Narasimhan & Das 2001, 596.) Efficient sharing of information and joint decision making are in the key role in integrating other functions to the purchasing. Purchasing's overall presence and close communication with other functions are required for successful integration. (Narasimhan & Das 2001, 596.) Iloranta & Pajunen-Muhonen (2013) suggest that the company should first define organisation's capabilities, then think who has the best capabilities to conduct a task and divide tasks between purchasing and other functions. The importance of purchasing overall to the company has great impact in deciding task division. (Iloranta & Pajunen-Muhonen 2013, 332, 333.)

3.5 The level of centralization in purchasing organisation

Maybe the most important issue in organising a purchasing function is to define the level between centralization and decentralization. Purchasing centralization is determined as the level of authority, power and responsibilities concentrated in the organisation or purchasing unit. Centralized purchasing is operated by specialised

purchasing unit that is operating in corporate level and all purchasing related decisions, strategies and processes are made in the purchasing unit. In decentralized purchasing organisation purchasing is in opposite operated by plants, individual departments or business units and they are taking care of their own purchases. (Karjalainen 2011, 88; van Weele 2011, 284 – 285.) Figure 7 below demonstrates the organisation models for decentralized and centralized purchasing.

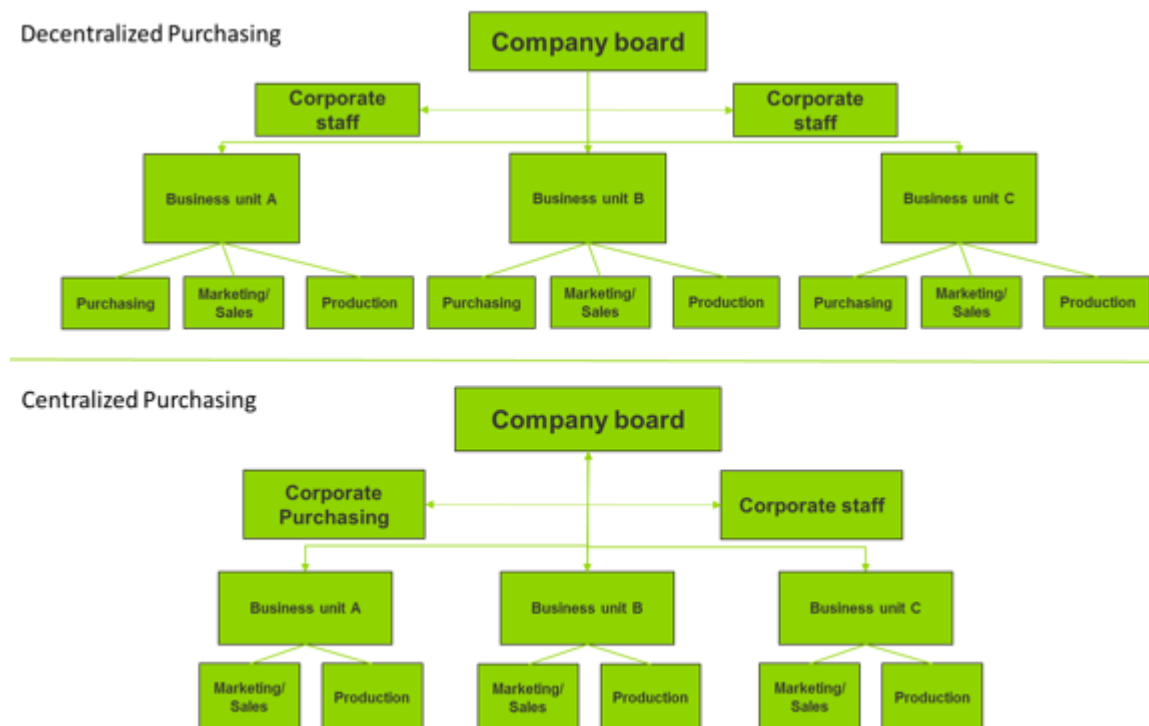


Figure 7. Decentralized and centralized organisation models (Karjalainen 2011, 88, 89; van Weele 2011, 284, 285).

In decentralized purchasing all the purchasing operations are in local business units' responsibility and business units are operating independently. Every business unit is responsible for their own unit's financial results. Purchasing is usually flexible in this model. In centralized purchasing there is corporate level purchasing unit which takes care of all the business units' purchasing needs. Local business units are not doing purchasing activities. This model is usually efficient for making financial results. (Karjalainen 2011, 88, 89; van Weele 2011, 283 – 285.)

The issue of purchasing (de-) centralization has been already discussed in literature in late 1970's. According to Corey (1978) the trend in late 70's has shown signs of increasing purchasing centralization. (Corey 1978, 102.) In 1990's the trend turned against centralized purchasing and these inflexible organisations were decentralized to the business units. (Iloranta & Pajunen-Muhonen 2013, 317). It was seen that decentralized purchasing offered a more agile solution where end users' needs were more emphasised. However nowadays the trend towards centralizing purchasing has started to strengthened again. It is nowadays normally seen that when purchasing starts to develop in companies the level of centralization is increasing alongside (Karjalainen 2011, 87).

The reasons for centralizing purchasing derives from the need of standardizing operations and operating efficiently in globalizing supply environment (Hartmann, Trautmann & Jahns 2008, 28; Karjalainen 2011, 87). Decentralization in the other hand derives from the need to customize operations and to increase responsiveness (Hartmann et al. 2008, 28). Purchasing centralization aims to capture potential purchasing synergies at a corporate level in the company (Karjalainen 2011, 87). Creating centralized purchasing organisation can be also seen as a way to increase purchasing's status and authority. Centralized purchasing organisations usually have stronger influence on the company's major activities thus having stronger strategic status in the company. The purchasing is also more professional in centralized organisations. (Glock & Hochrein 2011, 163.) The question whether to centralize or decentralize purchasing is much about whether the company wants to have efficient, capable and unified but bureaucratic purchasing or agile and end-user friendly process but somewhat unprofessional and inefficient purchasing (Iloranta & Pajunen-Muhonen 2013, 317).

However purchasing centralization does not mean that purchasing should be shifted from totally decentralized to a fully centralized purchasing thus the result can be that some activities are centralized and others remain in business unit or plant level (Corey 1978, 102; Monczka et al. 2009, 164). In centralized purchasing activities such as supplier base management and contract management should be at least done by central purchasing units (Karjalainen 2011, 88). This is the reality in

companies and very rarely purchasing organisations are either totally decentralized or centralized thus the organisation is leaning towards one end or another and dividing tasks and responsibilities. This combination of centralized and decentralized purchasing is called hybrid purchasing organisation. (Iloranta & Pajunen-Muhonen 2013, 320; Monczka et al. 2009, 164; van Weele 2011, 279.) Figure 8 below demonstrates the hybrid purchasing organisation model.

Hybrid Purchasing

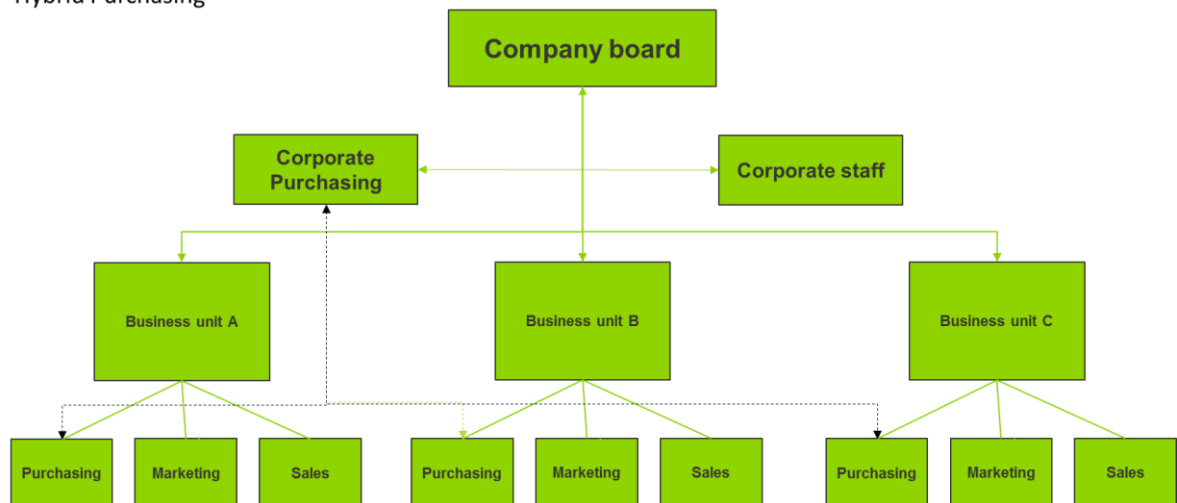


Figure 8. Hybrid purchasing organisation (van Weele 2011, 286).

Usually in hybrid purchasing organisation the more strategical and demanding tasks such as negotiations, supplier management and long term contracting are done in head office by central purchasing department and local departments or plants are left with the responsibility and authorization to place orders against the contracts being made. Thus local business units' purchasing units are interconnected into the corporate business units. (Karjalainen 2011, 88; van Weele 286.)

The issue in hybrid purchasing organisation is to determine how to capture synergy benefits without restricting too much business units' operations. The degree of centralization should be assessed always case by case and not try to fit one model for every organisation or even in every purchasing category within the organisation. Most often the hybrid model is the most efficient way of conducting purchasing. (Iloranta & Pajunen-Muhonen 2013, 320; Karjalainen 2011, 88.) According to

Karjalainen (2011) it is considered to be best way of operating purchasing since it captures the benefits of both centralization and decentralization. Hybrid model can be seen as centralized pricing and decentralized purchasing. (Karjalainen 2011, 88.) Even though most companies are nowadays preferring hybrid model for purchasing, the majority of companies is leaning more towards centralization than decentralization (Monczka et al. 2009, 165; van Weele 2011, 279). The change from decentralization to centralization isn't just about changing purchasing process by reassigning the tasks and responsibilities thus it is more about changing holistically the purchasing strategy and to interact more efficiently in the changing supply environment. (Corey 1978, 102.)

3.5.1 When to centralize purchasing

Purchasing centralization should be considered when there are two or more separate locations within the company that have common purchasing requirements. The possibility to standardize purchases is a prerequisite for centralized purchasing because it enables to units to use centralized frame agreements and contracts and to capture the synergy benefits. (Corey 1978, 107; Iloranta & Pajunen-Muhonen 2013, 317; Karjalainen 2011, 89.) However standardization can be very difficult since there should be common and accurate definitions of purchasing requirements and usage levels across the business units. Purchasing preferences and processes should also be harmonized. (Corey 1978, 107.) Centralization is more suitable for different business environments and for purchasing categories. In industry level purchasing centralization is usually more favourable option in service industry and decentralization is preferred in manufacturing sector (van Weele 2011, 279).

In purchasing category level purchasing centralization is often preferred for categories which are standardized and have low asset specificity: site specificity, specificity regarding human resources and financial assets. If looking from the purchasing portfolio perspective, leverage and routine items would be most beneficial for centralized purchases due to the possibility of gaining economies of scale. For example direct purchases such as standardized components and raw materials are usually easy to pool into a bigger entities (Karjalainen 2011, 89; van

Weele 2011, 289). Also MRO (Maintenance, Repair and Operation) related products and indirect material purchases would be possible to pool easily. (Karjalainen 2011, 89.) There is also pooling potential in high-tech components (van Weele 2011, 289). According to van Weele (2011) centralized purchasing model should be used also when multiple business units are purchasing the same products and services which are strategically important. Decentralized option should be used when every business units are buying unique products which can't be standardized. Pooling these purchases would result only in a limited benefits and cost savings. (van Weele 2011, 284, 285.)

Iloranta & Pajunen-Muhonen also suggest that some indirect purchases such as ICT services and hardware should be considered to purchase centrally. Corporate level strict control and coordination for ICT purchases would standardize and unify for example systems used in the company and reduce the variety of hardware being used. This will significantly reduce costs and work related in updating and maintaining systems and hardware base. However these purchases are not always easily standardisable thus purchases require strong cooperation with ICT and the business unit. (Iloranta & Pajunen-Muhonen 2013, 318.) From another point of view centralization is applicable also for high value purchases because centralized purchasing organisation's specialists can have better product knowledge thus resulting into increased service skills for end customers. (Karjalainen 2011, 89). Table 2 below lists the factors that are affecting on the decision to centralize purchasing.

Factors affecting purchasing centralization decision	
Centralized	Decentralized
Possibility to standardize purchasing requirements	Unique purchasing needs across the business units
Need for long-term supply availability	High need for fast local service with unpredictable purchasing volumes
Oligopolical supply market structure	Large supplier base from which to choose
Short geographical distances between business units	Global business unit network and long geographical distances
Purchasing expertise required	Engineering expertise required, simple purchasing tasks
Price fluctuation	Stable market prices and cost development
Possibility for cost savings	Strong customer demand

Table 2. Factors affecting on purchasing centralization decision (Corey 1978, 103 – 108; Iloranta & Pajunen-Muhonen 2013, 320; Karjalainen 2011, 89; van Weele 2011, 289).

Besides common purchasing requirements and standardization possibilities other criteria for purchasing centralization are: need for long-term supply availability, potential for cost savings, supply market structure, geographical location, level of expertise required, price fluctuation and customer demand. (Corey 1978, 107, 108; Iloranta & Pajunen-Muhonen 2013, 320; Karjalainen 2011, 89; van Weele 2011, 289). The need for secured long-term supply availability directs the company towards centralized purchasing because in central level the purchasing has holistic view of the supply volumes needed and the forecasting can be done in corporate level. This leads into bigger purchasing volumes which makes the purchases more interesting for suppliers. The coordination between units' purchases can be also better managed in centralized purchasing unit and it can ensure that business units don't compete with each other for example from scarce resources. (Corey 1978, 103, 104; Iloranta & Pajunen-Muhonen 2013, 320.) In the other hand according to Arnold (1999) internal competition can be beneficial in large companies and it increases the intrapreneurship attitude thus increasing the efficiency (Arnold 1999, 168).

The potential for gaining cost savings is important factor. The cost benefits derives from negotiating lower prices for purchased goods and from using the purchasing resources more efficiently. If there is possibility to pool purchase volumes it should be done centralized in order to gain better negotiation position. (Corey 1978, 107.) As mentioned before raw materials, standardized and high-tech components have good pooling possibilities. Price fluctuations also impacts on the centralization decision. If for example raw materials are strongly sensitive for market changes and the prices are fluctuating, the centralized purchasing organisation can better mitigate the fluctuation risks by purchasing volumes. (Iloranta & Pajunen-Muhonen 2013, 320; van Weele 2011, 289).

Supply market structure is also affecting in the centralization decision. If supply markets are oligopolistic and there is only one or otherwise very limited supplier base of large suppliers, centralized purchasing model is a way to balance the power in the supplier relationship and increase negotiation power. Smaller decentralized purchasing units would have disadvantage over the large supplier. High complexity of purchases thus needed expertise are also factors that are promoting centralization since purchasing is usually more professionalized in centralized organisation which are focusing and developing in purchasing capabilities. (Corey 1978, 108; Karjalainen 2011, 89; van Weele 2011, 289.) However in case if technical engineering expertise is needed decentralized solution is favoured since the specialists are usually working in business unit level thus able to better participate in purchases (Corey 1978, 108).

Geographical location has impacts on purchasing organisation model. If there are business units for example in different countries it is hindering the cooperation between units and may push the company towards decentralized purchasing. (van Weele 2011, 289.) Thus decentralized purchasing model may cause the local units to be too small and inefficient. However central management from the purchasing should be obtained if the business units are rather close to each other and other conditions to centralized purchasing are fulfilled. (Iloranta & Pajunen-Muhonen 2013, 320; van Weele 2011, 289.)

Strong customer demands are impacting negatively into centralization decision. If the customer is in the position to strongly impact or even dictate the company's purchases as in the case of some manufacturing industries such as aircraft manufacturing it hinders greatly the purchasing coordination (Iloranta & Pajunen-Muhonen 2013, 320; van Weele 2011, 289.)

3.5.2 Benefits of (de-) centralization

In this chapter the benefits of centralized purchasing model are presented and analysed. The disadvantages of centralized purchasing are also analysed. These are then compared to the benefits and disadvantages of decentralized purchasing organisation model.

Centralized purchasing organisation offers multiple benefits and it is considered to be more preferable choice for developed purchasing organisation. In order to change the purchasing organisation model there has to be clear benefits which justify the change. Smooth implementation of the purchasing organisation's change requires the company to be able to quantify the cost effects and other benefits to rest of the organisation. If the company is unable to prove the benefits of centralized purchasing it will encounter a strong change resistance because business units don't trust that the change will bring benefits. Business units may be unwilling to terminate relationships with existing suppliers, they don't agree on standardized product/service specifications and they have a lack of knowledge about the contracts being made. Also business units may have focused only in price thus they have no insight to TCO (total cost of ownership) and cost savings being made through reducing TCO. The unwillingness to change will lead into maverick buying where business units do not follow the centralized purchasing thus the potential cost savings and other benefits wont realize. For example negotiated frame agreements are not used and the cost saving potential is missed. It is estimated that 20–30 per cent of unrealized cost savings are due to noncompliance to negotiated contracts. (Karjalainen 2011, 90). Table 3 below demonstrates the common benefits of centralized purchasing organisation but it also compares benefits and drawbacks of both centralized and decentralized purchasing organisations.

Centralized	
Benefits	Drawbacks
Synergy benefits	Limited decision making in business units' even in strategic decisions
Economies of scale: and increased negotiation power through spend consolidation	Business units' needs may not be considered enough in standardization of purchasing
Economies of process: standardization of purchasing systems and processes	Resistance to change, maveric buying
Economies of information: information sharing and increased learning	Difficulties to manage and control purchasing processes
Standardization of purchases	Decreased and insufficient communications with business units, purchasing's scope and focus is too narrow
Lower prices through pooled purchases	Physical distance to business units and internal customers is too big
Efficient purchasing organization with lower administrative costs	Difficulties to manage and control purchasing processes
Specialized and increased purchasing capabilities through centralized personnel	Too much staff in headquarters, corporate sourcing, no personnel at plants
Solid purchasing organization which makes management easier	Slow response time
Improved reporting, measuring and awarding	Decreased competition within supplier base due to too large purchasing volumes
Improved capital- and warehouse management	
Increased interest from suppliers and increased services quality	
Global supply view and increased market knowledge	
Decentralized	
Benefits	Drawbacks
Unlimited decision making in business units but also direct profit responsibility in units	Fragmented purchasing volumes and loss of negotiation power
Suppliers and local units are in direct contact to each other	Different agreements, prices and purchasing terms and conditions in each units
Suppliers are better involved into product development	Difficult to standardize purchasing
Purchasing personnel have wide range of tasks	Difficult to develop purchasing capabilities
Simple reporting	Total costs on group- or company level are difficult to identify
Reduced bureaucracy and need for coordination	The focus is in local suppliers which makes difficult to use global suppliers
Fast response time	
Fast delivery time due to local suppliers	
Motivated local suppliers	

Table 3. Pros and cons of (de-) centralized purchasing organisation models (Arnold 1999, 168; Faes et al. 2000, 541; Iloranta & Pajunen-Muhonen 2013, 319; Karjalainen 2011, 88, 89; Monczka et al. 2009, 166 – 170; Quayle 2006, 62, 63).

Centralized purchasing organisation's benefits are usually referred to be synergy benefits. Synergy is described as an common aim of using the resources in such way that the result is greater than the sum of individual parts. In other words one plus one is three. (Karjalainen 2011, 88.) According to Faes et al. (2000) synergy benefits will lead the company to gain competitive advantage when two or more units share resources or knowledge, pool negotiations in order to increase power and coordinate strategies together (Faes, Matthyssens & Vandenbempt 2000, 540).

The synergy benefits of centralized purchasing organisation can be divided into three top categories: economies of scale, economies of process and economies information and learning. Economies of scale is referring to cost savings which are gained through consolidation of purchasing spend to a selected supplier and standardizing the purchasing categories. (Faes et al. 2000, 541; Karjalainen 2011, 88) By bundling the purchases to fewer suppliers and making centralized framework agreements, company can save from 8 per cent up to 37 per cent of the certain purchasing categories' purchasing prices, depending on the type of the product or service being purchased (Karjalainen 2011, 96).

Economies of process means that company is conducting the same process in the same way in every location thus having a common way of working with suppliers, internal customers, benchmarking and have joint training and purchasing development (Faes et al. 2000, 541; Karjalainen 2011, 89). Process synergies are reducing administrative work thus reducing the costs caused by that work. It also removes duplicate work in purchasing processes such as tendering and contract management. The economies of process also helps to establish standardized way of conducting with suppliers which will increase the supplier management's efficiency. (Karjalainen 2011, 89.)

Economies of information and learning refers to benefits which are gained through sharing information internally and externally with suppliers. It also refers to benefits gained from learning new capabilities and using them to increase purchasing's value. Centralizing purchasing function usually increases economies of information and learning because company can better assign category specialist responsibilities

and these persons can then focus on their purchasing categories and develop the skills needed. (Karjalainen 2011, 89.)

Even though centralizing offers many benefits it also includes some potentially critical risks. The main risk and drawback in centralized purchasing is that purchasing unit becomes too isolated from the business units. This leads to high level of bureaucracy and inflexibility and to the situation where purchasing needs of different units are not taken enough into consideration. There might be also strong change resistance in business units. (Arnold 1999, 168; Iloranta & Pajunen-Muhonen 2013, 319.) The local staff that has formerly been responsible for purchasing may become frustrated because of losing control over purchases and supplier selections. This may cause strong change resistance. (Arnold 1999, 168.) To prevent these problems it is crucial to establish effective communications between centralized purchasing and local business units. Purchasing should have regular meetings with the business units and actively involve them to the purchasing activities in order to increase business units' satisfaction. (Faes et al. 2000, 548.)

The benefit of decentralized purchasing is flexibility and close cooperation with suppliers and internal customers. Local purchasing can offer faster service and it isn't tied to centralized purchasing's bureaucratic processes. Decentralized purchasing has total control over purchases which enables them to customize the purchases into their own needs. However the major disadvantage is that decentralized purchasing is not able to gain economies of scale, process or information and learning if purchases are done differently in every business unit. (Arnold 1999, 168; Iloranta & Pajunen-Muhonen 2013, 319.) A single business unit may be too small to gain enough negotiation power and conduct purchase operations efficiently (Arnold 1999, 168).

3.6 Purchasing tasks and task division within the organisation

As purchasing has gained more attention from top management companies are starting to realize the importance and influence power of different purchasing tasks to the company. Companies have understood that tasks with different strategic

importance are impacting differently. Small operational and routine decisions may affect to operation in next couple of days but bigger strategic alignments may even determine the survival of the company in the future. The time being used to different levels of tasks vary a lot between the companies. Usually large companies have enough resources to focus on highly strategic tasks such as supplier base development and long term purchasing development whereas SMEs (Small and Medium Sized Enterprises) have to focus more on operative tasks such as ordering and recalls. (Iloranta & Pajunen-Muhonen 2013, 326.) Next the purchasing function's main tasks are categorised by their strategic importance and then the categorisation is being used to illustrate which tasks should be done centrally and which ones could be decentralized to the business units.

Van Weele (2011) has categorized purchasing activities into three groups according to the strategic level of the task. These three categories are: strategic level, tactical level and operational level. (van Weele 2011, 282.) Iloranta & Pajunen-Muhonen (2013) have taken this categorising even further and they have divided purchasing tasks into five categories according to tasks' strategic level:

- Strategic decisions
- Purchasing policy and common purchasing practises
- Supplier selection and management
- Operative and daily purchasing
- Purchasing's resources, infrastructure and system maintenance and development (Iloranta & Pajunen-Muhonen 2013, 326.)

Strategic decisions category includes tasks such as: making purchasing strategy, defining targets and goals, make or buy (outsourcing) decisions, selecting key suppliers, defining supplier base networking and organising policies and purchasing infrastructure and reporting, defining measurement and rewarding principles and purchasing's organisational design and task division. (Iloranta & Pajunen-Muhonen 2013, 327, 328; van Weele 2011, 282.) Audit planning, major investments and making long term contracts also include to the most strategic level's tasks. These decisions are impacting heavily on the market position of a company in long run. (van Weele 2011, 282.) The more the company is starting to realize the importance

of active purchasing management the more value top management will give to these strategic supply chain decisions. The important issue here is that top management is aware about the strategic alignments and if needed can be involved to these decisions. (Iloranta & Pajunen-Muhonen 2013, 327, 328.) These tasks are usually in the responsibility of CPO and company's top management (Iloranta & Pajunen-Muhonen 2013, 328; van Weele 2011, 282).

Second category purchasing policy and common purchasing practices includes tasks such as: defining purchasing policies and practices such as contracting, internal cooperation, managing operations and organising tasks, defining product and service specific purchasing teams and their purchasing strategy processes and defining supplier base management policies. These tasks are medium-term decisions which are taking into consideration to business lines' strategies and common corporate practices. (Iloranta & Pajunen-Muhonen 2013, 328; van Weele 2011, 282). The decisions have to be done in cooperation between other functions such as logistics, manufacturing and engineering (van Weele 2011, 282). These tasks are in the responsibility of purchasing's top management or executive teams of purchasing managers. (Iloranta & Pajunen-Muhonen 2013, 328.)

Next two categories (supplier selection and management and operative purchasing) include practical purchasing tasks whereas the two previous categories were focusing on merely defining purchasing policies and strategies in top level thus excluding practical tasks. Supplier selection and management category is strongly focusing on SBM tasks such as searching for new suppliers, actively monitor supplier base, supplier evaluation, analysis, selection and audits, tendering, negotiation and contracting and actions relating to supplier measuring and development. In order to keep the competitive advantage in rapidly changing markets the purchasing organisation need to conduct actively all SBM tasks (Iloranta & Pajunen-Muhonen 2013, 328, 329.) These supplier base management activities may be the most important duties of purchasing department. However it doesn't mean that only the purchasing should conduct these tasks alone thus engineering and other business functions and business representatives should be

involved to the process in order to have their needs heard. (Monczka et al. 2009, 41.)

Operative and daily purchasing category includes taking care of the ordering process, making orders and recalls and taking care of daily arrangements for example deliveries. (Iloranta & Pajunen-Muhonen 2013, 329; van Weele 2011, 283). Operational tasks include also deviation and problem solving with suppliers regarding supply, quality and payment issues. Through these tasks mentioned above also supplier measurement and evaluation are part of operational tasks. (van Weele 2011, 283.) This category is purely operational and the meaning of these tasks are to work as efficiently as possible by utilizing frame agreements and selected suppliers (Iloranta & Pajunen-Muhonen 2013, 329). These activities are in the responsibility of senior buyers or buyers but if possible recalling should be given to the responsibility of end users or use automated recalls based for example on stock levels. (Iloranta & Pajunen-Muhonen 2013, 329; van Weele 2011, 283).

The final category is the purchasing's resources and infrastructure. Purchasing's reporting, information systems and measuring systems are the body of purchasing function. These should be similar or preferably the same systems within different parts of the company. Especially after company acquisitions purchasing infrastructure integration can be difficult and expensive. However unified infrastructure will make purchasing more effective and transparent. Purchasing's HR resources, recruiting abilities, training and development and rewarding policies are important part of purchasing structure. Companies should focus especially in long-term training of the purchasing staff in order to increase their abilities. (Iloranta & Pajunen-Muhonen 2013, 330.) Successful training and good rewarding policies will also increase employee motivation which will help to retain and attract capable people to the company (Quayle 2006, 124, 128).

As mentioned previously all purchasing tasks do not have to be totally centralized or decentralized thus they can be divided within the company as in the purchasing's hybrid model. Figure 9 below demonstrates how the tasks could be divided within the organisation by their strategic importance.

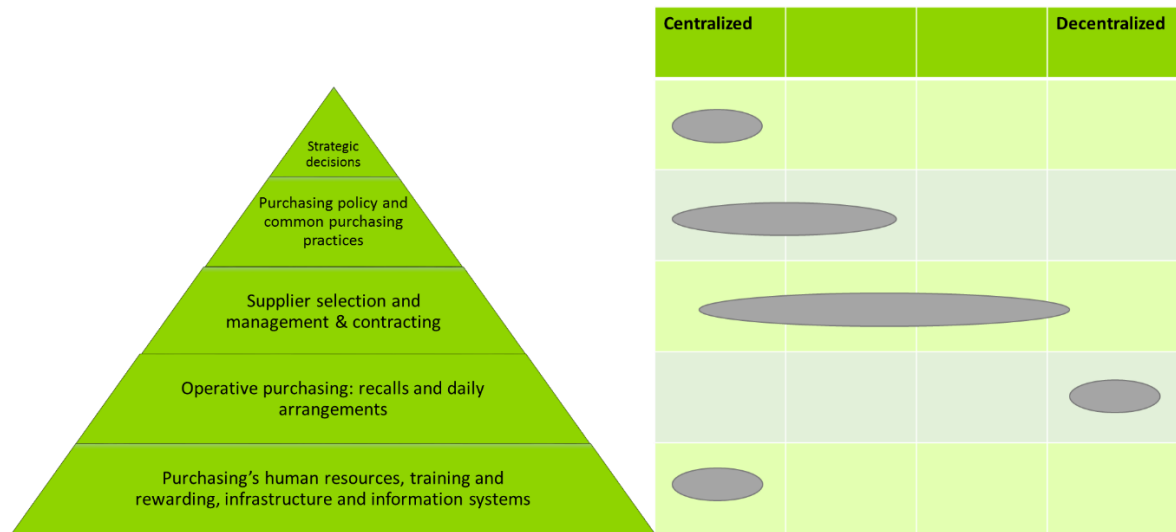


Figure 9. Purchasing task division within the organisation (Iloranta & Pajunen-Muhonen 2013, 330).

Strategic decisions and purchasing policies and infrastructure issues should be highly centralized and as mentioned above these tasks should be in the responsibility of the top management (Iloranta & Pajunen-Muhonen 2013, 330; van Weele 2011, 283). If the purchasing is decentralized purchasing policies can be made with all of the regional purchasing managers however the decisions should be organised centrally in a purchasing's management team. These tasks and infrastructure decisions should be centralized in order to capture synergy benefits and to operate more efficiently. Decentralized solutions should be considered to these tasks only if some purchasing units needs or processes differs greatly from the other units (Iloranta & Pajunen-Muhonen 2013, 331.) Supplier selection, contracting and other strategic practical purchasing tasks are usually organised cross-functionally throughout the organisation depending on the importance of tasks. The aim is to take for example purchasing category approach and see which tasks would be beneficial to do centrally. The operational purchasing such as ordering and recalls should be done as near manufacturing or end user as possible in order to reduce purchasing's routine work and bureaucracy. (Iloranta & Pajunen-Muhonen 2013, 330; van Weele 2011, 283.)

3.7 Purchasing capabilities

In order to have a successful purchasing organisation the company should have great focus on what kind of capabilities are needed in the organisation (Iloranta & Pajunen-Muhonen 2013, 335). Purchasing's performance is highly dependent on the skills and knowledge of purchasing staff thus the managers should understand what skills the organisation needs and how to train and develop the staffs' skills further on. The capability to develop purchasing skills and knowledge is a source of competitive advantage. (Eltantawy, Giunipero & Fox 2009, 927; Knoppen & Sáenz 2015, 126.) The identification and development of purchasing capabilities will also impact on purchasing department's organisational design and human resource development (Eltantawy et al. 2009, 928). The purchasing knowledge and skills are also impacting on the level how strategic the purchasing activities are in company (Carr & Smeltzer 1997, 204).

There is a strong history of companies to think that anyone can have success in purchasing activities as long as the person has some substance knowledge about the company's field of industry. However purchasing success derives from persons who are strongly purchasing orientated and can develop purchasing from operative level as well as in strategic level. (Iloranta & Pajunen-Muhonen 2013, 335.)

Achieving an effective purchasing organisation requires multiple different capabilities and skills from the whole purchasing organisation (Iloranta & Pajunen-Muhonen 2013, 335). However it is difficult to profile skills and competences into one certain model because companies are facing much of uncertainty in rapidly changing business environment which also changes the needed purchasing skill requirements. Profiling the skills can also reduce creativity and diversity of skills which can make purchasing into too narrow minded. (Knight, Tu & Preston 2014, 272.) However some general purchasing capabilities and needed attitudes can be identified thus table 4 below demonstrates 20 commonly required purchasing capabilities.

Purchasing capabilities and skills	
Strategic overview to supply management	Purchasing process understanding
Cost accounting skills and TCO thinking	Ability to manage suppliers and to utilize SBM tools
Critical view to forecasting and understanding the importance of transparency	Ability to measure and follow internal and suppliers' KPIs
Quality process management	Knowledge of eSourcing tools and ability to use databanks
ERP process understanding and basic ERP system knowledge	Basic legal knowledge about local and foreign commerce, contract and negotiation subjects
Understanding of purchasing classification criterias	Strong and systematic negotiation skills
Ability to evaluate suppliers and identify risks	Team working, management, Socio-psychological skills and ability to understand cultural differences
Change management & conflict management skills	Strong communication skills and understanding of the importance of strong customer orientation
Good analytical problem solving skills	Ability to effectively make decisions
Creative thinking	International purchasing orientation

Table 4. Generally required purchasing capabilities and skills (Eltantawy et al. 2009, 928; Iloranta & Pajunen-Muhonen 2013, 336, 337; Knight et al. 2014, 278).

These capabilities and skills presented in the table 4 are general skills that purchasing organisation's staff should have. Knight et al. (2014) highlights the importance of influencing, persuasion and negotiation skills (Knight et al. 2014, 273). In addition to the general skills and capabilities purchasing staff should have strong knowledge about their field of industry. Purchasing staff should have strong understanding about the purchased products, technology being used in production, knowledge about materials and material management. (Eltantawy et al. 2009, 928; Knight et al. 2014, 278.)

Even though all purchasing staff should have good and wide understanding about purchasing strategies and processes and they should possess as many skills as possible that are demonstrated in table 4 the needed skills vary between strategic and operative purchases. The company should identify what are the general needs and required mind-set for purchasing staff and further on what are task-specific needed skills. (van Weele 2011, 295.) There should be a clear division of required skills and capabilities between persons who are conducting strategic purchasing and persons who are conducting operative purchasing tasks (Knight et al. 2014,

273). van Weele has identified six different purchasing job profiles which demonstrate what skills and capabilities are required in different strategic levels of purchasing. Table 5 demonstrates these job profiles, main responsibility areas and required skills. (van Weele 2011, 294 – 296.)

Function	Responsibilities	Skills required
CPO (Chief Procurement Officer)	Developing corporate sourcing strategies, systems and reporting	General management skills, leadership, communication skills
		Leadership
		Communication skills
Corporate buyer	Strategic commodities	Commercial skills
		Long-term planning horizon
		Broad business orientation
Category buyer	New materials and components	Communication skills
	New suppliers	All-around technical education
		Medium planning horizon
Project buyer		Commercial skills
		Communication skills
	Investment and MRO purchases	Project management skills
NPR-buyer		Technical education
	General and facility goods and services	Generalist
		Business administration
Operational buyer		Communication skills
	Materials planning	All-around
	Order handling	Pragmatic
	Troubleshooting	Customer driven
	Vendor rating	Stress resistant

Table 5. Buyer profiles, responsibilities and required skills (van Weele 2011, 294 – 296).

Whereas the purchasing managers need strong strategic understanding the operative purchasers need skills wide all-around skills but still mainly focusing in operative process and technical knowledge. CPO, corporate and category buyers are working on more strategic level of purchasing activities thus they need good commercial, leadership and communication skills. They also need to understand how to create overall purchasing and category strategies with long-term planning horizon. Project buyers and operational buyers are working with more operative purchasing activities usually in decentralized level. In this level the combination of commercial and technical knowledge is highlighted since these persons need to be in close contact with internal customers defining the product specifications but they also need to have basic understanding of commercial issues such as supplier

management, negotiation and purchasing processes. In operational level customer orientated attitude is crucial because purchasing is a support function which's purpose is to serve internal customers. Operational level purchasing personnel are focusing on short-term planning. (van Weele 2011, 294 – 296.) The identification of these required skills is however not enough thus management needs to emphasize and further develop these different skill requirements for the two, strategic and operational, groups in order to make the purchasing organisation to prosper (Knight et al. 2014, 273).

3.8 Outsourcing the purchasing function as a future direction of purchasing

One strategical key component of supply chain strategies is nowadays functional outsourcing where company outsources different functions of its organisation. Usually this outsourcing has been focused in manufacturing operations. (Brewer, Wallin & Ashenbaum 2014, 186.) However a company should outsource all its activities that are not its core competences, unique or have a strategic importance (Parry et al. 2006, 436; Fernández & Kekäle 2007, 167). Thus the company should focus only in functions that will create competitive advantage. This advantage is created when company is implementing a strategy that is creating value and it is not used by competitors. Competitive advantage is also difficult or impossible to replicate by competitors. Company also need a diverse resource base which is: 1. valuable, creates opportunities and decrease market threats 2. scarce among competitors 3. difficult to imitate or obtain 4. can't be replaced by a resource that is easily available. (Parry et al. 2006, 436, 437.)

Outsourcing is done in order to reduce costs from the function being outsourced. Rather than making function in-house it can be cheaper to buy the same function from external supplier and this will also free company's resources to focus on their core competences. Outsourcing is generally the purchasing's task and responsibility. (Quayle 2006, 4.) Besides manufacturing companies are often outsourcing at least partly or fully IT function where a majority of service work is done in low cost countries such as India. There are also outsourcing possibilities in

HR function especially in companies that doesn't have recruitment strategies implemented. (Parry et al. 2006, 436.)

Even though companies have outsourced functions that are not their core activity for a long time still outsourcing of procurement is very rare (Fernández & Kekäle 2007, 167). Outsourcing procurement activities to a third party supplier offers a possibility to organise company's purchasing in a new way. Literature of this subject is still somewhat scarce since companies are not outsourcing their procurement often. Procurement is not outsourced often because it is nowadays seen as one of company's core function and important link to supplier base. Supplier relationships and the capability of leveraging these relationships are directly impacting on a company's core competences. Suppliers have a direct impact on purchasing company's total costs, product quality and company's end product or service delivery. (Brewer et al. 2014, 187; Parry et al. 2006, 438.) This makes companies reluctant to outsource procurement function because companies fear that they might lose innovations which could increase manufacturing's efficiency and overall competitiveness and performance. (Brewer et al. 2014, 186, 187.)

Other reasons for reluctance to outsource procurement are company's perceived loss of control and increased risk due to this loss of control (Fernández & Kekäle 2007, 170; Parry et al. 2006, 441). Organisational mentality is also an obstacle for outsourcing procurement. Even though outsourcing would provide proven benefits, the purchasing organisation doesn't want to give up from their own tasks since purchasing considers all of its operations to be strategic. (Fernández & Kekäle 2007, 170.)

Opportunistic behaviour is also a considerable risk when 3PL is exploiting the client's dependency to the services provided and increases service prices (Parry et al. 2006, 441). Brewer et al. (2014) examines opportunism in higher level and argues that Transaction cost theory or TCE (Transaction Cost Economics) and RBV (Resource Based View) are the reasons that affects to the outsourcing decision (Brewer et al. 2014, 187). TCE is used to define characteristic that affects to the

decision whether the company should perform a certain function in-house or should it be outsourced. These characteristics or sources of TCE are:

- opportunistic behaviour: One party tries to take advantage over other party
- asset specificity: Company's dependency on an asset and the usefulness of the asset in the transaction
- uncertainty: Unexpected changes related to the transaction
- informational asymmetry: other party has more information which it can use in order to have advantage
- bounded rationality: there are always unknown issues that the company is not aware about
- frequency: The frequency of transactions occurring. (Brewer et al. 2014, 187,188; Hobbs 1996, 18; Pitelis & Pseiridis 1999, 223.)

RBV theory argues that company's source of competitive advantage lies in its resources and the capability of utilizing these resources. The resources should also be rare, difficult to imitate and valuable to the company. (Brewer et al 2014, 188; Ordanini & Rubera 2008, 29.) These resources are physical assets of a company but also human capital assets and the intellectual asset that comes along with personnel. Both TCE and RBV impacts on the decision of outsourcing purchasing function. TCE address the level of opportunistic behaviour and RBV company's resources and capabilities. Brewer et al. (2014) argues that high possibility for opportunism and strong resources reduces the need for outsourcing. On contrast weak resources and low level of opportunism would increase purchasing outsourcing and be the most beneficial situation for outsourcing. (Brewer et al 2014, 188.)

Boyd et al. (2009) also uses the resource based view and argues that company's own purchasing abilities have great impact on the outsourcing decision. They argue that if a company possess required level of knowledge in order to make a purchasing decisions, then the company won't outsource purchasing operations. This knowledge is divided into two categories: Product specific knowledge and product class knowledge. The first one is then further divided into product familiarity which

refers to a buyer's experience of products and to product expertise which refers to the buyer's ability to perform product related tasks. If the purchasing organisation has a strong ability on both of these abilities it will reduce company's level of uncertainty and perceived risks of purchasing function. The more confident the company is about its own purchasing abilities the more reluctant it is to outsource purchasing operations. Second ability is product class knowledge which refers to the buyer's knowledge of purchasing markets. This includes knowledge about availability of different or new products, supplier information such as reliability of the company and suitability of these different combination of options. According to findings made by Boyd et al. (2009) the first ability, product specific knowledge will have greater impact than product class knowledge because the first ability is based on company's own experiences and the second one merely on market information about same products. However both abilities reduces uncertainty and reduces the probability of company to outsource its purchasing function. (Boyd et al. 2009.)

Even though there are reasons for not to outsource procurement, it can offer opportunity to have cost reductions and improved efficiency (Brewer et al. 2014, 187). If purchases have strategical importance, purchases are high valued or supplier selection has critical impact on company's operations and performance then it is certainly correct to say that purchasing is in strategic part of company's functions and it is a core competence. However in most companies this is not the case regarding company's indirect and non-critical material purchases. These purchases requires usually only operational activities and purchased items rarely bring any additional value to the end products. Thus these purchases are not regarded as strategic or capabilities to purchase these items to be a part of core competences. (Brewer et al. 2014, 187; Parry et al. 2006, 438.)

According to Boyd et al. (2009) companies should outsource procurement activities if they notice that procurement is not a part of the company's core competences (Boyd et al. 2009, 333). Procurement outsourcing is in most cases limited to only indirect purchases thus the outsourcing possibilities of direct purchases have received little focus. Fernández & Kekäle (2007) argues that it is only logical to extend procurement outsourcing also to direct, high-volume and high-value

purchases since the general purchasing process is the same for both indirect and direct purchases but the possible benefits and savings are bigger in the direct category. (Fernández & Kekäle 2007, 167, 168.) On contrary to the fear of missing innovations, Boyd et al. (2009) have identified innovation acquiring as one of companies main reasons to outsource their procurement. First reason for outsourcing is to get access 3PL's (Third Party Logistics Provider) specific product category and product knowledge. Better understanding of products help the service provider to achieve cost reductions by selecting best suppliers which have best products and consolidate spend to these suppliers. Second reason is to utilize service provider's technology such as electronic invoice automation systems which will make operations more efficient. (Boyd et al. 2009, 333.)

Parry et al. (2006) states that procurement requires lot of work and many small companies just don't have enough resources to conduct full time procurement activities. Due to this reason these companies will rely on outsourcing procurement. (Parry et al. 2006, 438.) By outsourcing purchasing activities to a 3PL company can free resources and focus on their real core competences and high-valued activities (Brewer et al. 2014, 187). However in many cases potential financial benefits may be the real key motivator for procurement outsourcing. Procurement outsourcing can increase contract and process compliance drastically by 65 to 95 per cent. Due to unified process and contract compliance company can save 4 per cent from cost of goods sold. (Brewer et al. 2014, 187; Parry et al. 2006, 440). Process compliance can be very difficult to achieve in-house due to resistance to change, but since process discipline is required from 3PL and they are specialized in procurement activities, it is easier for them to achieve needed level of discipline (Parry et al. 2006, 440). Purchase costs of products and services can be reduced 10–15 per cent because 3PL can pool many clients' purchase volumes together and gain greater economies of scale (Parry et al. 2006, 439). Also the operational costs such as P2P-process (Procure to Pay) costs can potentially reduce up to 15–20 per cent and administrative costs up to 75 per cent (Brewer et al. 2014, 187; Fernández & Kekäle 2007, 169). Even though there are savings potential in tactical processes the real possibilities are in outsourcing the whole indirect spend management which can create 85 per cent of savings (Fernández & Kekäle 2007, 169).

If a company decides to outsource its purchasing function the company have to be committed for the change. The client company should proactively help 3PL to understand how client's business works and what kind of a business environment they are in. Efficient communication with 3PL and client company's internal customers is also required throughout the changeover and afterwards while operations are running. If the client company's former purchasing organisation's employees are transferred to 3PL's services, they should be moved to a different environment. After the purchasing function is outsourced to a 3PL it is also vital to follow and measure performance of 3PL. For example cost reductions and service level should be measured actively. The key issue in outsourcing procurement function is to realize that outsourcing doesn't have to mean that the company would outsource the whole purchasing organisation. The company should just identify the most potential outsourcing targets whether it is for example sourcing, P2P-process or contract management. Outsourcing decision does not have to be irreversible thus company can take purchasing function back as in-house operation if outsourcing doesn't provide wanted results. (Parry et al. 2006, 438, 441.)

3.9 Theoretical Framework

The theoretical framework of this research is presented in the figure 10 below. It is a conclusion of the theoretical part of this research. The framework summarises the main issues that have been discussed earlier in the theory. It concludes the main issues that should be taken into consideration when planning organisational design. In addition the framework gives literature's suggestion about how to create an effective purchasing organisation. This theoretical framework is also used further on in the research as a basis for the empirical research themes. As conclusion about the theory part the framework will also be compared to the interview analysis results thus the answers for the research questions are derived from this comparison.

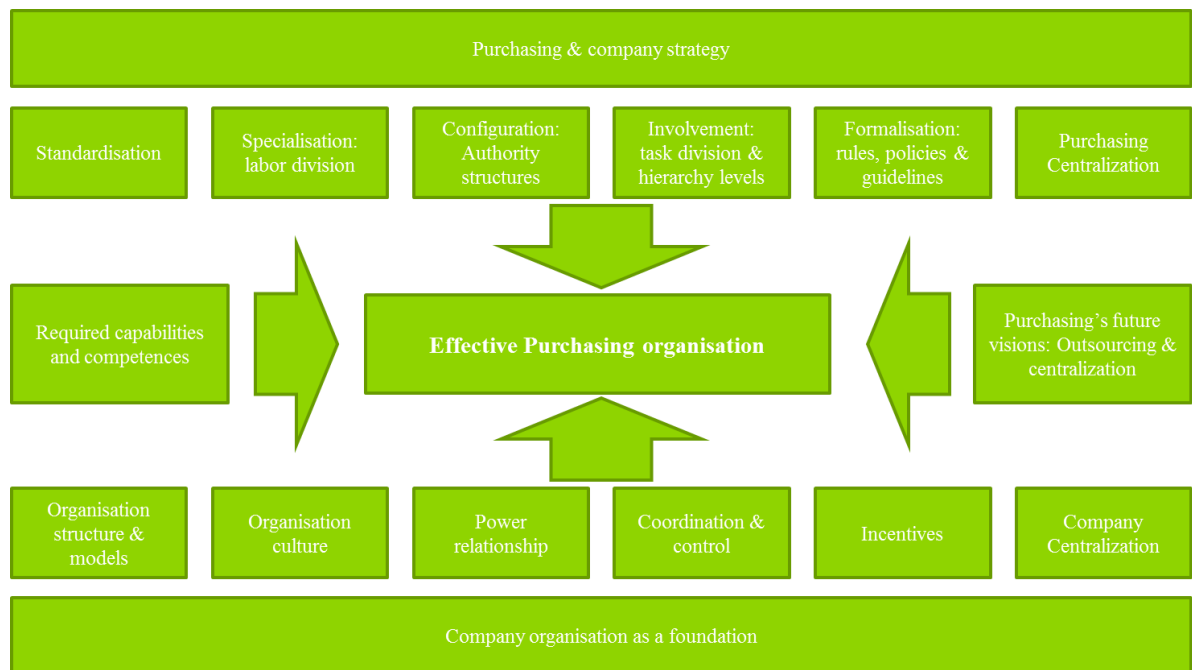


Figure 10. Theoretical framework.

The theoretical framework consist of four main parts. The first part is the company's overall organisation structure and management related issues. This part includes organisation structure, culture, power relations, coordination, incentives and centralization. These issues are the foundation of an organisation thus they should be carefully considered.

When deciding organisation structures it should be remembered that every organisation has its own reasons to organise in certain way thus it is difficult to assess which one of the structures would be the best in general level. However matrix model is usually used in order to mitigate the negative sides of functional or divisional organisation. It is also flexible model thus it can be considered to be the most advanced structure. It should be noticed that the company's organisational structure impacts on various issues such as communication, collaboration and coordination within the organisation. The organisation culture has a huge impact on the whole company's efficiency. It is important to create unified culture which is aligned with the company strategy. Power relations refers to the overall power and responsibility relations in the company. If there are highly different power

relationships the less powerful functions or units may be run over by the stronger ones thus making them inefficient.

Coordination and control are key issues of organisational management. Coordination is based on level of formalisation and level of centralization within the organisation. According to these levels the organisations can be categorised into 4 groups. Usually large sized companies are using a model where they have high level of formalisation and centralization which means that strict rules and policies being used and operations are managed centrally. Coordination is also very case specific thus different models should be applied according to each individual case. Coordination is also promoting internal cooperation and creating linkages to other functions. The general level of company's centralization is important because it can be an indicator about the organisation's attitude about centralization. It is important to acknowledge level of centralization because it impacts on the decision making power distribution. Incentives are used as part of the management tool. Incentives can be almost any kind of rewards as long as they motivate the employees. The important part is that employees are aware of the rewarding model and the targets are achievable. Most commonly used incentive model is the bonus based incentive model.

The second part of the theoretical framework is the purchasing theory part. Everything that is made in purchasing organisation should be aligned with company and purchasing strategies. Purchasing strategies can be divided into competitive and partnership strategies. Both strategies should be used depending on the nature of different purchasing cases. The purchasing strategy will give guidelines of what should be focused when planning the purchasing function's organisation. The organisational planning is also called purchasing's organisational design which consists of six different elements: standardisation, specialisation, configuration, involvement, formalisation and centralization. The standardisations is focused on how to standardise purchases and processes in order to increase efficiency and to centralize purchases in order to gain for example economies of scale. The standardisation should be focused into purchases which don't have much variance such as raw materials or basic components. In this way these purchases would be

easy to pool and centralize. Specialisation is about how the labour is divided in the organisation and in what kind of structure. This is strongly related into the organisational structures. Operative tasks are favoured to divide into function based and more strategic tasks could be done objective based division. Configuration is about authority structures within the company. In order to for purchasing function to be efficient and have enough decision and influence power it is important that the purchasing has top management's mandate and it is seen as equal with other functions.

Involvement is about task division within the organisation and also about cooperation within the company. Most of the purchasing activities especially the strategic tasks should be centralized to purchasing department's responsibility. However most of the tasks should be done in cooperation with other functions. For example strategic alignments should be done by purchasing management with the company's top management and supplier management related tasks should be done by purchasing managers with other functions such as engineering and R&D. The one task that could be done completely by end users is purchasing recalls. Formalisation as already described is a part of the purchasing coordination and management. It measures how much the organisation follows different rules and policies. High level of formalisation is recommended in order to ensure that processes are operated in efficient, standardised and professional manner. However too high level of formalisation can also hinder efficiency and decrease employees' working motivation. The last part of organisational design is centralization of purchasing. Centralization offers many benefits and it is seen that the more professionalized purchasing organisation is the more it tends to lean towards centralization. However companies rarely have totally centralized purchasing thus purchasing organisations usually use hybrid model where at least the management is centralized and some part of operations are decentralized. Hybrid model is seen as most effective way to organise purchasing.

The last two parts of the theoretical framework are required purchasing capabilities and future aspects of purchasing. The capabilities promote a wide range of tasks from analytical thinking to legal knowledge and to negotiation and communication

skills. The future aspects are focusing on purchasing outsourcing. Outsourcing can be a solution if purchasing is not seen as core function of the company. Outsourcing can offer cost reduction and increase purchasing's efficiency. Outsourcing doesn't mean that the whole function should be outsourced thus for example only operative or back-office services can be outsourced and management kept as in-house operation.

4 METSÄ WOOD PURCHASING

The case company for this thesis is Metsä Wood which is a part of Metsäliitto Cooperative, Metsä Group. Metsä Group is a Finnish forest industry group whose core business is to produce different kind of wood, paper and pulp products and to provide forest and wood supply services. Metsäliitto Cooperative is a parent company for Metsä Group which is divided into five business areas: Metsä Forest and Metsä Wood as parts of Metsäliitto and Metsä Board Plc., Metsä Tissue Plc. and Metsä Fibre Ltd. as subsidiaries of Metsäliitto. (Metsä Group 2015a.) Metsä Group was founded in 1934 and the company's name Metsä Group was taken into use 2012 after a company structure and identity renewal. (Metsä Group 2015b).

Metsä Group employs almost 10 000 persons globally and has a turnover of over 5 billion euros. As a cooperative company, Metsä Group is owned by 122 000 Finnish forest owners. Figure 11 below demonstrates the business areas of Metsä Group, their key figures and industry of operations (Metsä Group 2015a).

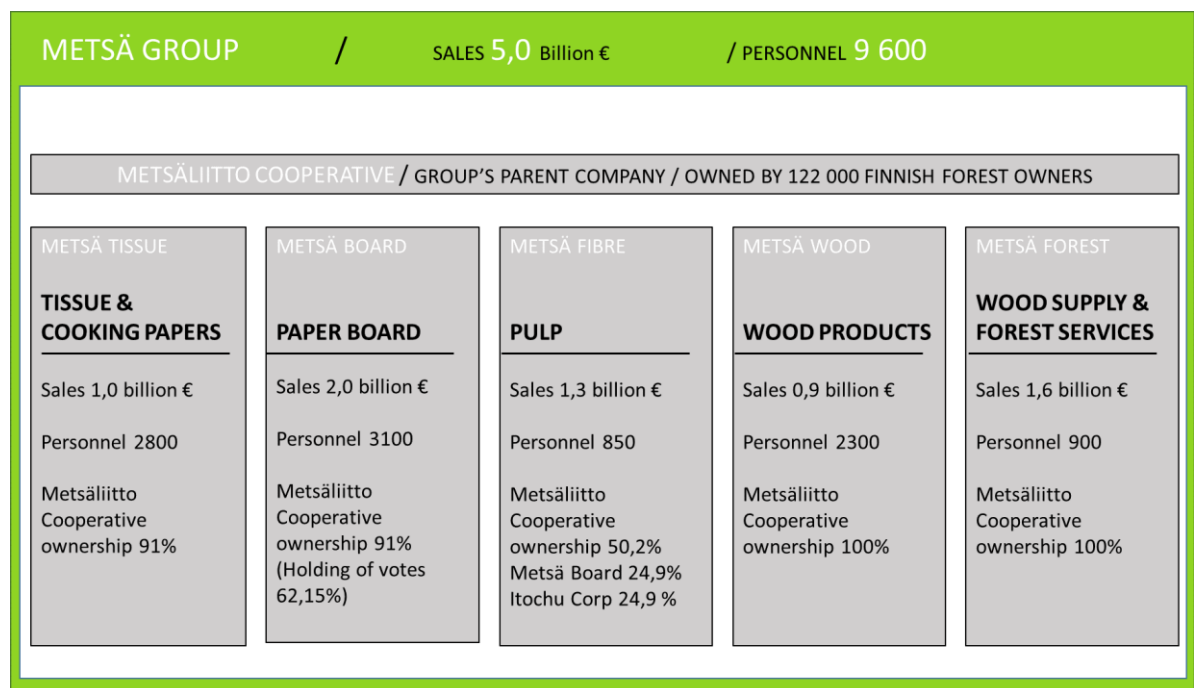


Figure 11. Organisation of Metsä Group (Metsä Group 2015a).

While Metsä Board is public limited company, Metsä Fibre and Metsä Tissue are private limited companies, Metsä Wood is part of Metsäliitto Cooperative and fully owned by it as Metsä Forest also. (Metsä Group 2015a). Metsä Group is operating in global markets and its main market area is Europe. Operations are in almost 30 countries from which production is in eight countries. Besides Finland the production is in Sweden, Germany, United Kingdom, France, Poland, Russia and Slovakia. Sales companies Metsä Group has all over the world from Asia's countries such as China and Singapore to North America. Metsä Group is seeking growth especially from North America and Asia. (Metsä Group 2015e.)

Metsä Group's strategy is to focus all its resources into areas that the company has competitive advantage. Focus areas' should also have good growth potentials in order to ensure long term success. The group is highly focusing on innovation, quality and origins of products. With quality standards Metsä Group tries to ensure that products are top quality, safe and produced in sustainable manners. Ecological aspects are taken into consideration in all stages of process from sourcing renewable wood raw material that's origins are always known, to an energy efficient production and refining process and finally to an end of product's life cycle, ensuring that products are always recyclable. Metsä Group's strategy can be concluded to seek success through innovative and sustainable operations in European, North American and Asian markets. (Metsä Group 2015e.)

4.1 Metsä Group's Purchasing

Metsä Group's Purchasing is centrally led but operationally decentralized service function for businesses. Purchasing's main function is to procure and ensure the availability of all chemicals, materials, machinery, products and services needed in production and service operations. Continuous development of the supplier network is also purchasing's key task. (Metsä Group 2011.) Metsä Group Purchasing is led by Group CPO, supported by Purchasing Management Team which consist from business areas' purchasing directors. Purchasing is operated in matrix organisation and it is divided according to business areas which are leading their own purchasing and making their strategies. Purchasing is also divided into 17 leading categories

which cross-operate in all the business areas. Figure 12 demonstrates Metsä Group's purchasing organisation and the leading categories. (Metsä Group 2015d.)

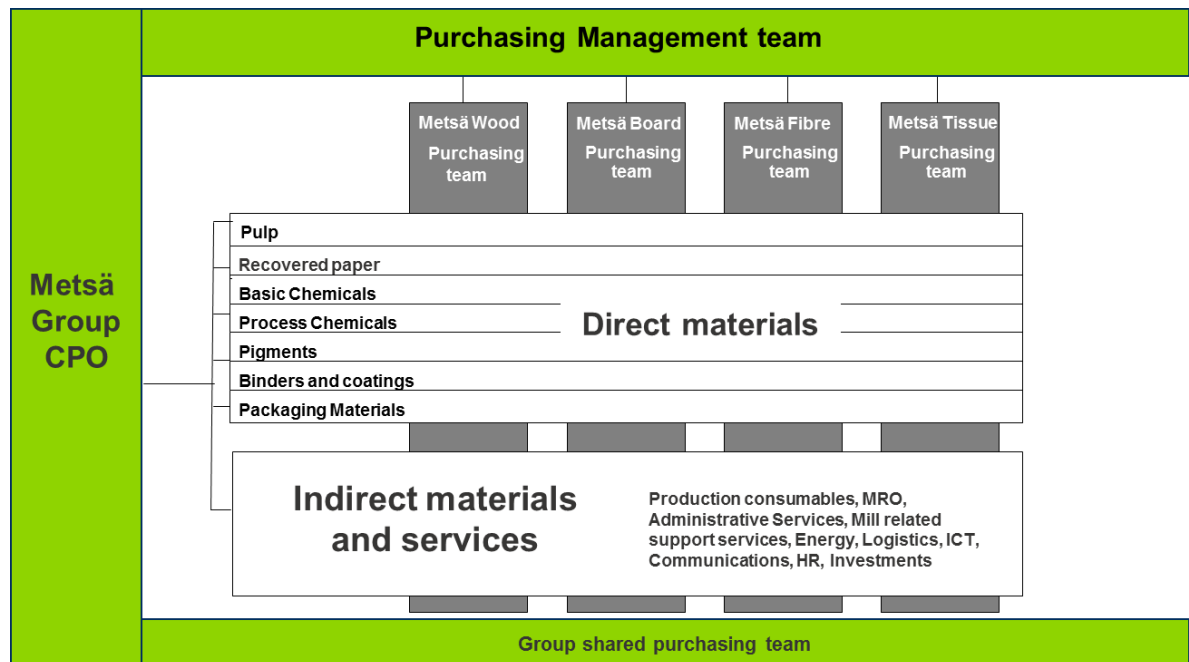


Figure 12. Metsä Group Purchasing organisation (Metsä Group 2015d).

Direct purchases include categories: Pulp, Recovered Paper, Basic Chemicals, Process Chemicals, Pigments, Binders & Coatings and Packaging Materials. Indirect purchases consist from categories: Production Consumables (PRC), Maintenance, Repair & Operations (MRO), Administrative Services, Mill Related Support Services (MRSS), Energy, Logistics, ICT, Communications, HR and Investments. Every category has its nominated Head of main category who is responsible of further developing the category. Businesses have given a mandate and targets to categories for operating sourcing activities. Metsä Group Purchasing has also Group's shared purchasing team that is responsible for purchasing's development and purchasing's support tasks such as different tools' admin tasks and spend reporting tasks. (Metsä Group 2015c.)

The author is working as a trainee in Group shared purchasing team and he is responsible for purchasing tools' admin and development tasks. The key tasks are to develop purchasing processes and tools in order to ensure that all the tools are

functioning properly. The author has also supporting role for businesses and purchasing categories regarding the purchasing tools. Author is working with Metsä Wood's purchasing in different projects and for that reason the thesis is done for Metsä Wood.

4.1.1 Metsä Group purchasing strategy

Metsä Group's purchasing strategy is based on the Metsä Group's code of conduct, corporate responsibility, sustainability and environmental issues. Since Metsä Group is operating in a forest industry, where sustainability is key driver of the business, these values have to be included into the purchasing strategy. (Metsä Group 2011.) Group wide purchasing strategy is focusing on developing proactive purchasing, identifying new suppliers and improving total cost of ownership (TCO). The strategy is executed every three years and reviewed yearly. Strategy is also focusing on identifying business areas' and mills' purchasing needs and to make group level frame agreements for capturing economies of scale and scope synergy benefits. The key here is to consolidate purchases to strategic supplier partners. The company seeks reliable suppliers who are competitive, approve Metsä Group's code of conduct and can bring additional value to the company. (Metsä Group 2011; Metsä Group 2015f.)

4.2 Metsä Wood & Purchasing's current situation

Metsä Wood is a part of Metsä Group and fully owned by it. Metsä Wood is focusing on producing different kind of wood products from Nordic timber for being used in building, construction and industrial purposes. (Metsä Wood 2015a.) Figure 13 below demonstrates Metsä Wood's organisation and purchasing's structure in it.

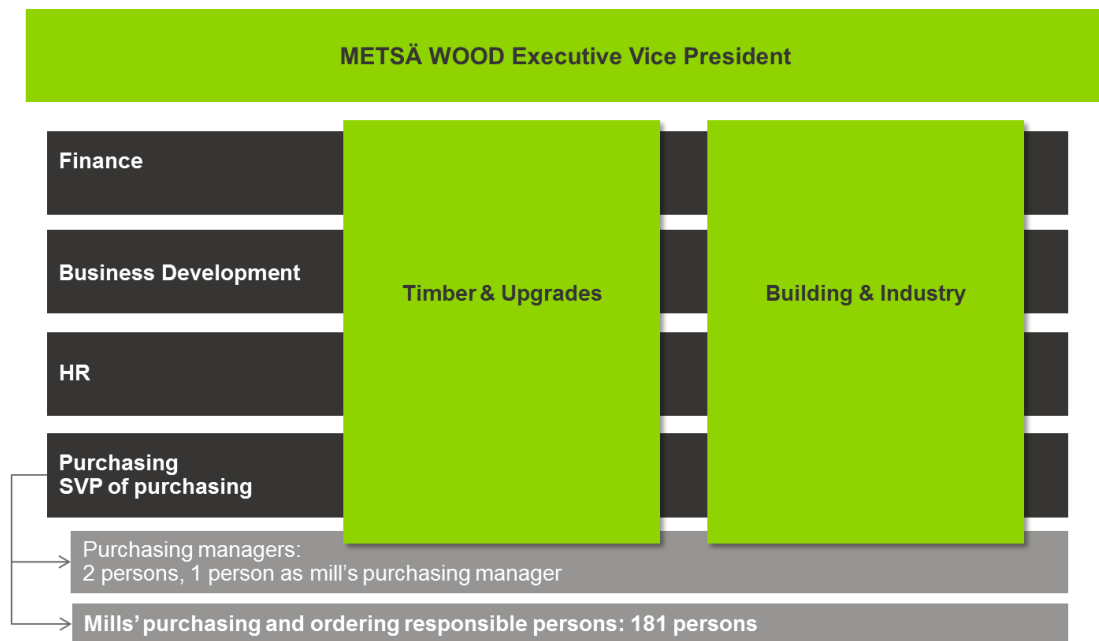


Figure 13. Metsä Wood Organisation & Purchasing's roles (Metsä Wood 2015b).

Metsä Wood is divided into two business lines Timber & Upgrades and Building & Industry. Support functions are Finance, Business Development, HR and Purchasing. Metsä Wood's purchasing is a part of the group's purchasing and it is led by Metsä Wood's Senior Vice President of Purchases. He is reporting to Metsä Wood's Executive Vice President but also as in matrix organisation to Metsä Group's Chief Procurement Officer. (Metsä Wood 2015b.)

4.2.1 Metsä Wood strategy

Metsä Wood's company strategy has been renewed in the past couple of years and the strategy is based on industrial efficiency. Strategy is divided into three parts: partnerships (commitment), simplified operations (reliability) and production excellency (quality). First Metsä Wood is focusing on customer relationships that are mutually beneficial and both parties are seeking win-win situation with partnership. With cooperation Metsä Wood tries to better predict customers' needs which helps to reduce stocks, need of working capital for operations and lower production costs. The key is to cooperate and co-design processes and integrate processes with customers. That is why operations and processes are tried to keep

simple in Metsä Wood. Just in Time (JIT) policy is part of this thinking. The requirements are that operations are at right time and right way. Processes are clear and well-functioning thus they can be a little inflexible. Lean operations are drivers for increased efficiency. Finally the target is to achieve an excellent production and quality with trustworthy employees who are at key role in implementing process and partnership thinking. Purchasing is also in key role for sourcing sustainable and high quality timber, goods and services. As part of the new company strategy the role of purchasing within the organisation has been renewed in late 2014. (Metsä Wood 2015b.)

4.2.2 Metsä Wood purchasing strategy and goals

Metsä Wood's purchasing strategy is a combination of Metsä Wood's company strategy and Metsä Group purchasing's strategy. It is based on the three pillars of industrial efficiency and strategical aims are also align with group purchasing. The strategy relies into external resource management and supplier management. The aim is to find and identify suppliers who are competitive and seeking partnership type of relationship. Metsä Wood has divided its suppliers into three categories: vendors without contracts, vendors with contracts and partners. The target is to reduce number of vendors without contracts as much as possible. The plan is to upgrade vendors without contract by making contracts with them or then change vendor by consolidating volumes to vendors who already have contract with Metsä Wood. Focus is to also increase amount of partner vendors.

From process and operation point of view Metsä Wood purchasing is trying to consolidate and simplify processes, operations and systems. Operative purchasing should be routine and the level of automation should be increased. The strategy is also to increase production's efficiency by ensuring product and service availability with low total cost of ownership. Purchasing should also be done by purchasing professionals who can cooperate throughout the organisation. (Metsä Wood 2015c.)

Metsä Wood Purchasing has seven targets in the purchasing strategy. The first is ensuring materials and services with competitive suppliers. The second is to

increase cost efficiency. Purchasing aims to make savings on total costs, reduce working capital, increase internal processes efficiency by consolidating and developing processes, increase automation and better re-allocate work force. Third target is to conduct close cooperation throughout the business units and the business lines. All stakeholders should have trust for Metsä Wood Purchasing. The fourth is to govern wood purchases in more market and business orientated manner. Fifth is to consolidate purchase volumes for best suppliers who are strategic partners. The sixth target is to seek flexibility to the operations thus keeping them simple. This can be achieved by bidding and consolidate purchase volumes actively, predict market changes and manage contract life cycles, make contracts more business area orientated and finally by simplifying recalls. The final target is to capture benefits from group purchasing. For example using joint systems, contract templates, Group's shared purchasing team for reporting and development tasks and seek joint purchases with purchasing categories in order to gain economies of scale and scope will benefit Metsä Wood purchasing. (Metsä Wood 2015c.)

In addition there are 11 key performance indicators (KPI) that Metsä Group purchasing has set for Metsä Wood purchasing to achieve. Table 6 lists all the KPIs set for Metsä Wood purchasing.

Key performance indicators	
Financial	Cost savings through negotiations
	Increased payment terms for purchases
	Beating cost inflation
Internal process	Increasing e-invoicing %
	Increase contract vendor usage
	Long term planning and monitoring of KPIs
Competences	Employee satisfaction
Supplier base management	Vendor risk rating
	Increased amount of claims to suppliers
	Code of conduct approved by suppliers
Customers	Increased customer satisfaction

Table 6. Metsä Wood Purchasing KPIs. (Metsä Wood 2015c).

With these KPIs mentioned in Table 3 Metsä Wood Purchasing is seeking for overall financial cost savings, process improvements, increase employee satisfaction and their competences, better manage suppliers and fulfil customers' needs. Overall these KPIs are pushing Purchasing to make excellent results and through improvements and savings support Metsä Wood's business. These actions also reinforce purchasing's importance to the company.

4.2.3 Key statistics of Metsä Wood purchasing

Metsä Wood's total spend in 2014 was about 500 million euros and the majority (293 million euros) of the spend is registered in "Other" purchasing category. It includes sub categories such as wood purchases and trading which together totals 100 million euros. However this category mainly consists from other purchases that don't have dedicated category and 184 million euros from spend can't be identified easily. The wood purchases are outsourced internally to Metsä Forest but wood purchases are strongly coordinated and controlled by Metsä Wood management and purchasing. Thus the wood purchases are operated in close cooperation with these parties. Other purchasing categories with large spends are Logistics (70m €), Maintenance, Repair & Operations (57m €), Energy (25 m €), Investments (19 m €), Process Chemicals (17 m €), Production Related Consumables (17m €) and Mill Related Support Services (12 m €).

From the figures above it can be seen that Metsä Wood's spend is strongly focused on indirect spend besides of Other category's miscellaneous spend. The logistics purchases are handled by Metsä Group logistics which leaves Maintenance, Repair & Operations (MRO) as the biggest purchasing category. MRO purchasing category includes all process maintenance related products and services thus the purchasing category have a wide range of vendors. It is a strategically important purchasing category since its purchases are directly related into the production capability. From the 13 Metsä Wood's Finnish mills the biggest mill by the spend was Vilppula which had 22 million euros spend.

In Finland Metsä Wood has almost 2600 active suppliers from which 44 are internal suppliers, other Metsä Group subsidiaries and mills. The rest are external suppliers. Almost all of the suppliers (2500) are Finnish vendors. In total Metsä Wood has 9000 registered suppliers in its system. From external vendors only about 250 suppliers had more than 100k € spend which indicates that small purchases are widely scattered among the rest of 2250 suppliers. Average purchase value from suppliers who had total spend under 100k€ was only 9 500€.

Metsä Wood Purchasing has conducted a couple of supplier management projects in order to gain better knowledge of their suppliers, create strategic partnerships, consolidate purchases to fewer suppliers and to reduce supplier base. These projects have been web-surveys where suppliers are being asked to answer to different questions and to agree on some terms and conditions. For example suppliers are being asked if they are willing to approve Metsä Group's general terms and conditions for purchases of goods and services, code of conduct and payment term changes. Suppliers are also asked to answer if they are willing to develop current relationship and suppliers can suggest development ideas. In this way Metsä Wood can identify those suppliers who are really willing to focus on creating a partnership. Suppliers who have showed their interest towards partnership can then be taken into focus and start to consolidate purchases to these selected suppliers. At the same time suppliers who are not interested in building cooperation are not used anymore and in this way also supplier base is reducing.

4.2.4 Metsä Wood Purchasing organisation

Metsä Wood's purchasing is centrally led but operationally it is decentralized into Metsä Wood's mills. Figure 14 demonstrates the current organisation of Metsä Wood Purchasing in Finland and the full time equivalent (FTE) amounts that mills are doing purchases.

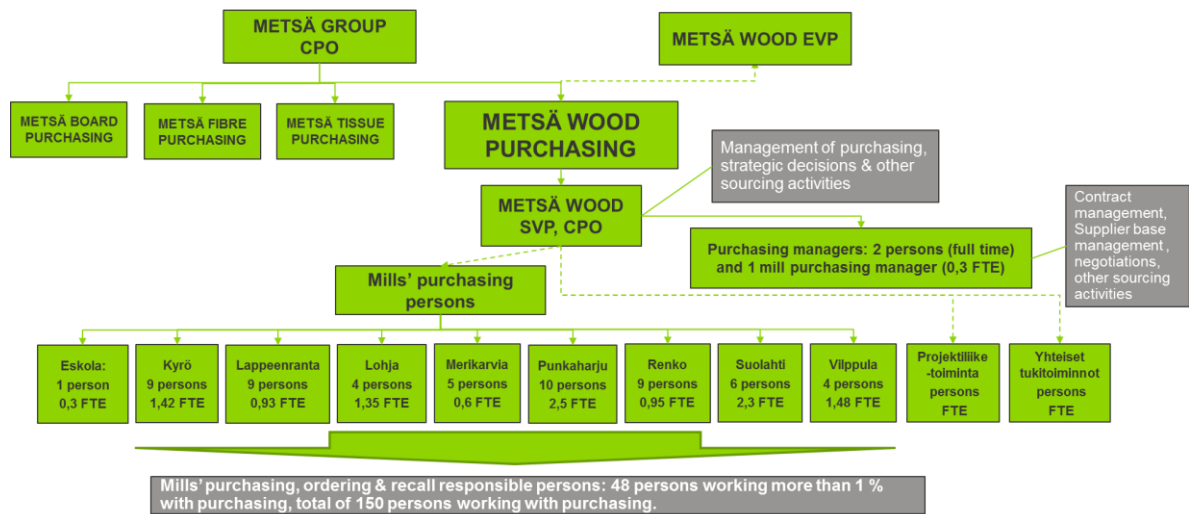


Figure 14. Current purchasing organisation of Metsä Wood.

Metsä Wood Purchasing operations can be divided into two parts. There small number of full purchasing persons in Metsä Wood Purchasing who are responsible for strategic tasks and then there are large number of persons in Metsä Wood business lines, mills, who are responsible for merely operative tasks. Purchasing team is formed from three persons: Metsä Wood's CPO and two purchasing managers which one of them is working in Kyrö mill. In addition Punkaharju's mill manager is participating into purchasing activities with purchasing team. Purchasing manager in Kyrö is responsible for managing Timber & Upgrades business line's purchasing activities and Punkaharju's mill manager is responsible for Building & Industry business line's purchasing activities. CPO's tasks are whole purchasing's management and strategic decision making. CPO participates also into sourcing activities.

Purchasing managers are responsible for the contract management, negotiations, supplier base management, finding new suppliers and other sourcing related tasks. Purchasing is also responsible for operation models, processes, trainings and purchasing systems. Overall purchasing management is centralized into Metsä Wood Purchasing in headquarters. Although Purchasing is responsible for processes supplier selection and other important strategic purchasing decisions, these decisions are usually made in cooperation with the mills. On the contrary

operative tasks are widely decentralized into Metsä Wood's 14 mills. Mills' responsibilities are operative purchasing, ordering and making recalls. Small mills are also selecting suppliers themselves and conducting more purchase activities by themselves.

There are 48 persons that are doing purchases more than 1 % of their total work time. These persons are divided into nine mills. In total there are 181 persons doing purchases in all 14 mills but majority of these people are doing purchases less than 1 % of their work time. These 181 people created almost 130 000 purchase orders in 2014. From spend point of view there are 58 people in mills that have made purchases valued over 1 million euros in 2014. The median purchase value of person is about 360k € in year. All the mills purchasing activities combined are now taking roughly 10 FTEs which means that all the activities that are now done by 181 people, could be done by 10 or 11 persons who would be focusing only in purchasing. There are currently only five persons in mills who are using more than 0,6 FTE to purchasing activities.

4.2.5 Problems in Metsä Wood Purchasing

Even though Metsä Wood has a defined strategy, KPIs, vision and organisation model as a decentralized purchasing the current operation model has some problems which are impacting on purchasing's efficiency, processes and overall results. The major problem is purchasing's current organisation model. The idea is that operations would be centrally managed even though operations are decentralized into mills as presented in previous chapter. However this model is not working properly. Actually Metsä Wood Purchasing doesn't have control over mills' operations. Processes and responsibilities are not defined and managing them is difficult. Even though negotiations, contracting and supplier selection should be in Metsä Wood Purchasing's responsibility mills are doing these activities by themselves. Mill manager should be responsible for controlling purchases in his or hers mill but due to lack of time it is impossible to control all purchases. Purchasing roles also differ a lot in the mills and the roles are personating according to experience. Purchasing is mostly done as a side job alongside rest of the work and

FTE for purchases differs from 0,01 FTE to 1 FTE per person. In other words majority of purchasing is not done by purchasing professionals.

It is also difficult to increase purchasing knowledge since there are so many people making purchases but having very little time to focus on purchasing activities. Expertise knowledge can't be developed in this kind of environment. For example in Lappeenranta's mill there are nine people doing purchasing activities but the combined FTE of all these people is just 0,93 FTE. This means that all the purchasing activities in Lappeenranta could be consolidated to one person who would be responsible for just purchasing and the person could now really focus in purchasing and develop his or hers purchasing skills. Although there are some mills such as Punkaharju and Lohja where purchasing tasks are consolidated reasonably to one or couple of persons. When many people are doing purchases it also means that many people are handling a lot of money. As said 58 persons had made purchases valued over 1 million euros in last year. Control over the spend is difficult because there are so many people making purchases.

Lack of purchasing knowledge and wide decentralization of purchasing tasks within the mills lead into situation where mills are purchasing in very different way, from different sources and with different criteria. Mills are usually using local suppliers which don't have contracts with Metsä Wood. The excuse is that suppliers are faster, more flexible and often cheaper than Purchasing's suggested suppliers. However other costs and terms and conditions are not taken into consideration. For example payment terms, life cycle costs, supplier risks and code of conduct issues are not considered. The importance of contract is crucial. If something would go wrong with supplier, it is vital to have written contract where all terms and conditions have been agreed.

Purchasing is also lacking synergy between mills. Mills have siled into their own purchasing units where purchasing information is not shared among other mills or with Metsä Wood Purchasing. This leaves critical information gaps into the process. At the same time two or more mills may be purchasing same items or services from different suppliers or even from same supplier but with different prices. MW

Purchasing may not be aware of the situation and they could have a supplier which has frame agreement for this purchase need or they could identify bigger need and search a supplier who can serve all mills' needs. In this situation economies of scale and scope are lost. Purchasing statistics from 2014 demonstrates how widely scattered the spend is. From 2500 external suppliers only 250 have over 100k€ spend. Rest of the spend is scattered on 2250 suppliers and average spend to supplier is a bit under 10k€ which implies that suppliers are small local suppliers. These statistics show that there should be a lot of consolidation opportunities. Metsä Wood Purchasing's strategy is to focus on key suppliers and in a way use dual or parallel sourcing strategy and in some cases single or partner sourcing. However at the moment the company is leaning more towards multiple sourcing strategy because the mills are selecting new suppliers without discussing with other mills. As said mills can easily use different suppliers for same purchases which causes supplier base to grow. The goal is just the opposite. Spend should be consolidate to fewer suppliers and number of suppliers should be reduced.

The current situation is difficult because organisations are already running on very low human resources. All organisational changes have to be able to justify with adequate benefits and defined payback time. Problems are also caused because there are no unified process for purchasing. Lots of ordering is happening by calling or sending e-mail to suppliers. Maverick buying is also occurring. Contract vendors are not used because mills aren't aware of existing suppliers or they just don't want to use contract vendors for other reasons.

5 RESEARCH METHOD

The aim of this research is to figure how a global company should organise its purchasing operations. More specifically the case company Metsä Wood is interested to reorganise its purchasing operations in order to achieve control from purchasing, to increase efficiency and gain synergy benefits. This study is a qualitative case study and the research method being used in this research is semi-structured case interview. In this chapter the used research methodology is shortly presented with the selected interview themes. The interview process is also described. Finally the reliability and validity of the research are being assessed. The actual interview analysis is included in chapter 6.

5.1 Theme interviews as a research method in qualitative case study

In a broad level research methods can be divided into two categories: theoretical researches and empirical researches. Theoretical researches are seeking to achieve new scientific knowledge without using any empirical data or practices thus they are using prior researches in order to produce new knowledge. In the opposite empirical researches are based on empirical data and on practise. Empirical researches can be further divide into quantitative and qualitative researches. (Hirsjärvi, Remes & Sajavaara 2010, 142.) Quantitative research is focusing on use of statistical methods. The gathered data should be measurable in order to statistically analyse the data. (Dul & Hak 2008, 5; Hirsjärvi, Remes & Sajavaara 2007, 135, 136.) Qualitative research in contrast is focused on using data that can't be measured statistically or by quantity. (Dul & Hak 2008, 5; Hirsjärvi et al. 2007, 156, 157.) The most common research methods in qualitative study are interviews, questionnaires, observation and knowledge based on different documents (Tuomi & Sarajärvi 2006, 73).

This study is a qualitative case study. Case study is defined to be an empirical research which is studying a certain contemporary phenomenon in a real life context, without manipulation of the situation. It is focused especially into situations where the boundaries of context and research object are not clear. (Dul & Hak 2008,

4; Yin 2009, 18; Syrjälä, Ahonen, Syrjäläinen & Saari 1994, 12.) Case studies can use several different research methods and data sources. For example case studies can be both qualitative and quantitative type study. (Dul & Hak 2008, 5; Laine, Bamberg & Jokinen 2007, 9; Yin 2009, 19).

Case study can focus on a single case or on a small number of cases. Based on the focus case studies are categorized into two main types of case studies: single and multiple or comparative case studies. Single case study is gathering data from one instance in order to achieve the research objective. If the data is gathered from a small number of cases in order to achieve the objective the case study is multiple or comparative case study. (Dul & Hak 2008, 4; Yin 2009, 19.) Both multiple and comparative terms are used to describe case study where there are more than one data sources (Yin 2009, 19). This study is more specifically a multiple or comparative case study because the research data is gathered from four different companies.

Qualitative case study is a descriptive research where the interest is in questions how and why (Yin 2008, 9). It is interested in certain instance's or instances' detailed structures and in certain actor's meaning and impact relations. Qualitative case study is well suited for studies where the focus is to get more information about the causal connections of cases. (Syrjälä et al. 1994, 12, 13.) The aim is to use and analyse qualitative data in order to gain a deeper understanding of a certain case (Laine et al. 2007, 12). It can be also used to further develop theories that are made by using experiments or surveys (Syrjälä et al. 1994, 13).

Qualitative case study is well suited for this research since the aim is to get a throughout understanding about how to organise purchasing operations effectively. The qualitative data gathered from companies will help to understand how other companies have organised their purchasing organisations. These so called benchmarking analyses will increase the understanding about the reasons and causalities of how and why the case interview companies have organised the purchasing operations in the way they have. In addition the case companies' opinions are collected regarding their opinions about how purchasing organisations

and operations should be organised and what are the best practices related to organising the purchasing.

The focus is to gather best practises from the same issues that are presented and discussed in theory part. These are for example the purchasing organisation's level of centralization, how to identify most important centralization cases, purchasing strategy's focus areas, benefits of current organisation model, task division model and coordination model. These case companies' best practices are used as benchmarking data for this research. The benchmarking data can then be used to compare the theoretical viewpoints presented in the research's theory part. The benchmarking results can either support or conflict with the theory although the benchmarking will provide deeper understanding about the real life cases and how these theories are applied in practice. If however the best practices of benchmarking are supporting the issues discussed in theory it can be concluded that they are relevant and effective ways of organising purchasing operations. Thus the best practises can then be applied into a model that suits a global company and further on the model can be applied into the case of Metsä Wood's Purchasing organisation.

The research is conducted by using semi-structured theme interview. Interviews are one of the most important sources of data in case studies (Yin 2009, 106). Interviews are usually the main research method in qualitative studies. The benefit of interviews compared to other methods is that in interview the data collection can be flexibly controlled in a way that the situation requires. (Hirsjärvi et al. 2007, 200.) The interviewer can repeat questions, correct misunderstandings, clarify questions, change order of questions and have a conversation with the interviewee. One benefit is also that the interviewer can observe how the interviewee acts in the interview situation. Besides what the interviewee answers the way how he or she answers to the questions can be observed. Thus interviewer can analyse the situation and if interviewee really mean what answers or if there are some hidden meanings behind the answers. Interviews are meant to gather profound data about the topic. It is solving the reasons to interviewee's opinions. (Hirsjärvi et al. 2007, 200 – 207; Tuomi & Sarajärvi 2006, 75, 76.)

Different interview types can be further categorised into three different categories according to the level of structure used in the interview. The categories are structured, theme and open interviews. A structured interview is formal and the interview is conducted by using a questionnaire form. Theme interview uses predefined questions as an assistance of interview and the open interview is open discussion. (Hirsjärvi et al. 2007, 203, 204; Tuomi & Sarajärvi 2006, 76, 77; Yin 2008, 107, 108.) The type of interview used in this study is theme interview. Theme interview is a semi-structured interview type where there is a selected theme or a couple of themes that are followed in the interview. However specific questions or the order of questions are not predefined thus the conversation remains open within the selected themes. (Hirsjärvi et al. 2007, 203; Tuomi & Sarajärvi 2006, 77; Yin 2008, 107.) Some questions can be made in advance but it is not the aim to follow them closely (Yin 2008, 107). The interviewer should carefully focus on what the interviewee is answering and keep the focus on the selected themes. If the answers are starting lose focus the interviewer needs to steer the conversation back to the selected themes. (Rubin & Rubin 2005, 11; Yin 2008, 107.) However steering of the conversation can't be too suggestive or leading so that the interview remains unbiased. (Yin 2008, 107.)

The aim of theme interview is to find explanations specifically to the studied case based on the interviewees' answers (Tuomi & Sarajärvi 2006, 77). Theme interview highlights the meanings and interpretations that the interviewees give to different instances and how these meanings are derived from the interaction (Rubin & Rubin 2005, 11; Tuomi & Sarajärvi 2006, 77). The methodology can be used to confirm certain facts that have been established in the research. However if the questions are leading interviewees in a biased way the purpose of confirmation is lost. (Yin 2008, 107.)

Theme interview was selected as the research method for this study due to its flexibility. Theme interview gives opportunity to discuss with the interviewee about specific subjects and prevents the discussion from distracting into irrelevant subjects. The semi-structured model gives the same framework for each interview thus it is easier to analyse and compare all four interview. Even though the same

themes are used in every interview the discussion is not tied to certain questions. This gives the interviewer an opportunity to focus discussion into interesting subjects derived during discussion thus gain a deeper understanding of certain issues. The interaction situation and interviewees acting during interview can also be analysed.

5.2 Planning of interviews and interview themes

Interview planning started from planning the interview themes. Interview themes are working as a framework for the interview and they are used to guide conversation in right direction (Yin 2008, 107; Tuomi & Sarajärvi 2006, 77,78). The interview themes are deriving strongly from the theory and the theoretical framework since those issues have been identified as a key issues in organising purchasing organisation. The themes are divided into two parts. In first part the themes are focusing on company's background, overall organisation structure and characteristics. These themes are:

- Company's field of business and key facts about organisation
- Company's organisational structure and level of centralization
- Organisational culture and the relationships between business functions

These themes were used in order to gain basic understanding about the company's organisational structures and the reasons why company is in the current state. These general organisational themes were used also to see if the purchasing organisation reflects the same values and reasons as other organisation and if they are in line together. The theme about organisation culture and relationship between business units was used to find out how purchasing perceives their status within the company and how other business units are perceiving purchasing's status. This is important information since if the purchasing unit feels that they are underestimated and not valued it is a clear sign that something needs to be changed in the purchasing or in the other business units. Organisation culture was used to investigate company's core values but also to reinforce the interviewees' reactions about the relationship questions and see if there are any hindering issues in the culture.

The second part of the interview themes focused on purchasing organisation's internal issues such as strategy, structure and coordination. These themes were mostly based on the sub-research questions since they are the key issues that needs to be solved in order to answer into the main research question. The part of interview themes were following:

- Company's purchasing strategy
- Purchasing's centralization and current organisation model
- Task division within the purchasing organisation
- Required skills for purchasing personnel
- Coordination and control of purchasing organisation
- Views about purchasing function's future

These themes give a good insight of how the case companies have organised their purchasing organisation. Through more specific questions the reasons behind the decisions could be figured out. First the purchasing strategy is important theme because the strategy can have great impact on the organisation model. The aims and goals of organisation are one of the main drivers which decide the organisation structure. Because of this it is important to understand what is the motivator of each case company thus realising how the strategy impacts on the purchasing's structure. The organisation structure and centralization theme is directly related to the main research question. This theme is handling how and why the case companies have organised the way that they have. More in-depth knowledge was sought about the reasons and benefits of the organisation model used but also about how the important question of centralization is seen within the case company's purchasing organisation. The task division is going further on discussing in more detailed level about the organisation. One important issue here is to identify how the case companies have divided tasks to other functions than purchasing thus how purchasing is cooperating with other business functions and business units. The theme related to required skills in purchasing is investigating what kind of people should be hired into the purchasing organisation but it also identifies the key values that are driving the organisation.

Coordination and control relates into centralization of an organisation but they also relate into the level of formalisation. The coordination theme is used in order to find out how purchasing management has gain control over the purchasing unit within the current organisation structure of a case company. This is important since without a proper coordination purchasing can't be effective but too strict control may also hinder the effectiveness. It is important to identify what kind of control models are used in different situations. The last theme is about purchasing's future visions. These theme was selected in order to identify some possible emerging ideas or future visions and out of the box thinking about purchasing organisations. Since organisations are constantly changing and adapting alongside the environment it would be beneficial if company could proactively adapt and prepare into the change.

After the interview themes were defined the interviewed companies were selected. The interviewed case companies are:

- Metsä Board
- Metsä Fibre
- Posti Group
- ABB Group

The case companies were selected in the principle that the two first companies are internal companies for Metsä Group and the latter two are external companies. Metsä Board and Metsä Fibre are Metsä Group's subsidiaries. They both have different purchasing organisation structures. Internal companies are great comparison cases since they are already following some group purchasing level practices but are still operating in different ways. External companies, Posti Group and ABB Group were selected since Metsä Wood had contacts to those companies and according to Metsä Wood both companies had a good reputation of having advanced purchasing organisations. ABB Group was selected because the company is operating in manufacturing industry. The field of business is not the same as Metsä Wood's but ABB can still be used as a good reference company for best practises. Posti Group in contrast is operating in service industry thus it was

selected in order to compared if there are some special characteristics of purchasing organisation from service industry.

After the case companies were selected, each company was contacted and requested to participate into the interview. These companies were the first selections for interviews. All of them agreed to participate into the interview and there was no need to contact other companies. The interviewees were purchasing directors and supply chain manager. Interviewees were from as high organisational level as possible because they are expected to have the most vision and decision control over their purchasing organisation.

5.3 Interview process

The interviews were conducted in January and early February 2016. In the table 7 below the key facts about the interviews are presented.

	Metsä Board	Metsä Fibre	Posti Oyj	ABB Oy
Interviewee's title	Vice President, Purchasing	Purchasing Director	Vice President, Sourcing	Global Supply Chain Manager
Duration of interview	45 min	1h 15 min	45 min	1h 10 min
Internal/ External company	Internal	Internal	External	External
Company's field of industry	Manufacturing	Manufacturing	Service	Manufacturing

Table 7. Key facts about case company theme interviews.

The interviewees answered to all questions excluding one legal limitation. At the time of interview Posti Group was changing their organisation structure which prohibited them to answer into question about their future organisation model. It can be assumed that the interviewees answered to the questions according to their best knowledge and they meant what they said without any ulterior motives. This is due to the reason that the interview subjects were very factual and related to the business and the interviewees shouldn't have strong personal emotions towards the subject which could possibly affect to the answers. In order to have intensive and

interactive interview situations the interviews were held face to face in each company's office in a quiet meeting room.

Main interview themes were told beforehand to each interviewee but no specific or detailed questions were given before the interview. This gave the interviewees an idea of what kind of subjects the interview could include and how they should possibly prepare to the interview. In order to get as throughout answers as possible it is good to send interview questions or interview themes to the interviewees before the actual interview so that they can prepare to the interview situation and upcoming questions (Tuomi & Sarajärvi 2006, 75). However more specific or detailed topics or questions weren't provided beforehand since the research method was theme interview which should be an interactive dialog. More detailed questions could limit the conversation to focus only to the preassigned questions and topics which again would possibly hinder the gathering of relevant information. This also prevented the situation that the interviewees would have misunderstood some of the questions or topics and would have prepared to talk about incorrect subjects. Interviews lasted between 45 to 75 minutes.

There was only little need to guide the conversations to correct subjects since all the interviewees were professionals in the interview theme and the answers for each question or theme were throughout. The guidance was mainly focusing on asking more detailed questions on some subjects. Each interview situation was recorded and later on transcribed in order to have better analysis data. Notes were also collected during the interview discussion in order to identify key points of the answers. Transcribed text with notes and tape recordings were then analysed individually by each company. The text was also coded and further on grouped into identified themes in order to make the analysis process more coherent and easier. This was done because the interviews didn't follow exact the same order as the interview themes were planned. The text was mainly grouped according to the predefined themes and to theoretical framework. In addition more specific groups were also used. There were in total 14 identified themes which were used to group the text. The themes are presented in interview conclusion and analysis chapter 6.5.

The interview recordings were also used in analysis to listen different voice tones if there could be found some meanings.

5.4 Reliability and validity of the research

The reliability and validity of research are important issues to analyse. The reliability is measuring the how well the research could be repeated thus the ability to provide non-random data. The validity is measuring how well the selected research method is suited for the research and how able it supports the research. (Hirsjärvi et al. 2007, 226; Yin 2009, 45.) Reliability and validity can be increased if the researcher will report all the phases of the research process in detailed manner. This will also increase the transparency of the research. (Hirsjärvi et al. 2007, 227; Tuomi & Sarajärvi 2006, 139; Yin 2009, 45.) For example researcher should describe the interview environment, time used for interviews, possible disturbance factors and other misinterpretations. Also the arguments for analysis conclusions should be clear. For example direct quotes of interviewees can support arguments. (Hirsjärvi et al. 2007, 227, 228.)

In previous chapters the research process methods and arguments for choosing the used method are well reported. The interview themes were planned to cover all the necessary issues for the research. The themes were told to interviewees beforehand in order to give them time to prepare into the interview and to gather information if needed. All interviews were recorded with two recorders in order to get good sound quality and not to miss any parts if one recorder would fail for a reason or another. Interviews were transcribed shortly after the interview situations. Analysis is tried to be done as an unbiased manner as possible and any uncertainties or other misinterpretations are tried to identify and report. Because of the detailed report about the research process and used methods the reliability of this research can be considered to be good.

One factor to consider is internal validity of the research. It refers to a situation where researcher makes wrong conclusions about causal relationships. The problem occurs if the researcher doesn't notice that besides identified factors there are also

other major factors that are influencing to the case. Then it is misleading to conclude that only the identified factor have causality with the phenomenon. (Yin 2009, 42.) Internal validity wasn't a problem in this research since all the interview themes were discussed throughout in the interview situation. If there was something that left unclear additional questions were asked to clarify the issues and to identify other causal factors. In every interview theme the interviewees were also asked to identify different reasons and causalities about the themes discussed. It can be assumed that at all the major factors were identified and if some factors were forgotten or left otherwise out they have been minor factors for the related theme.

The main issue that is affecting to this research is external validity. It refers to the generalizability of the results beyond the case study. It means that is the results of one case applicable into another case or are the results only case specific. The critics of case study methods are often referring into case studies', especially single case studies poor external validity. In order to increase the external validity it is suitable to have more than one case. However it should be considered that the results are applicable in the case environment but broad generalizations in different environments are difficult to create. The idea is not to generalize the whole results into one theory thus case studies are focusing on generalizing a specific set of results into a useful theory (Yin 2009, 43, 44.) External validity can be considered to be an issue also in this research. However the external validity is tried to increase by having a multiple case study and interviews from four different cases. In this way viewpoints from different backgrounds and environments can be compared. If there are similarities these issues can be taken as a specific set of results that could be generalized. However the different environmental factors and causality reasons were closely considered and reported during the analysis.

6 ANALYSIS OF INTERVIEWS

In this chapter all the four interviews which were made are analysed thoroughly. Each case companies' interviews are first analysed separately and then compared and concluded together. In this way each interview is going to be analysed more detailed manner rather than if they would be analysed all together. The analyses are compared to the theoretical framework which is demonstrated in chapter 3.9. Framework is providing literature's point of view about some issues how purchasing should be organised and what issues should be taken into consideration in whole. The interviews are providing real business life cases and purchasing professionals' point of views about the same issue. Interview analyses are then used to test and compare the theoretical framework. Further on by comparing interview analyses and theoretical framework the results can be concluded into a revised or updated version of the framework which will answer to the research question of how a global company should organise its purchasing operations.

6.1 Metsä Board

The first interview's case company was internal company Metsä Board. Interview was conducted on January 2016 in Metsä Group's headquarters. Metsä Board is a public limited company which is a subsidiary of Metsä Group. It is focusing on producing paper board products. Metsä Board was selected as a case company because it is an internal company from Metsä Group's point of view. Metsä Board's purchasing is coordinated by Group purchasing but it has its individual organisation structure and partly different ways of working. Internal companies are important references for Metsä Wood since the companies are operating under same corporation and the best practises could be implemented easily from Metsä Board to Metsä Group since they are already cooperating with each other. The interviewee from case company was Metsä Board's Purchasing Director Jani Suomalainen.

Metsä Board is focusing on producing paper board and it is nowadays also producing fibre. The interviewee starts the interview by saying that Metsä Board is organised in a traditional simple way. By this the interviewee means functional

organisation model where there are no separate business divisions thus there are functions such as marketing, purchasing and production and each function have dedicated personnel. Matrix organisation is not preferred in Metsä Board's top management because matrix organisation makes responsibilities unclear.

The functions in Metsä Board are centralized if possible but then there are also decentralized functions. For example Metsä Board has customers in around 100 countries and sales representatives in tens of countries which will require some level of decentralization from the organisation. The decentralization decisions are mostly due to the geographically dispersed business. By centralization the company has tried to have cost savings and increase efficiency of the decision making. Metsä Board's strategy is leaning nowadays towards centralization. The interviewee says that the company has sold a lot of non-core operations in order to focus and centralize the core operations.

The interviewee mentions that even though all the carton board products that the company produces looks fairly similar, they are not standardized and in each mill the company is using a little bit different production recipes thus the carton board in each mill is a bit different. The mills are responsible for their own production recipes. Interviewee mentions that he knows some paper production companies which are using standardized recipes and when asked how it could impact to purchases the interviewee says that it could improve pooling possibilities and bring economies of scale benefits. However the impact to the purchasing is small because the raw materials being used are mostly the same regardless of the mill thus only the quantities being used are a little different between the mills.

When asked about the purchasing function's position within the organisation the interviewee admits that purchasing does not have equal position with other functions. The main functions in the case company are sales and production units. Other functions are more as a support functions. This can be concluded from the fact that purchasing function is part of production function thus it is not a separate function. However purchasing's role is valued within the organisation according to the interviewee. The respect of other functions is strongly connected to the results

that purchasing is making. The position have to be won by good results such as cost savings and good product quality.

According to the interviewee the organisation culture in Metsä Board is already quite unified and there are no big differences between the mills. The reason for coherent organisation culture is that Metsä Board is using a lot of same KPI measurements, has unified processes and the personnel has moved a lot from one mill to another. Due to these reasons the mills have developed a similar culture. However Metsä Board has an ongoing project about developing the organisation culture even more into more harmonized model. The interviewee points out an important factor that the organisation culture is always a person's own perception about the surrounding culture thus it can be perceived differently by others. From this statement and the earlier statement about organisation culture development project it could be assumed that there is still issues to improve in the culture. Otherwise there probably would not be a project related to organisation culture improvement. The interviewee mentions that the culture is strongly focusing on management and is less supporting for example to internal entrepreneurship. Strong management culture derives from very difficult times and cost reductions what was going on a few years ago. According to the statements it can be seen that Metsä Board has hierarchy type culture presented in the theory in chapter 2.3.3. The interviewee says that the company is slightly stuck into this culture and it should promote more a development orientated culture where for example internal entrepreneurship would be promoted more. Too strict cost reduction will increase efficiency but it can hinder the growth of the business.

Metsä Board's purchasing strategy is more as an orientation than a well-defined written document. Purchasing strategy is strongly following Metsä Group level purchasing category strategies. Metsä Board is more focused on competitive purchasing rather than partnership models. The interviewee states that they have experiences from partnerships where in in long-term perspective the prices have usually increased a lot. The interviewee emphasizes the competitive approach for purchasing due to the negative experiences of partnerships. He says that in competitive strategy it is important to pool purchase volumes in order to change the

negotiation power from the vendor to the purchaser. From the interviewees statements it can be concluded that he is not really believing in the benefits of partnerships thus he sees competitive approach more effective for Metsä Board. The interviewee says rather a unexpected comment that he wants to see purchasing as a simple function rather than a complex external resource management. This is due to the reason that Metsä Board is strongly production and sales orientated company and the purchasing is acting as support function for production. It is not efficient to make purchasing operations too complex. The key is to gain cost savings by negotiating better contract terms such as payment terms and prices from best suppliers.

Even though Metsä Board in general is favouring matrix organisation the purchasing organisation is in matrix organisation by necessity because it is a part of Metsä Group purchasing which is using the cross-functional purchasing categories. The category structure is leading the purchases strongly. Otherwise the interviewee says that purchasing in Metsä Board is organised in fairly traditional way. The interviewee is managing purchasing as a purchasing director then there are purchasing manager roles and buyer roles. The purchasing is decentralized into the mills and almost in each mill there is one purchasing manager. Some purchasing managers have double roles for two mills due to the size of the mills and lack of resources. Metsä Board has nine mills which 8 of them are in Finland and one is in Sweden in Husum. Under the purchasing managers there are one operative buyer for each mill. In Husum mill there are two buyers because it is Metsä Board's largest mill and it basically has two mills because it is producing both carton board and fibre. The reason for organising this model is to seek cost savings and optimal state between centralization and decentralization thus purchasing organisation can be seen working as a hybrid model which is presented in figure 8 in the theory part. He says that the current organisation can achieve great results for each mill with minimal human resources in purchasing. The key is that each mill has very experienced and skilled purchasing people. They all have a minimum of five years' experience. When asked about the level of centralization the interviewee comments that the current model is good and it works for Metsä Board.

According to the interviewee they have centralized all the purchases that are meaningful to centralize. For example raw material purchases are centralized in Metsä Board level. However the interviewee says that it is not practical or efficient to centralize all purchases such as most of the service purchases. The interviewee states that volume is not a key indicator for purchase centralization since even small purchases are centralized in Board. The main issue would be to identify similar needs and standardization possibilities. Through that a better negotiation position can be gained even in smaller purchases.

In Metsä Board there are three primary category leaders from the total 17 Metsä Group level purchasing categories. Other purchasing managers are members of the other purchasing category teams and they have local or Metsä Board level purchasing responsibilities. The task division model in Metsä Board is following the model by Iloranta & Pajunen-Muhonen (2013) which is presented in the theory part in chapter 3.6. Some strategic decisions, purchasing policies and strategies are done in Metsä Group purchasing level but Metsä Board purchasing is otherwise making these centrally. Vendor selection is done mostly in purchasing category level but some local smaller vendor selections are also done decentralized in the mill level. Purchasing managers are responsible for conducting strategic purchasing tasks such as biddings and negotiations with vendors. Operative purchasing and recalls are done decentralized in mills by buyers. Buyers do not participate into biddings or other more strategical level operations. In Finland some of the production personnel are also doing recalls but in Husum mill in Sweden the recall responsible persons are under purchasing organisation. Purchasing infrastructure and information systems are mostly based on Metsä Group purchasing level decisions.

Metsä Board's purchasing personnel is cooperating well with each other. The interviewee says that they are mostly cooperating through the joint investment purchases or through purchasing category teams. Metsä Board purchasing is also cooperating with Metsä Group Logistics which is purchasing all the logistics services. This counts for 15 % of Metsä Board's all purchases thus the interviewee emphasises that the cooperation should be good due to the purchasing volume. The

level of cooperation with other functions is generally in a good level. However the interviewee states that there would be room for improvement in cooperation with product development function. The tasks are divided between purchasing and product development in a way that purchasing is tendering and negotiating with vendors and product development is strongly connected to vendors and discusses with vendors in order to improve and develop new products. The cooperation with product development is daily and is in fairly good state. However the importance of product development in purchasing process is big thus the cooperation is vital.

In Metsä Board's business the important capabilities for purchasing personnel to have are strong knowledge about the company's processes and supply markets. Technical knowledge about purchased products is needed in order to cooperate with product development and to better communicate with vendors. Analytical, problem solving and cost accounting skills are also needed. These skills will improve the operative work and promote cost savings generation. Also the negotiation skills' importance is emphasised. The interviewee says that negotiation skills are could be handled as a separate requirement because it is so essential for purchasing personnel. One important skill needed is also communication with internal and external parties. Internal parties represent the internal stakeholders and external parties are referring to vendors. Effective communication to both ways is important because purchasing is acting often as a middle man between these two parties.

Metsä Board purchasing is coordinated in a business controller manner. The interviewee says that as purchasing director he coordinates the purchasing through different KPI measurement. The roles and responsibilities are well defined so the reporting of different measurements is effective. The reporting lines goes in line with organisational hierarchy. The buyers are reporting to the mill's purchasing manager which is then reporting to purchasing director which is further on reporting to a member of Metsä Board's management team. The interviewee mentions that they arrange once a month a skype meeting with purchasing personnel where the current status and upcoming issues are went through together. Metsä Board has different policies and instructions how to conduct purchasing. Since the personnel hasn't changed much during five years the policies are already well known and used. The

purchasing staff already knows how to conduct, what is allowed and what is not. If there are any changes or new policies they are discussed during monthly meetings. From the interviewee's statements it can be concluded that the coordination model in Metsä Board is leaning on Burton's (2011) mosaic or clan coordination models which are presented in theory part in figure 5. The level of centralization is low but the level of formalization is medium. Common rules and policies are used into some extent but there is still freedom in mill level to conduct some local purchases.

The interviewee mentions that he is trying to motivate purchasing managers by changing category responsibilities over time. This will also develop their knowledge about other categories and reduces risks when there is more than one who knows how to operate certain category's purchases. The incentives are mostly bonus based and they are following Metsä Group's bonus policies. The interviewee says that praises from management and recognition from company's side is also used to motivate purchasing personnel.

When discussed about purchasing's future aspects the interviewee mentions that he has thought about purchasing outsourcing but doesn't see benefits in it. Metsä Board is an interesting customer for suppliers and the purchasing outsourcing to third parties could harm the customer supplier relationship. From the organisational position point of view the interviewee states that purchasing's position within the organisation is strongly related to results. Purchasing's results are further on related to general markets situations, cost deflation or cost inflation. Cost inflation and increasing prices are causing lot of pressure for purchasing organisation to make results and keep the position and respect. When the inflation hits purchasing it will decrease the purchasing's value in organisation. The interviewee mentions that they don't have plans to develop the purchasing organisation in the near future. The only change which could be done is to change purchasing category responsibilities with responsible persons. According to the interviewee more important future issue would be to focus on purchasing digitalisation since through that the processes could be improved and gained cost savings. Examples are use of the ERP systems and e-invoicing.

At the end of the interview the interviewee mentions his opinion how Metsä Wood should organise its purchasing. He strongly believes that the current model where there are no defined responsibilities doesn't work thus Metsä Wood should centralize its purchasing. The interviewee suggests that Metsä Wood should organise its purchasing into a model where they have real purchasing personnel who are only conducting purchasing tasks and they are responsible from negotiations with vendors and making purchase orders and recalls. He adds that if some mills are buying same products and services the purchases should be pooled together.

6.2 Metsä Fibre

Metsä Fibre was the second case company for the interview. This interview was also conducted on January 2016 in Metsä Group's headquarters like the first interview with Metsä Board. Metsä Fibre is a private limited company and it is Metsä Group's subsidiary. The majority of Metsä Fibre is owned by Metsä Group with 50,2 per cents of the stocks. The rest of the stocks are split between Metsä Board and Japanese holding company Itochu Corporation. Metsä Fibre is producing pulp. One of the main customers is Metsä Board. Metsä Fibre was selected as a case company because like Metsä Board it is also Metsä Group's internal company thus valuable reference. Metsä Fibre is known to have a different purchasing organisation which is operating its purchasing by having partly outsourced the purchasing. Because of this the Metsä Fibre is an interesting case company for the interview. The interviewee from Metsä Fibre was its Purchasing Director Timi Hyppänen.

Metsä Fibre's organisation is divided into three core processes which are: management, customers and purchasing and production. Support functions are business development, sales and production's support and coordination. The organisation is managed by CEO and management team which includes CEO and directors from all main functions: finance, development, HR, production and sales. Other functions are either operated under some of the main functions, for example purchasing is operating under production. Some support functions are also operated in Metsä Group level such as ICT and sustainability. The production unit is controlled

by production management team which includes production director, mill directors from each four mills: Kemi, Joutseno, Rauma and Äänekoski, technical support and development director and purchasing director. Metsä Fibre has also outsourced a part of its organisation. The company has outsourced maintenance function to a third party. It is under the management of production function. From the organisation model described by the interviewee it can be concluded that Metsä Fibre is organised into a process organisation because the business is divided into processes which are then managed throughout the company.

In general the level of centralization in Metsä Fibre's business can be assessed to be medium. Since the organisation is working in a process organisation the processes are managed centrally but the operations are conducted decentralized in the mills. However none of the functions are specifically in a certain location thus central administrative personnel are located throughout the mills. According to the interviewee the reasons for using process organisation and management model could be based on renewing the company, be able to develop organisation and to streamline and unify processes in order to increase efficiency.

Metsä Fibre has one end product which is pulp. There are different pulp qualities which requires different specifications. Customer demands are determining how the production processes are operating and from these customer demands there are mill specific differences in the processes. For example the mechanical repairing and equipment investments can differ between mills according to what kind of specifications are required. In raw material and chemistry sides there are also some differentiations between mills. The main raw material for Metsä Fibre is timber which represents 500 million euros from the total 800 million euros of purchases. The rest 300 million euros are spent to other materials and services which include chemicals, repair and maintenance services, other services and production equipment and machinery. Even though there are some variations in purchases between the mills generally the purchases are quite standardized which eases purchasing's operations and enables pooling the purchases.

The interviewee sees that the core functions in the company are very equally valued and have the same position in the hierarchy. This is due to the reason that all of the functions are part of Metsä Fibre's management team. According to the interviewee top management sees the importance of each function and gives the needed attention for each function. He mentions that of course there can be some small emphasis on certain functions which are depending on the strategic targets. However the functions are seen as equals and there are no major power and responsibility differences. The functions are supporting each other very well and there is no siloed thinking within the company. Metsä Fibre has centralized its purchasing management from mills to the headquarters in 2013. The interviewee says that centrally managed purchasing is still relatively new issue in the company. However by centralizing purchasing management, the interviewee sees that it has helped to increase purchasing function's visibility. Interviewee says that the visibility has been gained by implementing new purchasing practises and otherwise promoting centralized purchasing a lot to the mills. Centralized purchasing frees the working time of mills' personnel since they don't have to be involved into daily purchasing activities anymore. In addition when the centrally managed purchasing is also working efficient the functions are very pleased for purchasing's operations. However the role needs to be earned and kept by making good results.

The interviewee states that Metsä Fibre's organisation culture is promoting continuous development, working in cooperation with others and to have a customer orientated attitude. Also cost efficiency and sustainable thinking are also emphasised in the company. Openness and communication with others with transparent operations are also regarded as an important part of operations. The interviewee mentions that the culture is based on Metsä Fibre's common values which are quite well adopted in the company. It seems that Metsä Fibre doesn't have any major problems with the organisation culture thus the company has a good cooperative attitude. This could be due to the organisational structure where all functions are tried to be taken into consideration. Cooperation orientation is also increasing the feeling of being same team and strengthens the culture. Based on the interviewee's statements it could be concluded that the company has an open culture where intrapreneurship behaviour is promoted which will facilitate the

continuous development. Due to strong focus on development it could be concluded that Metsä Fibre's organisational culture is adhocracy type.

Metsä Fibre does not have its own written purchasing strategy. In material management the focus is now in cost effective material and service purchases. Purchasing's operations are based on Metsä Fibre's strategy and into a yearly conducted short-termed one year and three years planning. The short-term planning is which focus on planning all core processes including purchasing. The yearly planning is done by Metsä Fibre's 30 to 50 key persons. In the planning the process descriptions and instructions are revised and developed further. The planning model seeks continuous development of processes. Through the planning the upcoming year's targets are also defined. The process owners then select most relevant one year operative and tactical targets regarding their process. The purchasing strategy is basically to manage purchasing in order to achieve these key targets.

The interviewee adds that purchasing's main task is to cost effectively ensure the supply availability of raw materials and other materials in short and long term range. In addition purchasing process development and legal issues are in key focus of operations. Metsä Fibre is also following Metsä Group wide purchasing category strategies which guides most of the purchases. In order to achieve cost effective supply availability Metsä Fibre is using both competitive and partnership strategies depending on purchasing category. However it seems that Metsä Fibre is leaning a little bit more on competitive strategy. The interviewee says that they do have partnerships but in the same time the value of it needs to be proved yearly. There are not many contracts that are long-termed.

Purchasing organisation in Metsä Fibre is small. Purchasing is divided into two parts: the interviewee is purchasing director and he is responsible for Metsä Fibre's material purchases. The second part is wood purchases which are separated from the other purchases and it is managed by production director who is the interviewee's superior. Under the interviewee's management there are two purchasing managers which one is in Äänekoski and one in Rauma. In addition there is one purchasing assistant in Rauma mill. Purchasing assistant's role is to

take care material orders and ERP related issues. Otherwise the operative purchasing and buying is outsourced to a company called Botnia Mill Services (BMS) which is also operating Metsä Fibre's maintenance function. Botnia Mill Services has purchasing personnel for Metsä Fibre and it is conducting buying and recall tasks and it is also responsible for delivering different analytics and warehouse services.

The level of centralization in Metsä Fibre is medium. Purchasing is managed centrally but it is operated decentralized in mills thus purchasing is operated as hybrid model. The interviewee mentions that the reasons for centralizing Metsä Fibre's purchasing has been the general trend to centralize. Through centralized purchasing the company has aimed to gain economies of scale, improve negotiation power and to improve the coordination and management of the purchasing function. The interviewee says that he is contented to the current level of centralization but they could centralize even more also in the whole Metsä Group level. Now the biggest centralization cases are done thus the focus should shift into smaller centralization cases. From this comment it can be concluded that centralization is seen as direction for purchasing.

The centralization cases should be identified according to the strategic importance of the purchasing and to the pooling possibilities. Financial volume is not seen as the main issue for centralizing purchases. If some product or service is used in more than one mill and if it requires expertise from the vendor the purchases should be operated centrally from one vendor. However the pooling possibilities should be identified in Group level purchasing categories.

Metsä Fibre's purchasing tasks are divided into mills and into centralized purchasing. As said the purchasing managers are responsible for mill's purchasing operations. Purchasing manager is doing more strategic tasks such as negotiation and making contracts with vendors. Operative buying tasks are outsourced to BMS and the tasks include making mostly purchase orders and recalls. Purchasing categories are supporting Metsä Fibre's purchasing. Some of the purchasing categories such as chemicals are purchasing products or services for Metsä Fibre.

The task division could be concluded in simplified manner that purchasing categories and purchasing managers are negotiating contracts which are then used to make purchase orders and recalls by BMS. In addition to purchasing personnel the mill's project managers are participating into purchasing activities by defining technical specifications and through that influencing on supplier negotiations and selection. Purchasing steering is partly done by mill's production and maintenance managers. Controllers from finance department are also participating into purchasing to review processes. The interviewee mentions that they are cooperating with most of the functions but not with sales. The reason for this is that the sales are geographically widely dispersed. The interviewee says that there is always improvement in the level and quality of cooperation. The reason for this comment is lack of resources in purchasing. There are only two purchasing managers who can conduct strategic purchasing thus it causes a lot of pressure to cooperate well with every stakeholder.

About the required purchasing skills and competences the interviewee mentions negotiations and influencing skills, internal sales, technical knowledge, human resource management skills. Sales skills is especially important for internal marketing. In addition ethical attitude and values are expected and required from the purchasing personnel. These are ensuring that the code of conduct is followed and there are no unethical behaviour in purchasing. From this statement it can be deduced that purchasing's ethical aspects are highly valued in Metsä Fibre's purchasing. Overall the skill and competence set defined by the interviewee is promoting the same issues as presented in table four in theory part.

Metsä Fibre is using Metsä Group level purchasing policies, code of conduct and contract templates in coordinating. These are not planned in Metsä Fibre thus they are done in Group level. However in addition to the group level policies the interviewee mentions that they do have Metsä Fibre specific purchasing instruction document which is supporting other policies being used. Also Metsä Group's investment policy and manual is strongly related to purchasing thus it is used in purchasing organisation. In mill level the purchasing instruction document is the most used coordination tool. The aim of the document is to define roles and

responsibilities for each person. The purchasing processes are also defined in detailed manner. Each process step and their responsibilities are described in the instruction document. From these descriptions it can be deduced that Metsä Fibre has a clan like coordination model based on Burton's (2011) classification.

The interviewee says that they have a monthly meeting with material management team which includes purchasing managers, purchasing assistant and one person from Group Purchasing. In these meetings group purchasing and mill purchasing related issues are discussed with participants. There are no specific reporting responsibilities thus issues are usually reported in the monthly meetings. BMS buyers are usually reporting issues to purchasing managers or purchasing category managers.

The interviewee comments that purchasing managers are not part of the mills' management teams. This is seen as a problem because the information flows are disrupted. Some of the mill's issues are going through the interviewee further on to the purchasing managers even though the information could go straight to the mill's purchasing manager if he or she would be a member of the management team. Metsä Fibre's yearly planning is also used as coordination tool. The purchasing related targets and issues that have derived from joint yearly planning are implemented as an operation plan for Metsä Fibre purchasing. The operation plan is done together with purchasing managers and it is approved by production management team and also in company's management team. This process ensures that the purchasing operation plan is aligned with production strategy and with the whole company strategy. Incentives that are used for motivating and coordinating are bonus rewards that are based on the company level targets and personal level targets.

The interviewee thinks that in future the needed purchasing competences will change more towards wide range competences and multitasking kind of competences. In addition to purchasing competences also good sales, technical and legal and especially analytical knowledge are seen as important future capabilities. About purchasing's future in Metsä Fibre the interviewee hopes that the level of centralization would increase. The group level purchasing categories should be

stronger in order to shift the work from mills to the purchasing categories which could do the work centrally. This means that the interviewee doesn't want that the mills would make locally contracts and negotiate with vendors at least in large scale or strategically important purchases. However the interviewee states that with centralizing he doesn't mean that the purchasing personnel should be located in centrally in the same place thus the roles should be centralized. It is seen beneficial that purchasing personnel are in close contact with production in the mills. However they should have central responsibility from the company level purchasing, not just from one mill. In this way the centralization benefits such as economies of scale can be achieved and purchasing is still in close contact with the end users.

The roles should be also defined in more detailed manner. For example there should be dedicated technical advisors who could participate in purchasing tasks. The interviewee says that purchasing's organisational status could be improved significantly by improving reporting and communicating more openly to internal stakeholders.

About outsourcing the interviewee sees that in future operative purchasing tasks can be outsourced to a central unit which would make purchase requisitions or purchase orders and other operative tasks. This would require that the all necessary information would be up to date and in the purchasing systems. Thus system development would enable and make it easier to outsource these tasks in the future. More strategical tasks such as bidding could also be outsourced if the systems would support effective information flow to the service provider. The interviewee mentions that Metsä Fibre is not planning on change the purchasing organisation in the near future.

6.3 Posti Group

The interview of Post Group was conducted on late January 2016 in their headquarters. Posti Group is a Finnish logistics company. It is a government owned company which is providing postal and logistics services to consumers and business customers. Posti Group was selected as a case company since it is operating in service industry which gives a different perspective from manufacturing

environment. Posti Group's purchasing has also good reputation of being advanced in the field of purchasing and also using automation and new systems in their purchasing activities. The interviewee was Vice President Markku Gerdt.

As said Posti Group is operating in postal and logistic industry. It is also operating in the rising businesses such as supply chain solutions which is warehousing services and the additional services related to that. Posti is operating mostly within Finland but the logistics services and supply chain solutions are also in Russia and Baltic countries. Posti Group is organised in matrix organisation with some exceptions. Business units have their own sales and product units but the production or operations and other group functions such as sourcing, finance and ICT are common with all business units in Finland. The exception is that Supply Chain Solutions which have its own sales, operations and product development and Russia which is its own business unit and it is operating independently.

In Finland the group functions in Posti are strongly centralized. For example ICT, HR and Finance are centralized into the Posti Group. Sales and Marketing are decentralized in business unit level but they have also common group level support functions. The Baltic countries and Russia are excluded from these service thus they have their own organisations. This is mostly due to the reason that the volume in Baltic countries is relatively small thus the focus is strongly in Finland. The interviewee comments the reasons for centralization from purchasing perspective and states that the main reason for centralizing purchasing unit was to have better cooperation between other units and functions and to increase information flow within the company. Other reasons were to develop unified processes within function and to reduce overhead costs. It can be considered that these reasons were also affecting into other functions' centralization decisions.

Posti has both highly standardised and productised services but it also has highly but also customized services. The interviewee states that a big issue for Posti regarding standardisation is that the company is constantly trying to innovate new emerging services and products. This causes pressure for purchasing to acquire needed resources. Professional services, more specifically consultant services

have the biggest role in these purchases. The standardisation of purchasing can be difficult in service purchases since the consultancy services are dealing a wide range of issues. This makes it difficult to bundle the purchases thus the efficiency and economies of scale can be lost.

When asked about purchasing's position within the organisation the interviewee mentioned immediately that purchasing is part of the extended executive team which includes CEO and other main business functions' and business units' directors. The interviewee seems to be pleased that purchasing is a part of the executive team. He says that nowadays they are seen as a part of the core functions and in a much better situation compared to the situation couple of years back. However when asked whether purchasing is equal to other functions the interviewee states that purchasing is still strongly seen as a cost factor within the internal stakeholders and it is not as respected as much as for example sales. The lack of respect from stakeholders causes problems in cooperation. The benefits of purchasing are often questioned. This causes conflicts and purchasing needs to prove their value constantly to the stakeholders. According to the interviewee the only way to increase stakeholders' perception about purchasing is to have examples of successful cooperation and real value creation. The key issue in successful cooperation with stakeholders is the organisation and persons. The interviewee states that he has put a lot of effort in order to identify which kind of persons from available resources should cooperate with each stakeholder group. From the purchasing's organisational position in Posti it can be concluded that even though purchasing has the top management's support and mandate it is still crucial to focus strongly on the cooperation with other business functions and units.

As discussing about the organisation culture the interviewee mentions that they have tried to change the culture and break the old barriers between business units. Before the current organisation the businesses were divided into more specific business units which were strongly siloed to their own operations. There were huge barriers to cooperate between business units. As the old business units are tried to unify by having common operations unit in Finland the silos are starting to break. The company is currently having employee cooperation negotiations ongoing and

one of the focus areas is to further improve the organisation culture into a little more open and cost efficient. However there are still a lot of the old siloed us and them mentality between the members of old business units. Interviewee tells that one way to renew the culture is to have new people in the organisation since they don't have the old background and can more easily adapt the wanted culture. The discussion about organisation culture somewhat reinforces the purchasing's position. Within the organisation it is partly seen as a cost rather than a cooperation partner. Posti's organisational culture is seen to be hierarchy typed due to somewhat siloed culture.

The purchasing strategy in Posti is strongly based on Posti's group level strategy. Rather than focusing on one unified purchasing strategy Posti is focusing on purchasing area or in Posti's terms sourcing area specific strategies which can be considered to be one level higher than the widely used purchasing category strategy models. The purchasing area strategies are used in order to be able to focus into different key issues for example costs or quality depending of the type of purchases. The purchasing area strategies are made in cooperation with key stakeholders which ultimately approves the strategies. This indicates that there is still good level of cooperation with stakeholders even though there are some problems working together with the stakeholders. The company is using partnership strategy but it is only used in those purchasing areas where there is potential to gain benefits from the partnership. It is mostly used in strategic purchases. The partnership thinking is used and supported by Supplier Base Management (SBM) tool and process but the benefits from it have not been self-evident. Thus it has been considered in Posti if it would be more efficient to focus on competitive strategy.

Currently Posti's purchasing organisation is organised according to the purchasing strategy areas which are divided into commodity type purchases and more strategical purchases. Purchasing areas are also tried to distribute evenly according to spend. Spend distribution between categories is almost half-and-half. These purchasing areas are: Transportation and Category management. Transportation represents the commodity type purchases which are easy to define. It includes all transportation related purchases. Category management represents the more difficult purchases which includes everything else besides transportation. The

biggest spend areas in this are ICT, facilities and production purchases. The spend in both areas is about 400 million euros. Even though the areas are quite even from spend point of view the but the headcount is strongly focused into the category management team since from over 200 internal stakeholders 80 per cent of them were dealing with purchases related to the category management area. Purchasing areas are responsible for strategic purchasing tasks such as bidding and negotiations.

In addition to the purchasing areas Posti has sourcing excellence team which is divided into three parts: development team, procure to pay team and back office team. The idea of the sourcing excellence team is to support purchasing areas and to release their time from operative tasks into more strategic sourcing tasks. The purchasing department of Russia is also under Group purchasing but it has its own organisation in Russia which is divided into direct and indirect purchases. Russian purchasing organisation has a reporting responsibility for the purchasing area leaders and it is managed by group purchasing. Baltic countries are not yet included into group purchasing organisation but the interviewee states that it is in the near future's scope to have dedicated purchasing personnel into Baltic countries also. From the current organisation structure it can be said that Posti has highly centralized purchasing organisation within Finland. If however Russia and Baltic countries are counted in the purchasing organisation is operating in a hybrid model where functions are decentralized thus centrally managed. The organisation structure model seems to be functional organisation structure.

The reasons for centralizing purchasing was to gain better cooperation between units. This means that the fragmented units that were purchasing with low volumes from same suppliers which didn't discuss with each other at all could now cooperate together. The benefits that were sought from centralization were: increasing cost efficiency through economies of scale and scope, increase transparency of spend and to use human resources more efficiently and to focus the usage of human resources into needed purchasing operations. These factors are all supporting the benefits of centralization that are presented in the theory. Interviewee also mentions that the two major factors for centralizing were to get a stronger management for

supplier base and to increase supplier compliance. The interviewee discusses about the importance of supplier compliance especially within large organisation where sub-contractors are widely used. The social and environmental policy compliance is a huge factor for Posti's purchasing. This shows that even though the top management is more interested in cost savings than compliance benefits Posti's purchasing is taking

Since Posti has a highly centralized purchasing organisation and the purchases are already done centrally there are not that many pooling opportunities left. For example the purchases done in Baltic countries represent a fraction of whole group's spend volume thus there is no interest to focus on centralizing or pooling those purchases. The only pooling possibility that the interviewee mentions are ICT purchases which can be done globally. The interviewee thinks that the benefits of pooling should be always measurable and there should real possibility to create value. Purchase cases should be identified by the standardization possibilities and cost savings possibilities.

The task division within Posti's purchasing organisation is that strategic purchasing tasks are done in purchasing areas and sub categories. Operative purchasing, ordering related tasks, are done in P2P team. Strategic decisions are made by sourcing area managers. Everyone from the purchasing area or category team is participating for example in making purchasing area strategy but the responsibility is in area leader. Most of the operations are done centrally however the actions are done in cooperation with stakeholders. As mentioned the purchasing strategy is done in cooperation with business stakeholders which have the ultimate approval power. Strategic purchasing tasks such as supplier selections and management are done centrally but it is as well done in cooperation with stakeholders. The interviewee emphasises that they have succeeded especially in purchasing's early involvement concerning of strategic purchasing projects. Purchasing organisation is involved in every upcoming large scale purchases from the beginning of the process and purchasing has representatives in each of these kind of purchasing project's steering groups.

Operative purchasing is divided into central P2P team and to dedicated end users. End users can make recalls via electronic catalogue called SupplyCenter. From the catalogue end users can order most of the normally needed products. P2P team focuses on making purchase orders from products or services that are not in the catalogue. They are also maintaining the content of the purchasing catalogue. The task division model that Posti is using seems to be strongly supporting the task division model presented in the theory.

The interviewee mentions that rather than thinking general competences the required purchasing competences should be categorised according to the strategical level of the task into tactical and strategical competences. Interviewee mentions that purchasing organisations in general should focus and develop more the strategical competences and push the tactical work and skill requirements as near the end user as possible. By this the interviewee means that purchasing organisations should move towards hybrid model. Tactical skills includes mostly process, product and purchasing policy understanding of the company. These skills are required in order to conduct biddings or make purchase orders effectively. When moving more towards strategic purchasing the competences should focus on issues such as: influencing skills, “out of the box” and innovative thinking and cost structure understanding. Interviewee mentions that in order to develop purchasing into a more strategic function the key competence is influencing and internal marketing skills. By this the interviewee is meaning how purchasing can gain higher status and position within the organisation.

Posti’s purchasing is coordinated and controlled by group purchasing. The organisation is using purchasing area strategies as a coordination tool. Organisational reporting hierarchies within purchasing goes from managers to sourcing category managers and sourcing area managers which are then reporting to sourcing vice president. In addition to the purchasing strategies Posti has also a global purchasing policy which is used to coordinate purchasing activities in all countries where Posti operates. Country specific purchasing policies are derived from the global purchasing policy. The policies are defining purchasing roles and responsibilities. In countries where Posti Sourcing does not have personnel onsite

the sourcing related roles and responsibilities are included in some local employees' work description. Through defined responsible persons the coordination is easier for example in Baltics which does not currently have its own purchasing organisation.

The compliance policy is strict for external suppliers and code of conducts are used. In addition the compliance policy is also impacting on internal people. There are strict rules to purchase only according approved processes and from approved suppliers. From maverick buying the company will give warnings for employees. Due to high level of formalisation and centralization in coordination of purchases Posti can be categorised to use Burton's (2011) machine coordination model.

At the time of interview Posti had ongoing cooperation negotiations thus the interviewee couldn't answer how they are going to organise Posti's purchasing organisation in the near future. However the interviewee speculated and gave his own opinions about purchasing's overall future trends. The interviewee is considering that the question about purchasing centralization is constantly changing like a wave from decentralized to centralized organisation model. The next possible move for Posti could be to change from strongly centralized purchasing into decentralized purchasing. However this would require system which would support the purchasing personnel to keep strong connections and control over suppliers. The role for centralized purchasing in future would be more a strategic function which is coordinating the purchasing organisation, assessing and selecting suppliers and ensuring both external and internal purchasing compliance.

“ The role of purchasing in the future will be a watchdog type model where the coordination and compliance is managed centrally but operations are done decentralized”

The decentralization of tactical or operational tasks has come up in other parts of the interview as well so it could be considered that stronger decentralization and hybrid organisation model are very likely parts of future changes in Posti's purchasing organisation.

Outsourcing is seen as a possibility in the future but the interviewee is not perceiving the third party service providers' processes good enough in order to outsource whole function. Currently 3PLs are providing extra working resources into bidding and ordering processes thus they are not adding value. As a temporary external workforce for example into a large purchasing projects outsourcing is seen as a possible option.

6.4 ABB Group

The interview of ABB Group was conducted in early February 2016. ABB Group is a Swiss origins multinational corporate which is operating in automation and power technology industries. Due to a large size of ABB Group the interview is focused on a specific product group area in order to have a more comprehensible interview. The selected product group area was Large Motors and Generators and the interviewee was Global Supply Chain Manager Vesa Hukki. ABB Group's purchasing was selected because it represents manufacturing industry and it has a good reputation in the of having advanced sourcing organisation. In order to clarify the interview analysis the company's product group Large Motors and Generators is referred as ABB in the analysis.

The product group area Large Motors and Generators is fairly new and it is still under implementation. Generators business and Induction motors business were merged together in October 2015 and the current product group is derived from the merger of these two businesses. The product group is operating in seven countries and it has nine factories. The product group is Manufacturing takes place in Finland, Sweden, Estonia, Italy, Brazil, India and China. These countries are further on grouped into regions which are Europe and Asia and in addition Brazil is as its own region. There are seven product lines such as induction motors, small generators and stroke engines and generators. The product lines are operating in the countries. The product group has its own sales, marketing, R&D and purchasing units which are operating throughout the countries. Due to the different product lines it can be considered that the product group has a divisional organisation model. The

organisation model within the product group level is fairly decentralized hybrid model. Jointly managed support functions are indicators of centralization however the functions are still operating in decentral level. ICT has been outsourced for a long time thus ICT service desk is centralized.

Since ABB is operating in project business the products are mostly always customized to customers' needs. There are some large motors that are from ABB's perspective very standard but from customers' perspective they seem to be customized for example regarding the size or voltage specifications of the motors. Standardized products are easier for purchasing since there the main variance is only in quantities of raw materials being used. However otherwise when the products are highly customized it causes pressure for purchasing function to acquire multiple different products. For example there are hundreds of different copper products being used in the manufacturing process for different customizations.

Due to the product group organisation the cooperation with different functions is good. Since ABB is working in project orientated business all orders have to be designed specifically to the customer needs. This requires a lot of product development work which further on requires purchasing's participation. ABB has categorised development project into three groups: engineering related projects, commodity projects and sourcing projects. Engineering projects are strongly focusing into customizing the product structure, for example the technical specifications or manufacturing costs. Commodity related projects are focusing on decreasing product price or increasing the availability. Lastly the sourcing projects are focused in seeking new suppliers. ABB is strongly promoting cross-functional cooperation which is especially important in these three project categories. Purchasing is cooperating mostly with R&D and product management units since they have such an important role in customizing the products, determine the needed product specifications and to evaluate whether the vendors are able to fulfil the needs or not. The purchasing can be seen as an enabler of these projects. From the interviewee's statement it can be concluded that the functions are working well together and they have equal status within organisation. The interviewee adds that

one good reason for the functioning cooperation is stable purchasing personnel which is getting along fine with others.

Interviewee states that purchasing is well valued function within ABB. 70 per cent of the costs are related to the purchasing. Purchasing has huge potential impact on business profitability thus the businesses and other functions has realised the value of professional purchasing organisation. However the interviewee says that it is not only the cost savings which is needed in order to gain the respect. Equally important factors are the factors which improves the production. These factors are for example: ensuring supply, product availability, short delivery times and vendor quality.

The organisation culture in ABB has been very siloed in factory level but also within factories. The product group organisation model that ABB has implemented in 2010 has helped to shift towards more unified organisation culture where the total profit of the whole product group is valued more rather than single product line's profit. Purchasing organisation is especially interested to build a unified organisation culture in order to better cooperate with each other. Because of the strong cooperation orientation ABB's organisational culture is clan typed.

ABB has a multi-layered purchasing strategy. First there is overall group level purchasing strategy but there is also business unit level strategy which is further on divided into product group specific purchasing strategies. Before the purchasing strategies were a part of product group strategy but since the product group level purchasing unit is so big they are currently making their own purchasing strategies. The interviewee emphasises strategy needs to be in line with group level purchasing strategy and also with product group strategy. ABB's purchasing strategy is focusing on reducing total costs, standardise purchases, increasing supply availability, improving supplier quality and improving payment terms. The purchasing strategy is focusing more on centralising purchases from small local suppliers to larger partner suppliers.

The product group's current purchasing organisation is new since the purchasing organisations from former two individual product group's Generators and Induction Motors were merged into a one purchasing unit. In high level ABB has divided the purchasing into indirect and direct purchases. Indirect purchases such as office supplies, leasing cars and hotels are mostly managed decentralized in country level. There are specific country level indirect purchasing personnel who are managing those purchases. The large contracts for example logistics contracts and contracts with airline companies are negotiated in group level and managed in country level organisations. There are different group, division and region teams who are managing the indirect purchases. The purchase organisation for direct purchases in ABB is working in a matrix model where commodity type joint purchases are centralized and business line specific purchases are decentralized into the factories. As well as other case companies, ABB seems to also use hybrid model for operating purchases.

In product group level the purchasing organisation is decentralized into the factories. In each factory there is a purchasing director who is leading factory level purchasing. Purchasing director has a team of purchasing managers who are conducting strategic purchasing tasks. In addition there is an operative purchase team in every factory. These operative teams are under the supervision of purchasing or factory's production. This organisation is under the interviewee's responsibility as global supply chain manager in Large Motors and Generators product group.

The commodity type large spend purchases are centralized into business unit or global level purchasing organisation. This spend is about 50 per cent of all the purchases. There are 10 global purchasing product categories and 21 business unit level purchasing categories in ABB. For each purchasing category there is one category manager in each region. This team of category managers will manage the commodity type purchases for all factories in global or business unit level. In addition for each active vendor there is a defined vendor responsible person within region or country level. However business unit level category leaders are cooperating with factories. For each purchasing category there is a category team which is led by

category manager and there are representatives from each factory. From the ABB's purchasing organisation structure it can be said that the level of centralization is medium. Although the factory specific purchases are decentralized into factory level the large volume spend is centralized into the business unit level. The organisation structure can be seen as partly centralized matrix structure. Since the purchases are operated both centrally and in decentralized manner it can be concluded that the level of centralization in ABB's organisation is medium.

The interviewee states that one of the most important purchasing centralization factors are standardization and possibilities to gain synergy benefits. Especially for commodity typed products where there is large supplier base it is important to centralize purchasing in order to gain economies of scale or scope. Centralization of the spend is also almost the only possibility to increase negotiation power in the situation where there is only one or very few suppliers available. ABB has some of this kind purchases where pooling is the only possibility to have satisfying prices. Otherwise the negotiation power would be too low in factory or country level. The financial volume is not the only factor for centralizing purchases. Strategic importance is another factor that needs to be taken into consideration. Materials which have difficulties in supply and they are related into the core functions should be centrally managed and ensure the availability for each and every one of the factories and units. As a main principle the interviewee states that purchasing centralization requires that purchasing is strategically important or purchases are repetitive and have enough high volume. If the volume is low there is no point to focus on purchasing centralization because the gained benefits would be small. Geographical locations are also impacting into the centralization cases. If the suppliers are located in a way that they have possibility to supply for all product group's factories it is reasonable to centralize for one supplier. However if the supplier is located far away from some factories which would mean long delivery times for those factories it does not make sense to centralize thus using local suppliers would be more efficient.

ABB's purchasing task division is centralized and decentralized due to the division between factory level purchases and business unit level purchases. ABB's tasks

division model is supporting the model presented in the theory but ABB's model is leaning a little more to decentralized task division. High level strategic alignments such as purchasing strategy and policies are done centrally. As presented earlier there are also certain purchasing categories which are managed in business unit level. However within the product group the factories have their own purchasing organisations which are doing both strategic and operative purchasing tasks. Thus factories role is not just to make recalls as the model in theory part presents. In operative tasks some spare parts and commodity typed products are given to vendors' responsibility as a vendor managed inventories. Other units especially R&D and product management are also participating strongly on purchasing tasks. They are involved for example in supplier selection and product specifications because these tasks are strongly related into these units' tasks.

The interviewee emphasises that in the field of industry that ABB is operating the strategic purchasing personnel should have good technical understanding about the products and strong experience from purchasing tasks. By this the interviewee means that purchasing personnel should also have experience about operative side or good understanding about the purchasing processes. Also purchasing systems knowledge is becoming important as the use of e-sourcing systems such as e-auction are growing. Negotiations and influencing skills are considered to be key competences in purchasing. The interviewee emphasises cultural understanding aspect in influencing skills. Cultural understanding is referring to the issue how cultural differences are affecting into the negotiation situation and how it could be taken advantage both before and during negotiation situation. The importance of this competence is highlighted in ABB since it is operating in very different cultural environments. This kind of knowledge gives the purchaser an indication what is his or hers purchasing power in the negotiation situation which further on is a key issue in succession in the negotiations. The interviewee is not focusing strongly into operative competences since ABB is reducing their operational purchasing tasks by automating the processes.

ABB is strongly focusing on purchasing coordination. ABB is requiring that its code of conduct is approved and followed by every supplier. For internal coordination ABB

has also internal policies, trainings and rules which are followed in purchasing. Approval practises are also rigid. There is always approvals for orders and for large valued purchases two approvers are required. If the purchase value is really big there can be even four approval stages. Approvals are also internally audited regularly. The interviewee tells that he coordinates the purchasing by having three meetings in month for each factory where the factory's engineering, sourcing and commodity purchasing projects' status are revised and all the project road blocks are went through. In addition there is monthly meetings for purchasing KPIs and one meeting from cost reductions. The reporting responsibilities in ABB purchasing are in matrix hierarchy. Factories' purchasing directors are reporting both to the interviewee and business unit purchasing organisation.

The interviewee says as a joke that "trust is good but control is best" and "you'll get what you measure". This clearly indicates that coordination is seen as an important part of purchasing operations. However the interviewee states that overly controlling management will hinder the effectiveness. Predictability of problems, measuring and trust for the employees is a key for successful coordination. For rewarding the interviewee tells that ABB purchasing uses general target settings such as ensuring supply, product availability, short delivery times and vendor quality. In addition there are personal and factory specific targets which are used to measure bonus rewarding. From these discussions about coordination and control it can be concluded that the level of formality is high in ABB. Due to the high level of formality but rather low level of centralization ABB can be seen to use the clan coordination model presented in the theory part.

From future plans the interviewee tells that the plan is to move into region specific purchasing teams and to find purchasing synergies within the regions within the whole ABB Group. ABB Group is going to merge two large business divisions in group level. The regions would be divided into large entities such as Europe and Asia. The regions would have one lead buyer or category manager for each purchasing category and for each vendor. In this step the strategic purchasing would be centralized in group level. Operative buying would also be transferred into centralized service centres and there would be one or two centres within each

region. The shared operative purchase centre is operating in-house but it could be outsourced in the future. With this change ABB Group is trying to further focus strategic purchases, consolidate volumes and reduce labour costs from operative purchasing. The interviewee says that the implementation of the new region purchasing organisation is crucial to do all at once and fast. The interviewee states that ground breaking organisational changes are better to do at once rather than being in a malfunctioning model for a long time. If the implantation is not done right away and in one piece it will not be successful.

From outsourcing the interviewee tells that ABB is already using external workforce in operative purchasing tasks mainly to support their internal team. External workforce is making for example purchase orders. Strategic purchasing outsourcing is also possible but ABB has experience of only few cases where strategic purchasing tasks were outsourced. The benefits of outsourcing in these cases weren't obvious. The interviewee says that specific purchasing task areas, mainly operative side but also strategic side are possible to operate with external workforce. However it will require that the externals have clearly defined roles and responsibility areas and the superior needs to coordinate the external personnel actively. By this the interviewee emphasises the role of purchasing coordination and control. Outsourcing is also very business specific. The interviewee thinks that if the purchasing is not related into production planning the outsourcing could be possible. If however purchasing is affecting into the core competences and core production of the company the purchasing should be operated in-house because purchasing unit has to have really deep understanding about the business environment and its requirements.

From the centralization and decentralization question the interviewee says that it moves like a pendulum from a side to another. First from centralized purchasing to decentralized model and so on. Now they are centralizing the purchasing but in long run the focus will turn into decentralization again. This also applies into outsourcing. First functions are outsourced and then later on they are insourced again.

6.5 Analysis between interviews and theoretical framework

The interview analysis results from each case company are concluded in this chapter into the table 8 below. The table concludes the analysis results and they are grouped into 14 groups according to the predefined themes and theoretical framework. Overall the interview results had many similarities but as each and every organisation is individual and the company is affected by different issues there are some differences also.

	Metsä Board	Metsä Fibre	Posti Oyj	ABB Oy
Company's general organization structure	Process	Process	Matrix	Divisional
Level of centralization in company	Medium	Medium	High	Low
Standardisation	Medium	High	Medium	Medium
Purchasing's status in company and top management	Low. Operating under production unit. Valued as function. Status gained by results	Medium. Operating under production unit. Status gained by results	Medium. Still lot of improving with internal stakeholders. Status gained by results	High. Functioning cooperation with other units. Status gained by results
Organisation culture	Hierarchy: Unified and coherent. Strong management orientation	Adhocracy: Open and communicative. Promotes cooperation and continuous development	Hierarchy: Siloed culture. Need to break silos and communicate better	Clan: Siloed in whole company level. In product group level unified culture
Purchasing strategy	No written strategy. Uses Metsä Group level purchasing category strategies. Focus on negotiating better contract terms such as payment terms and prices. Competitive strategy orientated	No written strategy. Uses Metsä Group level purchasing category strategies. Focus on cost effective material and service purchases. Competitive strategy orientated	Based on group level strategy. Sourcing area strategies done in cooperation with key stakeholders. Partnership orientated	Product group strategy. In line with global purchasing and production strategies. Focus on total cost reductions, standardization, supply availability, improved supplier quality, payment terms. Partnership orientated
Purchasing organization	Matrix	Matrix	Functional	Matrix
Level of centralization in Purchasing organization	Low, hybrid model used	Medium, hybrid model used	High, hybrid model used	Medium, hybrid model used
Centralization targets	Standardization & pooling possibilities	Strategic importance & pooling possibilities	Standardization & cost savings possibilities	Standardization, synergy: economies of scale & scope, strategic importance
Purchasing task division	Purchasing strategy, policies and other strategic decision made centrally. Some strategic tasks and all operative tasks decentralized	Strategy made in cooperation with other functions. Other strategic decisions such as operation plan done centrally. Some strategic tasks and all operative tasks decentralized	Strategic decisions and tasks centralized and made in cooperation with stakeholders. Operative tasks both centralized and decentralized	Strategic decisions made both centralized and decentralized. Strong cooperation with R&D and product management. Operative tasks mostly decentralized
Required purchasing skills	Process, supply market and technical knowledge. Analytical, negotiations and influencing skills	Multitasking skills: purchasing, legal, sales, technical and analytical skills	Operative, tactical & strategic division. Negotiations, influencing and internal marketing	Technical, negotiations & influence skills, cultural understanding
Purchasing coordination & control model	Mosaic / Clan	Clan	Machine	Clan
Incentives	Bonuses	Bonuses	Bonuses	Bonuses
Purchasing's role and future aspects	Outsourcing not seen beneficial. Purchasing's role can decrease if cost inflation can't be beaten	Increased centralization regarding the roles. Geographical centralization not seen as necessity in strategic purchasing. Outsourcing and centralizing operative tasks seen as possibility.	Central purchasing as coordinator and watchdog role. Operative tasks decentralized. Outsourcing is possibility for temporary external workforce	Centralized Region level strategic purchasing and operative purchasing service centers. Outsourcing already used. Can be used in strategic purchasing but effective coordination is required.

Table 8. Comparison of interview results.

As a short conclusion of the interviews Metsä Board was an example of a company which has a hybrid model operated purchasing. The purchasing is managed centrally but the operations are decentralized. Metsä Fibre had small purchasing organisation which had also central management but operative tasks were outsourced and operated decentralized. Posti has high centralization in their purchasing thus they are developing the purchasing towards a hybrid model where the end user could be participated more on operative recall tasks. ABB has a multi-layered purchasing organisation which is centrally managed but operations are also decentralized as in almost all the other companies. ABB has the most international purchasing organisation from the four companies.

Next the interviews results are compared with the theoretical framework of this research. The comparison is grouped in the same order as the interview analyses were grouped in table 8. Each interview theme is analysed one by one.

The first theme is organisation's structure. The literature points out that there is no single right structure for all the companies thus the structure should be supporting the organisation. The importance regarding the structure is to understand how it will impact on other organisation issues such as internal communication. The case companies had different organisation structures. There is no evident best practice about what the company structure should be since each case company have their own characteristics and orientations. For example Posti Group is the only one of the case companies which is using matrix organisation which was seen as flexible and effective organisation according to literature. However Metsä Board is using process organisation because full matrix organisation is seen to make the responsibilities unclear. Metsä Fibre is organised also into process structure because it is seen as efficient way to operate business throughout the mills. ABB is using more traditional divisional structure. The choice follows exactly according the theory that large scaled diversified companies prefer the divisional structure because single divisions are more easily manageable than one large entity. However the negative side is that the structure may create silos within the organisation and this is also the case with ABB. From the case company interviews it can be seen that the companies' choices and goals that are tried to achieve with the structure are in line with the theory. It

can be seen that companies tend to favour matrix alike organisation structures due to the flexibility and efficiency needs.

The level of centralization within the case companies is medium except with Posti which has high level of centralization. Company's level of centralization is an indicator of the attitude towards centralization in general. It is also important for decision making within the company. Centralization improves efficiency and keeps the company unified. However as companies grow decentralization is seen more beneficial because of the bounded rationality related to too high centralization. The main issue according to theory is that the level of centralization should be in line with company strategy. The case companies choices seems to be in accordance with the theory. Centralization is seen as target but some of the functions are decentralized mainly due the large size of the organisation and geographical distances. For example Metsä Board tries to achieve cost savings and increased efficiency in decision making by focusing on centralization. Company strategy is also focusing on centralizing the operations and to only focus in the core competences. However for example sales units are decentralized due to global operations and geographical distances. The interview results support centralization as long as it is feasible and in line with corporate strategy.

Standardisation of processes and products is much related to the field of business that the company is in. Although companies would try to standardise products and related processes it may be very difficult thus they should know what to standardise. The lack of standardisation can cause the purchasing to be inefficient. Metsä Fibre and Metsä Board have the highest level of standardisation because they both are producing very standardised products with only some small differences in quality and detailed specifications. ABB has low level of standardisation because it is operating in project business where each product is customized according to customers' needs. However ABB, Metsä Board and Metsä Fibre have succeeded to standardized some basic products and raw materials used in production. This has facilitated the purchasing of these products. Also economies of scale has been achieved with standardisation. Posti has some standardised services but the company tries constantly innovate new services which will cause pressure for

purchasing function especially to procure professional services. Metsä Fibre also states that purchases with the most variation are service purchases which can differ a lot thus the purchases can't be pooled. Even though the case companies haven't succeeded to standardise all of the purchases each of the interviewees sees standardisation as important issue that should be tried to achieve due to the benefits such as economies of scale and increased negotiation power. This shows that the companies should try to standardise the products and purchasing processes as much as possible in order to gain the benefits. The focus of standardisation should be in the purchases that are easily standardisable such as basic components and raw materials.

Configuration and power relationships within the company are related to purchasing organisation's status and hierarchies within the company. Status should be high in order to have enough decision power to really create value. It is difficult for purchasing to operate without top management's mandate. For good internal cooperation with other functions it is also important that purchasing is seen as equal with other functions. To gain good status in the organisation purchasing also need to have potential to create value.

The case companies had various status within their own organisations. In Posti and especially in ABB purchasing organisations have high status and they are seen as equal with other functions. In case of ABB purchases are 70 per cent from the total costs thus purchasing has huge potential to contribute and to create value. Purchasing is also cooperating efficiently with other functions which increases its valuation. In Posti the purchasing function has strong mandate from top management.

Metsä Fibre's purchasing is also valued for their achievements and process improvements. It is seen equal with other functions but there may be some strategic emphasis towards other functions. However purchasing in Metsä Fibre is operated as part of the production unit. The same issue is in Metsä Board where purchasing is seen as a support function thus not completely equal for example with sales and production. Purchasing function is not an independent function thus it decreases the

organisational status and decision power but purchasing can still operate efficiently in both case companies. Each of the interviewed companies emphasise that the valuation, respect and high status of purchasing organisation can only be achieved through results. Whether it is cost savings, process improvement or supply availability, purchasing function need to make results in order to be valued and the results need to be strategically important for the company. From the comparison it can be concluded that in order to achieve high organisational status the purchasing has to create value and achieve results. However high organisational status is not a necessity especially if purchasing doesn't have great potential to create value.

Organisational culture is also important issue for effective organisation. It is important factor for example for productivity and job satisfaction. According to the theory organisational culture should be unified and even though sub-cultures would exist it would be beneficial to unite the cultures as much as possible. The organisational culture type doesn't have great importance as long as it is in line with the company strategy. However the level of unification is seen as important. The case interview companies had various types of organisational cultures but the importance here was to notice that siloed cultures are hindering the organisations. Posti has still somewhat siloed culture which is hindering the cooperation with other functions. ABB also had siloed culture before but by unifying different units into a larger cross-functional entities the culture has developed towards a more unified culture. Posti is also trying to unify the culture by creating common operations between siloed units. Metsä Board and Metsä Fibre are both organised in process structure which means that both of the companies have unified processes within their organisations. In addition Metsä Fibre is focusing on cross-functional cooperation which increases the unified feeling and culture. The interviewee in Metsä Board also mentions that unified KPI measurements and changeless staff has helped the organisation to achieve unified mentality. From the comparison between theory and interviews it can be concluded that unified organisation culture is important and it should be tried to achieve by having cross-functional processes and high level of cooperation in general.

Purchasing strategy is the key issue in organising purchasing organisation. According to the theory part, as in company level the organisation structure has to be aligned with company strategy the purchasing organisation structure has to be in line with purchasing strategy. In addition the purchasing strategy needs to be in line with company level strategy. All of the companies' purchasing strategies are based on group or company level strategies and this practice supports the theory part. An interesting issue in purchasing strategy is to figure out what are the purchasing organisation's goals and how to achieve them. Purchasing strategies can be categorised into competitive and partnership type strategies. According to the literature both strategies should be used depending on the nature of the purchase. This is only partly supported by the interview results because in contrast to the theory which emphasises the benefits of partnership model, most of the interviewees are somewhat sceptic towards the benefits of partnership strategy. This may be due to bad experiences where the risks of partnership model has realized or the chosen partner vendor hasn't been capable on adding real value. However the companies are using partnership model in certain purchases if the benefits can be achieved.

Metsä Board and Metsä Fibre do not have written purchasing strategy thus they both follow strongly on Metsä Group level purchasing category strategies where the focus area is depending on each category's characteristics. However both companies have their own focus areas also. Metsä Board is focusing simply to negotiate better contract terms in order to support and create value for the production unit. Metsä Board is using competitive purchasing strategy thus the benefits of partnership strategy are not seen to realize in real life. Metsä Fibre is focusing on making cost effective material and service purchasing by leaning towards competitive strategy. In contrast Posti and ABB are relying more in partnerships model. However Posti is a little sceptic about the gained benefits of partnership model thus competitive strategy could be used. In ABB the focus is for example in total cost reduction, standardisation and supply availability and with large partners suppliers. Posti uses purchasing area specific strategies where the focus can vary for example from cost savings to improved quality. From the comparison it

can't be concluded which one from competitive or partnership strategy would be better thus it should be concluded that the strategy should be selected case specific.

Case interview companies' purchasing organisations were mostly operated in matrix organisation. Posti is the only case company which has organised purchasing into the functional model. For the companies the matrix organisation provides flexibility and efficiency since the operations can be divided into different cross-functional horizontal categories or units. Matrix organisation helps to divide the work into reasonable parts and to focus on a single part rather than to a large entity. The focus into certain category will also help to pool the purchases thus gaining benefits through that. Metsä Fibre, Metsä Board and ABB are all part of a larger group or division specific purchasing organisation. Due to this reason it may have been reasonable to organise the purchasing into a matrix organisation. However Posti has only one unified purchasing organisation thus it is reasonable to keep clear line of control and responsibilities.

The level of centralization in the purchasing organisations vary a lot. However none of the case companies' purchasing organisation was fully centralized or decentralized. According to the theory centralized purchasing organisation is seen more professional than decentralized purchasing. Centralization can increase the purchasing's organisational status and ease to capture synergies. However the theory doesn't suggest that all tasks should be done centrally. Just as case interview companies are organised the theory is suggesting that the most effective way to organise is a hybrid model. In the hybrid model more strategical and demanding tasks are operated centrally and operational tasks such as ordering are done decentralized. Posti has the most centralized purchasing organisation. It is almost completely centralized but some recalling tasks are decentralized to end users across the company. Other companies have centrally managed purchasing organisations but more strategical tasks such as supplier negotiations are done both centrally and decentralized manner depending on the level of centralization. Metsä Board has the lowest level of centralization thus most tasks are operated decentralized. This is because purchasing is operated with as little human resources as possible thus decentralization will ensure that each mill is represented. Even

though only one case company has the level of centralization that the theory suggests the interviews comparisons supports the theory that hybrid model is the most effective way to organise purchasing. If possible strategic purchasing tasks should be centralized and operative ordering and recall tasks can be decentralized.

Even though centralization is seen as beneficial the companies should know when to centralize and in what centralization cases they should focus into. The theory suggest that the main reasons for centralization should be standardisation and cost savings potentials. Other factors for centralization are need to ensure long term supply availability, oligopolistic supply market structure, strong purchasing expertise is required in the process and short geographical distances between units. The interviewees emphasised much the same issues as presented in theory. The main issues discussed in the interviews were also standardisation and cost saving potential. All the interviewees commented that there should be some value generation potential in order to centralize purchases. For example ABB is focusing on centralizing commodity typed product purchases in order to increase negotiation power which otherwise without purchase centralization would be weak. ABB's widely dispersed geographical locations will lead into purchasing decentralization as the theory suggests. In addition to financial value potential the strategic importance of purchasing emerged as important centralization factor. Metsä Fibre and ABB are both suggesting that if the purchase is strategically important it should be centralized. Partly this is due to the purchasing expertise required in the process.

Involvement or in other words task division is a key factor in organising the purchasing function. According to the theory part the purchasing tasks should be divided fairly centralized to the purchasing. Strategic decisions and policy making should be done centrally by purchasing. Other purchasing tasks such as supplier selection and negotiations can be divided more within the company and operative tasks can be also decentralized. The case interviews are strongly supporting this task division model. Each case company is using the almost the same task division model. The only exception is that Posti has also centralized operative purchasing to a small Procure to Pay team. However recalls are also made by end users through e-purchasing catalogue. ABB has also decentralized some strategical tasks such as

supplier management into their factories due to the geographical distances. Even though purchasing tasks should be mostly centralized to purchasing's responsibility most of the activities should be done in cooperation with other units. ABB has especially strong cooperation for example with the R&D unit. In Metsä Fibre and Metsä Board the operations are also done in close cooperation with units' personnel. Posti is involving internal stakeholders even into purchasing strategy making thus the stakeholders are finally approving the strategies. From the comparison it can be concluded that the purchasing task division should follow the model presented in the theory but more emphasis should be put on the cooperative way of working.

There are a wide range of required purchasing skills according to literature. The general key capabilities for purchasing personnel are influencing and negotiation skills and technical knowledge. Other capabilities and skills are for example process understanding, legal knowledge, analytical and team working skills. The required skills should be divided into strategic and operative skills thus strategic personnel need more strategic understanding and influencing skills whereas the operative personnel need multitasking skills, operative process and technical knowledge. All of the interviews are strongly supporting the skill set presented in the literature. Most important skills derived from interviews were analytical thinking, negotiation and influencing skills and process, supply market and technical knowledge. The interviewees also mentioned that the skills should be categorised more specifically to strategic and operational skills. One important capability identified by ABB was also cultural understanding which relates into the supplier base management and negotiations in foreign countries. The comparison between theory and interviews reinforces that the key capabilities and skills presented in theory should be required from purchasing personnel. The required skill set should be also divided into strategic and operative skills thus the company can decide on which skills the two categories are focusing into more specifically.

Coordination and control is related to the level of formalisation and centralization. The literature suggests that the coordination style should be in line with the company's strategies. High level of formalisation, use of predefined rules and policies is seen as simple and effective coordination model. Especially if same type

of problems are occurring often in the organisation high level of formalisation is suggested. High level of centralization is also preferred in standardised and stable environment. However too hierarchical coordination can decrease flexibility. The case interview companies all have high level of formalisation and they are all using different kind of rules and policies to coordinate the operations. Each one of the interviewees supported active control and communication by having different kind of rules, meeting practices and measurements in place. Even though control is preferred too much control is seen as harmful. For example the interviewee from ABB highlights that there has to be mutual trust in the organisation in order to decrease constant control.

Incentives are used as a part of coordination and control to guide employee's work in the wanted direction. The key issue in incentives is that they should really motivate employees. The most common incentive used is a personal financial bonus reward. In addition non-financial incentives can be just acknowledgement from the superior or from the company. The interviewees all stated that they are using personal bonus model as an incentive. Praises and such were also used thus they were regarded as self-evident part of coordination and management.

Future aspects regarding purchasing operations' outsourcing and centralization was the last interview theme. The literature shows that just as other functions the purchasing can be also outsourced if it is not a core competence or strategically important for the company. Outsourcing is usually focusing on indirect purchases but also direct purchases could be outsourced. The company can also outsource only a part of its purchasing organisation such as P2P-process or sourcing process. About the centralization current literature prefers high level of centralization and considers it to be a characteristic of a professional purchasing organisations even though operative purchasing can be decentralized. The interview results are partly disagreeing with outsourcing. For example in Metsä Board it is seen to be unnecessary and Posti feels that the quality level of outsourcing offering is not high enough. However ABB sees the value of outsourcing especially in operative side thus they are planning to outsource operative purchasing into centralized service center. Metsä Fibre has already outsourced the operative purchasing thus supports

outsourcing. Both Metsä Fibre and ABB feel that also strategic purchasing can be outsourced thus it would require very active coordination and strong control. The interview comparison supports purchasing centralization. All of the companies expect Metsä Board sees that centralization of strategic purchasing will increase in future. However for example in Posti the operative recalling is tried to decentralized for the end users' responsibility and the interviewee assess that in future purchasing will have more of a coordinator than an actor role.

In the figure 15 below the interview and theory comparison is concluded into a updated model from the theoretical framework. The updated model includes the best practices which are needed to create an effective purchasing organisation.



Figure 15. Framework of effective purchasing organisation.

By using the framework a company can identify the key issues what to consider in planning of purchasing organisation. The framework provides a model with best practices of how a global company should organise its purchasing.

7 CONCLUSION

This chapter provides a conclusion of the research. The purpose of the research and the research process are shortly revised. The match of theoretical and empirical part is discussed and finally the research results are presented and concluded. Managerial recommendations to Metsä Wood are also given and the future research topics are discussed.

The purpose of this research was to investigate how a global company should organise its purchasing operations. This was the main research question of this research. The focus was to describe what are the key determinants of organising the purchasing operations, how responsibilities and control should be divided in purchasing operations and what kind of benefits can be obtained with effectively organised purchasing operations. These three issues were supporting the main research question as sub-research questions. In order to answer to these questions throughout literature review and empirical research were conducted. The main theme of the literature review was organisational design which guided the review. Theory was divided into general organisational theory which included organisation structures, centralization, management and coordination. The second part was a detailed review about the key factors of organising purchasing operations. This chapter included review of purchasing strategies, organisational hierarchies, centralization and its benefits, task division, purchasing capabilities and purchasing outsourcing. The theory part was concluded into a framework which included some suggestions about how the organising should be done.

In order to provide more detailed and accurate answers for the research questions the empirical research was conducted as a case study. Four different companies were interviewed in order to gather some of the business life's best practices about how to organise purchasing operations. Interviews provided a lot of data which was analysed and further on compared with theoretical framework. As a final result the comparison of interviews and theoretical framework provided a model with 14 points which describes how a global company should organise its purchasing operations

in order to be effective. The model is presented at the end of the previous chapter 6.5.

The key determinants for organising purchasing operations are the 14 points of the presented model. First six determinants are strongly related into purchasing organisational design and they are: standardisation, specialisation, configuration, formalisation and purchasing centralization. Other six determinants are related into organisational issues such as organisation structure, culture, power relationships, coordination, incentives and the company's level of centralization. In addition to this identifying purchasing capabilities and future aspects are regarded as key determinants for organising purchasing operations. These 14 issues were identified as the most important factors to consider when organising the purchasing operations.

The responsibilities and control should be clearly divided within the purchasing organisation and with other functions in order to have effectively working purchasing operations. The key issue in task division is that the more strategic the task is the more it should be centralized to the purchasing management. For example purchasing strategy and policy making should be centralized and done by purchasing management. However it should be remembered that purchasing is a service function for the rest of the company thus strong cooperation with other functions is required. For example purchasing strategy can be made in cooperation with main internal stakeholders in order to include their needs into the strategy. Supplier base management tasks can be operated centralized or decentralized way but the responsibility should be in purchasing organisation. Engineering, R&D or production process knowledge is usually needed into SBM tasks thus cooperation should be strong between purchasing and these functions. Operative recalls can be decentralized and the tasks can be operated by purchasing or in very basic cases by end users. Purchasing management need to have a strong control over purchasing operations in order to be effective. The best way for gaining control and to coordinate purchasing operations is to have a high level of formalization and centralization.

This model presents an efficient way of organising the purchasing operations which provides many benefits for a company. By adopting a centralized purchasing model the purchasing organisation of a company can achieve for example economies of scale and scope and increase negotiation power. High level of coordination gives rules and policies which help to standardise processes and to increase efficiency. Involvement of other functions to the purchasing operations and a clear task division between purchasing and other functions will improve internal cooperation thus increasing efficiency. When purchasing is regarded to function well it will also increase purchasing's organisational status thus giving more influencing power to purchasing. By identifying key capabilities purchasing can develop its staff and recruit the most suitable candidates into the purchasing organisation.

In conclusion a global company should organise its purchasing operations according to the presented model. However all of the decisions have to be always in line with company level and purchasing organisation level strategies because the strategies are the organisation's key drivers. High level of standardisation, formalisation and centralization are preferred. In the future strategic purchasing operations are seen to be centralized even further on thus centralization is seen beneficial way of organising operations. Purchasing outsourcing provides also a different kind of organisation possibility. Outsourcing operative or low level strategic purchasing operations partly or fully to third parties can be seen as an future organisation possibility especially if purchasing is not company's core competence.

7.1 Managerial recommendations

The results gained from this research can be applied for organising Metsä Wood's purchasing operations. It is suggested that the Metsä Wood purchasing would organise its purchasing operations according to the final model presented. The suggested model for organising the operations would be a hybrid organisation with centrally managed and decentralized operated purchasing operations. The more detailed model suggested would be the following:

Metsä Wood's company strategy is focusing on industrial efficiency which consist of partnerships, simplified operations and production excellency. JIT policy is an important part of the strategy. Purchasing strategy is focusing on same three main issues of industrial efficiency. Partnerships are preferred, processes, operations and systems are tried to consolidate and standardise and finally production is supported by ensuring the supply availability with low total costs of ownership. The company and purchasing strategies used in Metsä Wood are supporting and promoting already some of the results of this research thus the strategies are very suitable for organising purchasing operations efficiently.

Metsä Wood's organisation structure is a process organisation and the level of centralization is medium. Operations are decentralized to mills but support functions except purchasing are fairly centralized. The general organisation structure and level of centralization supports centralization. There is no unified organisation culture in the purchasing since there hasn't been a well organised purchasing function before. It is important that unified culture for purchasing is created after the reorganisation. Overall company culture promotes for example to strong cross-functional cooperation but the mills are siloed and do not communicate with each other as much as they could. These siloes should be broke by starting to cooperate with other units for example by centralizing some purchases. Purchasing should have a stronger power relationship within the organisation in order to create a new image about new and reorganised effective purchasing organisation. In order to achieve this the top management's full mandate for the reorganisation should be gained. In addition the research results show that the best way for being valued in an organisation by other functions the purchasing need to achieve results. The results such as cost savings, ensured supply availability and improved quality should be promoted within the organisation.

Standardisation of processes, operations and systems is a key part of Metsä Wood purchasing's strategy. This is fully in line with the suggestion that the purchasing should standardise as much as possible in order to increase efficiency. In addition to process standardisation the purchases should also tried to be standardised. Expect the wood and logistics purchases Metsä Wood's largest spend goes to MRO

purchasing category. The purchasing organisation should try to standardise these purchases as much as possible. However MRO category includes lots of services which are difficult to standardise thus standardisation can be started for example from MRO products, process chemicals or production related consumable products.

Metsä Wood purchasing is already operated in a matrix organisation because it is operating with Metsä Group level purchasing. Matrix organisation is seen as an effective model and it does not need to be changed. Hybrid model of centralization is suggested for Metsä Wood purchasing where management and strategic tasks are centralized and operative purchasing geographically decentralized into the mills but still working under purchasing organisation. Hybrid organisation is needed because onsite purchasing staff is valued in mills but the management should be centralized in order to gain control over purchasing and capture synergy benefits. The synergy benefits derive for example from centralizing purchases together among the mills. As the results suggests Metsä Wood should centralize purchases between mills if there is a possibility to standardise the purchases, there are possible cost savings related to the purchasing or the purchases are strategically important for the company. Through this the major cost savings and economies of scale and scope can be achieved.

The key issue in organising purchasing operations in Metsä Wood is to define responsibilities and divide tasks. The lack of defined operative responsibilities and task division within mills has been a major problem in Metsä Wood purchasing. The tasks should be divided according to the hybrid model. Management and strategic tasks are centralized and operative purchasing tasks can be decentralized into the mills. However purchasing management should centralize the operative purchasing tasks to small number of dedicated purchasing personnel in the mills. The problem occurred because there were no dedicated persons and a number of people operated purchasing tasks within one mill. By centralizing purchasing tasks for one or two dedicated persons per mill the purchasing operations could be effectively managed and operated. The purchasing management should identify and select one operative buyer for each mill and define clear responsibilities for the buyers.

According to the task division model the buyers should be responsible of procure-to-pay (P2P) process. These operative tasks related into the P2P process can be divided into simple functions such as ordering and receiving of goods. Strategic tasks should be divided according to objectives for example to centralize purchases to the partner vendors. For capturing the synergy benefits the mills' dedicated purchasing personnel should cooperate with each and the whole purchasing organisation should cooperate strongly with other Metsä Wood functions and mills.

Required purchasing capabilities which were identified in the research results help to select correct personnel into the purchasing organisation. Operative personnel should possess multitasking skills. For example production processes, technical and good overall purchasing knowledge is needed. They should also be customer driven and have problem solving and order handling skills. The requirements for strategic personnel are focusing more on supplier base management, negotiation and influencing skills, legal knowledge and analytical thinking.

In order to gain the control and coordinate purchasing level of formalisation should be high. There should be documented purchasing policies and processes in place which the organisation can follow. There has been a great lack of control thus at the beginning strong control should be achieved by implementing unified processes and policies. As the purchasing organisation gradually integrates the defined processes and policies as normal part of their operations the level of control can be slightly decreased because it should be based on mutual trust. However the coordination and communication between purchasing management and personnel should be active. Metsä Wood purchasing could for example implement monthly, or quarterly meetings for purchasing personnel in order to coordinate purchasing operations. Purchasing personnel can be motivated for example by having task rotation within the purchasing organisation regarding some responsibility areas. Another way to motivate is to give bonus based incentives for employees which would be related into specified purchasing targets such as cost savings or improved supplier quality.

The final suggestions are related to the future aspects of purchasing. As the research results shows the level of centralization in strategic purchasing is

increasing and decentralization is increased in operative purchasing. This supports the hybrid model suggested for Metsä Wood purchasing. Outsourcing parts of the purchasing functions was not fully supported by interviews. The key issue in outsourcing is to really gain benefits from it. Outsourcing of operative and strategic purchasing operations can offer cost savings and increase efficiency in future thus outsourcing could be considered as a future possibility. However the benefits should be visible for making the outsourcing decision.

7.2 Further research topics

This research has investigated about how a global company should organise its purchasing operations and the research has given suggestions for that. The next step from the theory of how to organise would be to actually implement the suggested organisation model. A logical further research topic could be to investigate how purchasing organisation changes should be implemented in a global company. The research could investigate for example what are the main issues in considering implementation and what are the most effective ways to implement change in order to minimize resistance for change.

Other interesting research topics could be to focus on purchasing processes or measurements. Purchasing processes are important part of organisation's functioning thus the research topic could be for example to create purchasing guideline or a policy for a purchasing organisation. After implementing a new organisation model and creating effective purchasing policy to the organisation the active measurement should be done effectively in order to keep a high performance level. The research topic could be to investigate how purchasing organisation's performance should be measured. The research could give suggestions of what are the most important key performance indicators for measuring purchasing organisations and how to develop the organisation. These research topics together would provide a very strong package to the companies about how the purchasing organisation should be organised from the beginning of organisational design to the processes, implementation and to the end of measurements and continuous development.

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