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A Case Study of Integrative Creation of Supplier Relationship Management Process

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Abstract

The purpose of the thesis is to create a model of the supplier relationship management process, which can be applied in business organizations. In addition, the thesis examines the benefits of a supplier relationship management process, how to measure the success of the process as well as the relevant stakeholders of the process.

The background literature discussed the topics of business process, sourcing, purchasing and supplier relationship management. In detail, the definitions and different elements of the concepts were identified. Moreover, several models of strategic sourcing and supplier relationship management processes were described in the thesis. After that, a theoretical framework was defined based on the academic literature.

To achieve the objective of the study, a case study research was utilized. The case company in the thesis is a Finnish-based international company that manufactures environmental instruments. Thirty-three semi-structured interviews have been conducted with the internal employees of the case company. Among those interviews, nineteen were conducted with the sourcing personnel, and fourteen were carried out with other stakeholders from other functions of the company. On top of that, two benchmarking interviews with two other Finnish-based international companies were also held in order to have a broader view of the topic. Thereafter, the interviews were transcribed and qualitatively analyzed. The as-is and to-be process were taken into consideration from the interviewees' perspectives.

The research shows that there is an urgent need for a model of the supplier relationship management process. A framework for the process was presented as the main result of the thesis. Furthermore, having a supplier relationship management process will solve the lack of standardization, the lack of harmonization in information transmission as well as the lack of strategic overview in the organization. The process should also consist of all stakeholders from different functions in the company, with sourcing in the center of the loop. In addition, it is suggested that the satisfaction survey method conducted both with suppliers and buyers are necessary to measure the relationship and the success of the process.

Keywords supplier relationship management process, supplier relationship management, supplier relationship, business process, sourcing

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Vantaa, February 2015.

Tran Thanh Ha

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LIST OF ABBREVIATIONS

Abbreviation	Meaning
SRM	Supplier Relationship Management
PwC	PricewaterhouseCoopers
TQM	Total Quality Management
SAM	Supplier Account Management
etc.	Et cetera
e.g.	Exempli gratia
N/A	Not applicable
c.	Chapter
p.	Page
SWOT	Strengths, Weaknesses, Opportunities and Threats

1. INTRODUCTION

This section will discuss the background and motivation of the research. Most importantly, it will introduce the research problem, objective and the research questions.

1.1 Background and Motivation

"In today's scale-driven, technology-intensive global economy, partnerships are the supply chain's lifeblood."

(Liker & Choi, 2004, p. 104)

Due to today's globalization, there are higher needs of diversification from customers, as well as the complexity of product components. This is the reason why the efficiency of supply chain management plays an important role in a company's competitiveness (Park et al., 2010). Not surprisingly, companies in developed economies buy more components and services from suppliers than ever before (Liker & Choi, 2004). According to *Purchasing magazine*'s estimates, the one hundred biggest U.S manufacturers spent 48 cents of every dollar of sales in 2002 to purchase materials, compared to 43 cents in 1996 (Liker & Choi, 2004). Hence, companies should not overlook this function in the organization. It has been acknowledged that managing the supply chain effectively can reduce risks and uncertainty, as well as enhance the inventory level and production cycle time, which leads to higher customer satisfaction and profitable achievements (Simchi-Levi et al., 2003).

More importantly, whether supply chain management is performed successfully or not depends greatly on the purchasing or sourcing function (Park et al., 2010). Sourcing is defined as "the management of the company's external resources in such a way that the supply of all goods, services, capabilities and knowledge which are necessary for running, maintaining, and managing the company's primary and support activities is secured at the most favorable conditions" (Van Weele, 2014, p.3). Moreover, Van Weele (2014, p. 12) also observes that the purchasing value in relation to cost of goods sold can account for approximately 60-80 percent in manufacturing companies. Thus,

sourcing function has a significant importance in controlling the total costs of manufacturing process in an organization (Park et al., 2010).

As a result of this effect, companies have focused more on the supplier relationship management (SRM) system (Park et al., 2010). According to Liker & Choi (2004), businesses are more and more relying on suppliers to lower costs, improve quality, and develop new products or services faster than their competitors do. SRM is the business process that contains the structure of how to develop and maintain the relationships with suppliers (Lambert & Schwieterman, 2012). However, Park et al. (2010) have pointed out that until recently, researchers of this field have only emphasized on specific topics of SRM, such as supplier selection, supplier development, or supplier risk management. These subjects are rarely dealt with a holistic approach. According to Lambert and Schwieterman (2012), SRM has become a critical business process owing to competitive pressures, risk mitigation, cost efficiency as well as developing good relationships with key suppliers. Hence, clear benefits can be achieved by managing the supplier relationships effectively. Nonetheless, it is currently very difficult to find any literature with a framework for an SRM process. There is a lack of a model for the SRM process where all departments or functions cooperate in an organization for this purpose. Even though Park et al. (2010) have successfully demonstrated a framework for the SRM process, it is more of an information system or integrative system, rather than a process flow of SRM. In addition, despite realizing that SRM can make a significant difference in the business, many organizations are having difficulties in initiating, developing and managing the relationships with suppliers (PricewaterhouseCoopers, 2013). Therefore, this thesis aims to develop a model for the SRM process, which can be applicable for business organizations to better structure and manage the supplier relationships.

1.2 Research Objectives and Questions

As stated above, the objective of this thesis is to create and develop a model of the SRM process. Since the research is done based on a case study research with different companies, the model developed will be suitable for business organizations in general, and for the case company in particular. Given the current lack of frameworks for the SRM process, implementing this SRM process model will help companies to structure and manage the SRM system more effectively.

In order to approach the research goal from relevant perspectives, the thesis tries to answer the following questions:

1. What are the current practices of SRM?
2. What are the benefits of an SRM process?
3. How to measure the success of an SRM process?
4. What should be the activities in an SRM process?
5. Who should be involved in an SRM process?

By focusing on these research questions, the researcher can shed light on the situation of SRM practices from the most relevant perspectives. The first research question aims to find out about the current situation and practices of SRM within the case company. The rest of the questions are related to the to-be SRM process. In short, a part of the study emphasizes the understanding of current practices, while the other parts aim at understanding the elements needed to create an effective SRM process.

The goal of the research is to create a model for the SRM process. The researcher will provide it in a form of a visualized framework, to make it easier to understand, implement and follow. It is also convenient for companies to communicate the big picture to the relevant stakeholders. This is very important, as based on the initial informal interviews, the stakeholders seemed to analyze the SRM process in activity-based view, and not necessarily keep the big picture in mind. The thesis has utilized a qualitative approach, using semi-structured interviews with both internal employees and benchmarking companies. Based on that, the research also identifies the key themes that arose from the interviews. After identifying the most common views, the thesis suggests a model for the SRM process and other elements related to the process. Moreover, the research also points out the benefits of utilizing and implementing the recommended model of the SRM process.

1.3 Structure of the thesis

The thesis is divided into two parts, theoretical and empirical part. These parts are further divided into seven sections in total. In the beginning of the theoretical part, the first section, general background, motivation and research gap are defined. In the second section, the literature review will be discussed through the topics of business

processes, sourcing, purchasing, and SRM. In the third section, the framework will be generated and formed into a model to be utilized in the empirical research.

In the empirical part, the fourth section of the thesis, the methodologies used in the empirical study shall be discussed, along with the analyzing method. An analysis on the results of the empirical research will be provided in the next section. Moreover, a separate section on benchmarking research is introduced in order to identify other practices regarding the SRM process across different businesses and industries. After that, the main finding of the study, the redefined framework, is presented and in the sixth section, the research results will be discussed and compared to the theoretical framework.

In the end, the conclusions will be drawn. Additionally, theoretical contributions and managerial suggestions are also provided. Moreover, limitations of the research and implications for further research will be indicated in the last section.

1.4 Definition of terms

All the terms used in the thesis are defined in Table 1 below.

Table 1. Definition of terms.

Term	Definition
Sourcing	The process of identifying a company that provides a needed good or services (APICS Dictionary, 2013).
Purchasing	The function of and the responsibility for procuring materials, supplies, and services (APICS Dictionary, 2013).
Supplier relationship management	A comprehensive approach to managing an enterprise's interactions with the organizations that supply the goods and services the enterprise uses (APICS Dictionary, 2013).
Business process	A set of logically related tasks or activities performed to achieve a defined business outcome (APICS Dictionary, 2013).
Company	The term in this thesis usually refers to buying company or buyer, as contrast to supplying company or supplier.

2 LITERATURE REVIEW

This chapter is thematically structured and divided into three main sections: business processes, sourcing, and supplier relationship management.

The first section discusses business processes, including definitions, and elements of business processes. The next two sections introduce definitions, benefits and elements of sourcing, purchasing and SRM, as well as best practices for successful sourcing or SRM system.

The purpose of this literature review is to review existing literature on the topic and, hence, to deliver a theoretical framework for the case analysis and further research. First, it is necessary to look into the concept of business process since the final objective of the thesis is to develop a model of a business process, particularly the SRM process. Next, the researcher discusses sourcing and purchasing terms, and maps out the current definitions and developments in the field. After that, the concept of SRM should be introduced to provide a clear perception of the topic and related elements.

2.1 Processes in Organization

The ultimate goal of this thesis is to develop a process model. Therefore, understanding the role and benefits, as well as what elements are included in a process is utterly important. These aspects will be discussed in the sections below.

2.1.1 Definition of processes in organization

As a result of today's industrial and commercial situation, companies have to focus more on effectiveness and efficiency, while still delivering high-quality products and services to meet customers' needs. That is the reason why Total Quality Management (TQM) has gained significant popularity (Bititci & Muir, 1997). TQM suggests businesses emphasize and scrutinize their business processes with regards to obtaining incremental growth, through the utilization of different tools and techniques (Deming,

1982). Despite the fact that TQM brought about a certain focus on business process, the criticality of business process orientation was only appreciated when Michael Hammer published a paper on business process re-engineering in 1990. From that on, business process has been one of the major topics in designing business organization (Bititci & Muir, 1997).

According to Davenport (1993, p. 5), a business process is defined as 'a structured set of activities designed to produce a specific output for a specific customer or market'. Harrington (1991, p. 9) describes a process as 'any activity or group of activities that takes an input, adds value to it and provides output to an internal or external customer. Processes use an organization's resources to provide definitive results'. Even though there are various definitions of business process, the common idea is that 'a business process is a collection of various tasks which produce an output' (Bititci & Muir, 1997, p. 366). Bititci and Muir (1997) also conclude that business processes can be created using either a bottom-up or top-down approach and are collections of different business activities grouped together.

Despite the fact that there can be a set of generic business processes for universal application, Mentzer et al. (2007, p. 106) point out that processes should be 'adapted' to the specific firm's business corporate strategies, environment and customers. They also indicate that processes can be the main means to differentiate between competing organizations.

Supporting that argument, within the area of supply chain management, Spekman et al. (1999) also provide a model of how process or system should be integrated in the supply chain strategy (Figure 1).

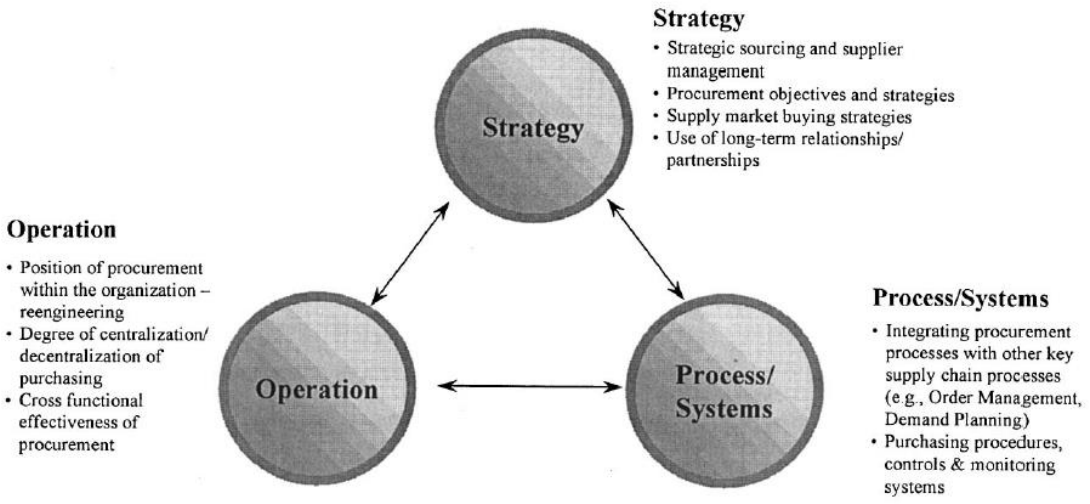

Figure 1. Key Sourcing Dimensions required for alignment. (Spekman et al., 1999).

In addition, processes can be categorized into three different types in terms of their purpose and detailed level based on Mentzer et al.'s discussion (2007, p. 107). These three types include:

- Core processes are the processes, which have business objectives, whose activities empower goods and services to reach the end customers, and together create the foundation of the business.
- Support processes are processes needed to help the core processes run as smoothly as possible, but might not be as important to the business.
- Management processes are applied to control, facilitate the core, and support process in order for them to collaborate and work well together.

The tasks of identifying these processes can be rather subjective and it depends on the business. However, having these processes mapped out can deliver an overall look of the business and how it generates values for the organization. (Mentzer et al., 2007, p. 107).

In general, a business process needs to have a goal, specific input and output, and clear resources. It also needs to have certain activities carried out in a certain order. Moreover, it can be linked with other organizational units or processes and creates value to stakeholders. (Mohapatra, 2013, p. 124).

2.1.2 Benefits of processes in organization

With the demand for a comprehensive, customer-focused view, as well as cooperation across borders, business processes bring significant benefits to organizations (Mentzer et al., 2007, c. 7).

Tan (2001) points out that processes are created to support the overall strategic business plan, and to implement the operational plan. Kueng and Kawalek (1997) summarize that business process models are used to control the sophistication and complexity of the behaviors and activities of human organizations, and they are created following purposeful goals. Regev and Wegmann (2003) also mention that business processes can monitor the business relationships with its internal and external stakeholders. Therefore, on a high level, business processes can help organizations to improve and sustain performance (Bititci et al., 2011).

In other words, each company has different goals. In order for each of these companies to succeed, they need to have several functions that are harmonized and fit within the whole strategic goal. Hence, each function identifies a number of processes or standard ways of working to carry out the activities, and these are conducted in a ‘repeated manner’. (Mohapatra, 2013, p. 118).

Mohapatra (2013) and Turbit (2005) shows that if a company implements repeatable business processes, it will gain the following benefits:

- Processes that run smoothly and consistently will deliver constant outcomes.
- When working procedures are standardized, it is easier to train people and get people to work similarly.
- Because of that, there are fewer chances for errors and defects to occur in the processes.
- From the original processes, skills and experience gained over the period can be utilized to modify and improve the processes so that they can be performed more effectively.

These points above state, in brief, positive objectives that can be achieved by implementing business processes across organizations.

2.1.3 Elements in business processes

In order to design or model a business process, it is important to understand what the core elements of a business process are. According to Hammer (2010), there are some specific elements or enablers of a business process, comprising:

- Process design: The process needs to identify the tasks, who needs to perform them, as well as the timing, place, situation, and with what resources and information. A design helps shape uncoordinated individual activity and bring forth organizational harmony.
- Process metrics: It is said that most companies use functional performance metrics, which leads to misunderstanding and sub-optimization. Processes require metrics that integrate customer needs and enterprise goals. A balanced group of process metrics (cost, speed, quality, etc.) should be applied so that all functions will try to improve within the same metric set.
- Process performers: The ones who work in processes are required to have different skills and behaviors than those working in traditional separate domains. They should have knowledge of the overall process and its aim, in order to be able to carry out the process effectively.
- Process owner: There should be a process owner, usually a senior manager who has the responsibility and authority for a process. The process owners need to make sure every task is well understood by performers or stakeholders, and the outcomes are reached following the process.
- Process infrastructure: The process needs to be assisted by information technology system, either some software or integrated system such as enterprise resource planning system, to better manage all the tasks and performers.

Laguna and Marklund (2005) further indicated five elements of a business process:

- Inputs and outputs: It is essential to identify the boundaries of the process, so there are starting point and ending point. The inputs and outputs can be either intangible or tangible.
- Flow units: An entity flows through the process. It can be either an input unit or an output unit.

- Network of activities: A process contains many different activities that the flow units have to pass to be able to transform from inputs to outputs.
- Resources: A process needs tangible resources such as machines, equipment, and intangible resources such as labor to handle the activities.
- Information structure: Before designing the process, it should be specified what information is needed, and what is required to make the decisions when performing the activities.

In general, Hammer (2010) covers most of the components in Laguna and Marklund's process structure (2005), and looks at the process at a higher level. He also stresses that it is essential to have all these elements incorporated when implementing a process; otherwise, it can work for a short term but will not operate successfully in the long run.

2.1.4 How to create a process?

As mentioned above, process design is one essential element of a process. Hence, this part will discuss how to create a process and what are the aspects should be taken into account when creating a process.

According to Mohapatra (2013, p. 119), before starting to model a process, it is critical to gather the right level of information about it. He states that too little or too much information can both create problems when developing a process model, since the process can be too simple or too complicated. The information can be collected by questionnaire, or interview, etc. (Mohapatra, 2013) since Balasubramanian and Gupta (2005) agree that process design relies greatly on the stakeholders and their opinions on the process. The processes about to be created should also be realistic and practically feasible (Mohapatra, 2013). Moreover, the big processes can be divided into different smaller processes in order to make processes easier and clearer to understand and follow (Damij & Damij, 2014, p. 133).

Another important thing about process modelling is that a process can have a number of elements, which interact with each other in order to achieve a goal (Turbit, 2005). According to Turbit (2005), the linkages and relationships between elements need to be specified carefully. Kemsley (2015) also mentions that the responsibilities of people in each step should be determined. Moreover, Mohapatra (2013, p.119) argues that even

though processes are usually thought of as linear workflows, sometimes, processes in real life can be more complex. Based on his study, it can consist of different decision points or phases that lead to iteration situation. Therefore, a process can also be iterative, and iterations happen under certain conditions (Mohapatra, 2013). In addition, processes need to have traceability, meaning that at any point in a process cycle, it is required that any actions or tasks can be traced back to the original starting point of the process (Mohapatra, 2013).

In accordance with the Damij's research (2007) and Turbit's study (2005), the use of flowcharts is highly recommended in designing a process. Lakin et al. (1996) have stated that the flowchart method defines a flowchart as a standardized graphical representation of a logic sequence, work or manufacturing process, or similar systematic structure. Based on their study, a flowchart is normally applied to display the flow of a process from its beginning to its end. It usually composes of different symbols linked by lines, organized to take the users through a series of steps in the correct order (Damij, 2007).

Similarly, Mohapatra (2013, p. 122) points out the steps to model a business process. Firstly, it is important to understand the process trigger and identify different steps/ tasks of the process. Next step is to determine the graphical objects, which will be used for the process design. For example, the flow objects are usually used as in Figure 2 below.

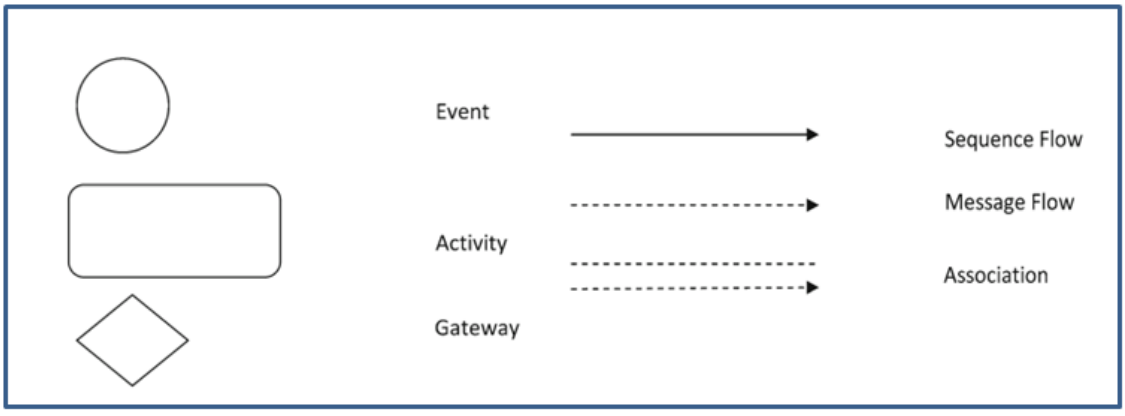

Figure 2. Graphical objects for business process modelling. (Adapted from Kemsley, 2015).

In detail, an event is a trigger or situation that might influence the process flow, either at the start or the end of the process, such as an alert message; activity is a work step that can be performed automatically or humanly; gateway is a point where steps converge or diverge; and different types of arrows are used as connecting objects to indicate different types of interaction and linkages (Kemsley, 2015). Hence, before designing any process, there should be a common set of objects established to describe different starting points, ending points, activities, and connecting objects, etc. in the organization. In that way, all the processes will be structured, standardized and understood in the same way.

However, due to the limit of this thesis, only the general framework of the SRM process will be taken into consideration, even though there are process flows or flow charts in the lower level of the process. Within the case company's real situation, the SRM process will be modeled in more details using the recommended figures and symbols above. For the purpose of developing a general approach for the SRM process, which can be applied for different businesses, the thesis will not cover the detailed level of the process.

2.2 Sourcing

This section will discuss the history and definition of sourcing, purchasing, the role of sourcing in organization and different types of sourcing.

2.2.1 History and Definitions of Sourcing

As defined above in the introductory part, in this thesis sourcing is the umbrella term, as it is the process of identifying the companies that provide needed goods or services, while purchasing function is only responsible for buying those goods and services (APICS Dictionary, 2013). Purchasing only happens after sourcing was conducted, and is a part of the sourcing function. However, purchasing definition has emerged first in the history of procurement.

Even though it was well recognized before 1900, the interest in the performance of purchasing function has been taken into great consideration for the past decades. The definition of purchasing has also been argued constantly, which has resulted in a variety

of organizational concepts. Terms such as *purchasing, procurement, sourcing or supply chain management* are still used interchangeably. (Leenders et al., 2006, p. 4).

For over 100 years, purchasing functions have had to deal with the poor perceptions from other internal departments. Most of the time, it was thought that purchasing agents (or "buyers") only cared about getting the best or lowest price. Sadly, it was also seen as a low-skill job where employees only spend time on doing operation tasks, placing orders, and getting components. It was perceived as a non-specialized knowledge field that everyone can perform. (Emiliani, 2010).

In spite of the fact that some academics still restrict the term 'purchasing' to the process of buying; however, the definition of purchasing has changed since then, especially in modern times. Since the end of World War II, companies encountered two main problems: an internal lack of almost all raw materials for operations, and a high rate of price increases. These issues placed a huge attention directly on supply, for their ability to obtain needed components from suppliers at good prices, since it can mean success or failure of the business. In the early 1990s, it became obvious that organizations must have an effective supply or purchasing function to be able to gain competitive advantages in the global era. In the 21st century, it is even more important that the purchasing function should move forward along with the developments of technology applications. (Leenders et al., 2006, c. 1).

Purchasing nowadays has widened its concept, as it is not only about buying materials at the lowest prices. Some researchers have been using procurement as a broader term, though these two terms are still used similarly (Van Weele, 2014, p. 9). According to Handfield et al. (2009, c. 1), purchasing today places a high concern on the importance of suppliers. They also mention that relationships with suppliers are switching from adversarial to a more cooperative approach, especially with key selected suppliers. Based on their study, there are different activities that purchasing needs to take into account, such as supplier development, supplier selection, long-term supplier relationship, or enterprise-wide systems (enterprise resource planning). Integrated Internet connection and shared databases are also considered as ways to manage and improve the performance of purchasing (Handfield et al., 2009, p. 18). Purchasing has been increasingly viewed as a strategic function by many senior managers, especially

owing to the huge amount of money that it accounts for – 50-90% of costs of goods sold (Emiliani, 2010).

Even though purchasing and sourcing are definitions that are still argued among researchers, according to Van Weele (2014, p. 8), modern purchasing can generally include these activities:

- setting purchasing specifications (quality or quantities);
- choosing the best possible suppliers and managing the process of selection;
- preparing and negotiating with suppliers in order to get the best agreement and have a written legal contract;
- placing the order, handling the demand-supply balance;
- and lastly following-up and evaluating the whole process.

The history and development of purchasing and supply chain development provide a complete comprehension of the growth and prominence of the area over the past 150 years. Moreover, it has shaped today's integrated supply chain management (Van Weele, 2014, p. 10). *'Supply chain management'* is one of the latest defined concepts in this field. Stevens (2007) states that supply chain management is the integration of key process from original suppliers to end users, where the provision of products and services occurs with the aim of adding value to customers and stakeholders. In other words, supply chain management has broadened the concept to include the whole value chain in an organization. It also takes other sustainability and environmental issues into concern according to Beske and Seuring's study (2014).

Interestingly, the concept continues to develop and alter over the years. Another term *'sourcing'*, indicating the activities of managing and developing the source of supply worldwide, has emerged (Van Weele, 2014, p.10). However, there has not been any agreement on how purchasing and sourcing are defined. Some state that purchasing is one part of a global sourcing strategy (Trent & Monczka, 2003), while others argue that sourcing is one of the major responsibilities of purchasing function (Zeng, 2000).

Purchasing department in modern companies are more and more commonly named as sourcing. In the situation of the case company, they have sourcing function carrying the tasks that were defined in modern purchasing earlier, and purchasing function mostly

carrying the 'buying and placing order' tasks. As mentioned earlier, sourcing is the act of selecting vendors for a certain components in need, and it should be incorporated into the companies' strategies (Zeng, 2000). Though it is beneficial to know different definitions and concepts, this thesis' aim is not to find the exact definition for sourcing. The focus is actually on the SRM activities inside a big picture of purchasing or sourcing process, however it is called. As explained above, in this thesis, especially in the empirical part with the case company research, purchasing will be referred to as a part of the sourcing process, where its function is more or less 'buying', while 'sourcing' will hold the broader term in a form of strategic aspects of obtaining resources and components from suppliers. Regardless of this division, both concepts combined still stay true to the fundamental values that are assigned to modern purchasing.

2.2.2 Sourcing as a Part of the Value Chain

The concept of *'value chain'* has been developed by Michael Porter back in 1985. The value chain is said to cover all aspects that are beneficial to a business or an enterprise. A value chain may be defined as "a linear map of the way in which value is added through a process from raw materials to finished, delivered product (including continuing service after delivery)" (Lysons & Farrington, 2006, p. 101).

According to Porter (1985), within an industry, many businesses produce similar products to their competitors. Therefore, in his opinion, a business can achieve competitive advantages by either 'cost leadership' or 'differentiation'. 'Cost leadership' results in remarkable cost advantage over competitors, while 'differentiation' means that the products and services of the entity have something unique and out of reach by rivals so that they are appreciated more than a lower price (Porter, 1980). In order to obtain these two things, business needs different activities to support the final goal (Christopher, 2005, p. 14). The value chain categorizes business activities into five primary and four support activities (Holsapple & Singh, 2001). Each activity provides inputs to the value-added outputs, which the end customers receive in the form of a product or service (Porter, 1985).

In Porter's value chain model (1985), the primary activities, including inbound logistics, operations, outbound logistics, marketing and sales, and service, are those involved

directly in the physical process of moving from raw materials to finished products and the delivery of those products to customers. The support activities are there to support and ensure that the whole value chain or all activities are well functioned (Holsapple & Singh, 2001). Hence, support activities can assist either primary or support activities, or both, in order to help companies to achieve their competitive positions (Mclvor, 2000). In the model in Figure 3, we can see that support activities consist of firm infrastructure, human resource management, technology development, and sourcing.

Since sourcing is a supporting activity in the value chain, it connects with the other eight activities. Moreover, it also interacts with external environment, particularly suppliers (Handfield et al., 2009, p. 12). According to Handfield et al. (2009, c. 1), its main responsibility is acquiring all the materials needed for production from suppliers. Hence, it has a major impact on the whole value chain. If sourcing fails to respond to the needs of resources or customers, companies can encounter huge consequences (Burke et al., 2006).

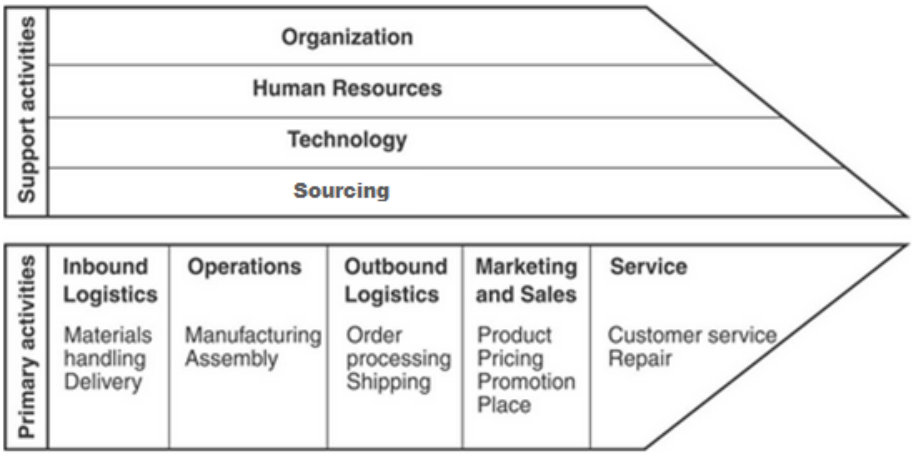

Figure 3. Porter's value chain model. (Adapted from Porter, 1985).

However, the main aim of a global sourcing organization is not simply obtaining resources based on internal needs (Handfiel et al., 2009, p.12). Not only is it required to be responsive to the materials and support needs of the internal stakeholders, but sourcing also needs to be managed efficiently with the right-level staff in order to have the whole process run smoothly (Parlour, 2014, p. 179). Moreover, it is important that sourcing function can develop and manage a successful supply base (KPMG, 2012), as

well as develop united goals with stakeholders inside the organization (Driedonks, 2011).

2.2.3 Indirect and Direct Sourcing

Each company manufactures goods and products differently, hence, they have various components and parts purchased from suppliers. Nonetheless, most of them will have hundreds to thousands of suppliers to function effectively. These resources needed from suppliers can include raw materials, office supplies, and travel agencies, etc. That is the reason why it is important to understand what products the company is buying. In response to that, a classification of sourcing has been developed, and it includes direct and indirect sourcing division. (Baily et al., 2005, p. 179).

Kim and Shunk (2004) realize that traditional view has always emphasized on direct sourcing side of the sourcing function. According to them, direct goods are defined as materials that are used in the manufacturing of final products. Those can include raw materials, supplementary materials, semi – manufactured materials, components and finished goods (Iloranta & Pajunen-Muhonen, 2008). Thus, decisions related to these direct goods are under direct sourcing's responsibilities.

In the manufacturing industry, direct sourcing has been considered as strategic relevance (Handfield et al., 2009, p. 12). A lot of efforts have been made to systematize the flow of goods to manufacturing, in order to bring efficiency to the whole sourcing process (Kim & Shunk, 2004). Moreover, they also clarify that information technology and many computer applications have been developed to support this function of purchasing and supply chain management.

In comparison with direct sourcing, indirect sourcing has been given much less concern at the organizational level (Kim & Shunk, 2004). Based on Kim and Shunk's study (2004), indirect goods are the supplies and resources that are used in daily business or operation, but not directly in manufacturing. These goods can include investments in facilities or manufacturing, travelling, office supplies, marketing, services, and insurance, etc. (Iloranta & Pajunen-Muhonen, 2008).

In the past, indirect purchases were often handled by phone calls, mails, fax (Kim & Shunk, 2004), or by purchasing cards and purchasing orders (Porter, 1999). However,

Porter (1999) illustrates that indirect purchases still account for a certain amount of corporate spending; therefore, nowadays, it is also focused on as much as direct purchases. In fact, indirect sourcing function is suggested to have objectives, as well as to identify managerial process and tracking system for the process (Porter, 1999).

2.2.4 Sourcing as a Strategic Function

Since sourcing is a critical part of the value chain, it has gained its strategic importance among companies (Pressey et al., 2007). With regards to the fact that the outsourcing of business activities has increased tremendously, sourcing has grown into a functional part of strategic management (Van Weele, 2014, p. 9).

Since sourcing strategy should be in line with corporate strategy (Van Weele, 2014, p. 151), the strategic management theory needs to be taken into concern. Michael Porter (1989) created a new theory of strategic management, in which he includes sourcing and supply management function, as well as the role of suppliers (Figure 4).

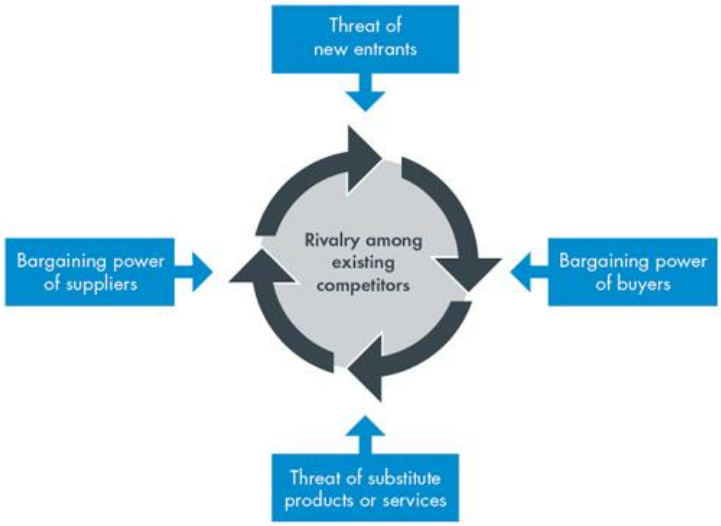

Figure 4. Porter's Five Forces (Adapted from Van Weele, 2014, p. 155).

His model implies that the competitive position of a company is affected by direct competitors, new entrants into the market, substitute goods, suppliers and buyers. If a company wants to position itself well in the industry and develop competitive advantages, it should differentiate itself according to these five forces. Hence, sourcing activity with suppliers has been considered as having a significant impact on competitive performance. (Van Weele, 2014, p. 154).

Moreover, Van Weele (2014, p.155) also states that one big influence on company's performance is also based on the resource-based view. Wernerfelt (1984) argues that the differences in performance among firms are not based on the final products, but rather on how the resources are used. Based on his study, it is shown that successful businesses tend to use their resources more efficiently than their rivals do. He categorizes resources into different groups such as labor, financial resources, or technological skills. Other relationships with suppliers, clients, or stakeholders can also be considered resources (Wernerfelt, 1984). From that, a theory of resource dependency has been developed by Pfeffer and Salancik (1978). The theory suggests that firms cannot function individually, but they need to establish connections with external suppliers to obtain resources in order to survive in the business. Therefore, it can be seen that both the resource-based view and the resource dependence theory imply different elements of value creation through supply chain collaboration or sourcing strategy (Van Weele, 2014, p.156).

Further reinforcing this argument, Lysons (2000, p. 261) shows that there are two kinds of sourcing in the business operation. According to him, sourcing can be either at strategic or tactical/operational levels. Tactical and operational sourcing implies lower level decisions, and it usually concerns non-critical goods that have high profit and low risk (Lysons, 2000, p. 261). Tactical sourcing also deals with short-term decisions to adapt to the situations, such as how and where some certain supplier requirements are met (Lysons, 2000, p. 261). As a consequence, Branch (2001) points out that this brings up inefficient suppliers only to meet requirements on the spot, and hence, low-quality products or services in the long term. Therefore, tactical sourcing is not the way that companies should seek for, especially when companies have a properly organized sourcing function (Branch, 2001).

On the other hand, strategic sourcing aims at creating long-term purchasing plans (Carr & Smeltzer, 2000) as well as cooperative relationships with suppliers (Paulraj & Chen, 2007). It has been defined as 'the process of creating a value-adding (or optional) mix of supply relationships to provide a competitive advantage' (Lysons, 2000, p. 261). Strategic sourcing is supposed to be top-level and long-term decision-making (Su et al., 2012). It usually involves risk strategic items with high profit and high supply characteristics; or bottleneck items with low profit and high supply risk features

(Kraljic, 1983). The final aim of strategic sourcing is to enhance the company's core competencies and competitive performance (Carr & Pearson, 2002).

In general, as strategic sourcing focuses on long-term strategy and building relationships with suppliers, top management commitment is essential. Organizations should take a more complete control of sourcing to be able to develop a long-term scope and effective sourcing process. (Branch, 2001).

2.2.5 Strategic Sourcing Process

Strategic sourcing as discussed above aims at managing the supply base most effectively with beneficial long-term supply relationships. In order to achieve the targeted outcomes of strategic sourcing, it is important to have a broad picture of the whole process. However, there have been many studies focusing on supplier evaluation, supplier selection, etc., rather than a holistic view of the term (Eltantawy & Giunipero, 2013). This part of the thesis will try to present several models of strategic sourcing that go along with the modern concept of sourcing.

One strategic sourcing process is developed by Handfield et al. (2009, p. 203), which is used to decide from whom to buy the items and services, together with what type of relationship should be set up. The sourcing process is introduced below in Figure 5.

Goal: Develop a scope of work plan	Goal: Understand the supply market	Goal: Classify suppliers and define sourcing approach	Goal: Nagotiate a win-win contract	Goal: Continuously improve performace
Inputs and Tools: Project leader Other team member	Inputs: Interviews, Online research, conference	Inputs: market research, Portfolio matrix, Forecasted spend	Inputs: Negotiation plan, Supplier evaluation tool	Inputs: Contract, Supplier scorecard
Outputs: Baseline data, Project Charter, Work plan	Outputs: Reports on supply trends, changes, pricing, capacity, etc.	Outputs: Supplier evaluation tool with desired relationship	Outputs: Signed contracts	Outputs: Supplier development plan, communication

Figure 5. Strategic Sourcing Process. (Adapted from Handfield et al., 2009, p. 203).

In addition, Mentzer et al. (2007, p. 256) introduces another way to structure the sourcing process, which can be observed in Figure 6 below. According to Mentzer et al. (2007), this process has been experienced by different companies such as Tesco, American Express and many others. In the figure, RFx stands for Request For X, where X can be Quotation, Proposal, or Information.

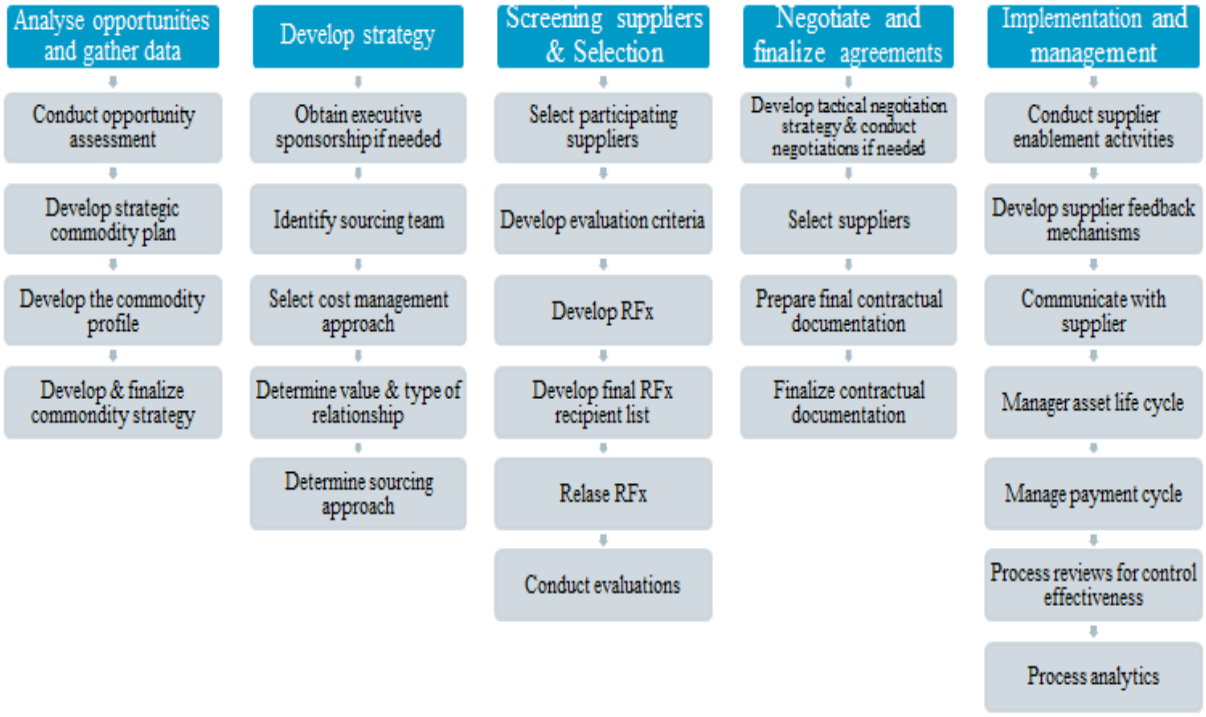

Figure 6. Strategic Supply Management Process. (Adapted from Mentzer et al., 2007, p. 256).

Interestingly, both processes presented above have five different steps. The processes go through the same order from having an initial understanding, to selecting the supplier, signing the agreement, and conducting SRM activities. Even though the steps are not exactly the same, they carry the same activities and objectives. In detail:

- 'Analyze opportunities and gather data' in Mentzer et al.'s process (2007) is similar to two steps combined in Handfield et al.'s process (2009), which are 'Build the team' and 'Market research'. Both processes highlight the importance of understanding the purchasing requirements regarding the business goals as well as the potential supplier's strategy, strengths and weaknesses. There are different topics that needs to be taken into account, including spend analysis, the power of buyer and supplier based on Porter's Five Forces model (Handfield et al., 2009), the Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis (Mentzer et al., 2007), as well as value chain analysis (Handfield et al., 2009). Moreover, according to Handfield et al. (2009), it is critical to gather from different functions employees that have good knowledge of the product to be purchased into one category team. They can come from operations,

engineering, sales or finance. There should be a project leader, with clear project plan and task allocation (Handfield et al., 2009).

- Both processes have the step 'Strategy development' or 'Develop strategy'. All the data from the earlier market research phase needs to be combined, analyzed using the purchasing portfolio model (Figure 9 in section 2.3.2) or different evaluation measurement. The goal of this step is to segment the suppliers and decide the type of relationship to move forward with them. (Handfield et al., 2009; Mentzer et al., 2007).
- In Handfield et al.'s process (2009), the forth step is 'Contract negotiation'. This step is when the legal agreement is drafted after the sourcing strategy has been determined. During this process, suppliers are selected, negotiation between two parties occurs, and the final goal is to have the contract finalized and signed by both companies. In comparison with Mentzer et al.'s process (2007), this step is divided in two individual steps including 'Screening suppliers and selection' and 'Negotiate and finalize agreements'. According to them, it is important for the firm to identify the key selection criteria based on their strategic needs and different production or quality requirements. Then the company can choose the best suppliers following those criteria before any contract negotiation happens. Nonetheless, both processes have the goal of finalizing the agreements at the end of this step.
- The last step in Handfield et al.'s process (2009) is Supplier Relationship Management. This step is relatively in line with 'Implementation and management' – the last step in Mentzer et al.'s process (2007). According to Handfield et al. (2009), the strategic sourcing process does not stop after the agreement is signed. More than that, the whole cycle of sourcing starts to begin when the relationship is developed by both partners (Handfield et al., 2009). They also point out that normally one member of the sourcing team will work with the supplier under supplier relationship manager role. According to both research, regular reviews, meeting, performance measurement, and result sharing are key elements in this step.

In general, we can see that there can be a variety in the way a strategic sourcing process is structured, but the main steps are still presented in all the processes. Especially it is critical to have the SRM process as the final step in the process since it is where

companies manage the suppliers in the long term. Different specific SRM process models will be introduced and discussed in the later part of the thesis.

2.3 Supplier Relationship Management

As mentioned several times earlier, strategic sourcing or strategic purchasing has increasingly evolved in business organization nowadays. The growth of sourcing in corporate strategy comes along with a greater focus on closer relationships with suppliers. Lewis (1995) raises the issue that the competitive pressure in today's business asks companies' managers to look for new sources of sustainable improvement. Competitive advantage does not appear only with the company's internal capabilities, but more than that, with the relationships and connections that it has with external organizations (Lewis, 1995). Moreover, when one firm buys materials from another firm, the bound of that relationship is a major impact on the eventual value and customer satisfaction (Leenders et al., 2006, p. 496). Thus, SRM is an important part in any sourcing or supply chain management strategy (Lambert, 2004).

This chapter of the thesis will introduce the definition of SRM, as well as different elements and activities involved in the SRM system.

2.3.1 Definition of Supplier Relationship Management

Even though SRM is more or less considered as a part of the strategic sourcing, Schuh et al. (2014) argue that while strategic sourcing tries to meet the business requirements from external supply markets by taking into consideration the relative correlation of demand and supply power; it does not deal explicitly with how to manage the relationships with suppliers. According to them, it is a separate responsibility of SRM. However, O'Brien (2014, p. 38) also states that SRM is not an easy topic to touch on and the meaning of the term is still vague in its definition (Schuh et al., 2014).

According to Gartner Consulting (2001, p. 2), SRM is 'a set of methodologies and practices needed for interacting with suppliers of products and services of varied criticality to the profitability of the enterprise'. Based on this definition, Poirier (2006, p. 3) has further developed the term as 'a means of building closer relationships with selected strategic supplier, the purpose being to discover the added features that could enhance the relationship while improving business performance as the firms work in a

network of environment for mutual benefit and increase the likelihood of creating profitable new revenues together.' Combining both Gartner Consulting (2001)'s and Poirier (2006)'s point of views, Fogg's definition (2009, p. 306) focuses on the interactive aspect between suppliers and buyers as well as the benefits of performance improvement in organizations. According to him, SRM is 'the process of managing the interaction between two entities – one of which is supplying goods, works or services to the other entity'. He further describes SRM as 'a two way process in that it should improve the performance of the buying organization as well as the supplying organization and hence be mutually beneficial'. It is in line with Brimacombe et al.'s opinion (2011) that SRM can 'optimize value through cost reduction, innovation, risk mitigation and growth throughout the relationship life cycle.'

Along with other academics, consulting companies such as PricewaterhouseCoopers (PwC) have also contributed to the development of SRM term in the modern economy. Similar to Fogg's opinion (2009), PwC (2013) highly values the two-way partnerships between suppliers and buyers. Nonetheless, PwC emphasizes more on the relationship with key suppliers, the shared benefits that can be achieved by both parties, together with the required characteristics of a relationship. The term has been described by PwC (2013, p. 8) simply as 'a systematic approach for developing and managing partnerships' that is 'focused on joint growth and value creation with a limited number of key suppliers based on trust, open communication, empathy and a win-win orientation'.

O'Brien's study (2014, p. 38) suggests that SRM can provide competitive advantages when it is taken into account across the organization. Similarly and more holistically, Schuh et al. (2014, p. 11) have taken a broader view of SRM and came up with the term 'TrueSRM', in which SRM is meant to 'drive supplier behavior, encompass the relationship between two enterprises', as well as 'enable a company to leverage its size by coordinating across divisions, functions, and hierarchies.'

We can see that there are various definitions of the term SRM in current literature; however, all of the definitions succeed to state a major point of SRM as *'developing and managing the relationships and interactions between suppliers and buyers'*. Moreover, they all illustrate that good SRM will help to create value and win-win benefits for both companies. This generalization of SRM term makes it easy to understand for people

nowadays. In this thesis, no specific definition is used; instead, the broad understanding of SRM stated above is taken into consideration.

2.3.2 Different Types of Supplier Relationships

Talking about SRM, we cannot forget mentioning different types of relationships between buyers and suppliers. Despite the fact that the buyer-supplier relationship is important, one should notice that not all relationships are equal (Trent, 2005). According to Trent (2005), there are various views and models on how relationships with suppliers should be categorized based on the value they bring to organizations. This part will introduce some of the models as most relevant to the research.

Trent (2005) has introduced the Four C's of supplier relationships (Figure 7). In his opinion, there are four different types of buyer-supplier relationships, which consist of counterproductive (lose-lose), competitive (win-lose), cooperative (win-win), and collaborative (win-win). The following explanation is based on both studies of Trent (2005) and Zamboni (2011).

Counterproductive (Lose-Lose)	Also called antagonistic relationships	Work actively against each other's needs	Neither party takes responsibility for what happens in a relationship	Destructive conflict occurs
Competitive (Win-Lose)	Also called adversarial or distributive relationships	Engage in a competitive struggle to divide a fixed amount of value	Attempt to maximize value for each side	Minimal sharing of information
Cooperative (Win-Win)	Also called integrative relationships	Longer-term relationships result from mutual goals	Supplier involvement during product development increases	Open sharing of information occurs, including sharing of cost data
Collaborative (Win-Win)	Also called integrative or creative relationships	Congruence of goals and co-destiny exists	Jointly identify new market opportunities	Jointly identify creative solutions to problems

Figure 7. The Four C's of Supply Relationship. (Adapted from Trent, 2005).

Counterproductive relationships happen when parties work against each other; therefore, no profits would be generated out of this. This type of relationship is obviously not recommended in business. The competitive relationship is also called 'adversarial' relationships, where members performing in their self-objective to gain a bigger value share and they do not work together to create new values. The cooperative relationships occur when suppliers are supposed to be in a longer-term strategy of a consolidated supply base. These relationships are committed by long-term contract, and discussions on how to improve cost, quality and other matters to provide a more effective supply chain. Lastly, the collaborative relationships only involve a limited number of suppliers that provide goods or services that are critical to the company. Buyers and suppliers in this case will work together to create joint development and other innovative processes. This last type of relationship is also called 'strategic alliances' in other research (Leenders et al., 2006, p.505). Leenders et al. (2006) describe strategic alliances as relationships that require significant investments of both buyers and sellers to create a major market breakthrough. These alliances are major concerns to top management.

In addition, Cox (1999) develops a relationship model to better describe and categorize the relationships between suppliers and buyers (Figure 8). The model by Cox suggests that buyers and suppliers interact in two-dimensional areas of relationships.

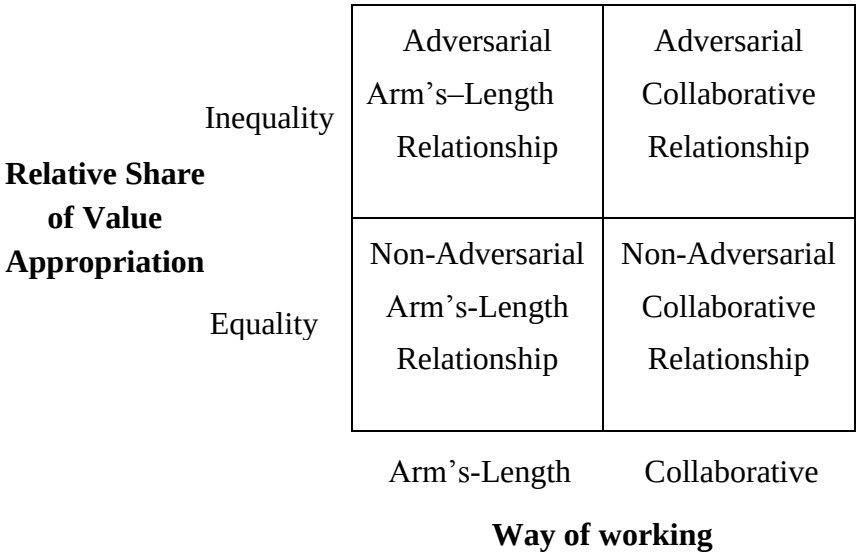

Figure 8. Relationship portfolio. (Adapted from Cox, 1999).

According to Cox and Ireland (2002), one dimension is the way of working which implies the operational interaction between two organizations. The arm's-length way of working refers to the case that buyers give suppliers basic information and suppliers deliver limited information to suppliers (Cox & Ireland, 2002). Their research also shows that on the other hand, the collaborative interaction happens when both parties invest extensively in the relationship, and try to create long-term relationships with each other. The other aspect of the relationship is the shared business goals and value between buyers and suppliers (Cox, 2001). Based on Ha et al.'s study (2011), if both parties only want to optimize their share of value without taking into account the partner's benefits, it is called adversarial value appropriation. By contrast, if they want to share the value with each other in a win-win relationship, it is called non-adversarial value appropriation (Ha et al., 2011).

With these two aspects, four relationship management styles have emerged (Cox, 2004). Compared to Trent's model, these four relationship styles are similar to the four styles in his above model. However, it is defined more clearly with the 'way of working' dimension, which brings a more concrete approach to relationship categorization. In line with Trent's model, Cox (2004) has described the four styles as below:

- Adversarial arm's-length – Counterproductive (Lose – Lose): exchange partner aims at maximizing the share of value and it is usually short-term interaction.
- Non-adversarial arm's-length – Competitive (Win – Lose): exchange partner pays the current market price without heavy bargaining.
- Adversarial collaboration – Cooperative (Win – Win): exchange partner gives operational and relationship-related information, but wants to optimize the share of value.
- Non-adversarial collaboration – Collaborative (Win – Win): exchange partner works transparently, builds long-term relationship and shares value equally.

Peter Kraljic develops another traditional model that is well known among purchasing and supply chain professionals in 1983 (Figure 9). Differing from Trent's model (2005), Kraljic's model does not focus on the values generated for both suppliers and buyers from the relationships; he focuses more on the profit impact and supply risk mostly for the supplier side (Gelderman & Semeijn, 2006).

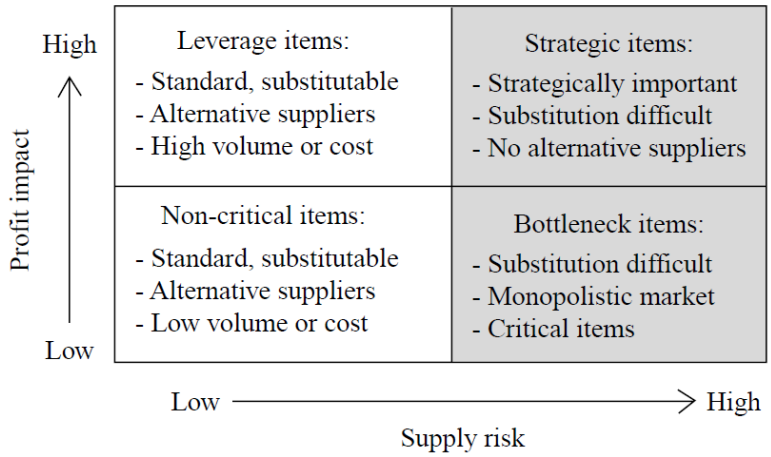

Figure 9. The purchasing portfolio matrix. (Kraljic, 1983).

According to the purchasing portfolio matrix of Kraljic above, products are classified into high-supply/low-supply and high-profit/low-profit characteristics, resulting in four different product groups, which are strategic, bottleneck, leverage and non-critical items (Gelderman & Van Weele, 2002). Therefore, suppliers with items falling into these groups can also be assigned to those four different categories (Nellore & Soderquist, 2000). Among these four, the strategic and bottleneck suppliers are the most important ones that companies should pay more attention to, while the leverage and non-critical suppliers can have lower attention from sourcing managers (Gelderman & Van Weele, 2003). It can be seen that the strategic relationship is nearly the same as collaborative (win-win) relationship in Trent's model, strategic alliance in Leenders et al.'s research and non-adversarial collaboration in Cox's model. Even though the other three styles are not congruent to the rest of the categories in other models, Kraljic takes into account the characteristics of the products. Therefore, his model provides another aspect of classifying the relationships with suppliers.

From these models, it can be concluded that the relationships cannot be the same with all suppliers. More importantly, companies should categorize their suppliers based on strategic value such as risk, profit or business objectives to decide the best relationship type and relationship management towards suppliers.

2.3.3 Benefits of Supplier Relationship Management

The apparent objectives or benefits of SRM have been mentioned throughout the research. Nonetheless, this section wants to specify the benefits of SRM in greater detail.

In a case study illustrated in Schuh et al.'s study (2014), SRM is presented through supplier performance and risk management, supplier segmentation, as well as coordinated communication across all functional domains, and hierarchical levels. Many studies have proven the link between successful SRM and financial performance (Carr & Pearson, 1999; Johnston et al., 2004). Moreover, stronger relationships also enhance supplier performance such as lead-time execution (Larson & Kulchitsky, 2000), enhanced responsiveness and loyalty (Martin & Grbac, 2003).

One advantage was also raised by Gartner Consulting (2001). In their research, it is pointed out that SRM will optimize the supplier relationships, as well as strengthen the relationships since each supplier will receive different treatment strategy based on their strategic value. Most importantly, SRM will initiate the developments that go beyond the contractual agreement, and maximize value across the ecosystem (Schuh et al., 2014). Monczka et al. (PwC research, 2013) demonstrate that SRM emphasizes on value creation, as it will take into account all elements that affect stakeholder value by raising market competitiveness. It is also stated by Schuh et al. (2014) that SRM brings the chance for a given company to make the best use of the supply base's energy for its competitive advantages. In a larger sense, the goal of SRM is to collaborate with suppliers to build a competitive advantaged ecosystem, and to pursue a value of growth and innovation beyond cost optimization (Schuh et al., 2014; Johnston et al., 2004). Mostly in line with that objective, Gartner Consulting's research (2001) points out that SRM will create competitive advantages and drive revenue by bringing innovative solutions to market faster together with suppliers, and drive profits by reducing the costs of supply chain and operations while still maintaining the quality.

In addition, Monczka et al. (PwC research, 2013) highly value the benefits of shared developments, profits and investments in SRM by having united goals, efforts, and resource commitments, which will provide a good culture for constant advancement. According to them, it will affect the supplier capabilities because suppliers have

beneficial position through early involvement in the product and process development. From that, both parties will have a mutual commitment and share the same success (Lambert & Schwieterman, 2012). Hence, the advantages lead to the fact that the buyer will become the 'customer of choice' with priority access in terms of costs, technology or availability of suppliers (Monczka et al., PwC research, 2013). Ultimately, strong relationships with suppliers through SRM will further increase the future relationship prospects (Duffy and Fearne, 2004) and develop the supply chain performance (Narasimhan & Nair, 2005; Benton & Maloni, 2005)

Through all this research, it is evident that SRM plays an important part in the strategic sourcing function of the company in terms of profit improvement, cost reduction, as well as attaining good supplier relationships.

2.3.4 Supplier Relationship Management Activities

Since the definition of SRM is already hard to be conceptualized, it is even harder for companies to know what should be the best way to manage the relationships with suppliers (Cox, 2004). Though considerable arguments about that exist, there are still certain activities that SRM in any organization should focus on (Trent, 2005).

In this part, SRM activities will be described more thoroughly. Those activities include supplier selection, supplier evaluation, supplier segmentation, relationship development, performance measurement, risk management, supplier development and supplier relationship performance measurement. Those activities are selected to be discussed in greater detail due to their popularity as important topics in research. The next section 2.3.5 will describe some developed SRM models that include those activities.

2.3.4.1 Supplier Selection

Some academic papers suggest that supplier selection is a part of the SRM process (Liker & Choi, 2004; Park et al., 2010). Supplier selection is very critical in order to achieve efficient manufacturing and supply chain management (Park et al., 2010). The important role of buyers here is to choose from the available suppliers the best ones that can provide the best combination of value, cost and functionality (Cox, 2004).

As mentioned above, suppliers are first evaluated based on some standards, and then either being selected or rejected. Since this activity is highly important as it will set up the whole supplier management process later, there are some problems that buyers have to deal with. First is the single sourcing, where the goal is to meet the requirements with one supplier. The sourcing manager then needs to choose wisely the most suitable one. Another issue is the multiple sourcing, in which it is impossible to satisfy the needs with only one supplier; hence, it will require the sourcing manager to choose several ones and assign the supplies reasonably among them. (Park et al., 2010).

When selecting suppliers, companies need to take into consideration many criteria (Handfield et al., 2009, c. 7). According to Leenders et al. (2006, c. 10), those include financial health, technological capability, geographical location or quality system. The decision of choosing suppliers also depends on the relative size advantages it has over the suppliers (Handfield et al., 2009, p. 261). Based on Porter's Five Forces (Figure 4), a company's competitive advantages are driven by suppliers and buyers' bargaining power. Therefore, according to Handfield et al. (2009, p. 261), with regards to the size and the business need of the firms, buyers can decide to select suppliers when it can have relative size advantage or not. A buyer can have bigger impact if they represent a larger share of the supplier's business (Handfield et al., 2009, p. 261).

Moreover, Lysons (2000, c.9) also indicate other issues to be considered when selecting suppliers such as domestic or international suppliers, low-cost sourcing, competitors as suppliers and the social perceptions towards the suppliers. Therefore, in order to choose the most suitable suppliers, companies need to set up clearly all these key criteria regarding their own business needs and situation.

2.3.4.2 Supplier Evaluation

Supplier evaluation is an essential task to manage successfully the relationships between suppliers and buyers. There are two phases when supplier evaluation is carried out. One can be seen in the selection task of the buying company. In this phase, evaluation plays a role in placing preference order for potential suppliers in order to select the better one. Another phase where supplier evaluation appears is in the end of supplier development activity with the purpose of controlling and evaluating the buyer-supplier relationship. (Oriso et al., 2014).

Supplier evaluation in SRM is defined as 'the process of quantifying the efficiency and effectiveness of supplier action' (Neely et al, 1995). Neely et al. (1997) also state that supplier evaluation is designed to support the decision-making of the buying company about evaluating suppliers. Through that, it is possible for the company to implement or encourage changes in the evaluated supplying company's behaviors (Neely et al., 1997). Furthermore, this activity is used as a means to make some effects on supplier action (Schmitz and Platts, 2003).

Nonetheless, evaluation is a generic term that can refer to different individual activities in any process. Hald and Ellegaard (2011) have mentioned supplier evaluation in terms of a three-phase model, which mainly evaluates the performance of suppliers. In other words, their view on supplier evaluation is supplier performance evaluation and the results of the performance measurement will be reviewed and acted upon. Meanwhile, different researchers have thought of evaluation as the act of segmenting and classifying suppliers based on certain criteria (Olsen & Ellram, 1997; Araz & Ozkarahan, 2007). Therefore, not only the performance but also the segmentation of suppliers should be taken into account in supplier evaluation.

2.3.4.3 Supplier Segmentation

As mentioned above, supplier segmentation can belong to the supplier evaluation process (Olsen & Ellram, 1997; Araz & Ozkarahan, 2007). However, it is described separately in this section to further clarify the objectives and activities of supplier segmentation.

Svensson (2004) has mentioned that supplier segmentation is an important business activity since it can contribute to support the company's efforts to sustain and improve its stand in the market, as well as other strategic objectives. Segmenting suppliers in the supply base will help to guide the future direction of the buyer-supplier interaction (Day et al., 2010). They also indicate that this activity is an essential input for the process of strategic sourcing. According to them, it is when companies can evaluate the supplier selection decision, and take consideration of the past cooperation as well as the future capabilities of value generation and potential collaboration. Hence, supplier segmentation plays a critical part in connecting the firm's abilities to get the best value out of suppliers (Day et al., 2010).

Kraljic's model (Figure 9) is a major breakthrough for ranking suppliers in the purchasing history (Svensson, 2004). In Kraljic's model, suppliers can be categorized based on their levels of profit impact and supplier risk. After the invention of Kraljic's model, there are many other models developed for this purpose such as in the research of Olsen and Ellram (1997) or Araz and Ozkarahan (2007). Most of the models have two dimensions, and suppliers are classified based on those dimensions. The framework created by Olsen and Ellram (1997) places suppliers according to their performance, such as the attractiveness of the supplier and the strength of the relationship. In another model by Sarkar and Mohapatra (2006), the suppliers are considered with regards to short-term performance and long-term capabilities. PwC (2013) suggests a model with 'competitive advantage and business fit' on one axis, and 'performance at risk' on another, in which suppliers are categorized as preferred, transactional, strategic or development suppliers.

Besides ranking the suppliers based on different strategic features, Lamming (1998) specifies the term 'first', 'second' or 'third' tiers, which are 'used to indicate the degree of influence the supplier exerts in the supply chain rather than some fixed position in a hierarchy'. According to him, first tier suppliers are the ones with integrated systems to supply directly to buyers or the ones who have significant technical impact on the buying companies if they supply indirectly. Following that, the second tier suppliers are the ones who provide support service or provide inputs for the first tiers.

Due to the fact that there are many ways to segment the supply base, an organization should take into account the most important aspects to the corporate strategy (industry, specific requirements, etc.) and choose the best fit for its segmentation process (PwC, 2013).

2.3.4.4 Relationship Development

In accordance with Fogg's study (2009, p. 299), relationship development is different from supplier development, which will be described in the following part. According to him, relationship development involves two-way interaction, and focuses on the relationship rather than the delivery of products. He indicates that usually it begins with the current good relationship between members, while supplier development process is tactical and mostly tries to solve problems. Relationship development is defined as 'a

two-way process between buyers and sellers where activities jointly undertaken bring the organizations and the people working within them progressively closer towards a more trusting and mutually beneficial state'(Fogg, 2009, p. 306).

To be able to handle relationship management, Ford (1980) places a great emphasis on the human element in any organization. He points out that it is beneficial to have human investment from the beginning of the relationship. There should be inter-organizational communication between buyers and suppliers (Paulraj et al., 2008) and suppliers should be invited to contribute ideas in the process (Trent, 2005). Besides, employees from buying company also need to understand the people from the supplying company, where they want to lead their organizations, and what they are aspired to do (Fogg, 2009, p. 300). Moreover, according to Fogg (2009, p. 300) and Liker and Choi (2004), regular meetings should be held to have frequent updates and further engage people from two organizations to each other. In addition, Mentzer et al. (2007, p. 367) and Ford (1980) specify that in order to develop good relationships between buyers and suppliers, both firms need to develop trust and commitment in the long term, pursue mutual benefits with support from top management, have constant sharing of information, as well as strong and open communication.

2.3.4.5 Performance measurement

As indicated by Handfield et al. (2009, p. 708), purchasing performance measurement is a standardized and systematic way to control and review purchasing or supplier performance. Cousins et al. (2008) add that performance measurement gives companies useful information to plan and manage different activities of the organization. Besides, Handfield et al. (2009, p. 309) suggest that performance measurements can include delivery performance, quality performance, cost reduction or other qualitative factors. There are different ways to conduct supplier performance measurement such as using a balanced scorecard (Kaplan & Norton, 1996) or the performance pyramid (Cross & Lynch, 1992).

Olsen and Ellram (1997) make it clear that one reason why companies always need to measure the performance is to support better managerial decisions, and effectively adjust the relationship to the goals of the companies. Moreover, performance measurement also underlines the needs for personnel training and helps to provide

suppliers with feedback in order to prevent or correct any problems that might arise (Leenders et al., 2006, p. 357). Most importantly, according to Leenders et al. (2006, p. 356), the measurement results can stimulate and direct action as well as behavior of suppliers. Fogg (2009, p. 310) also indicates that purchasing organizations measure because they want to make sure the performance goes in line with what has been agreed, to identify any possibility for process improvements as well as to indicate any drawbacks from both sides.

What to measure is another question in this activity. Fogg (2009, p. 310) states that companies should measure what is important to them, especially taking strategic goods or services into consideration. There are various categories of measurement; however, according to Handfield et al. (2009, p. 711) the most common topics are:

- Price performance/Cost-Effectiveness
- Quality performance
- Time/Delivery/Responsiveness
- Sustainability and environmental safety
- Technological innovation
- Strategic performance

According to Handfield et al. (2009), for each of these categories, there should be certain measures for it, either subjective or objective. For example, defective parts per million can be used to measure quality performance (Benton, 2010, p. 256); on-time delivery data can be used to review delivery precision (Beamon, 1999). Moreover, for quality management, different audits can be carried out to see how suppliers are performing, and these results play a great impact on the performance measurement results in general (Lysons, 2000, p. 481). Therefore, it is critical that firms should develop performance measurement system with objectives, clarity, use of accurate and available data and particularly joint participation between suppliers and buyers (Neely et al., 1997; Globerson, 1985). It is also suggested by PwC (2013) that companies should adopt two-way measurement strategy where both buyers and sellers measure the performance of the other. This action will stimulate the collaboration and the measurement will be more effective because both members are committed to the performance indicators (PwC, 2013).

In addition, in line with Kaplan and Norton's research (1996), PwC (2013) supports the use of a balanced scorecard to keep track of the whole process of performance measurement over time. Balanced scorecard utilizes value drives as a base for performance control and enhancement (PwC, 2013). The elements that usually appear in a scorecard often cover financial, operational, and innovation aspects as well as internal and external perspectives (Handfield et al., 2009). Organizations should incorporate development capabilities along with performance indicators into the scorecard, so that it can drive better performance in the future (PwC, 2013).

2.3.4.6 Risk Management

Based on Handfield et al.'s research (2009, p. 218), many events happened have shaped the view on the continuous flow of supply chain management. They mention the event of Hurricane Katrina in 2005, which has proven clearly the impact of interruption on the overall supply chain operations. Even though these events are hard to predict, and their impacts are difficult to measure, the damage of those disruptions can be costly (Handfield et al., 2009, p. 219). Moreover, Hallikas et al. (2005) mention that supply networks have been more complicated and sensitive to different risks. According to them, these characters are driven by global sourcing, the increasing complexity of products or services, and higher customer demand. Due to the tendencies, companies are more exposed to risks coming from external partners (Hallikas et al., 2005). That is why companies should focus on the risk aspects of supply chain management or purchasing management (Hallikas et al., 2005).

Risks can vary in many different areas. Johnson (2001) has categorized the supply chain risks into two different types: risks related to product demand such as seasonality, and product supply such as supply disruptions, etc. Besides, Chopra and Sodhi (2004) classify risks as delays, forecasts, intellectual property, inventories, systems, and capacity. Moreover, the type of business relationship also defines the benefits and risks in any industry (Hallikas et al., 2005).

In response to these risks, different models of risk management have been derived (Fogg, 2009; Hallikas et al., 2004). Risk management is defined by Fogg (2009, p. 10) as 'the process of recognizing the risk and minimizing the likelihood of a given risk occurring and the impact to the purchasing organization if the risk does occur'.

According to Hallikas et al. (2004), a typical risk management process comprises risk identification, risk assessment, implementation of risk management actions, and risk monitoring. In more detail, the company should identify risks by first taking into account different aspects such as quality errors, late delivery, etc., and then assess the risk impact if it is minor, medium or serious, and based on that to develop plans for actions (Hallikas et al., 2004). Furthermore, they suggest that each company should control the risks itself and it is useful to share the risk management process to some extent with suppliers, and collaborate to mitigate the risks.

2.3.4.7 Supplier Development

As mentioned in the Supplier Relationship Development section, supplier development tasks are mostly reactive and aiming at solving problems. It is defined by Fogg (2009, p.305) as 'the provision of finance, technology or other forms of assistance by the buyer to the supplier to enable the supplier to offer a product or service which meets the buyer's needs, or to interface with the buying organization in a mutually appropriate way.' In short, it is a way to improve the performance of suppliers (Park et al., 2010). Based on Wagner's study (2006), supplier development is one important activity of SRM. Purchasing companies should carry out supplier development in order to enhance the current state, achieve the business goals and maintain their competitiveness (Dyer, 1996). Fogg (2009, p. 297) and Wagner (2006) point out various reasons leading to supplier development phase, including:

- realization that products and services account for a larger amount of total cost since sourcing is common,
- suppliers are not capable of delivering required products
- suppliers are not performing as expected
- need to further develop the supply base to bring better goods and services, and improve the interactions between buyer-supplier,
- technology has been improved quickly, and suppliers should be encouraged to specialize on specific technologies,
- and companies always need to pursue new ideas and chances, since they cannot know everything.

Supplier development can be proactive before problems arises (Fogg, 2009, p. 297), but it can also be tactical when the suppliers have not met the buyer's needs (Handfield et al., 2009, p. 325). Additionally, in order to improve supplier performance, organizations need to be concerned about sharing technology, stimulating suppliers for development, providing resources and direct participation of its employees to suppliers' activities (Liker & Choi, 2004). Krause and Ellram (1997) acknowledge that involving directly in the operation of supplier is very challenging; hence, for successful supplier development, there should exist mutual understanding, great involvement, frequent communication and constant implementation over time between buyers and suppliers.

Concerning supplier development alone, there are also different models developed to carry out this step. The activities for supplier development listed by Gocke et al. (2011) and Handfield et al. (2009, c. 9) consist of:

- Target a certain number of suppliers needed to implement development activities
- Put efforts on what is most important
- Establish a cross-functional development team from different departments
- Engage and encourage suppliers
- Clarify opportunities and probabilities for development
- Define key metrics and goals
- Measure and track results
- Establish effective report-back system to keep the right focus of development

Hence, efficient supplier development needs to have the commitment from both sides, buyer and supplier, in financial investments, resources, timely and precise information sharing, as well as performance measurement (Handfield et al., 2009, c. 9).

2.3.4.8 Supplier Relationship Performance Measurement

Different from measuring the performance of supplier, measuring the performance of the relationship aims at understanding how both buyers and suppliers feel in a purchasing and supply relationship, rather than only through data metrics (Fogg, 2009, p. 315). Fogg (2009, p. 316) specifies that the main purpose of measuring the relationship performance is to develop the relationship, and further develop trust, commitment and loyalty from both buyers and suppliers.

Giannakis (2007) admits that although most of the research has not studied thoroughly the performance of supplier relationship, there is an increasing agreement that it is important to measure the performance of this type of relationship owing to the higher dependency between companies. He also indicates that performance, especially performance of a relationship is rather abstract and hard to measure. This is due to the active and complicated supplier relationships' behaviors (Giannakis, 2007). In cases where the targets are met, the results can be analyzed using any performance measurement tool (balanced scorecard, etc.) (Cousins et al., 2008). On the contrary, outcomes of a relationship, such as the level of trust between parties are hard to define and measure (Laaeequddin et al., 2010)

However, Giannakis (2007) suggests a model based on the gap analysis. The model measures the relationship performance by the differences between two parties' perception of the actual performance of their own and of the other in the relationship. These perceptions can be collected from different managers of both companies to be integrated as organization's perceptions; and when the gaps are small, it means that the relationship performance is high.

On the other hand, taking slightly different approach, Leenders et al. (2006, p. 497) have developed a model based on the satisfaction towards the relationship of both parties as can be seen in Figure 10.

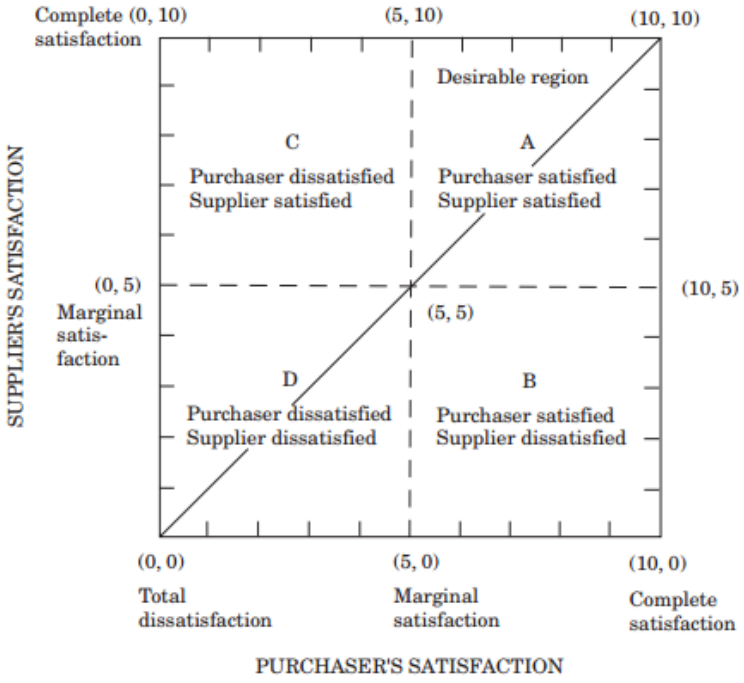

Figure 10. The purchaser-supplier satisfaction model. (Leenders et al., 2006, p. 497).

In this model, the satisfaction by both buyer and supplier is measured on a scale of 0-10, resulting in four different quadrants of relationship situation. It implies that using this framework, both parties want to move to the best position, and wish to develop the relationship together.

By measuring the relationship performance, it helps company to understand the perception of the other partner towards their relationship. It also gives the chance to discuss constructively, build up trust and develop the relationship further in the long run. (Leenders et al., 2006, p. 497).

Besides, Van Weele (2014, p. 353) also identifies the benefits of sending supplier satisfaction survey periodically in order to understand how satisfied suppliers are with the relationship and receive feedback from them for improvement.

2.3.5 Supplier Relationship Management Process

It can be seen from the Strategic Sourcing Process section that SRM process is a part of the whole sourcing process. In addition, SRM is also one in eight key processes of supply chain management process based on Lambert's research (2004). According to him, 'SRM process provides the structure for how relationships with suppliers are

developed and maintained'. The process will focus on the development of close relationships with a small base of suppliers in terms of the value that company can generate from the suppliers (Lambert, 2004).

Hence, it becomes clear that the SRM process is an essential process as a consequence of rising competition, and the need to bring more innovative and better solutions to end customers (Lambert & Schwieterman, 2012). Their research shows that many benefits can be achieved through better managing the relationships with suppliers. As Park et al. (2010) have mentioned, there are many more studies focusing on SRM, but not the holistic view of the process. However, a few previously developed models of SRM or SRM processes have been found and they will be demonstrated in this section.

Since there is a lack of models of the SRM process, it was challenging to find relevant literature and the researcher started with general descriptive model of the SRM activities. The overall model of what are done in SRM is presented in the study of Trent (2005) in Figure 11 below.

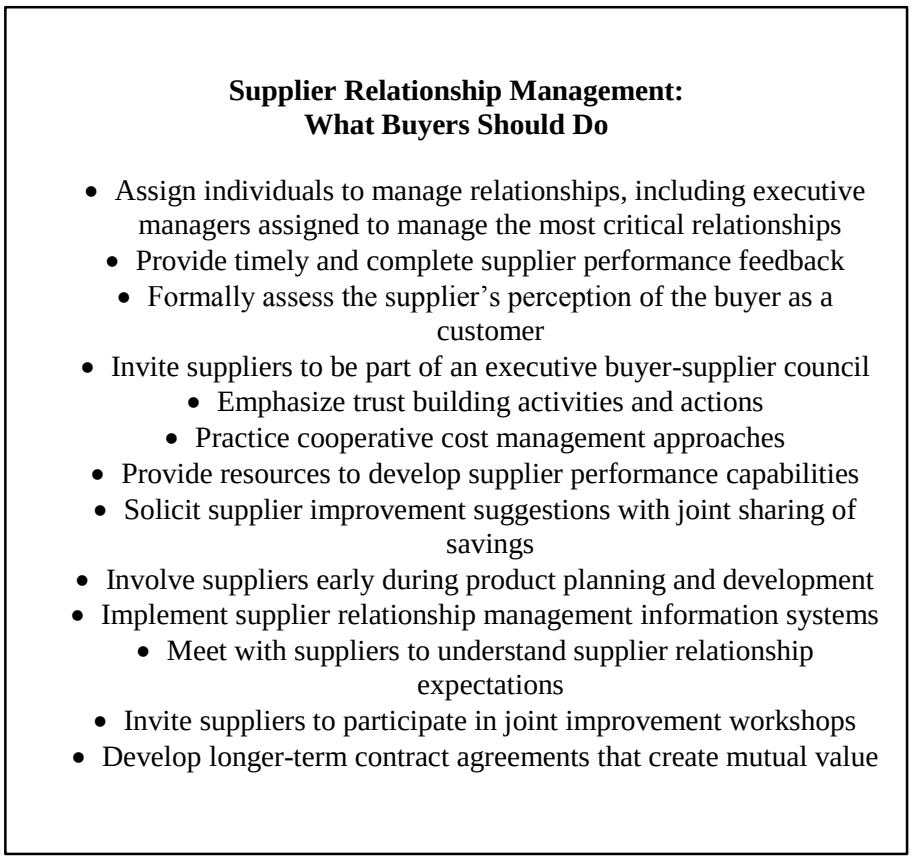

Figure 11. List of activities in SRM. (Adapted from Trent, 2005).

This model lists similar activities to the last steps in the sourcing process developed by Handfield et al. (2009) and Mentzer et al. (2007). The main elements consist of assigning supplier relationship manager, carrying out performance measurement, practicing regular meetings, creating joint development and long-term planning. Moreover, it is critical to develop trust-based relationships between parties and suppliers should indicate how satisfied they are with the customers through surveys or questionnaires.

From those standing points, other models have been developed to illustrate the process flow with different steps in SRM process. One is the supplier-partnering hierarchy by Liker & Choi (2004) in Figure 12 below. This process covers the whole elements of both sourcing process and SRM activities. It was said to be implemented successfully by Toyota and Honda as far back as the 1980s.

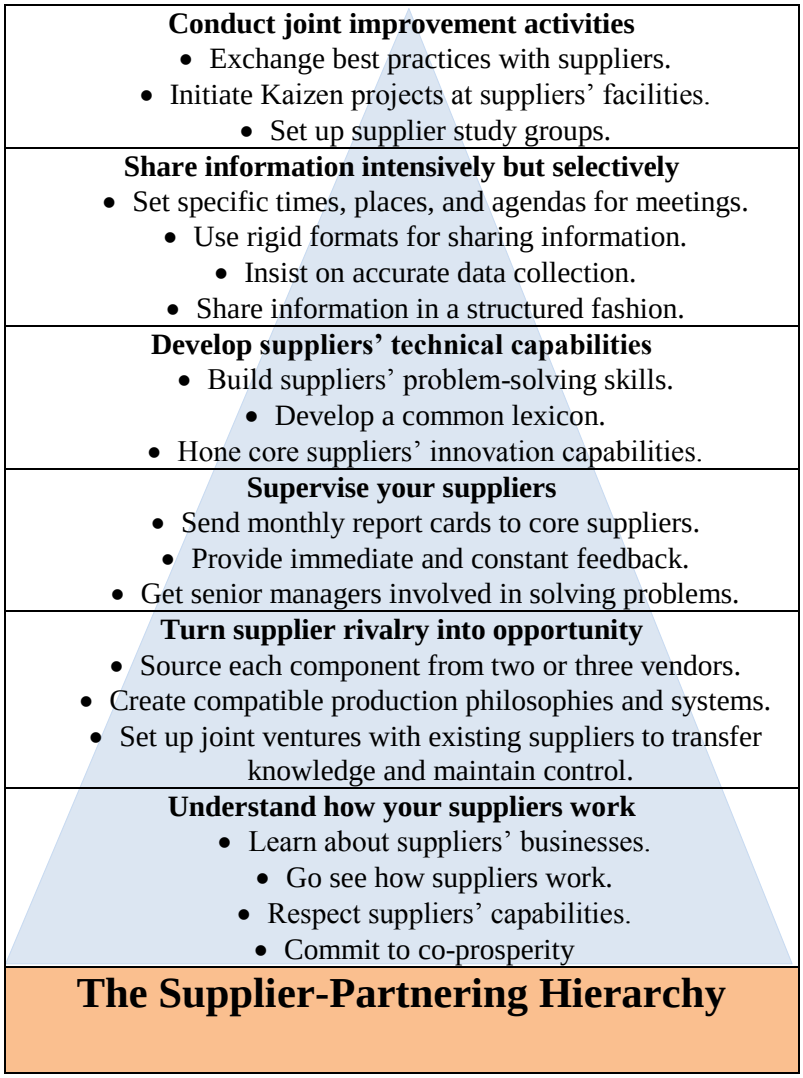

Figure 12. The supplier-partnering hierarchy. (Adapted from Liker & Choi, 2004).

Taking a broader view of the SRM process, this hierarchy goes from understanding the suppliers, selecting suitable suppliers by turning supplier competition into opportunity, supervising the suppliers, to the steps of developing the suppliers' capabilities, sharing information and carrying out improvement together. These steps support each other in the process, and if all are handled skillfully, the company can achieve great success due to better relationships. This process also re-emphasizes the importance of communication, supplier development as well as joint commitment in any supplier relationship process.

Moreover, Charles Noland (2015) has concluded that 'SRM process is a continuous dynamic and iterative process and similar to the Deming's Plan-Do-Check-Act framework'. This argument is also supported by Mintzberg (1978) and Wasner (1999), who stated that 'supply relationship is a complex and iterative process with overlapping

stages'. In coherence with this opinion, Park et al. (2010) have developed an SRM process that all elements are integrated and continuously moving (Figure 13).

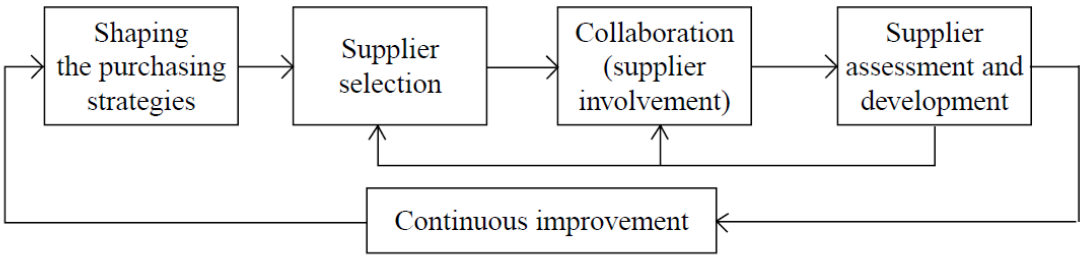

Figure 13. The integrated SRM framework. (Park et al., 2010).

The process above also contains the main steps similarly to the strategic sourcing processes discussed above, with purchasing strategies, supplier selection, collaboration, evaluation and development. However, instead of ending with SRM activities, this has a continuous improvement step running back and forth in a loop so that the process always takes into account of any changes during the relationship period and as a result, reshaping the purchasing strategies. Moreover, the selection, collaboration and development are also iterative processes, meaning they can run over and over again, from development back to selection or from development to collaboration, and so on (Park et al., 2010). This is a very thorough framework since it concerns the real-life practice of companies when not every step is moving horizontally following a straight process flow.

Another more modern concept developed by PwC (2013) also focuses on the iterative course of the SRM process. According to PwC's research (2013), many respondent companies stated that they have initiated SRM programs, but there is no standard way of working as well as a lack of supporting tools and templates. Therefore, it is essential to implement across organization a harmonized and standardized SRM business process, consisting of suitable tools and templates, such as supplier segmentation tool, balanced scorecard, meeting templates, and customer/supplier perception survey. The process shown in Figure 14 also runs from supplier selection, segmentation, to further defining strategy, building relationship, developing and managing the performance and risk. The research also stresses that a modern SRM system should incorporate the participation of different stakeholders, along with sourcing or procurement. Those

stakeholders can include logistics, operations, research & development, marketing, finance, and information technology. Most importantly, the model strongly highlights the continuous value creation from the SRM process. The research pinpoints the fact that *"SRM should also deliver value for the supplier; otherwise you will never become a customer of choice."* (p. 22).

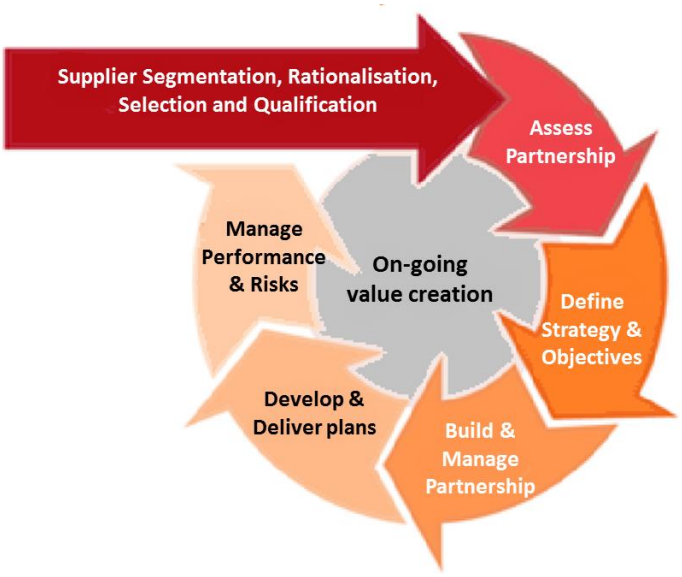

Figure 14. SRM as a formalized business process. (PwC, 2013).

Overall, we can see that the SRM process models in literature research have been developed to a certain extent. These processes take most or all of the important elements of the strategic sourcing process models described in the earlier section, from supplier selection, to following up performance and development activities. Moreover, they all indicate that SRM activities should be iterative and cyclical with certain inevitable steps.

3 THEORETICAL FRAMEWORK

This section presents the theoretical framework of the research, which is based on the literature covered in chapter 2. The framework illustrated in Figure 15 defines the model of an SRM process. It incorporates different models suggested above in section 2.3.5 and highlights the importance of certain elements in the SRM activities as mentioned in 2.3.4, as well as the life cycle of managing supplier relationships.

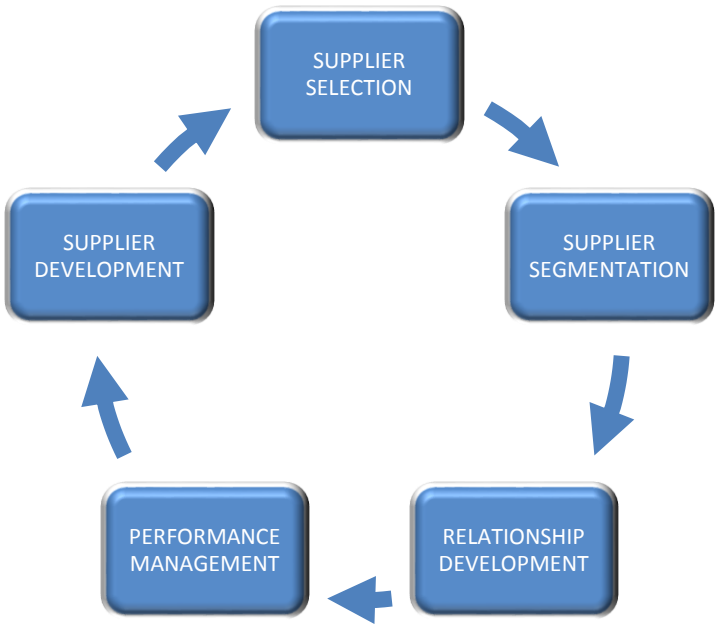

Figure 15. Overall Theoretical Framework.

As mentioned by Noland (2015), Mintzberg (1978) and Wasner (1999), SRM process is an iterative process with high repetition of different activities in the life cycle of supplier relationships. Park et al. (2010) as well as PwC (2013) also develop SRM frameworks, which are repetitive and continuously moving. Since every step in the process can be performed repeatedly over the period, it justifies the cyclical order of the SRM process in the research framework.

With regards to the steps inside the process, Liker & Choi (2004) and Park et al. (2010) agree that supplier selection is a part of the SRM process. Moreover, Park et al. (2010)

indicate that supplier selection is highly important as it is the starting activity that will set up the whole supplier management process. Supporting that, PwC's model of the SRM process (2013) also identifies that the process starts with supplier selection. All the relationship strategies are followed after the suppliers are selected. Thus, supplier selection phase is placed as the first one in the SRM cycle.

According to Svensson (2004), supplier segmentation is an important business activity. Additionally, segmenting suppliers in the supply base will help the company have a clearer picture of how to direct the future relationship and interaction with suppliers (Day et al., 2010). They also point out that segmentation can further evaluate the earlier decision of supplier selection. Hence, it can be considered as the next activity in the process after supplier selection. Furthermore, Fogg (2009) has emphasized greatly the importance of relationship development in a strategic process. Since it is beneficial to have employees from both parties cooperate closely in the business, relationship development should be taken into consideration right after the supplier segmentation or relationship strategy is identified, in order to engage people and strengthen the connection.

After the relationship development activities, it is logical to follow up supplier's performance. Handfield et al. (2009) state that performance management task is a standardized and systematic way to control and review supplier performance. Leenders et al. (2006) also conclude that performance results can stimulate and direct actions of suppliers. In line with this argument, Trent (2005), Liker & Choi (2004) and PwC (2013) all include performance measurement or management in their SRM frameworks. These aforementioned points contribute to the fact that performance management should be a part of the SRM process. Furthermore, since knowing supplier performance can help to improve the supplier actions and behaviors (Leenders et al., 2006), supplier development is clearly the next step after performance management. Fogg (2009), Wagner (2006) and Park et al. (2010) also support that supplier development is needed to enhance the current state while simultaneously improve the suppliers' performance and capabilities. The main objective of this activity is satisfying the company's goals in order to meet the end-customers' needs. Then, as the cycle develops, it comes back to supplier selection when the target is not met, or there are some other needs occurring such as selecting new supplier or selecting existing suppliers for new business.

4 RESEARCH METHODOLOGY

This section will introduce the methods of the research by presenting how, where and when, as well as what type of data was collected during the study. Moreover, data analysis methods will be briefly discussed.

4.1 Overview of Methodology

This thesis is based on qualitative research in which the data is observed, gathered, analyzed in order to develop an understanding of the topic, and, after that, discuss the findings and drive to conclusions. According to Amaratunga et al. (2002), research can be classified into two different ways: quantitative and qualitative. They explain in their study that while the quantitative method relies heavily on numbers, uses standardized measurements to clarify testable hypotheses and find differentiating characteristics, or empirical barriers; the qualitative method is particularly suitable when the aim of the research is to define, analyze and build an understanding of culture, social behaviors or other issues. A qualitative method also aims to take into consideration the differences between people (Amaratunga et al., 2002). Hence, this method is the most appropriate method for this thesis since the goal is to develop a model or framework for the SRM process, which can be utilized in real business organizations. It is important to have an understanding of the process, and based on that, create and describe the model.

Moreover, as mentioned above, this is done as a case-based research, using a case company's situation to generalize and solve the research problem. Based on Yin (2014, p. 4), the case study approach is applied in various circumstances, in order to contribute to our knowledge of individual, group, organizational, social, political and related phenomena. The approach is popularly used in many different fields, including business. It allows researchers to emphasize on a specific 'case', and still maintain holistic and realistic perspectives of different issues such as organizational and managerial processes. Eisenhardt (1989) also says that the case study research strategy emphasizes on understanding the dynamics occurring within single environments. Furthermore, Amaratunga et al. (2002) mention that case studies are tailor-made to

discover new processes or behaviors, which have not been largely understood. Thus, using a case study approach is beneficial to understand the current practices and processes that the case company is having for the SRM activities, in order to develop a model for it later.

This thesis uses a qualitative research approach on three different types of data from primary and secondary sources: semi-structured interviews with internal employees from the case company and the benchmarking companies, as well as academic literature. Among several qualitative data gathering methods, semi-structured interviewing was chosen as the most suitable way to study the SRM process, especially in the case company. According to Rubin & Rubin (2012, p.3), qualitative interviewing helps researchers to understand in detail the experiences, feelings, motives and opinions of others, and explore the problem from the different perspectives. It is also pointed out that this method is flexible, can be used in any circumstances and is able to generate data with deep meanings (King, 1994). King (1994) suggests that a research interview is suited for a study that emphasizes the meaning of specific phenomena to the participants, as well as various perceptions of individuals in an organization. Based on this, interviewing was selected as the most appropriate method that allows participants to express their thoughts and opinions on the topic. Thus, the primary data have been obtained by interviewing employees from the case company, particularly who are involved in the SRM process.

4.2 Background of the Case Company

The case company participating in this research is a Finnish-based international company. Starting as a producer of radiosondes, the company has now become a global leader in environmental and industrial measurement. The main products of the company are still radiosondes, with many others such as weather radar. With its core value of working towards a better world together with customers, the case company has experienced steady growth over the last few years. In 2014, until September, it achieved net sales of EUR 204 million, and an operating profit of EUR 11.5 million, and employed nearly 1,600 people worldwide. Serving customers in more than 150 countries annually, the case company has its headquarters located in Finland, as well as subsidiaries and offices in many regions.

The case company provides a wide range of observation and measurement products and services. Customers are served in two different business areas of weather operations and controlled environment. The company's vision is to be the leading provider of operational values for customers in these targeted segments. Along with the vision, its mission is to offer high reliability and added value with the products and services by bringing business and technical expertise together from both sides. Moreover, the company highly values the focus on customers, being strong together, integrity, as well as innovation and renewable. In particular, it emphasizes the importance of quality and sustainability in its manufacturing and productions.

Since manufacturing is a critical function of the case company's business, the role of the suppliers cannot be overlooked in the sourcing function. The quality, sustainability, and business strengths of suppliers are also scrutinized frequently because these factors affect the final products and services directly. Therefore, the sourcing function plays an important part in the organization. As mentioned above, the case company has its sourcing and purchasing function separately, both under the general Operations department. Here, the purchasing function is where purchase orders are handled, while the sourcing function is where sourcing managers try to find, select and establish agreements and relationships with suppliers according to the business needs. The case company also separates its direct and indirect sourcing. While direct sourcing deals with direct materials used for manufacturing, indirect sourcing handles others such as corporate support, service sub-contracting, facilities, etc. The direct sourcing has four different categories based on component types, and each category has different major emphasized issues.

Since the company is moving towards a process-based organization, all of its departments and functions are developing formal processes on the company's process map. Similar to the lack of process frameworks for SRM system, the case company has not had an established SRM process. Therefore, it has been chosen for this case research, in order to examine what the current practices are inside the company, and how they consider a future SRM process.

Since the sourcing function employs people from different regions, including the United States, Finland and China, it is important that the research covers the global picture of the case company's SRM system. Moreover, global sourcing is increasingly common

with different types of suppliers, which asks the researcher to take into account that aspect when studying the SRM process in the case company.

4.3 Data Acquisition

Altogether, thirty-three interviews were conducted during November 2014. All the interviews have been recorded and then transcribed to make it easier for later analysis. The interviewees were defined in two different groups: the ones who are directly involved with SRM activities such as sourcing managers, and the ones who are indirectly involved with SRM activities such as employees from quality, purchasing or other operational functions. Categorizing the interviewees this way helps to see the linkages between suppliers and different departments in the organization, as well as how the relationship is handled with the involvement of different functions. Therefore, there are two different sets of interview questionnaires. The first one is used for nineteen employees from the Sourcing team, and the other is used for the latter group of interviewees (fourteen people in total). The interviewees also wanted to remain anonymous in the thesis, so only their titles have been mentioned in the later parts.

The interview questionnaire for the Sourcing team (Appendix A) was designed according to two themes: the as-is and to-be situations or practices of SRM process in order to understand the SRM process and activities in the case company. More precisely, the interview started by asking the interviewees about their current positions, current responsibility in the SRM process, current issues rising from the lack of a certain process, the SRM activities they are currently doing, and further about their satisfaction with the current process or activities of SRM. The following part tried to dig deeper into how the interviewees see the SRM process and what they think it should be like. These interviews took in general approximately an hour per person.

The interview questionnaire for other functional areas (Appendix B) is created simpler than the first one, since the interviewees in this group might not necessarily be involved directly in the SRM activities. In these interviews, the participants were asked about their current positions, how they are involved in the SRM process, their satisfaction with the current situation, and what they would want to change or improve. These interviews took roughly half an hour per person.

The researcher interviewed employees from different regions with different amount of

professional experience to ensure that the thesis takes into consideration all kinds of perspectives and therefore, get a clear view of the overall picture and its complexity. Among thirty-three people interviewed, ten are at middle management level from different functions, and twenty-three are employees. Table 2 lists the details of departments, number of people interviewed in each department and titles of the interviewees:

Table 2. List of interviewees in terms of departments and positions.

Department	Position	Number of people interviewed
Sourcing	Head of Sourcing Category Managers Supply Chain Analyst Sourcing Managers (Supplier Relationship Managers)	19
Life Cycle Management	Manager Project Manager	2
Offering (Research & Development)	Project Manager Development Manager Engineering Manager	6
Testing	Head of Production Technology	1
Weather Factory	Head of Weather Factory	1
Purchasing	Purchasing Manager Buyer	2
Supplier Quality	Group Supplier Quality Manager Supplier Quality Manager	2

Beside the interviews with employees of the case company, two benchmarking interviews with two other companies, namely Company 1 and Company 2, were also conducted, mainly based on the interview questionnaire used for the Sourcing team since the interviewees from these companies are Category Manager and Head of Supply and are greatly involved in the SRM processes there. The benchmarking interviews are

essential in order to know the current practices and situation in the business world in general, and in each industry in particular, as well as take into account different views and perspectives over the research topic.

Moreover, the researcher has obtained qualitative data through reviewing existing academic literature on sourcing, SRM and business processes. Principal secondary data sources for this research were gathered through an extensive Internet search, different books and textbooks as well as library services. The key words used in these searches consisted of supply chain management, sourcing, purchasing, SRM, supplier relationship, supply relationship, and business process.

By reviewing the academic literature published in the fields of purchasing, sourcing and SRM as well as analyzing the primary data obtained from the interviews, the thesis is able to answer the following research questions:

1. What are the current practices of SRM?
2. What are the benefits of an SRM process?
3. How to measure the success of an SRM process?
4. What should be the activities in an SRM process?
5. Who should be involved in an SRM process?

Further, interviewing relevant stakeholders and benchmarking companies helps the researcher to explore the research questions and draw conclusions about the current and to-be state of the SRM process. Thus, a model for the SRM process can be created at the end based on the literature and the interview data.

4.4 Data Analysis

Eisenhardt (1989, p. 539) states that ‘analyzing data is the heart of building theory from case studies’. Therefore, this is the most difficult and important step in any research. Rubin & Rubin (2012, p. 190) agree that analysis process enables researchers to gravitate gradually from the raw interview data to clear and reliable answers to the research questions. In this research, the data collection method, which is semi-structured interviews with employees from different functions in the case company and with two benchmarking companies, greatly supports the analysis phase.

The researcher reviews the literature on sourcing, purchasing, SRM and business processes to understand and identify the important elements in the SRM process. The data collected from the interviews brings more in-depth understanding of the current situation at the case company, as well as the wanted to-be state, then allowing the researcher to draw conclusions on the best practices for the SRM, and further on developing the model for the SRM process.

The first step was to transcribe all the interviews in a full and accurate word-for-word written format. All the interviews were conducted in English and transcribed in English. According to Rubin & Rubin (2012, p. 190), it is much easier to find information in a transcript, rather than listening to a recording repeatedly. Therefore, even though it is not necessary to transcribe in detail, all the interviews were transcribed carefully in order to ensure the precise quality of analysis and to ensure no information was lost during the process.

After transcribing, the results were compared and contrasted with regards to the theoretical framework and research questions. The main goal is to find similarities and differences, as well as putting together general discoveries about the nature of the SRM activities at the case company and benchmarking companies based on the interviews. From that, these findings were discussed relatively to the literature in order to deliver the final summary of the research.

4.5 Limitations of the Research Methodology

There are certain limitations to the research that might affect the findings and conclusions. Firstly, there is subjectivity involved in the analyzing process of this research, which might bring some bias to the conclusions. Secondly, the only method used is through interviews, which might be a limitation in the sense that a more concrete data analysis might be required, such as more in-depth benchmarking research or extensive quantitative data acquisition.

5 ANALYSIS AND FINDINGS

This chapter will go through the findings from the interviews. Especially the theoretical framework will be taken into account when analyzing the interview results. The current overall situation and the current and suggested SRM activities in the case company are assessed first. After giving a general understanding of the as-is and to-be situations, different elements of the theoretical framework, including the process structure, supplier selection, supplier segmentation, relationship development, performance management, and supplier development will be identified. Moreover, the interview results also raise other opinions related to the process activities, which will be discussed in light of the theoretical framework. Furthermore, the findings also aim to analyze other issues in the research questions, consisting of the benefits of an SRM process, the process stakeholders as well as how to measure the success of an SRM process. Most importantly, findings from benchmarking interviews will also be taken into concern in comparison with the conceptual framework and with the case company's interview results. Finally, the results from the interviews will be used to validate the theoretical framework of the SRM process, in order to provide a redefined framework.

5.1 Findings from Internal Interviews

This section will discuss the results obtained from the interviews with the internal employees of the case company. It will take into account all thirty-three interviews conducted with both Sourcing personnel and personnel from other relevant functions. However, in some certain sections, especially the current and suggested SRM activities, as well as the SRM process, the researcher will mainly focus on the interviews with Sourcing personnel. The reason is that they are the ones directly interacting with suppliers on a daily basis and having high experience on SRM in general.

5.1.1 Satisfaction with the Current State

Nearly in the beginning of the interviews, all the interviewees are questioned if they are satisfied with the current practices of the SRM system at the case company. Most

interviewees (seventeen out of thirty three) answered that they are not satisfied with the current state and they have big issues with the lack of an SRM process in place. Nine people think that the current way of doing is quite good, but there is still room for improvement. No one actually stated that the situation was excellent or miserable, while there were only three neutral opinions. Out of all the interviews, three personnel said that they were satisfied with the current state. The satisfaction number with the current state is visualized in Figure 16 below.

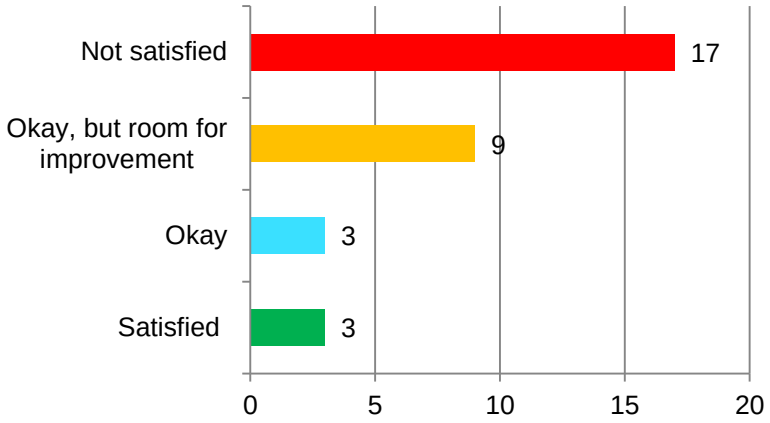

Figure 16. Interview results: Satisfaction with the current state.

We can see that most people are unsatisfied with the current practices of the SRM system. The ones who feel satisfied and neutral are mostly the employees from the other functional areas, rather than from the sourcing function; and they are not involved largely in terms of the SRM activities. Most people from the sourcing department, especially sourcing managers are not satisfied with what is currently being done. These answers show that there is a common awareness of negative situation caused by the lack of a standardized SRM process in the organization.

5.1.2 Current Problems

Since there is a negative overview of the lack of an SRM process, the interviewees were asked to specify any problems that they have encountered due to this condition. All kinds of issues were mentioned and most issues were mentioned several times. Since it seems to be a long list of issues, all problems are categorized into three interdependent main groups as displayed in Table 3. The goal is to be able to focus on the most important issues and to simplify the analysis.

Table 3. Categorization of the stated issues.

Category	List of stated issues (summarized)
Lack of standardization	• Lack of a common and structured way of working • Lack of a process which is clearly defined • Lack of common understanding • Lack of standardized documentation
Lack of harmonization in information transmission	• Lack of communication and information flow between stakeholders • Miscommunication between different functions • Misunderstanding between stakeholders
Lack of strategic overview	• Actions are more tactical and operative, rather than strategic • Risks derived because of the lack of understanding of suppliers and their capabilities • Lack of development tasks • Lack of resources

Lack of standardization was mentioned in most of the interviews (nineteen interviews) as the biggest current problem in managing and conducting SRM activities. According to the interviewees, the lack of a systematic process or standardization in the functions leads to the situation where everyone does their jobs individually and differently. No one knows exactly what others are doing. Moreover, misunderstandings can happen because actions are not done in a common way.

One category manager said: *"I am not satisfied because we don't have a process. We have lots of discussions, but what we are currently doing is totally different. We expect others are doing the same, but we don't know. I'm not saying we are doing the right or wrong way, but what is the right way?"*

Supporting this argument, another sourcing manager mentioned, *"I think that the process should be better defined, because currently it's mostly up to the individual supplier relationship managers what they do."*

Another manager stated, *"We don't have unified way of doing thing, no unified documentation. We don't have a common way of doing things that everyone can understand. Everybody's doing individually, so there's a problem. We don't have unified way to manage our suppliers."*

Apart from the lack of standardization, the second most-described issue from the interviews (in fifteen interviews) was ***the lack of harmonization in information transmission*** with regards to the SRM activities. Since there is no information flow specified, the whole SRM system lacks its transparency, which brings about miscommunication and misunderstanding between internal stakeholders, or sometimes between internal stakeholders and suppliers. This can lead to inefficiency of working and the company will be in danger of losing some benefits that it should generate.

One example of miscommunication and misunderstanding is brought up by one sourcing manager during the interview: *"We don't have common understanding, and some miscommunication. For example, we don't expect to pay the travel expenses, but other teams who communicate with suppliers said we will pay that cost. So it is a waste of money, and losing added value what might be achieved."*

Another sourcing manager mentioned, *"There can be some misunderstanding between our stakeholders, like purchasing. They might have a bit different target in somewhere and we are not going in the same direction. There should be more discussion in the whole supply chain. Everybody should look at the same direction. My work shouldn't overlap or harm anybody else's work."*

One purchaser also stated their opinion on this problem: "*but I would like to have more information from sourcing managers, for example, their monthly meetings with supplier. I think that important category should have meetings with buyers regularly. Currently we share information only by email such as problems on supply chain."*

Most importantly, ***the lack of a strategic overview*** for SRM activities was stated clearly in eight interviews. Without a strategic view of what should be achieved from the SRM system, it is difficult for the employees to know how to prioritize their tasks. Moreover, different departments will not have the same objectives if there is no certain strategic goal. This can be the reason leading to higher risks of operation, because the company does not understand its suppliers on a strategic level. Additionally, it leads to the lack of

development activities inside the SRM activities as well as insufficient resources for various activities happening at the same time without standardization.

One category manager has specified that: *"I think we have risks there, we don't know suppliers; we don't know what's happening there".* The other manager said: *"We don't know all the capabilities what suppliers can offer to us, we don't know properly their performance, and we can't compare suppliers effectively. We just don't know enough about the suppliers."*

One great example of the fact that the strategic overview was not taken into great consideration is this particular answer by one sourcing manager: *"Most of them (SRM activities) are tactical things. It is now more or less reactionary management. It should be more strategic."* Similarly, typical comments received are that we *"should be more proactive"* or *"Working with suppliers, working on goals together, not happening often."*

Resource bottlenecks also occur when the employees were trying to do all the important SRM activities. As one category manager stated, *"We don't have the time to do things that are necessary to be done. We do more operative issues than strategic."*

Those examples above show that the lack of standardization, lack of strategic overview, and lack of harmonization of information flow result in uncoordinated activities in different functions while conducting the SRM activities. Therefore, there is a need for an SRM process that serves as a simple and clear guidance for the employees to follow.

5.1.3 Current Practices of SRM

In the interviews, the employees were also asked what activities they are currently doing with relation to SRM. The answers were fairly consistent in what kind of activities they are doing at the moment, even though there can be differences in the amount of time they do it, and the tools or documents used. Suppliers in the case company are divided into three different ranks: one, two, and three; where rank 1 is given to suppliers with the highest level of relationship and rank 3 is the lowest. Hence, the importance of each supplier is different depending on its ranking. Table 4 displays a list of the current SRM activities with the ranking separation due to the fact that the interviewees distinguished theirs actions towards suppliers based on their ranks. These activities and the frequency

of doing it are summarized from the interviews, but it is not a strict rule that is followed by all the employees in this specific case company.

Table 4. Current SRM activities.

Activity	Rank 3	Rank 2	Rank 1	Tools/Documents/Data
Ranking/Segmenting suppliers	N/A			No common criteria for different categories
Meetings with suppliers	No identified frequency		Regularly	No common template for meeting minutes
Financial analysis	No clear rules how many times it should be done for each supplier rank.			Financial report from third parties, no common tool for analyzing supplier financial health.
Price Negotiation	Case by case	Annually agreed	Minimum annually agreed	Agreements, Price list
Sustainability Management	With selected supplier, bi-annually	Bi-annually	Bi-annually	Supplier questionnaire sent to suppliers
Performance measurement	Follow-up regularly, however, there is no certain structure how it should be done.			Quality data, Spend data, etc. However, some data are not precise; people do not use the same data; and there is no common tool for measuring performance.
Product change	If needed	If needed	If needed	Product change plan
Ramping down	Case by case	Case by case	Case by case	Transfer check-list, ramp-down plan

Even though all the activities are listed above, because of the lack of a standardized process, sourcing managers mentioned that sometimes they did not have enough time to do all of the activities or they do things when it is necessary. For example, one sourcing manager said that: *"I don't have much time to pursue real improvement projects….Mainly, I'm dealing with operational issues, when there's a problem…."* Some other stated, *"It's quite ad-hoc. We don't have structured approach. We contact them when there's some problem, technical, shortages,… For few bigger suppliers, quarterly meeting I have"*. Another example of the unsynchronized process is: *"My time is currently used for making agreements, or then solving problems. SRM is done on need basis, not on systematic regular basis."*

Moreover, we can see from the list that the documents are not harmonized. People are not using the same templates or documents for certain activities. One mentioned, *"I have my own tool to do it".* In other cases, if there are templates/tools, some employees might not be aware of them. The employees are sometimes not clear where or from which source to get different data of quality, or on-time delivery, etc. Therefore, it is highly imperative for them to build a structured system, stating clear where and how the information and data should flow, and what tools and documents to be used.

5.1.4 Suggestion for Improved Practices of SRM

After asking about what the interviewees are currently doing, the interviews took them to the next level of the topic: 'What activities should be included in the SRM process?' This question will help us understand more how the process should look like in a more detailed level, and helps to define the general phases of the process. Hence, this section will list the activities that should be taken into account when conducting SRM activities based on the interviews (Table 5).

Table 5. Improvement suggestions for SRM activities.

Activity	Rank 3	Rank 2	Rank 1	Tools/Documents/Data
Ranking /Segmenting suppliers	N/A			Common criteria based on criticality, spend and technology aspects.
Supplier Relationship Plan	N/A	With key suppliers/ Annually	Annually	Relationship plan template (agreeing on meeting practices, who should be involved in the relationship from other functions, etc.)
Meetings with suppliers	When needed	Twice a year	Monthly/ quarterly	Monthly and quarterly meeting minutes
Financial analysis	For some suppliers only	Annually	Annually	Financial report from third parties, and financial analysis tool
Price Negotiation	Case by case	Annually agreed	Minimum annually agreed	Agreements, Price list
Sustainability Management	With selected supplier, bi-annually	Bi-annually	Bi-annually	Supplier questionnaire sent to suppliers
Performance measurement	Follow-up when necessary	Key suppliers only	Regularly	Quality data, Spend data, Supplier Scorecard tool, specific performance metrics
Risk management	Based on the risk indication and assessment, manage risks as needed.			Risk assessment tool
Supplier Development	Based on supplier scorecard result, sustainability score, quality control or business needs, etc.			Development plan template/ Supplier Scorecard
Product change	If needed. Need to be communicated with relevant stakeholders.			Product change plan
Ramping down	Case by case, depending on the production plan, the significance of the business or supplier evaluation results.			Transfer check-list, ramp-down plan
Internal communication	N/A			Meetings, information transferring, etc.

The main differences between the current practices and the improvement suggestions are supplier relationship plan, risk management, supplier development, and internal communication.

- Supplier relationship plan is important because it will set up how the company and suppliers maintain meeting practices or different way to communicate later on.
- Risk management is crucial in the SRM process. As stated above, one of the biggest issues is not having an understanding of the suppliers' capabilities, which leads to high risk in operation.
- Supplier development was mentioned as one main activity that people want to conduct in a more structured way. Currently, the tasks are still tactical and they do not have enough time to carry any supplier development task. However, the employees want to emphasize the importance of supplier development and make it the priority task before other tactical tasks, which can be assigned to other operational people.
- Internal communication should be of greater concern. It was one of the problems listed above by misunderstanding and miscommunication among the stakeholders. Therefore, if there are certain practices of handling internal communication, it will improve the efficiency of the SRM activities.

Moreover, all the documents and tools, the metrics of measurement and analysis are suggested to be structured and systematized. This will make it easy for everyone to follow using the same tools and templates when dealing with SRM-related activities. In addition, people also mentioned that the process should define their responsibilities, such as the frequency of activities they have to do with suppliers based on different rankings. If that is applied, suppliers will be managed better, which can reduce the quality error, and build up stronger relationships than ever before.

5.1.5 Supplier Relationship Management Process

After having wider understanding of the as-is and to-be activities in the SRM system, the researcher turned to ask the interviewees about how they think of the SRM process. Since the case company is lacking the process at the moment, it is beneficial to ask them why they think it is beneficial to create an SRM process. Moreover, in order to create a

process, we should know what phases should be in it, as well as who will conduct the activities.

5.1.5.1 Benefits of a Supplier Relationship Management process in business organization

Before moving into the detailed questions about the process, the interviewees gave their views on the profits that the SRM process can bring to them. Most of the benefits come as a result of solving the problems above successfully.

First, if the lack of standardization in SRM system can be handled, it will systematize the work, make sure that everyone is doing the same way with clear responsibilities, as well as have a structured approach of how to communicate with suppliers. Moreover, it will ensure the appropriate level of performance from strategic suppliers. One sourcing manager stated, *"The process can make sure we have the services and the delivery of services/products comes in a certain mode".* Moreover, with standardization, it creates the ability to measure supplier performance and compare the results among different suppliers, which make it more visible as a coherent overview of the whole supplier performance. One senior sourcing manager mentioned, *"It is easier to know what we are doing, what our responsibilities are, and we have more efficient supplier management."* Most importantly, one common process can solve the problem of misunderstanding because *"it gives the company, sourcing people, and suppliers clear understanding of how the company is working, how we treat our suppliers, how we rank the suppliers, etc."* – said one sourcing manager. Moreover, according to one manager in Offering team, it also brings *"common understanding of the project goals"* among relevant internal stakeholders.

Another great benefit that the interviewees have mentioned is related to the lack of harmonization in information transmission. Having the process means that they will have structured way to either deliver or receive information with each other. It will create constant communication by using proper communication channel, which helps both the case company's employees and suppliers to discuss and plan things in advance. Additionally, one sourcing manager also stated, *"it's good to have a structured approach how to communicate with the suppliers."* For example, one buyer said *"if we have more transparency with sourcing, I think buyer would get a better overall picture of the supplier",* and another supplier quality manager agreed by saying, *"it can*

improve our work if we have clear communication protocol, we know who to contact in what matters." Hence, with a well-defined process, the problem of lacking information or thorough communication can be gradually solved and stakeholders can have a complete picture of all the activities related to suppliers.

The last and most critical advantage that a common SRM process can bring to organizations is to enhance strategic implementation of supplier activities. For example, it takes into account supplier development activities as one sourcing manager mentioned, *"Without a process, it is very easy to just manage supplier issues/poor performance, but that neglects improvement opportunities. An SRM process encourages continuous development that has more long-range for the supplier relationship."* Based on that, it creates chances for the company to better understand the suppliers and their capabilities, hence, resulting in better risk management. As one category manager said: *"There are many reasons why it is important, such as risk mitigation, knowing the supplier, supplier development and improving quality."*

Overall, most interviewees acknowledged that an SRM process can strengthen the relationship with suppliers, and enhance the management of the supplier base. It will lead to higher loyalty from suppliers, consequently enabling and improving the whole supply chain. Therefore, the benefits of an SRM process have direct impacts on the business. Moreover, it is a clear indication that the creation of the process is a definite need for the case company in particular, and for other organizations in general.

5.1.5.2 Stakeholders of a Supplier Relationship Management process

As mentioning in the Data Acquisition part 4.3, the interviews were conducted not only with sourcing personnel; other employees from other functions are also taken into consideration. However, every interviewee was asked who they thought should be involved in the SRM process, or at least be aware of the process.

Due to the fact that the activities related to suppliers are not restricted only to sourcing managers, there are many other functional employees involved in these. For example, when choosing the suppliers, sourcing managers need feedback from the engineering team; after selecting the suppliers, the purchase orders are handled by purchasers towards suppliers; and if there are any issues with suppliers, either engineering or production team needs to be involved. Those activities occur only in the direct sourcing

team. Meanwhile, for the indirect sourcing team, most of the other departments are involved in the SRM activities. For instance, they have suppliers for corporate support, facilities, etc., so it can include information technology licenses, travelling agency, stationary, or consulting services. That is why it is necessary to collect feedback from all the users from information technology team, to human resources, finance, and many other functions if they are using the products or services provided by suppliers from this section.

Table 6 below will summarize the stakeholders for SRM process of both direct and indirect sourcing teams.

Table 6. Suggested stakeholders in the SRM process.

Department	**Direct Sourcing**	**Indirect Sourcing**
Stakeholder	Sourcing (sourcing manager, category manager, Head of sourcing) Purchasing Quality Project Management Research and Development Manufacturing Production Planning Service	Human Resources Information Technology Finance Etc. → All functions

It seems that if the process lists all the stakeholders, it will become too long and complex to follow. Therefore, most of the interviewees said that all of the stakeholders can be mentioned as 'Internal Stakeholders' when they are involved in some activities (basically giving feedback or attending meetings). Then the management needs to make sure that the process is communicated to all relevant stakeholders so that there is a common understanding of the process goal. The interviewees from the other departments rather than Sourcing also agreed with that idea. They think that making the process in too many details including all the individual stakeholders is too complicated as the main goal of processes is concise, simple and easy to follow. Moreover, the most relevant stakeholders who directly affect the activities between suppliers and sourcing managers can be listed, such as supplier quality manager or purchaser.

5.1.5.3 The Model of Supplier Relationship Management Process

During the interviews, the interviewees were asked how they thought of the SRM process, and what are the activities should be included in the process. These questions are only asked towards sourcing personnel since they are the ones having the expertise in SRM activities. Hence, this section will discuss their opinions on the structure and activities of the SRM process.

Process Structure

There are different ideas when talking about how the process should look like. Even though interviewees all agree that an SRM process is beneficial for their daily work, many had the same opinion that it is very hard to create. The creation of SRM process is challenging since it does not contain any specific activities that flow from this one to the other step by step, and have certain inputs and outputs for each activity. SRM process is about relationships, and relationship is an abstract term to be defined in a specific process.

However, there were still some suggestions of how the process should look like and different ideas emerged. For instance, one thought from a sourcing manager is that the SRM process can have several parallel sub-processes, which are loosely linked, but not following each other in chronological order. Another popular idea is that the SRM process should be cyclical and iterative, with certain elements happening regularly and over again. In fact, most of the interviewees think that the process should be iterative and presents the iterative nature of supplier relationships.

Process Owner and Process Infrastructure

In the case company, the process is assigned to one of the category managers as owner to manage and develop the process throughout the time. Especially, the process owner has the responsibility to implement the process in real life and make sure everyone is following it. Moreover, he will also need to communicate the process to all relevant stakeholders to ensure that the process is run smoothly.

With regards to the process infrastructure, the case company uses QPR Process Designer software to describe, analyze, communicate, and improve the processes (QPR website, 2014). It is a software where the SRM process can be designed on, and

published into the company's general process database system. Although all the roles, detailed activities and responsibilities of each stakeholder are not identified in the thesis due to the limited space, they are clearly demonstrated in the QPR software for the case company. Therefore, it is useful for the case company to utilize this software in order to further manage the processes in general.

Process Activities

There are different activities that people have mentioned during the interviews. However, it was also difficult for them to exactly give the activities their orders and according to the interviewees, only the main activities should be placed in the high level of the process. Below is a list of activities of the SRM process and the times they were mentioned in the interviews (Table 7).

Table 7. Suggested activities for SRM process.

Activities	Times mentioned (over 19 interviews)
Supplier selection	0
Supplier segmentation	0
Evaluating suppliers	11
Establishing/Developing supplier relationship	17
Performance management	17
Supplier financial performance	10
Supplier development	14
Ramp-down/Phase-out	8
Risk management	12

Supplier selection was not mentioned at all in the interviews as one of the process activities. According to the interviewees, the start of the SRM process is after the suppliers have been selected and approved. Similarly, supplier selection is not listed as one of the activities of SRM. The main idea is that SRM should only focus on the supplier relationship, how to manage the relationship and activities with suppliers after they are already selected to establish the business with.

Supplier segmentation, or in other words, ranking the suppliers was not approached as an activity in the SRM process. For most of the interviewees, supplier segmentation was only a task in the SRM system, and it does not itself form a main activity in the process. Some opinions suggested that it could be included in the supplier evaluation activity.

Evaluating the suppliers was acknowledged as one important activity by many interviewees (in eleven interviews). Supplier evaluation is suggested to be the starting activity of the SRM process where sourcing managers can rank or re-rank the suppliers, as well as look at other factors to see if the suppliers are in line with the company's requirements in different aspects such as quality or business needs.

Establishing or developing supplier relationship is the term that was not always mentioned directly. Some suggested that *relationship development* should be conducted by regular meetings and agreeing meeting practices with suppliers; while others did not exactly express the term, but stated that regular meetings, meeting and communication practices are inevitable activities in the SRM process. Therefore, in total, seventeen interviewees have touched upon the topic of relationship establishment and development either implicitly or explicitly.

Performance management is apparently an essential activity of SRM process. Seventeen employees brought up this topic when asked. According to them, performance management or performance measurement happens in the middle of the process, after either evaluation or establishing the relationship. Usually, it is the follow-up activity that happens iteratively. Suppliers need to get information on their performance frequently so both the company and suppliers are aware of the statuses of quality or delivery, etc. Most interviewees said that the use of a balanced scorecard would improve and structure their works for this activity. In addition, supplier sustainability was also thought to fall into this phase as it measures the sustainability

performance of the suppliers and how they are dealing with different environmental issues and supplier code of conduct required by the case company.

Risk management was justified above as one of the major benefits a company can get from an SRM process. Hence, it cannot disappear without being mentioned in twelve interviews. Employees said that the SRM process should consider risk management. Risk management includes supplier financial performance measurement (which was also talked of in ten interviews) and assessment of other risks such as natural disasters, bankruptcy of suppliers, sole-sourcing, single sourcing or lack of supplier interest. Based on the comments, it is important to measure and keep track of the risks before they impose any costs or damage to the company.

Supplier development is one of the activities that were approached the most in all the interviewees at fourteen times. Many employees have raised the concern from the beginning of the interviews that they were doing various tactical tasks, but lacking development activities with suppliers. As a result, this aspect was particularly talked of during the interview. The supplier development action can be triggered from performance result, quality control or business needs. The interviewees suggested that there should be time and resources for development activities, and other functional stakeholders should be involved.

Ramp-down/Phase-out was not the leading topic by all the interviewees. However, eight employees commented that ramping down suppliers was one critical part of any SRM process. Since the company has a large supplier base, one regular task of some sourcing managers is ramping down or phasing out different suppliers. The activities included in phase-out are terminating the agreements, gathering all relevant documents and equipment from suppliers, informing all relevant internal stakeholders, inactivating the supplier in the company's database and ensuring that the availability and all other activities are managed. Phase-out is not simply just ending the relationship; it involves many people and different tasks. Thus, having a sub-process dedicated to phase-out activity would help them in their daily tasks.

Those are the main suggested activities in the to-be SRM process that were mentioned throughout all the interviews. They are correlated to the suggested SRM activities discussed in Table 5 by the employees.

How to measure the success of a Supplier Relationship Management process?

The last questions that the interviewees were asked was 'How to measure the success of an SRM process?' All of them said that this was unsurprisingly hard to measure since the whole process was about enhancing the relationships. Some of the ideas suggested that better quality, better performance of suppliers in on-time delivery and other aspects could indicate the success of the relationships. In other words, the success is measured by better performance results.

Meanwhile, others have different opinions. They considered better performance only satisfied the performance metrics assigned by the company. The success of the SRM process means better relationships or more efficient relationship management with suppliers. Some mentioned that a satisfaction survey could be used and sent to suppliers to get feedback from them towards the company's SRM activities.

Other employees thought that the SRM process was successful when everyone complied with the steps and activities listed in the process. For example, there can be a table or checklist created for sourcing managers to check if they have done all the activities needed following the process such as meetings four times per year or doing the scorecard.

In general, it is difficult to define a certain way to measure the success of the SRM process. Nonetheless, most agreed that better performance indication and satisfaction survey might be effective to utilize in this case.

5.2 Findings from Benchmarking Interviews

In order to have a broader view on the SRM process, the researcher has conducted two interviews with benchmarking companies, naming Company 1 and Company 2. Table 8 below compares the industry and other main factors of the two companies with the case company presented in this thesis.

Table 8. Comparison between the case company and two benchmarking companies (as of 2013).

Factor / Company	Type of company	Industry	Number of employees	Net sales	International company?
Case company	Manufacturing	Environment & Weather	1,500	EUR 273.2 million	Yes
Company 1	Manufacturing	Crane	11,800	EUR 2,100 million	Yes
Company 2	Project-based manufacturing	Mining and metals	4,800	EUR 1,911.5 million	Yes

As can be seen from Table 6 above, all three are Finnish-based international companies and the case company has relatively smaller size compared to the other two benchmarking companies. The case company is similar to Company 1 as both are manufacturing companies, and focusing on delivering products and maintaining services for customers. This is one obvious reason why Company 1 was chosen as one of the benchmarking companies because it is good to know what is happening with the SRM process in another manufacturing company.

Company 2 is functioning in a different industry with a different business model – project-based manufacturing. Rather than manufacturing end products, Company 2 focuses on tailored solutions or project-based offer to customers. Originally, the project managers play important parts in selecting the suppliers. However, they now want to have sourcing managers to manage and consolidate the supplier base, but still feedback from project managers are highly crucial. Moreover, Company 2 also manufactures certain modularized products that can be used for different types of projects in the end production. Therefore, the reason Company 2 was approached for a benchmarking interview was that the research aims to broaden the view of the SRM process not only in one type of company or industries, but it aims to discover the overall picture of the SRM process in different industrial backgrounds.

Interestingly, both Company 1 and Company 2 are highly concerned about the SRM process and emphasize on improving upon their current processes. That was also a comprehensible reason for them to stand as benchmarking companies. In addition, it proves that businesses are acknowledging the importance and benefits of SRM processes in their organizations. Not only the case company focuses on implementing one, but also all the companies are working towards more effective SRM processes. The interviews have shown that both companies have similar SRM activities as the case company has or wants to have (listed in Table 4 and 5). Though they can have different ways to rank their suppliers such as Preferred, Approved, and Conditional, the main idea is that they still treat their most strategic suppliers with highest concern. For example, the amount of meetings per year and performance follow-up of the most strategic suppliers for both companies are similar to what the case company does with its Rank 1 suppliers. Additionally, with regards to process infrastructure, it was interesting to find out that both benchmarking companies use QPR Process Designer software to build and manage the SRM process in particular and other processes in general.

During the interviews, the interviewees were also asked about how satisfied they are with their current SRM system and the details of their current SRM processes, which will be described separately below.

Company 1

Company 1 has already developed an SRM process with clear ordered activities needed to be done. They were quite satisfied with the process; however, it should still be developed further in the near future. The company said they needed the process because they wanted to maintain and develop the supplier base, and further develop strategic relationship. Moreover, it also helps to increase the knowledge of suppliers' capabilities and limitations. The objective of the process is to create win-win relationship for both Company 1 and suppliers.

Within the process, the company assigns supplier manager for each supplier and they will be the main contact of the company, with internal stakeholders include quality, purchasing, production, engineering, and other relevant functions. The SRM process of Company 1 is shown below in Figure 17.

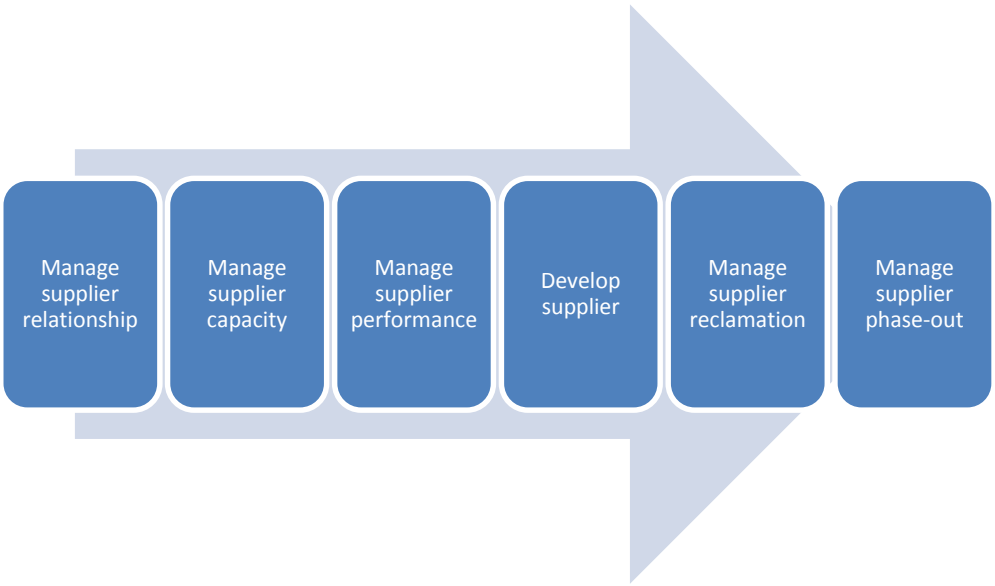

Figure 17. Company 1's SRM process model.

It can be seen that the SRM process is a linear flow, from managing the relationship to managing phase-out task. The details under each activity are similar to what we have discussed above within the case company. Two activities that Company 1 has that have not been mentioned above are 'Manage supplier capacity' and 'Manage supplier reclamation'. However, in the case company, 'Manage supplier reclamation' step is a separate process and under the control of Supplier Quality team. 'Manage supplier capacity' includes forecasting the balanced supply and demand quantity, and it also has an individual process in the case company. Both are not considered the tasks of sourcing managers in the case company.

In addition, Company 1 is using database software to manage their entire supplier base, such as all documents and information related to suppliers. The software makes it easier to keep all data organized and easy to find, which solves a big problem of most current SRM system. Therefore, in addition to a systematic SRM process, it is beneficial to have other tools implemented along to get the best benefits of the process.

Company 2

Similar to the case company, Company 2 has not yet developed a specific SRM process with activities and process flow. They are not satisfied with their current SRM system. However, they have all the tasks clearly defined and specify what needs to be done with

what type of suppliers. The company calls their SRM system Supplier Account Management or SAM in short.

The SAM manages the overall supplier relationship over its lifecycle and across projects. It contains a set of concrete practices to improve transparency and alignment. The main reason why the SAM was created is to give better visibility and integrity internally and between the company and the supplier. Most importantly, they want to speak with 'one voice' to supplier. In addition, SAM process acts as an enabler for operational and strategic alignment between the company and the supplier.

In this process, supplier relationship managers or supplier coordinators are also nominated for most important suppliers. While they are the main contacts with suppliers, there are different people from other departments involved such as purchasing, quality or engineering. Hence, similarly, SRM activities involved different stakeholders based on all three companies' perspectives. Moreover, in Company 2, they have steering meetings on the management level twice a year to decide what the strategies for supplier base and what should be taken into concern in the SAM activities, especially with the most strategic suppliers. Thus, that is one beneficial point that the case company can learn from.

As said, the SAM process as such has not yet been created. It is also under development to build up a concrete process flow; however, the responsibilities of account manager are clearly listed:

- Identify and build network of supplier contacts and internal stakeholders globally
- Be up-to-date on the relationship with supplier, and act as escalation point for supplier, and for internal people when needed
- Provide information about supplier capacity and facilitate conflict resolution
- Lead frame agreement and price list negotiations
- Manage supplier data in Supplier database
- Provide and analyze information for supplier risk management
- Maintain supplier log of major events

To summarize, the supplier account manager has the responsibilities to be the contact point for suppliers, follow up the performance, control all supplier data, as well as analyze any possible risks. One additional task is leading the frame agreement and negotiating the prices. This is different from the activities listed above because for the case company, this task is included in a separate Supplier Contract Management process. Moreover, the development activities are not apparently stated here instead of 'maintaining supplier log of major events'. Furthermore, it is easy to recognize that Company 2 is also using different tools such as Supplier database, or supplier log to support their SRM process.

5.3 Redefined Framework

The previous sections have discussed the findings achieved from both internal and benchmarking interviews. Thus, it is now important to propose a redefined process framework based on the results as in Figure 18. Chapter 6 will discuss the validation of this result to the literature above.

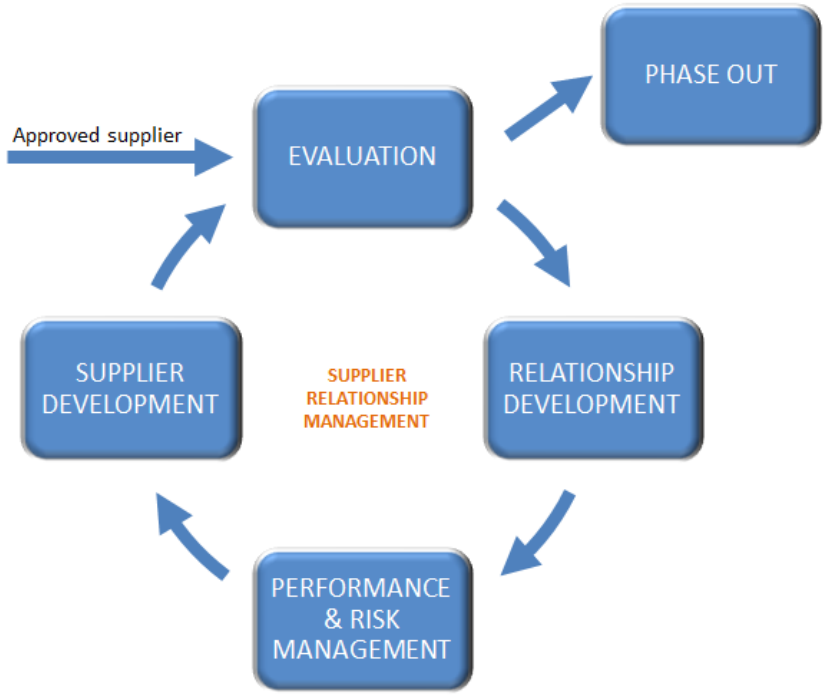

Figure 18. Redefined SRM process framework.

According to the main points attained from the interviews, the theoretical framework is redefined as above. The SRM process is cyclical with activities happening iteratively. It

starts with supplier evaluation activity after the supplier is selected and approved. In the evaluation activity, either ranking or re-ranking, as well as assessing the suppliers in different areas will be carried out. After that, the process moves to relationship development where both buyers and suppliers agree on meeting practices and how frequently they should have meetings in a year. The meeting practices will help to build up a better and more reliable relationship between the two parties. After the meetings and discussions have been set up, the next step is performance and risk management. The company always needs to follow-up supplier performance throughout the relationship period, in order to know if it meets the requirements and to provide feedback to supplier. The performance and risk measurement results are parts of the reasons for supplier development activity to occur next. Based on different results and business needs, suppliers might need to develop to better meet the business goals or performance metrics. After developing the supplier, it is necessary to go back to the evaluation activity, to further assess if the supplier has met all the goals of the business relationship. If it has, the process will move forward to relationship development activity as in the cycle. On the contrary, if it has not satisfied the requirements from the company, it might need to be phased out from the existing relationship.

To summarize, four main differences between the redefined framework and the theoretical framework include:

- Supplier selection and supplier segmentation are not presented in the redefined framework.
- The redefined framework starts with evaluation activity after the suppliers are approved. In detail, supplier segmentation will be included in the evaluation activity.
- Risk management is added to the redefined framework. It is combined with performance management activity to form ‘Performance and Risk management’ activity.
- Phase-out activity is added as the final step in the redefined framework.

Further explanation and validation of the redefined framework will be debated in Chapter 6 below.

6 DISCUSSION

In this chapter, the results are linked to the literature, which is essential to support the proposed model. The topics that arose from the interviews will also be further debated in order to provide more valuable insights to this research project.

6.1 Overall Situation

Since the researcher interviewed thirty-three people from different departments and functions, many different problems on the lack of an SRM process were mentioned. Along with the problems, the benefits were also stated accordingly. As it is not the main purpose of the research, only major problems and benefits were focused to understand the overall circumstance.

So far, we have three main problems, including the lack of standardization, the lack of harmonization in information transmission and the lack of strategic overview. With the help of the SRM process, these problems would be solved for relevant stakeholders both from the company and from the supplier. As Tan (2001) states, processes are created to support the overall strategic business plan. Therefore, the lack of strategic overview with the SRM activities will be tackled effectively by implementing a process, similarly to what most of the interviewees have mentioned. Furthermore, Monczka et al. (PwC research, 2013) have described the objectives of the SRM clearly as sharing development, profits, and understanding the risks. It is coherent with the most critical advantage that the employees emphasized, which is enhancing strategic implementation of supplier activities, including development activities and risk management.

Moreover, Kueng and Kawalek (1997) also summarize that business processes are used to manage the complexity of the behaviors and activities of people, and are developed towards specific goals. This opinion goes in line with the benefits of standardization when SRM process is created. The lack of structured way of working was mentioned the most in the responses. This is coherent with Mohapatra's study (2013), which

strongly points out that when the ways of working is standardized, it is easier to deliver constant outcomes, train people and get people to work similarly.

In addition, Regev and Wegmann (2003) mention that business processes can monitor business relationships with its internal and external stakeholders, which can solve the problem of the lack information harmonization and the lack of communication both internally and externally. From that, the interviewees said it could strengthen the business relationships and create better value through relationships for both sides. That was clearly defined in Schuh et al.'s research (2014) and Gartner Consulting's study (2001) as SRM will optimize the supplier relationships beyond cost and build a competitive advantaged ecosystem.

When asked about the interviewees' satisfaction with the current state of the SRM system in the case company, seventeen out of thirty-three said that they had to deal with great challenges when working without a process. Thus, there is an urgent need for creating and implementing the SRM process in the organization.

6.2 Supplier Relationship Management Process

This section will discuss the process structure and process activities mentioned above in relation to the literature of business processes in part 2.1, SRM activities and processes in part 2.3.4. and part 2.3.5.

Process Structure

There were several ideas on how the process should be structured. The prominent opinion was that the SRM process should be cyclical since it represents the nature of supplier relationship. Activities usually happen iteratively from the beginning of the relationship till its end. Mohapatra (2013) also points out that processes can be either linear or iterative. However, based on his argument, processes in real life can be complex and consist of different decision points, which can lead to iterative cases. Additionally, both SRM frameworks created by Park et al. (2010) and PwC (2013) focus on the iterative course of the process. Hence, having the SRM process in a cyclical order is proven to be the most applicable solution.

Before creating any process, it is equally important to understand who should be the stakeholders. Based on PwC's research (2013), many departments and functions are involved in the SRM process such as operations, logistics or research and development. Both two benchmarking companies also stated that the process should take into account all relevant internal stakeholders, with Sourcing in the center of the loop. This idea is also supported by the interview results. Therefore, in the process, the main stakeholder will be sourcing manager or supplier relationship manager, and other relevant internal stakeholders. It is difficult to identify exact responsibilities of each stakeholder as said, so only the activities of the most relevant stakeholders such as purchasing or supplier quality should be indicated, and others can be listed commonly under Internal Stakeholders.

Process Owner and Process Infrastructure

As mentioned by Hammer (2010), the process needs a process owner, who is usually a manager in the company. According to him, the process owner needs to ensure every task is well understood by stakeholders. It goes in line with the decision from the case company that a category manager will be the process owner and he will take care of developing and implementing the process.

Moreover, Hammer (2010) also mentions that the process needs to be assisted by information technology system, which in this case is the QPR Process Designer software for all three companies. In addition, Laguna and Marklund (2005) suggest that the process needs to specify the information structure and the decision-making requirements in between activities. Using the QPR software, the indications of information needed and decision points, as well as the communication of the process across the organization, become more convenient.

Process Activities

Supplier selection was not mentioned in the interviews as one of the process activities. In accordance with some academic papers such as Liker & Choi (2004) or Park et al. (2010), supplier selection is a part of the SRM process. As Park et al. (2010) mention, this activity is important because it will establish the whole supplier management process later. PwC's model (2013) also has supplier selection as the starting stage. However, none of the interviewees agreed that supplier selection should be in the SRM

process, since they think that the selection activity should be a separate process that consists of analyzing and assessing the suppliers before selecting. Moreover, they had the opinion that SRM process should start only after the suppliers have been selected, and the company starts building the relationship with them. That opinion goes in line with Trent's research (2005) where he lists the major activities that the buyer should do in SRM.

Supporting this argument, both Company 1 and 2 also did not include supplier selection into their SRM process or activity list for the same reason. They all have the suppliers selected before assigning supplier relationship manager for specific suppliers and handling SRM activities. Supplier selection also includes different activities such as analyzing suppliers, doing supplier audits, bidding, etc. Thus, it should be treated as an individual process rather than being included in the SRM process.

Supplier segmentation was not explicitly suggested to be an activity of the SRM process. All interviewees from the case company and benchmarking companies only mentioned ranking suppliers as an activity in the system. The reason can be that because ranking suppliers is an individual step based on certain criteria, it does not need to stand alone as a sub-process since there will not be any other actions to specify inside it. However, because of its importance in the SRM process (Svensson, 2004), some interviewees said that it could be included in the supplier evaluation activity. This suggestion is justified by Olsen & Ellram (1997) and Araz & Ozkarahan (2007).

Evaluating the suppliers was suggested as the starting activity of the SRM process where sourcing managers can rank or re-rank suppliers, as well as examine other aspects to see if suppliers are in line with the company's business. Different researchers have considered supplier evaluation as the act of classifying suppliers based on specific criteria (Olsen & Ellram, 1997; Araz & Ozkarahan, 2007). Furthermore, according to Oriso et al. (2014), supplier evaluation can be used to control and manage the supplier development activities, which should also be included in the SRM process. Even though the activity has not been included in the SRM models developed by PwC (2013) and Park et al. (2010), Schimitts and Platts (2003) prove that supplier evaluation has certain effects on suppliers' behaviors and actions.

Establishing and developing supplier relationship was mentioned by Fogg (2009) as one of the activity of SRM. According to him, it emphasizes two-way interaction, and focuses on the relationship itself rather than the final delivery of the products and services. That is why he and Ford (1980) state that it is essential for employees from both sides to communicate frequently in order to build up the common understanding of the business goals and strengthen the relationship. Fogg (2009) and Liker and Choi (2004) also suggest that regular meetings and discussions should be the appropriate methods for communicating among the companies' employees. Supporting this statement, seventeen out of nineteen people in the Sourcing department reached a consensus that supplier relationship development activity should be included in the SRM process. Importantly, they highly valued the importance of meetings and frequent exchange of information in order for both parties to reach the same goals and improve the closeness of relationship. From that, it will enhance trust and commitment, as well as increase the open communication in the long term. Mentzer et al. (2007) and Ford (1980) also place high emphasis on trust, commitment and constant sharing of information in relationship development activity. In addition, despite the fact that PwC (2013) and Park et al. (2010) do not use the same term 'relationship development' in their SRM models, their terms, 'Collaboration' and 'Build and manage partnership', imply the same activity and objectives in this case. Trent (2005) also supports this activity by listing tasks such as 'meeting with suppliers to understand supplier relationship expectations' or 'involving suppliers in product planning and development'.

From the benchmarking interview, Company 1 also has 'Manage supplier relationship' as its first activity. Though not using the exact same term, its aim is also to build better relationship and conduct meeting practices with suppliers. Therefore, relationship development should be taken into account when creating SRM process.

Performance measurement was mentioned in most of the internal and benchmarking interviews as one essential activity of the SRM process. The interviewees said that it is extremely important to follow up supplier performance regularly and examine if their performance satisfies the company's requirements in different aspects. Meanwhile, Fogg (2009) agrees that companies need to do this step to ensure everything is running as the company expects. In the SRM model by PwC (2013), managing performance is

also one of the key activities in the process. Furthermore, though Liker & Choi (2004) do not explicitly suggest measuring the supplier performance, their model shows that companies should supervise the suppliers, send report cards monthly and provide immediate feedback to suppliers. Moreover, the use of balanced scorecard or some kind of tools to measure effectively the results of supplier performance is highly recommended by Kaplan and Norton (1996) and PwC (2013).

Risk management is suggested to be taken into account in the supply chain management by Handfield et al. (2009) and Hallikas et al. (2005). The employees also placed high concern on risk management with regards to supplier-related activities. Twelve out of nineteen people from sourcing department said that risk management should be an activity in the SRM process. In the recently developed PwC's SRM process (2013), 'managing risk' activity is also included in the process, combined with 'managing performance'. Company 2 also mentioned that providing and analyzing information for supplier risk management is critical in their company. The interview result from the case company showed that the supplier risk management was not clearly defined yet; hence, it will be beneficial to have this activity structured in the SRM process.

Supplier development unsurprisingly was talked about in all the internal and benchmarking interviews as a crucial activity in the SRM process. According to all the interviewees, supplier development activities are inevitable since they will improve the supplier performance, help suppliers to reach the companies' requirements, and hence, creating value for both buyers and suppliers together. From the performance results, companies can give feedback to suppliers and develop their performance. Therefore, performance results usually trigger the supplier development activity. Leenders et al. (2006) support this point and say that performance measurement can provide suppliers feedback to avoid further problems, and stimulate actions of suppliers. Simultaneously, Park et al. (2010) agree that supplier development is a way to improve the performance of suppliers. Along with Park et al., Dyer (1996) and Fogg (2009) also encourage businesses to conduct supplier development activities to improve the current state and further obtain their business goals. Similarly, Trent (2005) suggests joint development in his list of SRM activities; and Liker & Choi (2004) include developing suppliers' technical capabilities in their supplier-partnering hierarchy. More interestingly, both

SRM processes of Park et al. (2010) and PwC (2013) involve supplier development activity. Hence, it is obvious that the SRM process should consist of supplier development as an activity in the process.

Ramp-down/Phase-out was not mentioned in the SRM processes and models created by Trent (2005), Liker & Choi (2004), Park et al. (2010) and PwC (2013). Nonetheless, all the interviewees identified ramp-down or phase-out as a necessary activity of the SRM process (Table 5), while eight people said that it should be one of the activities in the process. Coherent with this, the SRM process by Company 1 (Figure 17) shows clearly that 'Manage supplier phase-out' is a separate activity in the process and it marks the end of the process. The reason why literature has not mentioned much about ramp-down or phase-out process might be because the researchers want to focus on the long-term of the relationships when talking about supplier relationship management. Hence, many research emphasizes separately different activities such as supplier evaluation, supplier performance management or supplier development. Supplier phase-out might not be taken into great consideration for that it is considered as a simple activity of exiting the relationship. Nevertheless, for companies, supplier phase-out is very important because there are many tasks involved in this activity and if those tasks are not carried out carefully, the supply base will become unorganized and hard to gather the overall information.

How to measure the success of a Supplier Relationship Management process?

Giannakis (2007) concludes that measuring the relationship is abstract and difficult. The result from the interviews show similar concern as most were not sure which way was the best to measure a better relationship with suppliers. However, they have indicated that measuring the relationship based on satisfactions of both sides can be an effective way. This idea is supported by Leenders et al. (2006) with a relationship satisfaction model for buyers and suppliers. Companies can apply this model in assessing the status of their relationships. Moreover, Van Weele (2014) also indicates the benefits of sending supplier satisfaction survey, which is one of the popular responses from the interviewees.

6.3 Cross-validation with Other Companies

It can be seen that both benchmarking companies took great concerns into the development of SRM processes in their companies. Company 1 has already had the process mapped out, but was working on the detailed steps, while Company 2 has defined the tasks for sourcing manager or supplier relationship manager but was trying to create the process out of it. Hence, it has been proven as a fact that SRM process is getting great attention regardless of industry or business models.

From both benchmarking cases, we can see that SRM process is a popular topic among businesses across different industries. As it is of relatively recent interest, many companies are still trying to develop a complete SRM process. However, the benefits and necessity of this process are acknowledged at the same level in all companies. They all agree that SRM system includes stakeholders from many different functions, rather than only sourcing personnel. The SRM activities vary slightly between companies based on how they structure other related processes and activities, but most of the activities are basically similar. Remarkably, the two benchmarking companies both use some kind of tools going along with the process or activities. As mentioned by PwC (2013), the SRM process should comprise suitable tools and templates to ensure that the process can run effectively. Therefore, the process alone might not be enough, but there should be tools to help manage it better.

6.4 Redefined Framework

Based on the research, the framework presented earlier has been redefined as observable in Figure 18 in section 5.3. According to the analysis, findings and the literature review of this study, it becomes evident that the SRM process should have a cyclical structure, where activities happen iteratively in the long term.

Though the process is iterative, supplier evaluation is created as the starting point. After suppliers are selected and approved, they need to be segmented into different categories in order to guide the future direction of buyer-supplier relationship (Day et al., 2010). As being mentioned, supplier segmentation can be a step in this activity. Therefore, supplier evaluation is placed first so that the company knows what relationship strategy will be used for each supplier. After that, the process moves to relationship development

where companies agree on meeting practices with the suppliers (Fogg, 2009; Liker & Choi, 2004), and have open and constant communication with each other (Mentzer et al., 2007; Ford, 1980). The aim of this activity is to strengthen the relationships with suppliers and engage people from both organizations.

Next, the performance and risk management is carried out. Since it is the follow-up activity, it is placed in the middle of the process after the relationship has been established. Furthermore, risk management has been mentioned as one critical activity in the SRM process. Risk management and performance management can happen simultaneously, and are exclusive of each other. However, both concern about the health and performance of suppliers; thus, it is reasonable to place them under one common activity as 'Performance and Risk management'.

Similar to the suggested theoretical framework, after knowing the supplier performance status, the next step should be supplier development. This is logical because understanding supplier performance and risk can help to improve suppliers' behavior and actions, thus improve their performance (Leenders et al., 2006). Then, as the cycle progresses, it comes back to supplier evaluation activity. Evaluation also means assessing the suppliers to see if they go along with the business goals to continue the relationship or not. According to Oriso et al. (2014), supplier evaluation can appear as the final step of supplier development activity with the aim of controlling and assessing the buyer-supplier relationship. That is why after developing the suppliers, it is good to go back to evaluating the suppliers, either re-ranking them, or assessing if they are still in line with the company's business. If yes, the cycle moves on again to relationship development stage. Otherwise, it leads to phase-out where the company goes through the process of exiting from the relationship with the suppliers.

The model displays the SRM lifecycle from the beginning when the suppliers enter the business relationship until they either continue or get out of the relationships in the end. This is the proposed framework of the thesis based on the literature review and findings from different interviews. The framework should later on be analyzed in light of case studies of multiple organizations.

7 CONCLUSION

The last chapter of the thesis consists of three sections. The first section will review the research objectives and summarize the key findings of the research. Then, the researcher will discuss the theoretical and managerial contribution of the thesis. At last, limitations and suggestion for future research will be illustrated.

7.1 Key Findings of the Research

The motivation of the research comes from the increasing attention given to supply chain management in today's business. The globalization trend has placed high importance on the efficiency of supply chain management (Park et al., 2010). Companies have purchased more and more goods and services from suppliers, and focused greatly on the relationships with their suppliers (Liker & Choi, 2004). Hence, supplier relationship management plays a crucial part in the success of supply chain management (Park et al., 2010). However, many organizations are experiencing problems associated with the lack of an SRM process model in their operations. Most importantly, there is also little literature studying this topic thoroughly, which makes it difficult for both researchers and companies to find scientific information on this topic. That is the reason triggering the thesis to create a model for the SRM process that can be applicable to different business organizations.

With this research objective, the thesis tries to answer the following research questions:

1. *What are the current practices of SRM?*
2. *What are the benefits of an SRM process?*
3. *How to measure the success of an SRM process?*
4. *What should be the activities in an SRM process?*
5. *Who should be involved in an SRM process?*

The researcher started by reviewing the key concepts to build the research framework for the whole study. The literature review discussed the topics of business process,

sourcing, purchasing and SRM. Most importantly, in order to build the framework for the SRM process, the researcher took into account the important SRM activities as well as the previously developed models of strategic sourcing and SRM process. After that, the theoretical framework was presented in a form of cyclical process flow, starting from supplier selection, then supplier segmentation, relationship development, performance measurement, to supplier development and back to supplier selection. In order to verify the theoretical framework, a case study research with semi-structured interviews with thirty-three internal employees and two benchmarking companies were conducted. The key findings have supported the research objectives and answered the research questions closely.

1. ***What are the current practices of SRM?***

From the interview results, it was found that the SRM process was currently under development in many different companies. However, among the companies involved in the research, none has fully defined and implemented the SRM process thoroughly. Therefore, there is a high need for a concrete framework of the SRM process. Moreover, most interviewees were currently dissatisfied with the way the SRM activities are handled. Three main problems have emerged from the lack of an SRM process in business organization, including the lack of standardization, the lack of harmonization in information transmission and the lack of strategic overview.

2. ***What are the benefits of an SRM process?***

The benefits of the SRM process will solve the three main problems listed above. An SRM process implemented successfully will help to systemize the work, and ensure that all employees do the job in the same way. Furthermore, it will improve the harmonization of information transmission among all relevant stakeholders of the process. The stakeholders will get an overall picture of different activities related to suppliers, thus reducing cases of misunderstanding or miscommunication. Most importantly, having an SRM process will enhance strategic implementation of supplier activities and mitigate the supplier risks for the organizations.

3. How to measure the success of an SRM process?

The finding from the research indicated that measuring the success of an SRM process was not an easy task. In order to know if the process has run well, the supplier relationship should be measured. To get the accurate results, the views of both supplier and buyer on the relationship need to be taken into concern. A supplier satisfaction survey has been agreed to be one of the most effective ways to achieve this result. With the satisfaction survey method, companies can evaluate if the proposed SRM process model works effectively and leads to stronger relationships with suppliers in the end.

4. What should be the activities in an SRM process?

The main finding of the research was identifying the main activities of an SRM process and how they are linked together in an SRM process model. Based on the literature, theoretical framework and the interview results, the researcher proposed a framework for an SRM process (Figure 18) in cyclical order with activities occurring iteratively. Differing from what was defined in the theoretical framework, supplier selection was not included in the process; and supplier evaluation and phase-out were added to the proposed model. In detail, the process starts from supplier evaluation, then relationship development, performance and risk management, and to supplier development. After that, the process comes back to evaluation and goes either to phase-out or back to relationship development. The suggested framework was designed to bring better structure to the current SRM system and help companies to manage their SRM activities more efficiently.

5. Who should be involved in the SRM process?

According to the research findings, the SRM process involves different departments and functions of an organization such as operations or research and development. Therefore, the process needs to take into account all relevant stakeholders, with Sourcing in the center of all activities. Even though it is difficult to indicate the responsibilities of all the stakeholders, the process should identify activities for important stakeholders such as purchasing or supplier quality employees who frequently interact with suppliers on different operational areas.

7.2 Theoretical and Managerial Contribution

As the SRM process is still a newly concerned subject, not many academic studies directly addressing this topic can be found. Most studies of this field emphasize on specific topics of SRM (Park et al., 2010), such as supplier segmentation (Svensson, 2004; Day et al., 2010; Olsen & Ellram, 1997; Araz & Ozkarahan, 2007) or performance measurement (Handfield et al., 2009; Fogg, 2009; Lysons, 2000). Among them, only Park et al. (2010) and PwC (2013) have developed a framework for SRM process. Hence, this research will contribute as an academic reference for the SRM area in terms of process model and major activities. With the aim of providing additional knowledge to the subject, the thesis simultaneously recognizes and points out the gaps between the SRM activities in literature and in real-life cases. The study introduced a new framework for the SRM process, along with its benefits, stakeholders and how to measure the success of the process. Along with some other developed models, the research can act as one starting point for further research on the SRM process.

With regards to managerial implication, the research offered a concrete model of the SRM process which is suitable to apply in business organizations. The case company decided to apply the suggested SRM process and started to implement the process in its organization. All the tools and documents have been developed for the SRM activities. Most importantly, training session was conducted with all relevant stakeholders in order to provide a comprehensive understanding of the process, its activities and their responsibilities. Along with the development of the SRM process, the case company has its whole sourcing process ready and in place. A development forum was established for further improvement of the processes. The future step for the case company is to follow-up the implementation of the SRM process. Moreover, it needs to ensure that the employees apply the process, and utilize the right tools, and that all the documentation can be located.

Since the thesis used the methodology of case study research with three companies involved, its significance for business utilization is without any doubt. The managers in business organizations can examine their current SRM system and see if it is applicable to integrate the proposed process model into their existing supply chain management process. Additionally, they can compare the recommended process framework with their current ones, analyze the differences and scrutinize if there need to be any changes

or improvements in their SRM processes. The process emphasizes the participation and awareness of stakeholders from different functions and departments in the companies. Therefore, managers planning to implement the SRM process should be ready to communicate the process activities and its objectives with the aim of bringing a common understanding to all relevant stakeholders.

Not only identifying the major SRM activities, the research also pointed out that there should be tools and documents such as balanced scorecards or meeting templates to support the process activities. Hence, companies need to develop and harmonize these tools thoroughly before the actual implementation of the SRM process. Moreover, it is crucial to think of the process infrastructure including the information technology software before designing the process. More importantly, companies should create ways to measure the success of the SRM process in general and the supplier-buyer relationship in particular (e.g. by satisfaction survey) since it will prove how well the process is carried out.

Nonetheless, it is important to consider that the recommended framework of the SRM process is not a complete solution for conducting the SRM successfully in any organization. As mentioned, companies need to have tools and technological software to assist the SRM process in daily progress. In addition to being well-equipped with great tools, the internal management has to be robust as well. For example, the management team needs to communicate the process thoroughly to stakeholders. Furthermore, employees need to be well-prepared for different SRM activities such as meetings with suppliers, as well as to have a proactive mindset in order to follow the process efficiently and achieve successfully the SRM process objectives.

7.3 Limitations and Suggestions for Future Research

Although the research design for this study was carefully thought of, there are still some limitations. Firstly, only three companies were involved in the interviewing process. Therefore, the thesis worked on a limited sample in comparison to many different companies and industries that operate the SRM system. Even though the industries and operating models of the three companies are not similar, the research did not approach other industries, which are also highly relevant. In future research, for example fashion or food industries, along with fast-moving consumer goods companies can be examined

to see if there are any differences in their views on the SRM activities and process. Especially, the three companies are relatively middle-sized and all are Finnish-based. Hence, it will be beneficial to study big corporations and non-Finnish-based organizations to provide new angles on the topic.

Moreover, the thesis only discussed the suggested framework of the SRM process, but it did not cover the implementation of the process. The development of the framework was based mostly on the literature and the subjective opinions of the interviewees. In addition, the analysis of these qualitative data was also subjective. Therefore, the framework should later be analyzed in case studies of multiple organizations to further validate its significance to general business organizations.

In relation to the above limitation, the research also did not take into account the effectiveness of the process. Apart from the subjective opinions that SRM will be improved using this process model, there is no certainty that it will happen. Hence, an idea for future research is to collect and analyze quantitative data of supplier performance, including on-time delivery, responsiveness, defective parts, and supplier-buyer relationship's satisfaction data before and after implementing the SRM process framework. From the results of that research, it can further enhance the relevance and effects of the suggested SRM process in organizations.

In addition, even though the SRM process is identified in detail in the case company situation, the scope of the thesis did not allow for detailed description of the steps under each SRM activity in the recommended framework. Because of that, the researcher could not define specific responsibilities of each stakeholder in each activity. Therefore, it will be more beneficial if there is a thorough research of how the steps and tasks in supplier evaluation, relationship development, performance and risk management, supplier development as well as phase-out are designed. This will give a better understanding of what needs to be done and by whom in each of the activities. Moreover, it will demonstrate carefully how the SRM activities in the process are linked together through detailed steps.

Furthermore, as mentioned in the research, the SRM process cannot be successful without helping tools and documents such as balanced scorecard or monthly/quarterly meeting templates. However, due to the limit of the research, the tools were only

mentioned, but were not covered deeply in this research. Therefore, there can be a separate study working on the required tools and documents for the SRM process to function at its best.

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APPENDIX A

Interview Questionnaire for Sourcing personnel and benchmarking companies

Description of the project: Supplier Relationship Management Process

The aim of the interview is to get an overview of how Supplier Relationship Management activities are being handled and if there is any problems in the process. Most importantly, the interview wants to tackle what important activities should there be in the Supplier Relationship Management process.

1. Name/Title/How long have you been working in this field?
2. Why having a Supplier Relationship Management process is important?
3. What is your role in the Supplier Relationship Management process?
4. How many suppliers are you dealing with? What are the ranking of them?
5. What activities are you currently doing with regards to Supplier Relationship Management and how are you doing them? How often do you conduct these activities?
6. Are you satisfied with the current way of doing? Have you experienced any problem because of the lack of a process?
7. What activities do you think should Supplier Relationship Management process have? Is there any order?
8. What activities do you think should be in Supplier Relationship Management process? Can you rate their importance? How often should you conduct these activities?
9. What data are you currently using and what do you need for the process?
10. What are the documents currently used? What documents do you think are needed for this process? Where the documents are currently stored and where should they be stored?
11. What would you improve to make the process more effective?
12. How to measure the success of the process?
13. What team/other stakeholders do you think should be involved in Supplier Relationship Management process?

APPENDIX B

Interview Questionnaire for other relevant stakeholders

Description of the project: Supplier Relationship Management Process

The aim of the interview is to get an overview of how you are involved in the Supplier Relationship Management activities and what are the benefits of a Supplier Relationship Management process for your daily work.

1. Name/ Title
2. To what extent do you think you are involved in Supplier Relationship Management process?
3. How is your daily work involved in the Supplier Relationship Management process? What is the data needed? How often do you have to conduct these works?
4. Are you satisfied with the current way of doing and communicating for this process?
5. What can a Supplier Relationship Management process help you in your daily work?
6. Any team/stakeholders do you think should be involved in SRM process?