

SUPPLIER SELECTION IN GLOBAL SOURCING: THE CASE OF ELEVATOR INDUSTRY

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<p>Abstract</p> <p>The purpose of this thesis was to examine KONE's sourcing decision making process and the criteria for selecting supplier in global sourcing operation. Selection model based analysis was created according to the identified process to study the current sourcing of component or materials management. The vast available literature and researches make the work more challenging.</p> <p>The theoretical part of this thesis focuses on the definition of global sourcing, supplier selection and supply chain management. Other part of the theories described different ways to select supplier and management decision making process. The theory survey was supported by an empirical part including a case study from an elevator company.</p> <p>The methodology of the whole study was a combination of literature and interviews. As part of the data collection, the interview was semi-structured and open-end questionnaires. The findings from the theoretical and data analysis provide different criteria for selecting supplier and sourcing decision making process.</p> <p>The study therefore reveals that sourcing decision making process depends on three categories: sourcing location, sourcing relationship and sourcing option. In the empirical part, the result from the study shows that the key important criteria for selecting supplier is based on price, quality, delivery time, services and customer relationship.</p> <p>Finally, at the end of this master's thesis some proposals were presented to develop further the criteria for selecting suppliers and to improve management decision making process.</p>		
Keywords Global sourcing, Sourcing, Supplier Selection, Supply Chain Management		
Miscellaneous		

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Abbreviations

GS	= Global sourcing
IB	= International business
KSO	= KONE sourcing organization
SCM	= Supply chain management
SS	= Supplier selection

1. Introduction

The importance of sourcing, clearly characterize as the practice of buying goods and services from one global market to another geopolitical boundaries can be clearly felt in global economy. As market becomes more competitive, companies are forced to seek global efficiencies by pursuing global sourcing strategies that hinge on reducing price, increase quality, meeting customer needs and deliver products and services. As a result, sourcing management has turned to support globalization companies' in their internationalization process. Specifically, the significance of global sourcing as a key competitive strategy for companies seeking globalization of sourcing, is that, sourcing management approach to focus on supplier from different emerging countries rather than domestic suppliers offers the opportunity to improve global sourcing experience that are different from local markets.

However, there positive and negative approaches that are associated with emerging countries, apart from low price, the issues of general business understanding in a potential market and local business practices are fundamental to the survival of business performance. Thus, tapping into skills or resources unavailable to local suppliers, developing choice supply or vendor sourcing to cope with competition and most important increasing the overall supply capacity. The negative associated with global sourcing is that, cost are not known but affectively link to cultural differences, time zones, financial and political risks exposure, intellectual property and high supervision of costs in the local supply.

Today, companies rely on different suppliers around the world to maintain business activities and satisfy their growing domestic and foreign customers. There is no question that the role of sourcing has become increasingly important to the survival and growth of global companies, as they pursue their ultimate goals for remaining maintaining their core activities. As emphasized in several sourcing literature, the last decades has witness the potential sourcing in shaping global business environment and corporate strategy. The whole global business has become a single business area almost full of unexploited – and therefore highly attractive – opportunity to source material from emerging countries to high earned countries.

What we have seen and continue to observe is the growing for sourcing, which has already change the way company compete in industry as challenging as the manufacturing of elevator and escalator equipment. Study by Accenture, (2005) shows that large numbers of firms believe global sourcing to be part of their core strategy, where external resources, skills, knowledge and know and capabilities can be leverage. Thus, make it possible for the purchasing managers to learn new skills, improve their knowledge of international business and logistics processes.

To me, the key management challenge remain in the area of competence, getting new suppliers which is capable of adding value to overall operations and managing the huge network of global suppliers. While globalization has succeeded in helping firm operates in foreign markets, it is clear that firms no longer rely on local market for their material sourcing and manufacturing of products. As a result, the choice of supplier selection in sourcing is considered a key decision in the literature of supply chain management (SCM) and purchasing, thus, it is clear that supplier selection is an integral part of global sourcing decision-making process. (Axelsson & Wynstra, 2002.)

As a result, companies go into sourcing operation to achieve cost efficiency, skills and knowledge that are not visible within their organization and markets. Many literature review indicates that the practice of global sourcing in the production of goods and services is flourishing, but yet, many firms are not fully clear on their cost saving and are particularly concern of product safety and other related risks. Naturally, speaking, cost is the main driver of total cost in sourcing decision-making. On one hand, elevator manufacturers are already well known, and it is easy to get sufficient and reliable supplier information in a particular market. On the other hand, foreign and local product regulations are becoming aware of various safety issues, but it is still a challenge to ensure that goods and services purchased are in meet domestic and foreign requirements. To do so, the key to success will depend on choosing the right supplier and setting accurate quality control and safety rules suitable for both parties.

While, a number of studies in global sourcing declare the importance of supplier selection process, most of the researches have basically focused on the criteria and their relative importance. However, lack of process-oriented and studies on supplier selection represent a clear

gap in global sourcing literature. Even so it not clear at what extent and under what circumstance can the process be considered a truly separable and distinct decision-making entity within the process of global sourcing operations. (Cohen & Roussel, 2005.)

In the area of sourcing, the potential for continuous improvement in some firms is very huge. But again, the firm will also need to recognize the need for sourcing – to define its sourcing strategy to be inline with it global sourcing operation. Firm's core activities are the main basis by which the firm can compete and leverage its competitive advantage in the global marketplace (Scudder and Hill, 1998; Prahalad and Hamel, 1990). Firms, in both locally and foreign has their own core competence and it is the basis for their business operations. The rationale for sourcing globally is to focus on core competence and at the same time meet the needs of the customers. Business operation will then be integrated from initial material purchase to delivery of products and services to customer. (Bowersox at al. 2010.)

According to (Arnold, 1999.), the ability to satisfy customer demands while reacting to harsh competitive force requires more creative and involved approaches to managing firm's supply chain. But in reality many managers believe that globalization offers the great opportunity to achieve hug performance gains, and global sourcing has been seen to be one area where companies have managed to capture the benefit of globalization, which includes global integration of operations and procurement centers especially inside the upstream segment of a firm's supply chain. (Monczka and Trent, 2003.)

1.1 Objectives of the study

While firms generally believe that sourcing naturally focus on eliminating inefficiencies and controlling costs. The benefits of sourcing do not stop at increased efficiency alone, especially, when cost savings has become more critical in today's business environment. As a result, the objective of this study: is to provide a method and understanding into managerial supplier selection decision in the activities of global sourcing. This objective can be divided into more practical process and are listed as follows:

- To explore the element of decision-making that are essential for the supplier selection
- To understand the selection process and the influencing factors in the global sourcing operations
- To examine the phenomenon of global sourcing and provide a wider approach to supplier selection

The first point consists of building up a comprehensive understanding of the subject and the elevator industry in general. The outcome will be the general overview of elevator industry and some of the critical determining the global sourcing operations. The second point focuses in the understanding of the selection process and the influencing factors in the global sourcing operations. The sourcing benefit would be studied to provide the solid understanding of why firm enter into global sourcing and what should be taken into account. Sourcing decision is also taken in order to adapt to market force, skills shortage, technology and network of suppliers and access to global market.

The final point will further our understanding of sourcing and the practical ways to select suppliers. However, the overall viewpoint of this study will be managerial, taking into account the sourcing process and decision in global sourcing operations. The main idea in this study is to utilize existing framework and theories to provide solid understanding of selection process and decision, instead of creating new ones.

1.2 Research problems

The rich literature on SCM and global sourcing has not been shy of stressing the key role of supplier selection in global sourcing operation. While many of the existing theories have focused on the criteria for selection applied by firms, it fails to show how firms actually select their suppliers in the global sourcing operation (Scudder and Hill, 1998.). In light of the present research problems, the main research questions can be defined as follows:

HOW DO FIRMS SELECT THEIR SUPPLIER IN GLOBAL SOURCING?

The questions can be derived from three main research questions:

- 1) *To understand how company make global sourcing decision and what they should consider?*
- 2) *To examine the criteria for selecting suppliers in global sourcing operations?*
- 3) *To understand the key decisions and actions within global sourcing process that differentiate firms in regards to how they select their suppliers?*

As the objectives are related to describing the present state of sourcing in the elevator industry, the focus is on the element of supplier selection with the perspective of global sourcing. In fact, this study will approach the field under consideration in both theoretical and empirical methods. Apart from going through several literature on global sourcing and creating the framework for supplier selection, the study will provide concrete example of how firm select their suppliers and what criteria have been applied, support with case study analysis. As part of the empirical part, factor determining the decision to select and how will be explore through questionnaire and findings in the data collection.

1.3 Definitions

Global sourcing

While the literature on global sourcing is increasing fast that, the problem strongly present in the research is the inconsistency in the definition of this field. However, the earlier phase of global sourcing actually meant low-cost country sourcing. The use of global sourcing has been the natural driving force behind the growth and development of the world economy. To this, sourcing product/ component from a country with low labor costs, and thereby attains cost advantage and competitive price. Today, as company's think of the best way to respond to demand, the development of global strategies and approaches as well as global sourcing strategies, will become ever more attractive option.

According to Monczka and Trent (1991), refers to global sourcing as the coordination and integration of procurement requirements across global business units including processes, technology and suppliers. Kotabe and Murray (2004) definition refers global sourcing as a process where inward, outward and cooperative operations are linked in the dynamics of international trade: *“Global sourcing can be seen as the process of increasing international involvement in international operations”*.

Birou and Fawcett (1993) presented four factors which are considered important to successful global source. They said a successful global sourcing must have: 1) overall support of the top management; 2) ability to communicate; 3) able to build long-term relationship and; 4) have the skill required for international sourcing. Monczka and Trent (1991), also argue that recognizing international business opportunities, knowledge of foreign business practices, qualifying foreign supplier and adequate planning for international sourcing can contribute to the success of global sourcing. Kotebe (1998) concluded that going into global sourcing gives company the opportunity to exploit both its own competitive advantages and the comparative location advantages of various countries in global competition."

Therefore, in this study global sourcing is defined as the activity of searching and obtaining material, goods, services and other resources on a worldwide scale. This means that companies is able to manufacture and sell their product globally, source some or part of their materials from different suppliers so that, cost effective and sourcing efficiency can be achieve. This definition will be adopted in this study, even though the study concentrates on exploring the supplier selection process in global sourcing operation.

Supplier selection

Supplier selection has long been seen as one of the most important role perform by the purchasing manager, in order to gain access to material, equipments and services in different areas of the business. As competition increases, it is impossible to manufacture product from emerging countries and high quality products without a good supplier. Thus, decision to selection supplier and manage their competence is one of the important task of the purchasing units.

Supplier selection process is itself a very long evaluation process. Weber and Current (1991) refer to supplier selection as the search for potential providers, for such a search, the providers are sorted (evaluated) into potential and non-potential providers. For example, suppliers may be evaluated on price structure, delivery (timeliness and costs), product quality and services. Previous research has paid more attention in the benefit and risks of supplier selection, while little research has focus on the dynamics of collaboration and management relationship.

All in all, supplier selection is perhaps the sole most important stage of the purchasing process. The main objective is to look for the best supplier, who can offer the best technical solution, service and low price possible and at shortest delivery time. Naturally, there is a relationship between the buyer and suppliers; therefore, in this study, supplier selection is defined as the process of searching and selection potential provider of product (goods) and services which in turn make available to the market for the purpose of satisfying the consumer needs. However, this study will focus on supplier selection which is defined as ongoing process of searching and evaluating process to find a supplier of an essential goods or services. The selection of good and reliable supplier is one of the most challenging tasks in global sourcing operation.

International purchasing

International purchasing is defined as the commercial transaction between a buyer in one country and the supplier located in another country. Global sourcing, which differs from International purchasing in scope and complexity, involves proactively aggregating volumes and coordinating common items, practices, processes, designs, technologies, and suppliers across worldwide procurement, design, and operating locations. Many researches in international purchasing has focused on risk management, as a result of increase inventory across extended material pipelines, longer lead-time of material ordering, unreliable suppliers and huge increases in total cost compare to unit costs. Arnold (1989) argued that international purchasing is either operation or tactical than integrated or coordinated, the decision into international purchasing can thus be made by independent units within the organization.

1.4 Structure of the study

Figure 1, depicts the structure of this thesis. It shows how the presentation proceeds chronologically and what the basis of the conclusions is at the end of the Master's Thesis.

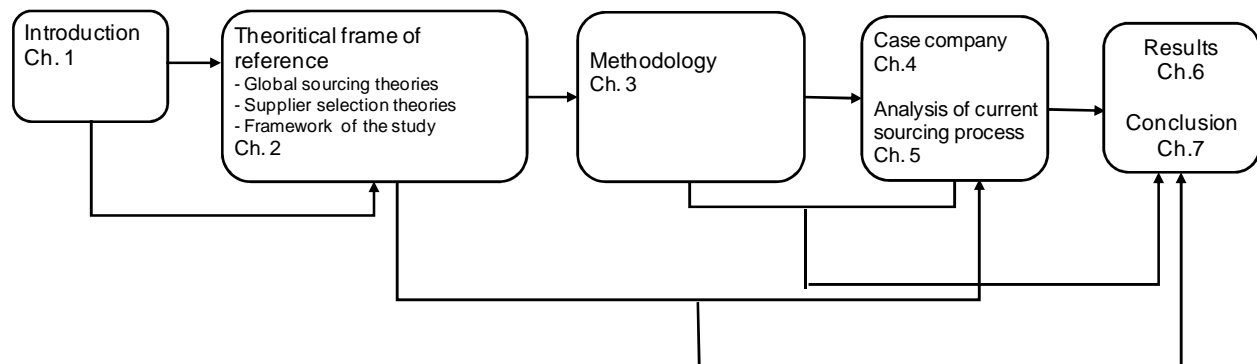


Figure 1: The structure of the Master's Thesis

Chapter 1 presents the introduction to the Master's Thesis, the background of the study, objectives, goals and research problems are specified as well as the definition of relevant terms. *Chapter 2* presents the theoretical frame of references, which provides the literature review and the theoretical foundation in global sourcing and supplier selection. After that, the framework of the study, which divides the theoretical discussion into three (see chapter 2) is presented. *Chapter 3* inaugurates the methodology of the study and *chapter 4* introduces the case company in general terms and their sourcing process in particular. *Chapter 5* is the analysis of current sourcing process and *chapter 6* presents the results. *Chapter 7* is devoted to the conclusion, discussion and managerial implication of the study is presented. Finally, some ideas will be proposed for future research purpose.

2. Theoretical frame of reference

2.1 Global sourcing

Global sourcing is more than just the physical sourcing of products and services, which includes the operational task of buying and supplier development and the creation of global purchasing

activities. The goal of global sourcing is to increase the competitive position of the firm by means of strategic and coordinated efforts, and that, resulting in generating competitive advantage for the entire company and its supply chain. Some of the major reasons driving companies' decision to international sourcing strategies are direct and indirect:

Direct drivers:

- Labor cost and productivity of suppliers/ manufacturer
- Energy rates
- Raw materials
- Improve quality and technology

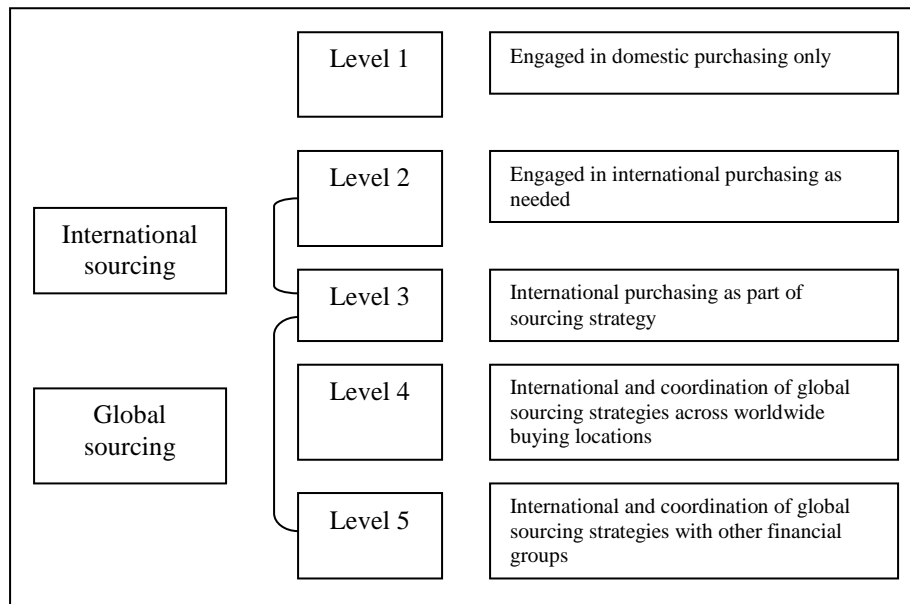
Indirect drivers:

- Tax costs
- Delivery or inventory holding
- Supply chain flexibility and continuous productivity
- Cost of managing suppliers

However, improvement in technology has giving businesses worldwide the opportunity to benefit from global resources. Sourcing manager is able decide if to purchase material from a single source or multiple sources. Global sourcing enable companies to identify reliable suppliers across the world based on price, quality, and technology and delivery reliability.

Monczka and Trent (2002) compared domestic purchasing and integrated global sourcing. They say that sourcing activities and processes through reliable supplier can increase operational efficiency and enhance value-added business capability. Given this in mind, the sourcing process takes place when firm increases their worldwide experience (Monczka and Trent, 2002.) The development from domestic purchasing and integrated global sourcing is as follows also see (figure 2):

Figure 2: Domestic purchasing to the integrated global sourcing



Sources: Monczka and Trent (2002) “Pursuing competitive advantage through integrated global sourcing”

- Level 1: Companies in the level 1 has no direct worldwide purchasing activities, because they don’t find the need for buying internationally or have no formal experience.
- Level 2: in this level companies enter into international purchasing because of domestic competition and there are no suitable domestic suppliers and competitor is benefiting from worldwide sourcing
- Level 3: Companies in this level understand the benefit of solid international purchasing strategy which can help improve overall company performance and handle worldwide supply market from global viewpoint.
- Level 4: companies in this level have international experience and can integrate and coordinates material and service requirements in a cross worldwide level.
- Level 5: in this level company have gained cross location integration and proactively engaged in coordinating their technology, processes and suppliers across worldwide purchasing center.

Monczka and Trent (2003), for example, argue that process toward global sourcing should be gradual and require global business capabilities. Arnold (1989) noticed that global sourcing,

when put into practice correctly the benefits that will come with it – is high quality products, affordable products, access to worldwide technology and better access to new market and customers alike, thus, success in the global sourcing will strongly depends on the ability to execute and manage it in the right way. (Arnold, 1989)

2.1.1 Supply chain theories

The concept of supply chain is not new to the world, because global development from building to the humanitarian relief worldwide, material flow and information are all made to meet the need of the global economy and customer. According to Christopher (2005), emphasis logistics and supply chain management can provide a multitude of ways to increase efficiency and productivity and hence contribute significantly to reduced unit costs. (Christopher, 2005)

Bowersox, Closs and Cooper (2010) emphasized that the globalization of supply has forced companies to look for more effective and efficient ways to manage and coordinate the flow of materials within and outside the company. One good reason for such coordination is the closer relationship between the company and the suppliers. La Londe et al. (1997) concludes that supply chain aligns the firm with its customers and the entire supplier networks. Christopher (2005) stresses the unique feature of supply chain and identifies the three supply chain components: as supply chain network structure, process and integration. He found that SCM is built on relationship which link company to their entire global network of suppliers and channels. (Christopher, 2005.)

2.1.2 Internationalization process theories

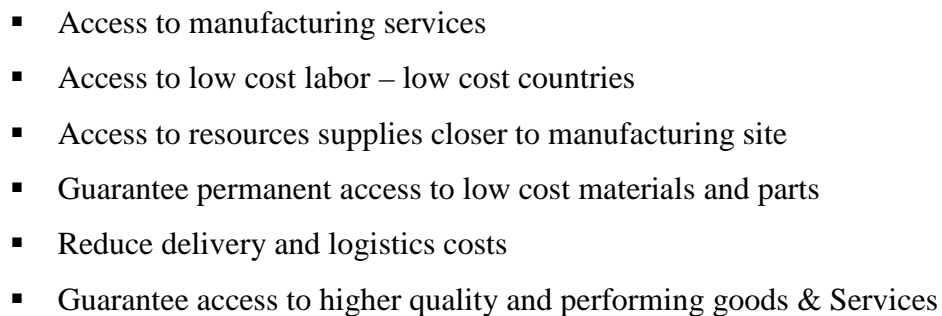
Luostarinen (1994) argue that firm internationalization process is a gradual development and taking place through purchasing and logistics operation, and that, internationalization requires the ability and willingness to develop operation in the international level. According to Luostarinen (1994), the force driving companies internationally consists of four parts: 1) home country factors, 2) host country factors, 3) firm related factors and 4) global factors. Monczka and Trent (2003) found that firm international ambitions are a global call and that a firm begins their

international involvement through purchasing; international purchasing and finally global sourcing. Both international purchasing and global sourcing involvement is considered to be firm reactive strategy seen to secure permanent component or material supply and to effort to reduce cost.

2.1.3 Global sourcing determining factors

In the general, the theory of global sourcing answers the question as to “why firm would want to produce their product and service in a foreign location?” instead of exporting and entering into other forms of corporation with local firm. Monczka and Trent (2003) argue that transferring spends to low cost countries and access to know-how and technology is important determinant of global sourcing operation.

Figure 3: Rationales underlying global sourcing determinant

- 
- Access to manufacturing services
 - Access to low cost labor – low cost countries
 - Access to resources supplies closer to manufacturing site
 - Guarantee permanent access to low cost materials and parts
 - Reduce delivery and logistics costs
 - Guarantee access to higher quality and performing goods & Services

Monczka and Trent (2003) suggested three important benefit of global sourcing, and are: purchase price or cost is lower, better access to products and services, technological know-how and supplier relationship. Even as cost reduction remain one of the most success factor of global sourcing, labor and material cost also drive firm into sourcing from low-cost countries.

Handfield (1994) argue that foreign country specific plays an important role in the success of global sourcing. He argues that why low cost, higher quality, technology remain the main drive for global sourcing, success in global sourcing can be hard to measure because of other hidden cost or expenses that are not fully known. Kotabe (1994) also suggest that firms seek suppliers

from foreign countries because of lack of domestic suppliers of certain components and high demand of better products in the global marketplace.

2.2 Supplier selection theories

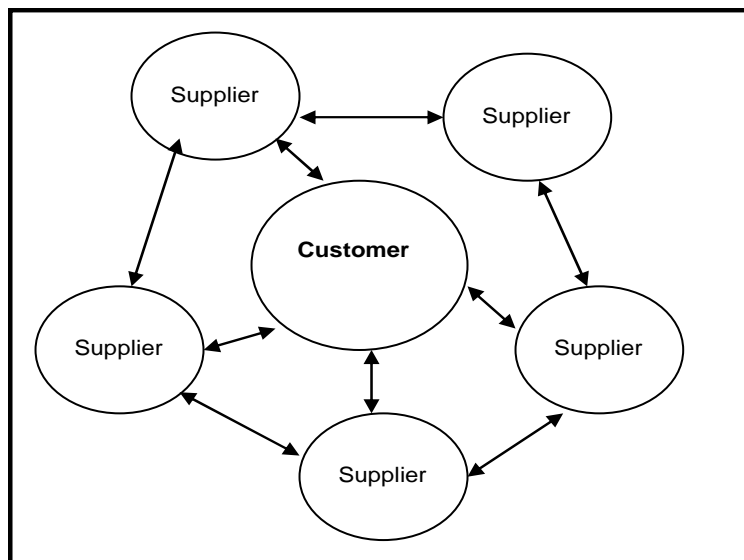
Supplier selection is considered a key managerial decision in the supply chain literature. Selecting the best and right suppliers are the most crucial part of sourcing operations and the success or failure of sourcing activities. According to Beil (2009) supplier selection assist firm in identifying, evaluating and contract with suppliers for strategic partnership. He argues that for firm to achieve its sourcing objectives they will need the right suppliers capable of delivery results to the company. Weber and Ellram (1993) considered supplier selection to be a long-term process, and argues that suppliers should be evaluated based on core competences and strategic needs. While several literature on supplier selection has stress the key role of supplier, other studies has focus on the criteria firms use to evaluate prospective suppliers. Bhutta & Huq (2002) study focus on evaluation of prospective supplier - one single mechanism in the selection process. They argued that, although selection criteria is important, other criteria is needed to support the selection process.

Weber, Current and Benton (1991) identify three ways to manage suppliers: (1) supplier selection must be successful; (2) supplier must be innovative and improvement strategy; and (3) supplier measurement must be meaningful and systematic. Van Weele (2005) argues that there are no differences between the way suppliers are selected and the traditional ways of buying a product from the seller. However, selecting the right suppliers is the prime determinant of every firm because of the complexity in evaluating and the criteria used. Study by Dickson (1966) suggests cost, quality and delivery capabilities consider as the most important when selecting suppliers. Other studies done in the area of supplier selection also identified cost, quality, cycle time, service, relationship and organizational situation should be consider as important criteria for supplier selection.

2.3 Supplier buyer relationship

According to Baily, Farmer, Jessop & Jones (2005), relationship between the firm and its supplier companies are important part of global sourcing operation, because successful supplier relationship will allow firm to effectively manage and maintain steady relationship between internal and external suppliers. Successful management of supplier buyer relationship (figure 4) is important in order to be competitive in market, because internal supplier is vital to the company future survival in the market. (Baily at al. 2005). Varis at al. (2005) argues that a good and reliable supplier relationship is fundamental to the success and failure of global sourcing activities. They notice that companies with solid relationship with their supplier have a greater access to the market and remain competitive in the long-run.

Figure 4: Supplier relationship



Source: Baily, Farmer, Jessop & Jones (2005)

Cox (1996) argues that long-term relationship with the suppliers is the best to provide growth and relatively reduce risk associated with sourcing activities. He noted that relationship with supplier is important and best used as a general form of collaborative relationship between buyers and suppliers. Effective supplier buyer relationship helps increase business confident and enhance atmosphere of co-operation and mutual advantage. Axelsson and Wynstra (2002) noticed that

firms that are involve in global sourcing operation often seek long-term relationship with suppliers, and consider the relationship with suppliers to be very important to the successful operation of sourcing activities. Varis at al. (2005) concluded that say that strong relationship with supplier is vital to both buyer firm and suppliers. They further stress the need for continuous relationship management and organization capabilities, by linking relationship as the key factors in a successful sourcing operation.

2.4 Characteristics of component sourcing

Sourcing materials and component differs in nature and the component suppliers or manufacturers. Normal sourcing procedure is used in order to meet different demand condition and supply chain process. However, sourcing is mainly between company to company and supplier to company basis. According to Silver, Pyke & Peterson (1998) SCM must be seen as taking the business approach managing component supplies from the supplier partner to the next. Lambert & Stock (1993) argue that by integrating all aspect of sourcing capabilities within firm, the supply chain management can support the sourcing activities so that component can be made available to the market and thus enhance to sourcing component simplicity.

Table 1: Characteristics of component or material sourcing

- | |
|--|
| <ul style="list-style-type: none"> • Requires high negotiation and supplier analysis • High understanding of component markets • Differences in component criticality must be recognizable • Supply of component difficult to forecast, and depend on demand • Supply or delivery can depend heavily on supplier and manufacturer • Delivery and lead time • Product complexity • Supplier – buyer - relationship • Global location |
|--|

2.5 Sourcing decision-making

Sourcing is essential for an organization intend of competing in today's business environment. However, with changing global market and technology company measure of success have shifted, driving companies to rethink how acquire materials and deliver sacrifices to their final customers. One of the logic behind sourcing is that, sourcing can take place on several locations for that reason the term of "global sourcing" can be applied, this is because sourcing is finding and managing source of production of final product or services at a worldwide basis and that require the overall management decision. This pave the way for company to fully recognize that sourcing has the potential to delivery business values and cost savings in order to enhance operational efficiencies.

According to De Looff (1996) companies sourcing decision depend if the company want to maintain current position or make it better (by sourcing) would have to consider cost, time-to-market, quality, flexibility, control and continuity. De Looff (1996) argues that sourcing decision is the early opportunity for company to improve their business performance and maintain competitive position. Lysons and Farrington (2006) concluded that a successful sourcing operation need top management support, because sourcing has a direct link to the overall operation of the firm, especially, profit, supply risk, high risk of product and services. Today, companies are making more informed decisions about sourcing and they want to leverage the potential value its offer.

2.6 Framework of the study

The research approach in this study is divided into two phase of sourcing and the supplier selection process. The theories of global sourcing and supplier selection are discussed and used as a starting point, to explores how firm select their suppliers in the sourcing activities. So, this chapter introduces the framework of the study and is built on the previous theoretical assessment in the previous chapters. The most important conclusion in earlier studies is that global sourcing is more about producing enabler and supporting productivity, and buying or selling goods and

service from low cost countries to another country. As a result, global sourcing is considered as integral part of international sourcing strategy.

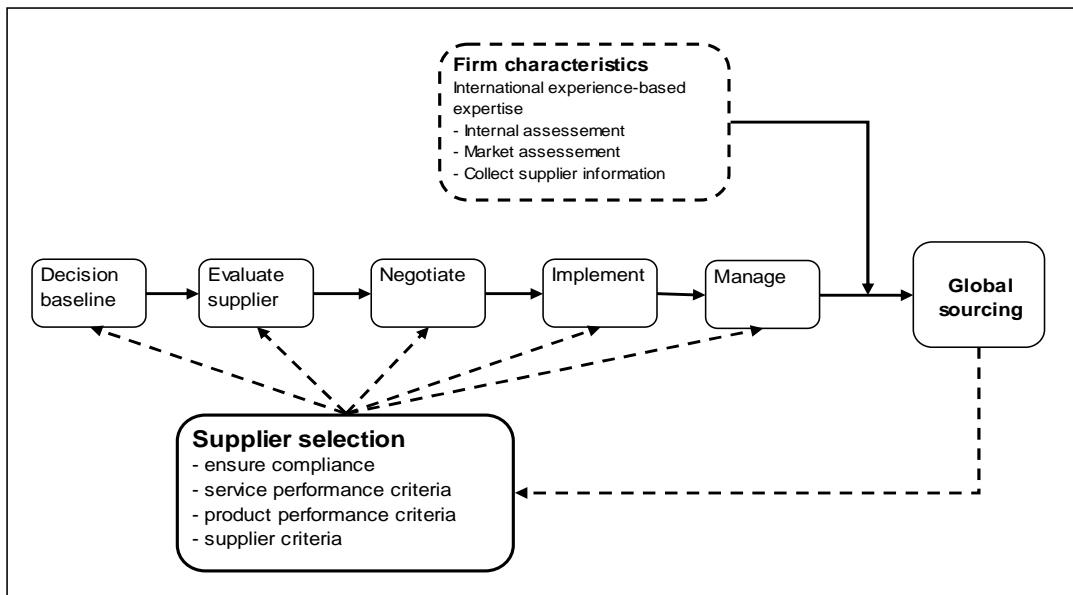


Figure 5: Framework of the study

Global sourcing is an alternative for international purchasing and improvement in global business, because firm increase their foreign experience through sourcing operation. Kotabe & Swamidass (1993) argues that among many drivers of sourcing, the most commonly known is the low cost, quality, technology and access to global resources, in which the company can no long find in the domestics markets. They concluded that in wake of global sourcing activities, a firm does not need a physical present in the foreign country, and thus uses the local or foreign suppliers in order to achieve its own operational goals. Figure 5 displays the framework of this thesis, by explaining the process of global sourcing – supplier selection in the context of elevator industry. Other forms of competitive advantage provided by sourcing is the economic of scales, proprietary learning and differentiation with other competitors are not tied to countries specific but to the configuration and coordination of the firms global approach to sourcing. (Kotabe & Murray, 2004)

3. Methodology

The methodology of this study is qualitative based, that is, a single case-study methodology. A qualitative approach was chosen because it allows for an in-depth analysis of the case using the theoretical framework. Silverman (2006) emphasized the important of methodology, he argues that methodology shed light on the research methods to be used, data collection and analysis that will be follow throughout the research.

Yin (1984) suggests that single case studies are useful when the limitations between phenomenon and context are unclear, but are fundamentally available and used in other theories. Also, Anderson, (1993) concluded that single case studies help answer the question of how and why such phenomenon take place, and make it possible for a proper research within it real-life context to identify the origin and the actual sources. As the goal of this study to further explores supplier selection in global sourcing operation, a single case methodology will therefore, be used.

Patton (2002) sees that the nature of research methodology can suggest the direction of research and its process. So, the research strategy of this study is built on the in-depth understanding of global sourcing, but the qualitative research methodology will be use to address the research questions (Patton, 2002). The following chapters will focus on the kind of data and how the data is collected, and finally the empirical findings and result is display respectively. However, the main data collection method will based on semi-structured interview, because it permits the adjustment and advance preparation of question, which allow researcher to better explore, obtain valuable knowledge and understanding on the subject matter (Koskinen at al. 2005.) Further to this, different publications, materials, reports and notes obtained during the interview will be use to strengthen the basis for comprehensive analysis.

3.1 Data collection

The data collection is based on secondary and primary data. The reasons for selecting such data collection methods and the case company is explain in this section, and the reliability of various sources of information is discussed.

3.1.1 Selecting the case company

The main reason for selecting KONE as the target company for this study was its global experience and operation, its size and different business-lines. As one of the first Finnish companies to internationalize, KONE provides a successful model on how sourcing in a modern business environment is managed and the implication for future development in global sourcing activities. This is particularly problematic especially, in low-cost countries where information flow can be challenging and hard to get. For this reason, I decided to interview people within the company and who are in the line of purchasing, sourcing and logistics management operations. Because, I knew they are in that field, their input can share more light in understanding sourcing operation in corporate levels and decision to select a supplier is made possible.

Another reason for concentrating on one single company is because as a global company, it can provide a global view in sourcing activities, enough to analyze as a whole. My aim was to collect as many information as possible from the experts and managers in the subject. Furthermore, this study concentrate on sourcing operations of KONE and as an employer, I have met many of the managers in different occasion and in short, I had a great opportunity of contacting, emailing and personal visit them, in an effort to gather information. All the materials used in this study are based on the narrative of my discussions and interviews made during this period of my studies.

3.1.2 Primary and secondary data

Primary data source: Naturally, academic research is based on primary sources such as original 'material' from the field one is studying, including books, articles and letters, interviews and diaries they kept, etc. according to Hirsjärvi & Hurme (2009), a good researcher knows how to use both primary and secondary sources in his or her writing and to them put together in a combined fashion.

The primary data source in this study was applied through various discussions and interview carried out in different office location and with relevant people in sourcing, purchasing, supply chain management and logistics in the company who is capable of contributing to the subject

matter. While this collection method is important in this study is that it allow the face-to-face interviews and discussions, and has provided relevant information to support the thesis. The researcher was able to gain in-depth knowledge and understanding about the topic in general and how the company make their supplier selection decisions in particular. The minimum age participant in the interviews was around 28 year old.

The interview included four opened questions related to global sourcing – supplier selection. I also have a set of open questions to be discussed in order to fully understand the criteria use in selecting suppliers. The interview or discussion was organize around time frame suitable for the participants and the researcher, and lasted for about an hour or so. The discussion was conducted entirely in English and sometimes Finnish languages were spoken, led by the researcher. The researcher took notes during and throughout the interview or discussion period, however before commencing; the participants had warm greetings with the researcher. An overview of the day activities and the thesis was presented – but loosely defined as the “Supplier selection in global sourcing – the case of elevator industry” was highlighted. Finally the participants were given time to think and ask any questions.

The method used was semi-structure interview methods with open end-questions. The benefit of this method is that it is less structured, flexible and allow new question at any giving time during the interview depending on what the interviewee says. The researcher also used other method of communication such as the email and carrying out phone calls as much as it is needed. The purpose was to clarify any element that was not fully understood or clear enough during the interview. However, to support other analysis, qualitative analysis was carried out to collect related information and data already available in the company. This way, I was able to get hold of relevant but important information.

However, what I consider important and useful to me throughout the interview is the pen and paper which I carried with me during the interview, which make it possible to keep note of any discussion and I was not ready to miss any relevant information. This was very helpful and proves useful to me because since the questions are open and can be change depending on the response, taking a personal note become very important and useful method. Thus, I was able to

focus on what is important to the respondent and assist in providing an answer to the research problem.

Secondary sources: Secondary data is information gathered for reason other than the completion of a research study. A wide range of secondary information sources is available to the researcher gathering data on an industry, potential product and the market. Secondary data can be used to gain initial insight into the research problem. Herrman (2009) argues that “Secondary data source” can provide a means by which the benefit of the survey, particularly its ability to provide a national-level dimension, may be combined with other methods in order to bridge the traditional dichotomy of qualitative and quantitative research. Creswell (2003) classified secondary data in terms of its source – either internal or external. He suggests that internal secondary data is information acquired within the organization where research is being carried out, while the external secondary data is obtained from outside sources. For this study, my internal and external sources are information already available in the company, reports, presentation materials, internet base publications, books and sourcing journals.

In addition to this, several literatures were reviewed to further strengthen the theoretical structure and analysis of the study. However, I am fully aware that there are a number of disadvantages in the secondary source because of the differences between the aim of research and original purpose of data being collected. The information collected is also depended on the particular standards and purposes set by me and that, I have to utilize this information in order to present analysis and recommendation.

3.1.3 Qualitative and quantitative

A qualitative approach was chosen because it allows for an in-depth analysis of the case using the theoretical framework to capture the development at a firm level. A company case is chosen for qualitative purposes, aiming to broaden the perspective on supplier selection in global sourcing operation. Another method is the quantitative research (interview) - the purpose is to increase my understanding of the subject matter using an interview-based approach aiming to gain a bigger picture of the company wide sourcing operation. The advantage of using

combination of qualitative and quantitative-oriented research is that it helped to apply effectively the research tools and detect the subject matter phenomenon. "All research ultimately has a qualitative grounding" (Creswell, 2003.)

Uusitalo (1991) compares quantitative and qualitative methodologies and concludes that a qualitative study must represent the essential features of the research topic, and that the collection of research material and analysis are closely related. A typical research material consists of field observations, free-form interviews, documents and products of culture. A qualitative study develops a theory further and the ability to follow a researcher is significant. (Uusitalo, 1991.)

The interview conducted in this study is a good example of quantitative research because it is based on describing and clarifying certain issues and words was used as the main element for analyzing the results. In the other way round, the questionnaire applied in this thesis is directly related to quantitative research technique, even though the element of the analysis was in words. All my forms of the data collection include interviews and discussions, my reflection field notes, various texts, pictures, and other materials.

3.2 Data analysis

The goal of data analysis is to understand the sourcing element and the force behind the sourcing decision, especially, when selecting suppliers. Hirsjärvi & Hurme (2009) argue that method of a research can not tell the best technique, ways and correct practice to fully analyze qualitative data, and that data analysis is part of case study which is sometimes uncontrollable and difficult to manage. Silverman (2006) suggests that by clarifying the research method and other data collection mechanism will set the stage for data analysis to be followed throughout the study. The framework of the study and the theoretical component shape the overall theme of the study.

For this study the most notable source of data is the researcher notes obtained during the interview. By reading through my notes give me a good understand that support the theme. This was followed reviewing and summarizing all details information from the materials, papers and reports to get the overall understanding of the topic, and clarifies area that was unclear in the

subject matters. Giving this explanation, the summaries was broken down systematically into different areas of the study and according to a specify subject matter, such as sourcing, supplier selection and firm decision-making process in global sourcing operation. Throughout the whole process of reading, writing and conducting the interview, the theories have played a huge role in the interview process and have helped shape the research phenomenon. Thus, all data collected and information from the interview was analyzed so that all aspect of the research goal will been achieved. All data divided according to content and overall theme was analyzed based on the core concept of the study.

The good case data also came from the interview and discussion, which focused mainly on the firm sourcing activities in the global marketplace. The interview method was chosen as the main method for data collection because it gives detailed information on the firm supplier selection process and purchasing strategies, which may not be available in the literature. The central issues are that, the data analysis was divided into different sub-set of the study, to allow an exploration of the study validity. The result and the theoretical perspective of the study will be discussed in the final two chapters of the study. As the purpose of the study was to examine and explore firm decision-making process in global sourcing, the general purpose as stated earlier is to increase our knowledge of difference sourcing and firm supplier selection process.

3.3 Reliability of the study

The validity of a research can be enhanced greatly when there are a several methods or viewpoint applied in the studies in order to avoid systematical errors possible in the study. Kirk & Miller (1986) state that validity allows us to see if the research can truly measure according to its purpose and how straightforward is the result of the research in the context of validity. Creswell & Miller (2000), claim that researcher opinion and his ability to observe can affect the validity of the study either positive or negative. Thus, researchers has to think of a proper way to validate their study based on how and what they consider suitable for them, for example, research quality, accuracy and honesty and readability (Stenbacka, 2001).

Furthermore, the validity of this present study have increased and made safe because of the fact that many viewpoints have been considered and on similar issues. For example, the researcher data collection method and the interviews or discussion carried out with sourcing managers, specialist and logistics make it possible to validate this study, because different views have been considered that can have some direct validity to our general understanding of the study.

Naturally, I am made to believe that a measure can show the way to valid discussion and conclusion. So sample allows us to give valid orientation and at the end, bring the conclusion that have good validity and which the reader understands. However, it was argued that when the reliability is high it means that the same research methodology and techniques has been used to give the same answer. Therefore, by stressing the importance of high quality studies, you are saying that the validity and reliability of a research is high when there are proper control in the over settings of work, the use of language, logically meaningful and measurement, and other areas of examinations in the study are connected (Stenbacka, 2001.)

4. Case: Company presentation

4.1 KONE in brief - history

KONE is one of the global leaders in elevator and escalator industry in the world. Established in 1910, KONE has grown and become one of the global companies and in 2010 KONE has net sales of 5 billion Euros, and operating income of 696, 4 million Euros, about 145 of net sales. As one of the global leader in the elevator and escalator industry, KONE has over 1,000 offices around the world and services over 800,000 units of equipment globally. In 2010, KONE has about 34 000 employees and is present in more than 50 countries and serves about 250 000 customers globally. Globally, KONE has seven production units and seven R&D centers. Further to its position as industry-leader, KONE people technology, KONE deliver the best people experience that enable people to move smoothly and safely. KONE strategy is delivers a performance edge to its customers by creating the best user experience with innovative people flow solutions. (KONE, 2010.)

4.2 KONE market and sales operation

KONE objective is to offer the best People Flow Experience (PFE) by developing and delivering solutions that enable people to move smoothly, safely, comfortably and without waiting in buildings in an increasingly urbanizing environment. KONE provides its customers with industry-leading elevators, escalators and innovative solutions for modernization and maintenance, and is one of the global leaders in its industry.

KONE key customers include builders, building owners, facility managers and developers. Further, architects and consultants are key parties in the decision-making process. The majority of KONE customers are maintenance customers. KONE two main business is new equipment business with income of 46% and service business with 54% of the income (figure 6).

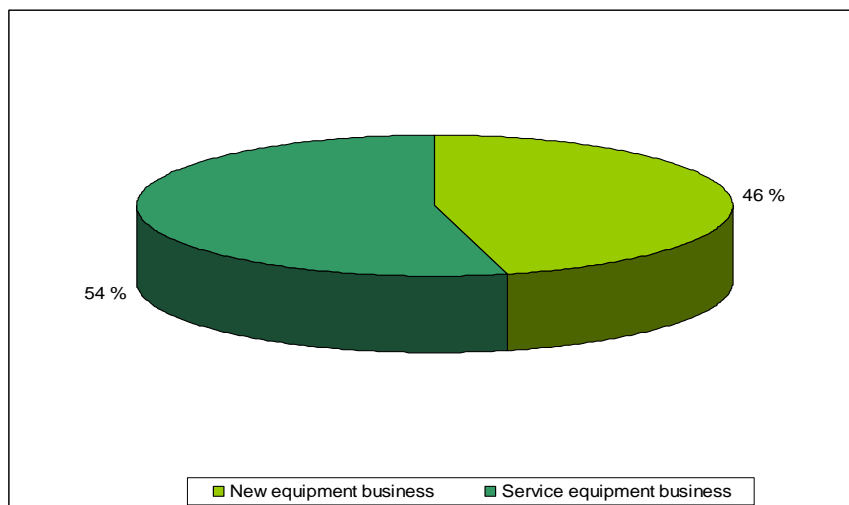


Figure 6: Sales by business

The sales by market shares of these three segments are as follows: 58% of the market share are EMEA, the Americas is 21% while Asia Pacific is also 21% (figure 7). KONE sourcing organization plays a key role in ensuring that our suppliers are aligned with KONE approach to corporate responsibility. KONE organizes an annual Supplier Day for strategic suppliers to share objectives, best practices and to recognize performance. (KONE, 2010.)

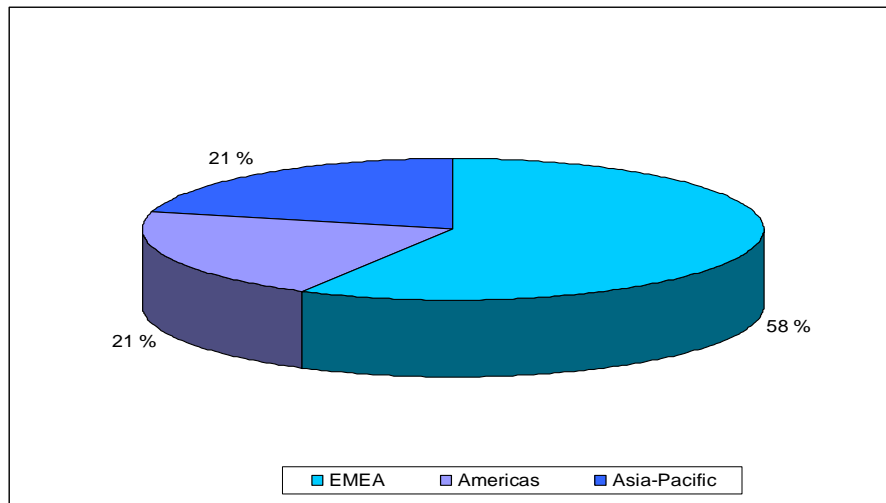


Figure 7: Sales by market

Traditionally, the most important market for KONE is still the European markets. At the moment, the new equipment market is recovery in many Central and Northern European countries and in the Middle East. However, the maintenance business markets continue to develop well in these markets. Markets in the Americas are stabilizing since 2010 and recovery is underway, but maintenance business still show strong sign and still competition is increasing. In addition, the Asia-Pacific markets seem to be the most position market development, modernization and maintenance markets continue to develop favorably. The new equipment markets – in China all segment continue to grow. India, Australia and South East Asia market also show a strong growth in many of these countries driven by economic recovering. (KONE, 2011.)

Among the 575 000 equipments in operation, about 30 percent of them are KONE own makes equipments and lifts. However, most of the (35,3%) consists of inherited lifts. Naturally, these are lift makes by that the subsidiaries manufactured before merging with KONE. There are also some competitors lifts under service contracts by KONE and these lifts are made up of (33,7 %) of all lifts in service. Among all the lifts, the significant lifts are made by KONE competitors like Otis, Schindler and Thyssen. (KONE, 2010.)

Over half of KONE employees are in the field every day, and the biggest majority (59%) of the 34 000 employees are in maintenance and modernization work category (see figure 9). The new

equipment sales and installation is still growing and in second with (24%) share of the workforce, while manufacturing is 9% and administration, IT and R&D represents also (9%) of the workforce in KONE. (KONE, 2010.)

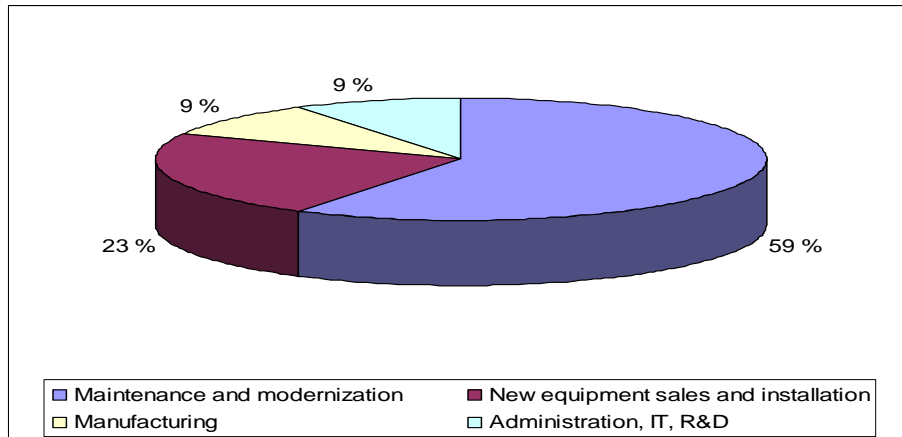


Figure 8: Employees by product category

As can be seen in figure 8, approximately 11,000 of KONE 34,000 employees work in the field, keeping the equipment running as smoothly and safely as possible. Understanding the company's strategy is one of the key elements driving employee engagement. KONE promotes active dialogue with employees to ensure that every KONE employee understands the company's direction and their role in executing the strategy, including the approach to corporate responsibility (appendix 1).

4.3 KONE global sourcing organization

The KONE Sourcing Organization (KSO) is a global team of approximately 180 sourcing and supplier quality professionals responsible for management of our enterprise-wide direct and indirect materials and services spend including our supplier relationship development and management. Working in close collaboration across more than 40 country organizations and manufacturing sites, KSO operate in a matrix organization combining local / unit, regional and global knowledge and expertise to deliver maximum business impact. KSO mission is to continuously improve customer value and profit contribution by proactively engaging internal and external (supplier) partners in collaborative teamwork as well as relentlessly provide

innovative solutions and reduce total cost of ownership so that KONE is competitively positioned in every market in which we compete. The vision is to be recognized as a world-class sourcing organization.

KSO responsibility and objective includes cost management of all KONE material and services spend, including supplier quality and management, in collaboration with internal business partners to provide maximum value for KONE. A key building block of KONE Sourcing is the concept of category management, defined as a comprehensive, unified approach to managing areas of spend (categories) identified by similar material attributes and or supply market characteristics. The category management approach enables cross-functional teaming and enterprise-wide alignment.

4.4 KONE global supply chain

KONE suppliers play a key role in helping to deliver high quality solutions to its customers. In order to serve the needs of its customers as efficiently as possible, KONE has established a global supply network supported by an optimized distribution and delivery network. The purpose of the supply chain is to deliver KONE products to the building sites in the most efficient manner possible, fulfilling time and quality requirements, while aiming to minimize KONE operational carbon footprint. While the company approach its business from a global perspective, their supply chain, particularly in the installation business, is highly localized. (KONE, 2009.)

KONE conducts business with close to 25,000 suppliers, of which approximately 100 are considered to be strategic. KONE purchases 80 percent of its raw materials, components and systems supply for new equipment production from approximately 100 suppliers located in proximity to the production centers. Suppliers include raw material providers, contract manufacturers, component manufacturers, as well as subcontractors in the installation phase. (KONE, 2009.)

The KONE strategic sourcing process requires the creation and continuous renewal of sourcing category plans for all spend categories and identifies execution accountability at global, regional, or local levels. Sourcing Unit management, Sourcing Category management and Sourcing Area

management must ensure that all KSO staff receives adequate training and that the process is understood and adhered to. However, sourcing category plans are defined as three year plans setting out the steps to reduce the total cost of ownership while ensuring supply, supplier quality and delivery of business requirements. Managers are required to work in close partnership to develop and execute respective category plans and ensure timely, quality and cost competitive supply of products and services.

4.5 The KONE Way

The KONE Way (KW) define as a process underline the way of doing business and in relationship with its customer, their delivery of products and services, creation of new solutions, and the management and support for these processes. These processes are deeply embedded in KONE policies, systems and tools. The objective is to remove overlaps in different process areas in order to gain productivity, clarify responsibilities and emphasize collaboration between functions. Further to enable the improvement in customer satisfaction and market expansion. This connection between these view points is seen in the (see figure 10).

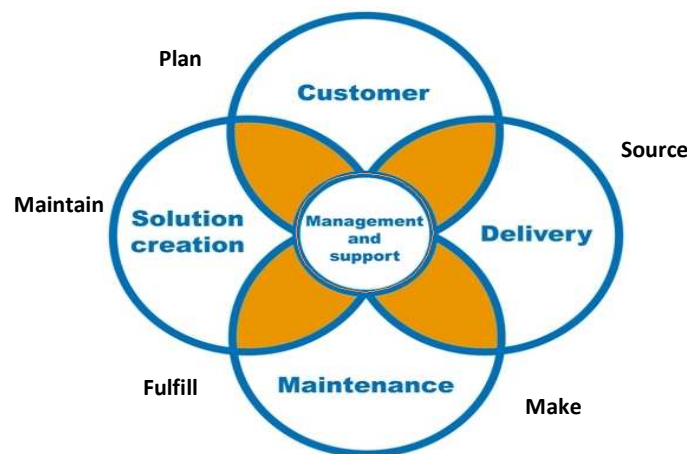


Figure 9: The KONE Way (KONE Intranet, 2011)

5. Analyzing current sourcing process

Current sourcing initiation for selecting suppliers falls into three stages: The first stage involves a choice regarding the organizational form, namely the sourcing department, at which point

supplier is selected, (see figure 10). The second stage represents the supplier search and selection process, while the last stage comprises negotiations with the selected supplier to create a framework that establishes complementarities and fosters the development of synergies.

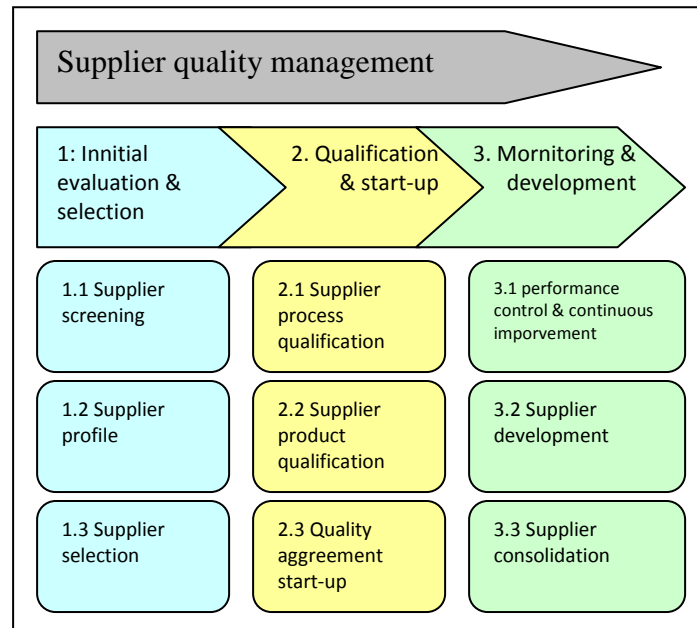


Figure 10: Summary of the mean of sourcing at corporate level decision process

As present in figure 10, the supplier selection process constitutes many stages at a corporate level: 1. drawing a profile of the desired supplier attributes; 2. identification and screening of potential supplier; 3. preliminary contacts and negotiations; and 4. Final selection. The initial evaluation and selection process is when the company engages with the potential supplier. This method ensures that the company has the best supplier selected and allows progressive building of a strong supplier network. Sourcing department takes the leading role to perform and evaluate the supplier selection process.

KONE strategic sourcing process (also known as BENIM) requires the creation and continuous renewal of sourcing category plans. It seems clear that firms find and choose their suppliers by following different paths, each entailing a varying number of stages and a varying level of resource intensity. Currently, company calculate the impact of global sourcing savings have on measures that capture the attention of executives in sourcing team. It shows that savings from

global sourcing operation affect financial performance of the company, thus, selecting the right supplier is one of the critical function of the purchasing and sourcing team.

6. Results

6.1 Sourcing decision-making

Sourcing can be operated from several locations around the world, which is why global sourcing is frequently used. But most companies have to make the right decision on a global scale sourcing, whether local market or foreign market. To compete in a global level through sourcing, companies can add value to their services in terms of cost savings and increased efficiency. This study finding reviews the following components of sourcing decision making: sourcing location, sourcing relationship and sourcing option.

The empirical evidence from this study shows that effective decision can significantly reduce cycle times, achieve cost saving target and help the company secure the best value management sourcing decision. As a global company, it has the ability to enter new markets and seize new business opportunities by making effective sourcing decision. Rather than leveraging only local resources and suppliers, the company can benefit more when they integrate their global sourcing and purchasing operation to take advantage of resources and suppliers around the world.

Therefore, it can suggest that accurate sourcing decision can create opportunities for securing specialized suppliers from previous providers, leveraging sourcing and supplier networks for the best of and most economical result, adopt global values and capabilities that will extend collaboration across geographical boundaries.

Sourcing can bring fresh minds to your business, and it can also free time up for innovation and other vital tasks. However, making the wrong decision can put your business at a competitive disadvantage. Perhaps you'll lose control of proprietary information, or receive components that don't meet your organization's quality standards.

6.2 Supplier decision making process

Based on the literature reviews and findings from the survey, supplier selection is the most important component of the purchasing process. This findings led to the discovery of how firm make their global sourcing decision, and a framework has been developed for the “sourcing decision” on global sourcing (figure 11). A key building block on the sourcing decision is that they defined a comprehensive and unified approach to sourcing process at global, regional and local levels to establish supplier agreements and relationships to drive performance in both cost and value.

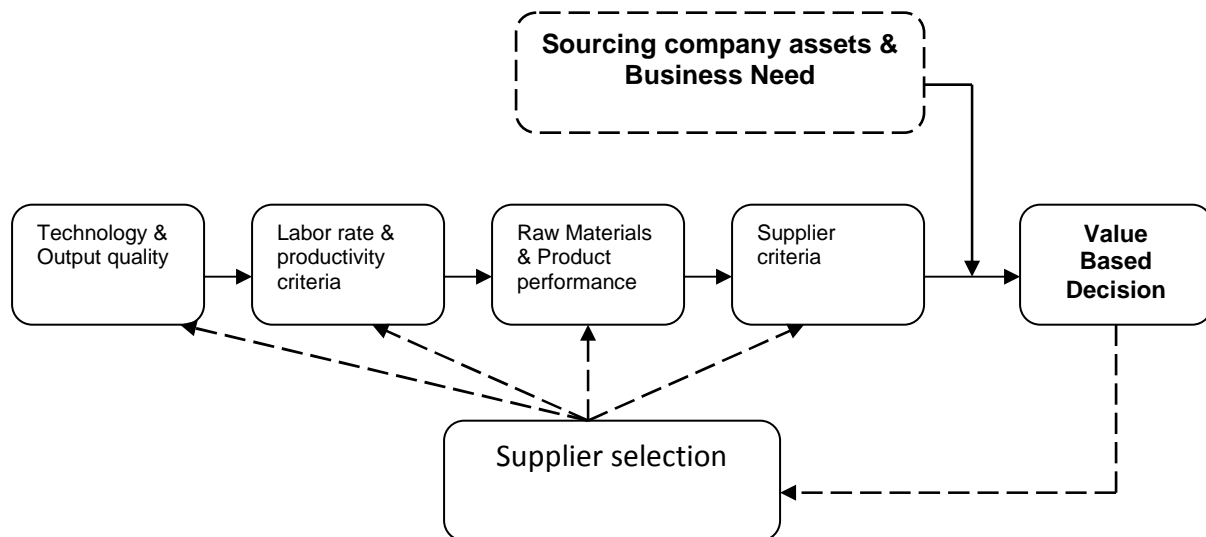


Figure 11: company's sourcing decision

It appears that part of the decision process in global sourcing operation was to do with global competition, transfer of expenditure to low cost countries, unavailability of resources and most importantly the increase used of sourcing in the global market. Many of the low cost countries have seemly advance technology and they enjoy a huge direct investment from big manufacturers from other parts of the world. However, it has evident that labor rates and other costs benefit many of low cost countries and that, local businesses would ultimately want to attract more investment in the area of equipment, technology and technical expertise in order to meet quality and production requirement of their foreign customers.

6.3 Supplier selection process

To clarify Dickson's (1966) point of departure and the definition of supplier selection, the following is stated:

“The word “selection” frequently used in the literature to indicate the final decision on which provider is used. Selection could be the search for potential providers, for such a search in itself means that providers are sorted (comparison/decision) into potential and non-potential providers. For this reason, it is suggested that search, assessment, and provider decision are all elements of selection. Further, movement from search to evaluation to decision may occur only once, or it may be repeated (Dickson, 1966).”

Based on the empirical analysis, two modes of selection used in the case company are evaluation of alternative and short partner selection (see figure 12). In this study, these two modes of supplier selection are considered to plausible in the sourcing supplier selection context. Each other these modes demand certain criteria and resources of the firm.

It is suggested that smaller and less experienced firms are likely to choose supplier considered “good enough” rather than most favorable and that are less willing to undertake supplier selection process based on the evaluation of alternatives mode. On short supplier selection, decision is more of a team effort making it a plausible option for firms access a wide range of alternate which balance both short and long-term need of the firm.

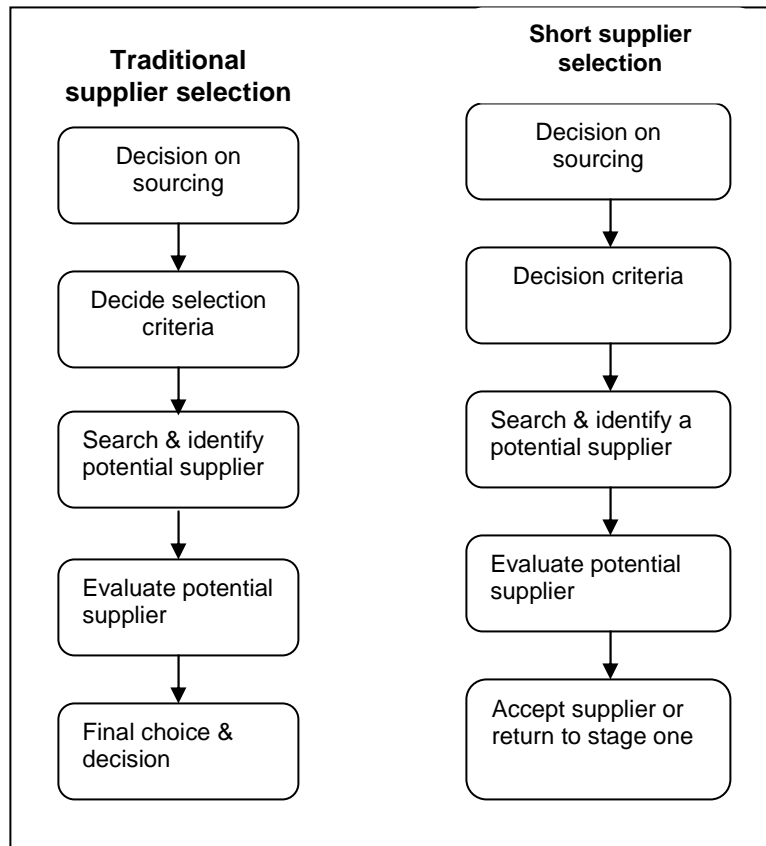


Figure 12: Proposed alternative modes of supplier selection

The proposed mode show sourcing option depending on firm sourcing location and relationship. Sourcing decision is based on the importance of cost reduction, quality, flexibility, and time-to-market. Savings in purchase price or cost varies and depending, thus, choice used in supplier evaluation and selection can depend on country level, sourcing situation and purchasing decision.

6.4 Criteria for selecting supplier

The result shows that quality - cost/price, delivery, supplier relationship, management and organization are important criteria for their supplier selection (see table 1). However, the approach to evaluating supplier seems to be reactive, because one supplier may offer higher quality components with unreliable delivery, while the other may offer inexpensive component of slightly below average quality, setting up a trade-off. The important thing to note is that, each

criteria is important for supplier evaluation at a separate stage because, allows the company to organize its decisions and operating structure around its core business. Table 1 summarizes the results of criteria normally used by the company to rate potential suppliers. The result of this study identifies quality, price, delivery time, technical capability and R&D know-how as the most criteria factors in their supplier selection process.

Table 1: Criteria for supplier selection

*Rating	Criteria	Factor
➤ 1A	Quality	Performance, durable, reliability, ease of operation and usability
➤ 1A	Delivery	Lead-time and speed delivery, on time delivery, response time to market
➤ 1A	Cost	Transportation, operating cost, after sale-service
➤ 2	Management & relationship	Management of relationships, industry relations, partnership
➤ 2	After-sales & services	Able to modify, flexibility, actionable, respond to urgent request
➤ 1	Technical capability	Know-how, technical contribution
➤ 2	Geographical location	Distance, local or foreign, ready to act when needed
➤ 2	Regulation compliance	Obey local employment laws, avoid unlawful employment
➤ 2	Trust & commitment	Trustworthy, reliability, dependability and performance
➤ 1A	Financial condition	Financial stability and credit worthiness, stable financial capabilities
➤ 2	Procedural compliance	Ability to follow rules, maintain agreement
➤ 1	R&D capability	Ability to contribute to new product development, SCM

*Ratings: 1A = Extreme importance 2 = Average importance 1 = Considerable importance.
3 = Slight importance

In general, under the global sourcing dynamics, firm makes decisions to source in different supplier markets for products and services that are valuable, reliable, and low-cost and offers a higher return to the organization and customers. Thus, table 3, indicates that firm develop global sourcing approach by managing new and long-term inventory process. The purchasing and sourcing managers have the option of sourcing from variety of markets that are compatible to the firm core business and competences.

6.5 Concluding remarks of key findings

The overall result of this thesis acknowledges the benefit and contribution of global sourcing is huge. So, the success and failure will depends on the management decision making and the criteria for selecting supplier. Therefore, the key findings will now be summarized as follows:

Benefit areas	Key drivers
Organizational:	
▪ Top management support to sourcing	➔ Sourcing and corporate strategy
▪ Access to technology and resources	➔ Closer to leading developmental edge
▪ Short availability of local suppliers	➔ Availability of qualified technical personnel
Purchase cost:	
▪ Reduction in overall cost	➔ Direct labor and other costs linked to productivity
▪ Reduction in direct material costs	➔ Closer to source of supply provides competitive advantage
Country wide specific:	
▪ Present in emerging and low cost countries	➔ Level of cost are very low
▪ Availability of large scale production	➔ Secure access to sourcing manufacturing services
▪ Ability to approach purchasing as global entity instead of country-wide driven	➔ Secure access to low cost materials and parts

Table 2: Concluding remarks of key findings

Based on the findings, sourcing can be seen to be the enhancer and production development, which provide firms with adequate resources. As it was said, sourcing from foreign suppliers can help complement the firm internal product development, and thus, provide well needed resources and large scale production. However, by using external suppliers, the firm can reinforce its own capabilities and maintain global competitiveness, even in most challenging and demanding business environment. Sourcing from low cost countries is beneficial to companies, because of the opportunity to operate at a reduced costs possible and increased productivity. The case company stress that the firm can not be internally skillful in all aspect of its operation, and thus, sourcing decision is as a result of changing business environment and customer needs. Therefore, supplier capability, technical know-how and location can affect the decision making process.

7. Conclusion

This study has contributed to our understanding of global sourcing in both theoretical and empirically. The purpose of this study was set to explore the firm decision making and supplier selection process in global sourcing activities. As the data analysis and findings indicate, that it is possible for the firm achieve cost savings by selecting the right and suitable supplier. The firm should evaluate sourcing options (country-level) and supplier on a case-by-case basis.

From all direction of this thesis, effort was dedicated in defining and understanding the current global sourcing and supplier selection theories. As part of the learning curve, a capability of the firm was also examined by reviewing internal data and interviews with the sourcing teams. As the study move on to a progressive stage, it is clear that the field of sourcing and the pressure to choose the best supplier will depends on the top management decision. It is also clear that global sourcing and purchasing strategies are critical to understanding sourcing complexity, especially, when selecting the right and potential suppliers. This view in GS helps to develop a complete picture about relationship between different criteria and factors.

More importantly, this study has offered empirically important trend in evaluating suppliers. It can conclude that sourcing experience is an important factor for selecting right suppliers, especially, when lead-time and supplier competence is concerned. The transfer of expenditure cost, lower purchasing costs, new supplier possibilities and high quality increase in product quantity and lower labor cost is critical importance for global sourcing activities. While access to new markets, technical know-how and solid financial background are key criteria for supplier selection, it is acknowledged that customer service, supplier relationship and management are still the key component for supplier selection decision-making process.

As evidenced in the study and the findings, cost, quality and delivery are most significant findings of the study as one the key drivers for sourcing activities. The company's international experience also contributes to the success in sourcing operation, for example, supplier related-business activities; the company pursues a global supply and purchasing policy in search of access to new material suppliers.

The study also finds strong support in the validity of the company pattern of GS operation, namely, supplier selection process and industry-wide sourcing strategy. The supplier selection model suggests that selecting criteria depends on an individual company method and its sourcing strategies. However, literature review also shows that more focus has been on how firm's select their suppliers instead what criteria an individual firm should apply. From an academic point of view, the model presented in this study shows new ways of evaluating factors criteria in the research of supplier selection.

Finally, while we recognized the importance of sourcing and its contribution to global economy, it is important also not to underestimate the process of selecting supplier. As the findings shows, supplier selection is one of the key important role of sourcing and purchasing managers in evaluating and deciding which supplier is best qualify and suitable for the firm. Global sourcing process should be integrated in the overall performance of the supply chain management. When the cost of sourcing can be reliably estimated, then it would be easier to evaluate supplier based on maintain delivery time, quality, reduce risk and continuous improvement. One thing is certain, successful sourcing and supplier selection decision can lead to alternative cost savings and increase competitive advantage, even at a global market level.

7.1 Recommendation

The created model (table 1) indicates that internal and external capabilities are important elements of global sourcing. The selection criteria make it possible to evaluate supplier and improve the firm overall sourcing process. For this reason, choosing right the supplier is the key to achieving the success of global sourcing activities. In doing so, meeting global competition and satisfying the global customer, firms should select and manage core suppliers in the long-term. Therefore, proper evaluation of the supplier selection process and categories is needed in order to successfully operate at low-cost, high quality and management of the supplier relationships. The created model itself shows much potential in the selection process and makes it possible to analyze supply chain performance and cost, as table 2 shows.

Table 3: Business benefit of the modify model as proposed.

Improve communication	<ul style="list-style-type: none"> ➤ How both supplier and the company can improve supply chain management ➤ How to utilize and improve communication network ➤ The effect on KSO and the suppliers
Improve overall understanding	<ul style="list-style-type: none"> ➤ The factor affecting supplier management ➤ The relationship between suppliers and the company ➤ Supply chain process and unaccountability of product and services
Improve overall risks and cost analysis	<ul style="list-style-type: none"> ➤ Identified hiding and unhidden costs associated with supply chain management ➤ Supply chain management and component suppliers challenges ➤ The concrete effect of improvement effort and action plan

Therefore, since sourcing can take anywhere around the world, adequate monitoring system of actual lead time of all suppliers is highly recommended to enhance the performance of supply chain network. Since purchasing is fundamental to supply chain management, the combination of all logistics and purchasing processes as well as the SCM systems into single units will ensure smooth coordination and collaboration between the firm and suppliers.

Furthermore, even as several studies have stressed the importance of cost, quality, delivery, customer service, supplier relationship and management to be important criteria for selecting supplier. Other studies have also considered managerial aspect and experience in international business. Thus, ethical and moral issues that all global companies must face when dealing with supplier in foreign markets are an important part of global sourcing operations. Finally, it is important to understand that what is “right” and “wrong” is not always easy to determine, as there are no universally accepted code of behavior to aid decision-makers in the global sourcing activities. But, having knowledge of foreign markets is essential to arriving at one’s own behavioral code for each business situation faced in any markets.

7.2 Manager implication

The managerial implication for this study is that, sourcing of materials was to support the operation of elevators and escalators in the global market. Managers faced three distinctive decision-making challenges: the long-term, medium-term and short-term decision-making. In the long-term, the manager has to be ready to make decision on which suppliers to choose and why. Their decision should be based on analyzing supplier historical performance and their ability to meet and maintain business relationship. The medium-term, managers should be willing to make sourcing decision and agreements to purchase materials with the three major distinctive criteria in mind (such as cost, quality and delivery). Finally, short-term ability is more tempting because of the timeframe. In business terms, time is money and managers will have little time to analyze supplier historical performance. So the challenge for managers in negotiating sourcing agreement is to focus on supplier capabilities and technical knowledge.

7.3 Further research

Further research could carry out towards understanding of the selected suppliers in order to learn from the past decision-making process and to support additional improvement in the selection process. It would be interesting to know from the supplier's side, how their foreign partners are selected and which criteria used. Finally, the role of the sourcing personnel should reveal interesting aspect on how suppliers are selected and the market implications to the company.

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Appendix 1: The interview lists

	Company	Date	Respondent roles	Type of encounter
1	KONE Corporation	March 2011	Sourcing Specialist	Interview
2	KONE Corporation	March 2011	Sourcing Manager	Interview
3	KONE Corporation	April 2011	Sourcing Category Manager	Interview
4	KONE Corporation	May 2011	Supply Quality Manager	Interview
5	KONE Corporation	May 2011	Purchasing Manager Global Spare Supply	Interview
6	KONE Corporation	May 2011	Logistics Manager	Interview
7	KONE Corporation	May 2011	Logistics Operation Manager	Interview
8	KONE Corporation	June 2011	Sourcing Manager	Interview
9	KONE Corporation	June 2011	Supply Manager	Interview
10	KONE Corporation	June 2011	Sourcing Manager	Interview

Appendix 2: Product – elevator and escalator



KONE elevator



KONE escalator

Appendix 3: Elevator component



KONE LCE control board



Escalator component /step