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Creating a Decision-Making Tool for Strategic Purchasing

A case study of SKF

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ABSTRACT

The purchasing function has for the past decades been subject to forces shifting the internal strategic balance in its favor. Earlier having been seen as no more than a support function, the purchasing departments today carry a crucial role in realizing the overall corporate strategy. While organizations have adapted to the increased complexity of global sourcing, there still exist conceptual underdevelopment regarding how to decide the approach towards purchasing. Where the scope for supplier relationships ranges from short- to long-term, this thesis investigate an approach that falls in the middle - namely strategic purchasing. The purpose of this thesis was to develop a tool for organizations to evaluate characteristics of their purchases, which then would guide towards choosing the right purchasing approach. By doing a case study of SKF and conducting 21 semi-structured interviews, the thesis contributes in two major ways. First, the theoretical definition of strategic purchasing was compared to real-life practice, improving the concept's empirical accuracy. Second, a multi-theoretical approach was adopted to develop a framework identifying potential for strategic purchasing. The findings show how strategic purchasing deviates from theory in that a long-term focus can be achieved without committing to supplier relations. Further, the findings specify that *Strategic Importance, Supply Complexity, Customization, Supply Market Volatility and Technological Uncertainty* are five dimensions of characteristics that should be evaluated to provide guidance for the purchasing department. Last, a call for further research into the role of social capital as well as the measurability of the proposed framework is given.

Key words: strategic purchasing, purchasing characteristics, purchasing supply management (PSM), purchasing portfolio management (PPM), transaction cost economics (TCE), buyer-supplier relationship, multinational corporation (MNC).

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Fredrik Peterson Victor Jacobson

LIST OF ABBREVIATIONS

MNC Multinational Corporation

PPM Purchasing Portfolio Management

PSM Purchasing Supply Management

TCE Transaction Cost Economics

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1. INTRODUCTION

Traditionally, purchasing has been seen as a rather generic role within organizations, where theory and practice alike promoted that activities were to be kept in-house. Along with globalization, where specialization allowed for value chains to be disaggregated and reassembled according to 'who is best at doing what', companies have been forced to spend more resources on purchasing (Van Weele & Van Raaij, 2014). As a consequence, multinational corporations (MNCs) have to capture opportunities and build competitive advantage by globally sourcing their inputs. In unison with this transformation, purchasing supply management (PSM) has incrementally gained an increasing strategic role.

Following the prompt escalation in globalization, outsourcing and the rapid development of information technologies, the environment in which PSM resides is increasingly becoming more complex. Referred to as a "*strategic approach to planning for and acquiring the organization's current and future needs [...]*" (Monczka, Handfield, Giunipero & Patterson, 2011 p.11) much focus has been given towards the latter part, namely how to approach the acquirement-side in such complex settings. However, the initial part of the definition, being "*planning for*", clearly indicates that there also is a process prior to the acquirement. More specifically, a way for MNCs to deal with purchasing of high complexity has been to establish rigid processes for how to approach suppliers, how to evaluate them and what kind of relationships that are preferred. One such approach is strategic purchasing. Yet, in the midst of the proliferation of sourcing processes a gap exists in that there is a clear lack of understanding how an organization can determine when to use different sourcing process. In other words, this conceptual shortcoming resides in the process that precedes the actual purchasing activity. This thesis will address this gap by focusing on strategic purchasing and examine how it takes its shape in reality as well as how an organization, prior to engaging in this approach, could identify a strategic purchasing potential.

The study will present the case of SKF, a world-leading bearing producer, that similar to what was just described had established two comprehensive sourcing processes at the Group Purchasing department. However, regardless of how meticulously made the processes were, the problem arose regarding when they were to use what process.

1.2 PROBLEM DISCUSSION

Van Weele (2014) argued that one of the first articles that explicitly gave notice to the strategic role of purchasing dates back to when Michael Porter (1985) explored organization's value chain. However, it was not until later that theory departed from traditionally favoring in-house production towards the 'make-or-buy' decision becoming more prevalent, proponed through the works of Barney (1991), Rumelt (1991), Wernerfelt (1985), Prahalad and Hamel (1990) and Quinn (1992) amongst others. Moving beyond this, many of these scholars argued that the organization's competitive performance was the result of how they chose to employ and combine their resources – one of which was the relationships to suppliers. Tying this to the purchasing literature, the decision evolved from 'make-or-buy' into 'buy-or-ally'.

Dyer, Cho and Chu (1998) did in their early work state that the purchasing relationship to suppliers traditionally had taken two forms; arm's length or partnerships. Arm's length relationship was characterized as short-term transactions designed to minimize any kind of relationship with suppliers whereas the latter emphasized long-term relationship with a focus on relationship-specific investments (Asanuma, 1989; Mark Fruin, 1992). Dyer et al. (1998) criticized previous research for lacking theoretical and empirical understanding, claiming that the 'buy-or-ally' dilemma had been treated too generically. Instead, they introduced 'durable arm's length' as a third option to the 'buy-or-ally' decision. They proposed that by considering not only the price but also the suppliers' capabilities for bringing future cost reductions, organizations could benefit from engaging in more long-term relations as opposed to arm's length, but still without entering partnerships.

For the past decades the field of PSM has been studied extensively (Van Weele, 2014). Several scholars have attempted to extend both the theoretical and empirical understanding of the increasing strategic relevance for the purchasing function (Spina, Caniato, Luzzini & Ronchi, 2013). In doing so the progress has taken the purchasing function from the generic level to carrying a relatively large strategic weight. Considering the major contributions, it is clear that not only has these developments shed light upon purchasing's evolution in a systematic way, but also introduced another concept similar to Dyer et al.'s (1998). This concept is strategic purchasing, which provides the core for this thesis. Having been incrementally improved and developed since the early 90s, strategic purchasing has

theoretically become a concept whereby organizations, without entering alliances or partnership, still are purchasing with a more long-term focus.

The addition of concepts such as durable arm's length and strategic purchasing suggests that the 'buy-or-ally' decision do not remain as generic anymore. However, the problematization of this thesis rests upon two shortcomings. First, studies within supply chain management and PSM have a tendency to advocate for supplier partnerships and alliances as soon as a purchase shows signs of criticality. The downside of such long-term relationships is that they require much organizational resources and therefore become more costly (Dyer et al., 1998; Lysons & Farrington, 2012; Van Weele, 2014). Therefore, the complication arises that in reality organizations are constantly limited by resources. As a result, the gap between theory and reality is that although an organization would prefer running as much of their purchases strategically with a long-term focus, they will not be able to. Hence, organizations must be selective in what they choose to strategically purchase. In other words, although strategic purchasing has received theoretical elaboration there remains an empirical connection to reflect reality.

The second shortcoming is that until today no comprehensive picture has been provided that addresses the decision that precedes the actual purchasing. That is, the decision of whether purchasing will be carried out through arm's length or strategic purchasing. Instead, previous research largely focused on evaluation processes of suppliers once the decision has been taken regarding how to purchase. This combined with previous research's tendency of suggesting long-term partnerships without taking limited resources into consideration makes it imperative to extend the understanding of this area, as an organization will have to carefully choose how to deploy their resources.

In their work Shook, Adams, Ketchen and Craighead (2009), Spina et al. (2013) and Van Weele (2014) concluded that although PSM has gained considerable recognition and traction, it could be extended even further by studying it through multiple theoretical perspectives. This has been taken into consideration when specifying the purpose and research questions of this thesis, which are explained in the following section.

1.3 PURPOSE & RESEARCH QUESTION

The purpose of this thesis has been to investigate the decision that helps an organization choose how to approach purchasing. More specifically, taking resource scarcity into consideration this study has assessed what characteristics for a purchase that should be evaluated to identify when there is a potential to engage in strategic purchasing. In order to do so, the following research questions were developed:

How can a global organization determine when to use strategic purchasing?

In order to answer the research question, the following two sub-questions were needed to be answered:

What is strategic purchasing?

What characteristics are important to identify when deciding how to run purchasing?

Building upon Shook et al. (2009), Spina et al. (2013) and Van Weele's (2014) call for multi-theoretical approaches, this thesis has constructed a decision tool that draws upon two prominent theories. The proposed framework has been based on the work by Luzzini, Caniato, Ronchi and Spina (2012), where Kraljic's (1983) purchasing portfolio matrix and transaction cost economics (TCE) were used to extend it further. Overall, addressing the research questions and pursuing the specific research area of this study required full comprehension of the context in which strategic purchasing resides. Since there were no existing scale or metric for strategic purchasing and due to its underdeveloped conceptual understanding and the relatively wide research gap related to the decision of when to engage in it, a thorough literature review has been provided. As such, the conceivably largest contribution of this thesis lies in the conceptual elucidation and identification of specific metrics, or parameters, and how they relate to this decision.

1.4 DELIMITATIONS

In order to provide a better understanding it is important to highlight the boundaries of this study. Having utilized a case study approach it was naturally accompanied with certain limitations, which will be useful for the reader to bear in mind going forward. First, since the case study has taken the perspective of a single MNC it is reasonable to assume that this could make it industry-specific, which could have a certain impact on the generalizability of the findings. Furthermore, since all interviewees were employees of the same company, the responses could be reflective of a company culture. Yet, whereas the case of SKF has been the subject of all data collection it must be emphasized that the objective of this thesis has not been to provide a company-specific solution. Therefore a diverse sampling population was encouraged to reduce population specificity of the data gathered (further explained in methodology chapter). As a result, while acknowledging that limitations in terms of generalizability exist, it is still argued that the findings are providing value across firms and industries. Second, this study was delimited to researching purchasing at a global level. This is evident since all interviewees belonged to the Group Purchasing department, meaning that they themselves do not perform daily buying activities but instead have the ultimate responsibility of maintaining an optimal supplier base (further explained in the Case Study chapter). As such, differences could appear if the study would have been made on a more local level. A last delimitation regards that whereas the purpose is to investigate and create a decision-making tool, this study do not intend to go into decision-process theory. As such, to maintain focus and a more in-depth analysis, it will become evident that the literature review and theoretical framework was limited to consider only developments within purchasing.

2. LITERATURE REVIEW & THEORETICAL FRAMEWORK

In this section the focus is initially on strategic purchasing, and its emerging role within businesses. This is followed by the theoretical framework, which gives an explanation of the theories and models used. Subsequently the reader will be provided with the proposed adjusted framework.

2.1 HISTORY OF PURCHASING

This section specifically concerns the development that the PSM literature has experienced for the past 30 years. By reviewing the major contributions within this field the following discussion goes through the many theoretical facets that purchasing as a function has experienced. Last, a summary of popular theoretical perspectives is provided. This will facilitate a comprehensive understanding of PSM, being a fundamental factor in the development of strategic purchasing.

2.1.1 THE RISE OF RELATIONSHIPS IN PURCHASING

PSM and its strategic role within it was first explicitly addressed in the literature by Michael Porter and Peter Kraljic. Purchasing was identified as an important factor considering the competitive performance of a firm (Porter, 1985). Along this work, Peter Kraljic (1983) gave notice to that changes in the supply market would require greater emphasis on purchasing strategically. As a result Kraljic presented his purchasing portfolio matrix. The main argument was that when firms purchase critical items under conditions that are competitive and complex, the use of supply management is to be considered favorable. The portfolio matrix created by Kraljic was the first comprehensive portfolio approach developed and used within PSM. The approach has been considered a breakthrough in the PSM field by many scholars, and has been used frequently over the years (Van Weele & Gelderman, 2002; Caniëls & Gelderman, 2007; Gelderman & Semeijn, 2006; Pagell, Wu & Wasserman, 2010; Luzzini et al., 2012; Drake, Lee & Hussain, 2013).

Concerning the potential benefits that purchasing could have, Reck and Long (1988) were early in recognizing that for purchasing to become a competitive weapon, it needed to move from a conventional to an integrative strategic function. Moreover, it was stated that

purchasing strategies should be aligned with the strategic plans of the firm (Ibid.). Hence, at this point the purchasing function is suggested to take on a more strategic role in the firm.

Starting the 1990s, Heide and John (1990) acknowledged the emergence of *alliances* and *partnerships* and its contrast to the more conventional arm's length buyer-supplier relationship. In order to study this recent phenomenon Heidi and John (1990) adopted Williamson's (1985) TCE perspective to be a corner piece of their paper. They argued that a closer relationship between buyers and suppliers denoted a shift in transaction governance from a market-based exchange towards bilateral agreements. Heide and John (1990) concluded that both the level of transaction-specific assets and uncertainty were related to the closeness of purchasing relationships. Furthermore, it was stated that bilateral governance should only be utilized in purchasing relationships when there is a presence of specific assets and uncertainty.

Ring and Van de Ven (1992) further recognized the rising appearance of alliances and other cooperative relationships between buyers and suppliers. To study the shift in buyer-supplier relationships and the new forms of governance of such transaction, they also used Williamson's (1985) TCE perspective. A proper governance structure would, according to them, allow for safeguarding against risk. As such, the level of risk was a determining factor for what governance structure to adopt. As a result of risk being subject to changes, the purchasing governance structure was to be subject for reevaluation (Ring and Van de Ven, 1992).

2.1.2 FROM PURCHASING STRATEGY TO STRATEGIC PURCHASING

In the wake of increased research giving the purchasing function new shapes and dimensions, the above discussion outlined how the PSM field progressed into considering the importance of buyer-supplier relationships to a larger extent. Mandal and Deshmukk (1994) took this perspective further by applying it to supplier selection processes. They pointed out that whereas the objective of the purchasing department remained similar to earlier, the way in which vendors were selected had changed. Mandal and Deshmukk (1994) argued that purchasing strategies traditionally scrutinized the suppliers on cost, quality and delivery, where the selection was on a transaction basis. However, the more modern selection process considered factors allowing for more long-term relationships to establish. These factors would still include cost, quality and delivery, but also consider qualitative criteria such as

management and organizational aspects of the supplier, their technical readiness and future R&D capabilities (Ibid.). Reviewing 30 years of research within purchasing strategy, Ellram and Carr (1994) partly conformed to this change. They argued that, in line with Watts, Kim and Hahn (1992), in order to elevate purchasing to a strategic level it was necessary that the firm continuously made improvements in cost and quality, but also supplier flexibility. Apart from reviewing the development within purchasing literature, Ellram and Carr (1994) also emphasized the difference between purchasing strategy and strategic purchasing. They concluded that strategic purchasing was a key influence in establishing and attaining the firm's overall corporate strategy.

The remaining part of the 90s saw several seminal works being published that explicitly discussed strategic purchasing, its role, characteristics and importance. Studying the manufacturing and assembly industry, Gadde and Håkansson (1994) identified supply base structure as well as buyer-supplier relationship as two strategic choices that faced the purchasing function. Therefore, the number of suppliers the organizations would use and the nature of their transactional relationship had to be determined. Gadde and Håkansson (1994) argued that by engaging in strategic purchasing, whereby the organization deepened the supplier relations and reduced the supply base, several advantages were to be realized. These were first and foremost that deeper cooperation with suppliers would bring cost reduction and joint resource exploitation (Ibid.). Along the increased attention to strategic purchasing, the construct was conceptualized into having a long-term and proactive focus that emphasized strategic alignment between purchasing and corporate strategy as well as strategic management of supplier relations (Van Weele and Rozemeijer, 1996; Carr and Smeltzer, 1997; Carr and Smeltzer 1999; Chen & Paulray, 2004; among others). Furthermore, Carr and Smeltzer (1997) held that strategic purchasing was not merely long-term relationships, such as partnerships or alliances, but also maintained that the strategic function of purchasing includes a mix of different purchasing approaches.

In their research of more than 450 buyer-supplier relationships within the automotive industry, Dyer et al. (1998) criticized the conventional firms' practice to dichotomize the choice between arm's length and partnership purchasing models. As was partly explained in the problematization, Dyer et al. (1998) concluded that instead of adopting a one-size-fit-all, or readily assume that all purchases will benefit from long-term partnerships, suppliers must be segmented and analyzed to establish what strategy is best suited for that specific purchase.

Dyer et al. (1998) held that maintaining a balance between short- and long-term relations would enable competitive advantages to be realized. Contrasting the differences between the two choices of how to pursue purchasing relations they introduced the concept of durable arm's-length, by which they meant more long-term oriented relations – without going into alliances or partnerships. Extending this, the difference between the conventional and the durable arm's length is that apart from looking at lowest cost, the buyer also considers the supplier's capabilities for maintaining this price in the long run. As such, the buyer will aim to assure the supplier future business as long as they maintain a competitive pricing. This conforms to the belief of both Mandal and Deshmukk (1994) and Ellram and Carr (1994) in that there is more to evaluate suppliers on than cost, delivery and quality.

2.1.3 EVALUATION & PERFORMANCE

Going forward several scholars recognized the relation between strategic purchasing and firm performance (Carr and Pearson's, 1999; Carr and Smeltzer's, 1999; and Chen, Paulray & Lado, 2004). Differently from the earlier studies Carr and Pearson (1999) used TCE to investigate strategic purchasing's impact on supplier evaluation processes, buyer-supplier relations and finally on the firm's financial performance. The major finding was that by increasing the emphasis put on strategically managing sourcing processes a firm could better their financial performance. Further, Carr and Smeltzer's (1999) investigated the relationship between strategic purchasing and supply chain management. Based on Kraljic (1983), Carr and Smeltzer (1999) argued for the increased importance of strategic purchasing, seen as a consequence of supplier market developments. The findings of Carr and Pearson (1999) and Carr and Smeltzer (1999) were later confirmed by Chen et al. (2004) who empirically and quantitatively established a strong relation between strategic purchasing and overall firm performance.

In 2004, Talluri and Narasimhan (2004) stressed the importance of not only making the selection and evaluation of suppliers based on operational factors, such as costs, delivery and quality. Instead they stressed the inclusion of capabilities and strategic dimensions of suppliers, such as process capabilities, quality management, capabilities for cost reduction, and development and design capabilities. In other words, Talluri and Narasimhan (2004) did not only comply with the view of Watts et al. (1992), Ellram and Carr (1994) and Mandal and Deshmuck (1994), but also extended these arguments as they showed that such a supplier selection criteria had a positive impact on firm performance.

Giunipero, Handfield and Eltantawy (2006) payed further attention to understanding the shift in supply management. In the results they too clarified that the buyer-supplier relationship should be established on a case-by-case basis, since a mix of arm's length and strategic relationships are often needed. According to Giunipero et al. (2006), the term 'total cost' had gained emphasis as a superior way for the purchasing function to evaluate suppliers. The term considered that the actual cost of a product or service provided by a supplier should be more important than just the price paid. The total cost associated with a specific supplier was also dependent on elements such as quality, flexibility, delivery, service and other factors.

2.1.4 POPULAR THEORETICAL APPROACHES FOR FURTHER RESEARCH

For the past decade, a number of reviews have been published that gives account to the progress made within the PSM. One was the review by Shook et al. (2009), where they studied the increased strategic importance of sourcing by taking a multi-theoretical approach. Shook et al. (2009) presented the ten most used organizational theories to highlight the evolution of the field. In line with the theoretical discussion above, TCE was identified among these ten. Concluding their review, Shook et al. (2009) urged scholars to study purchasing and sourcing through the use of multi-theoretical perspectives – combining multiple theories to enrich insights into the field.

In another review Chicksand, Watson, Walker, Radnor and Johnston (2012) looked into the extent to which theory had been used in PSM research and identified the most prevalent theories. They argued that the field was still experiencing an extensive lack of coherency. First, there was a general absence of research applying theoretical perspectives to investigate the PSM discipline (Ibid.). Whereas Chicksand et al. (2012) conformed to Shook et al. (2009) in that the most widely used theory was TCE, they did however oppose them in that a multi-theoretical perspective was necessary to advance research further. On the one hand they contended that multi-theoretical combinations often results in incommensurable theory and it as such would not contribute to the discipline's development. On the other hand, the criticism did indirectly highlight the importance of choosing truly complementing theories, given that one wish to pursue a multi-theoretical research approach. Thus warranting multi-theoretical perspectives if caution is taken.

Last, Spina et al. (2013) like many others also held that TCE remained by far the most widely adopted theory. In addition, it was also noted that purchasing portfolio management (PPM), lead by the work of Kraljic (1983), had experienced growth in application but was still in need of further development (Spina et al., 2013).

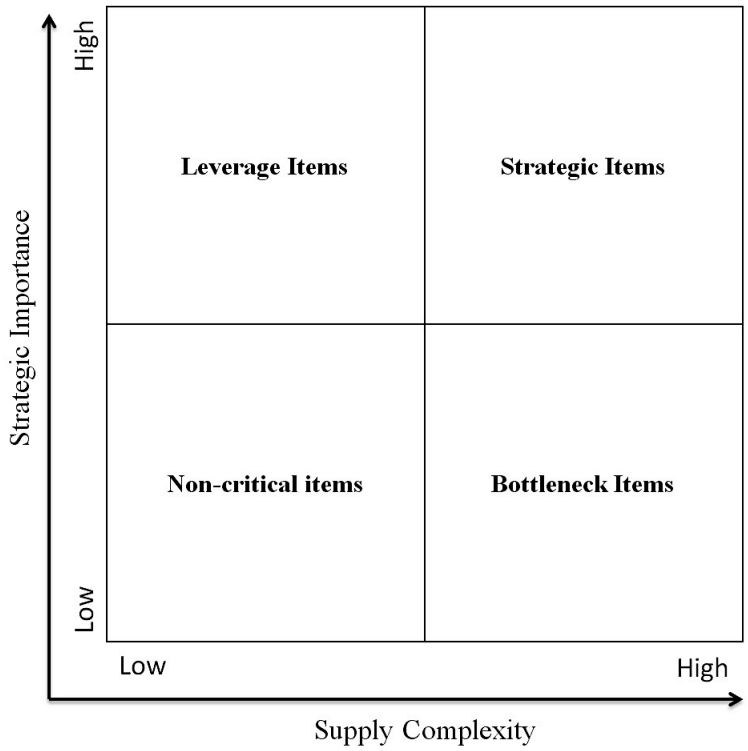
2.2 THEORETICAL FRAMEWORK

The literature review above highlighted some important lenses and tools through which the decision of sourcing process could be studied. Due to the potential insight of combining PPM and TCE a multi-theoretical approach, as was suggested by Spina et al. (2013), could give further value to the research field of strategic purchasing. As such, to assure a comprehensive understanding of the theories constituting the base for this thesis the following section will in more detail present Kraljic's (1983) purchasing portfolio matrix as well as give further explanation on TCE, Last, combining these two approaches into this thesis' multi-theoretical approach, the original framework of Luzzini et al. (2012) is presented.

2.2.1 KRALJIC'S PURCHASING PORTFOLIO MATRIX

The foundation of the portfolio matrix is that as critical items are purchased externally, supplier relationships should be carefully managed. As supplier relationship uncertainty, physical availability and technological development increases, supply management becomes more important (Kraljic, 1983). Kraljic pointed out that since organizations have limited resources, not all buyer-supplier relationships should be treated as long-term. The matrix developed by Kraljic work as a tool for supply managers to establish and nurture supplier relationships, thus resulting in different purchasing strategies (Kraljic, 1983). Hence, the matrix carries resemblance to the research topic of this thesis since it can be viewed as a decision tool prior to actually engaging in a specific purchasing strategy. The model is a two-by-two matrix that evaluates items along two dimensions; *the degree of strategic importance of purchasing* and *the characteristics of the supply market in terms of complexity*. The former relates to the value added by the product line, the volume purchased, the percentage of raw materials to total costs, the effect on product quality or business growth and the purchased product/service's impact on profitability. The latter refers to factors such as supply scarcity, pace of technological change and material substitution, entry barriers, logistics cost or complexity, risk and monopoly or oligopoly conditions. The matrix is seen in *Figure 1*.

Figure 1 - Kraljic's Purchasing Portfolio Matrix



Source: Compiled by authors. Data retrieved from: Kraljic, 1983.

Kraljic (1983) argued that depending on the composition of supply complexity and the strategic importance of each purchase, the item would take different characteristics. The four cells in Kraljic's matrix describe the four different groups of characteristics and each of these was associated with certain purchasing strategies. However, since this thesis has not used the four outcomes of Kraljic's matrix, but instead focused on the two dimensions, they will not be further deliberated upon.

Whereas a strength of Kraljic's (1983) arguments were that they pointed out the importance of regularly reevaluating and updating the categorization of items purchased, since supply and demand patterns may change over time, the matrix has also received some critique. For instance, the strategic recommendations following the matrix has been criticized for being rather generic, providing only limited indications for how to approach purchasing (Gelderman and Van Weele, 2005).

In general, Kraljic's matrix suggests that as an organization applies this approach, thus allocating their limited resources strategically, the performance of the purchasing department should increase.

2.2.2 TRANSACTION COST ECONOMICS

TCE does in its simplest form consider the cost of conducting any and every kind of exchange between organizations in the market (Williamson, 1981). Since Williamson's (1981) seminal work many scholars and even more theoretical interpretations have been provided that are based on his TCE approach, as was depicted through this study's theoretical review. Williamson (1981) referred to the transaction cost as the economic equivalent to friction and argues that when friction is high, meaning that transaction cost is high, objects will tend to stop moving, or in purchasing terms the exchange will tend to operate out of harmony. In turn, this will impact the way in which the relationship between the transacting parties take shape. TCE capitalizes on and identifies the problem of interface between economic organizations as deriving from a contracting problem (Williamson, 1987). Hence, Williamson (1985) argued that his TCE framework bears an important and explanatory role in the exchange relationship between buyers and suppliers.

In specifying the TCE framework's explanatory power Williamson (1981; 1985) outlines three factors that affect the buyer-supplier relationship. These are behavioral assumptions, transaction dimension, and governance mechanism. The first parameter, behavioral assumptions, was what set Williamson's TCE framework apart from the earlier economic theories as it provided a more truthful picture of the real world. This parameter assumes bounded rationality and that certain agents of different transacting parties will be subject to opportunistic behavior. Williamson held that more realistically the ability to gain full access to full data processing is limited. It is due to this bounded rationality that contracting can never completely and fully comprehend all complexities, yet it will work as a structural tool for establishing relationships.

The second parameter is the transaction dimension, which comprises the most fundamental theoretical base of TCE (Carter and Hodgson, 2006; Luzzini et al., 2012). The most critical element of this parameter is *asset-specificity, uncertainty* and *frequency of transactions* (Williamson, 1981; 1985). Out of these three, *asset-specificity* has become the most important in terms of explanatory power of the buyer-supplier relationship. Fundamentally, it specifies that as idiosyncratic and transaction-specific investments are made between a buyer and supplier, that relationship will principally experience a "lock-in" effect (Williamson, 1985; 1989). The result is that although a tendering process initially would have a variety of bidders, once such an investment have been made it will automatically benefit that first supplier into

having a certain transaction cost advantage. When these investments are present it often results in longer relationships. These advantages are not limited to investments that can be measured in monetary terms but can also accrue to learning and know-how (Ibid.). Referring to the remaining dimensions (*uncertainty* and *frequency of transactions*) these too assume critical roles. *Uncertainty* in transactions arises due to the previously discussed bounded rationality and opportunism (Williamson, 1985). The most relevant interpretation of uncertainty within TCE is defined by Koopman (1957, p. 162-163) as *"random acts and unpredictable changes in consumer preferences"*, since it can partly be controlled or protected for through proper contracting. In terms of *frequency of transactions*, this parameter provides that when non-standard transactions are present (i.e. purchases that requires asset-specific investments) some sort of specialized governance structure, which is equivalent to more long-term relations with suppliers, is often needed. Williamson (1985) argued that the benefits of these specialized structures were positively correlated to the extent of asset-specificity involved.

The last parameter outlining Williamson's framework is the governance mechanism. Here TCE recognizes that the contracting process in its entirety includes ex ante and ex post features. The former represent the procedure of negotiating, drafting, creating and safeguarding contracts whereas the latter looks closer at the contract renewal stage (Williamson, 1989). According to Williamson the initial ex ante part of contracting therefore only serves to describe what sets a relationship in motion. Instead, the nature of the *transaction dimensions* (with asset-specificity, uncertainty and frequency) will determine the ex post renegotiations and how relationships takes shape. Overall it is held that whereas the ex ante bidding process always aims to establish competitive terms with many suppliers, the degree to which ex post negotiation rivalry will arise depends on previous transaction-specific investments. For instance, if an initial bidding process has resulted in investments into either physical capital or human expertise between a buyer and supplier, that will in most instances reduce the ex post competition. (Williamson, 1985; 1989). The fundamental idea behind the governance mechanism is then that the buyer-supplier relationship will tend to become more long-term when asset-specificity is high.

2.2.3 KRALJIC'S MATRIX & TCE COMBINED – THE ORIGINAL FRAMEWORK

Whereas Kraljic's matrix and TCE are powerful theories in themselves this thesis has set out to take a multi-theoretical approach towards addressing the identified problem. In line with this, Luzzini et al. (2012) were among the first scholars to explicitly take a TCE perspective on purchasing portfolio management (PPM), and their contributions serves as a fundament for this study's framework.

Luzzini et al. (2012) reviewed both PPM literature and TCE to integrate the two disciplines in order to operationalize the characteristics of different purchases and how this governs strategic purchasing strategies. To begin with, Luzzini et al. (2012) made an important distinction. Similar to Williamson (1981), they correctly identified that in their study of purchasing professionals from close to 700 companies, only recurring transactions were in focus. Therefore, both Luzzini et al. (2012) and Williamson (1985) gave all their attention towards the *asset-specificity* and *uncertainty dimensions*, while neglecting the *frequency of transactions* since this was assumed to be high in all cases. This too was applied in this study and as such became an important assumption:

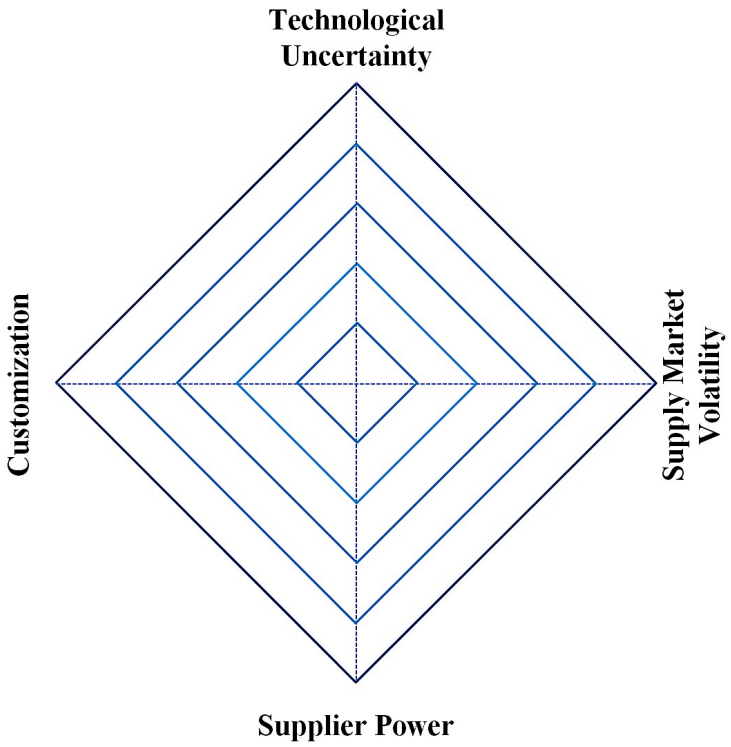
Assumption: Due to the nature of purchases made by SKF's Group Purchasing (further explained under *Case Study of SKF*)**, this study assumes to only involve purchases of a recurrent character.**

The arguments put forward by Luzzini et al. (2012) provided useful support for this study, as they too investigated how characteristics determined what purchasing strategy to pursue. As such, this thesis concurs with Luzzini et al. (2012) in that TCE will provide an enriching perspective to PPM literature. More specifically, since much critique against Kraljic's (1983) matrix, and PPM models over all, concerns its simplicity and that several aspects of its variables are considered immeasurable, a combination with TCE would provide more characteristics of the transactions to study and analyze. Building upon this, Luzzini et al. (2012) successfully operationalized five different dimensions and argued for how the combination of these would translate into different purchasing category strategies.

The dimensions presented by Luzzini et al. (2012) were *Strategic Importance, Supplier Complexity, Customization, Supply Market Volatility* and *Technological Uncertainty*.

Furthermore, along with these they also offered several parameters for how the dimensions were to be measured (all of which are further elaborated upon in the next section). Among the dimensions, the first two (*Strategic Importance* and *Supplier Complexity*) signifies dimensions provided by Kraljic's purchasing portfolio matrix and the remainder three were argued to be reflections of Williamson's (1985) TCE literature. However, when building their final framework Luzzini et al. (2012) did, due to the nature of their sample, exclude *Strategic Importance*. The reason for this delimitation was that all purchasing categories that were included in their study were considered highly important. As a result, Luzzini et al. (2012) made sure to clarify that their study only considered Kraljic's (1983) top-right quadrant – namely 'strategic items' (*See Figure 1 on page 12*). *Figure 2* below depicts the framework as it was used by Luzzini et al. (2012).

Figure 2 - Theoretical Framework Developed by Luzzini et al. (2012)



Source: Compiled by authors. Data retrieved from Luzzini et al., 2012.

Looking at *Figure 2* and contemplating on how the combination of the dimensions can translate into certain purchasing strategies, Luzzini et al. (2012) used a 6 point Likert scale, where 1 indicated *low* and 6 indicated *high,* to measure the dimensions. Referring to *Figure* 2 the basic idea is that the closer to the center the lower is the potential for long term supplier relationships. The score for each dimension was based on the mean score for all the

parameters that belonged to it. Luzzini et al. (2012) were on the one hand arguing that a low score is most likely describing a category that is not creating a competitive advantage and should therefore receive considerably less strategic attention. These buyer-supplier relationships would be short-term and to a certain degree based on more spot contracts. On the other hand, situations in which the score climbs implies more supplier involvement, longer contracts and more integrated relationships, hence, suggesting for a category with more strategic purchasing potential (Ibid.).

2.3 THE PROPOSED THEORETICAL FRAMEWORK

To fully understand the framework used a detailed description for each of the five dimensions comprising the framework is presented. Each dimension first presents the parameters that were introduced by Luzzini et al. (2012) and consequently move on to discuss how these conform to either Kraljic's matrix or TCE. The last section provides an addition that was not from Kraljic's matrix or TCE and moves on to summarize the final framework.

2.3.1 STRATEGIC IMPORTANCE

The first dimension, *Strategic Importance*, was an entirely new addition to the framework in this thesis. Whereas it was introduced by Luzzini et al. (2012) to identify categories' impact on the final product in terms of quality and cost, they chose not to incorporate it into their framework for reasons already explained above. Therefore, the inclusion of *Strategic Importance* was one of the contributions to the research made in this thesis. In their discussion of parameters useful to measure *Strategic Importance*, Luzzini et al. (2012) based their arguments on Kraljic (1983) and presented the following parameters:

- Category's impact on the cost of firm's product or service
- Category's impact on perceived quality
- Category's impact on the quality of firm's internal processes

When assessing the *Strategic Importance* of a category it most certainly make sense to evaluate its contribution to total cost of the focal firm's products, thus confirming the value of including the first parameter in the framework. Similar to this, the second parameter, which measures the impact on perceived quality, also becomes reasonable if the category purchased to a larger extent is contributing to the overall quality it certainly must be deemed to be of high strategic importance. However, the third parameter, concerning internal processes, will

be excluded from the framework used in this study. The reason for this is that in their method-section Luzzini et al. (2012) did not present enough arguments for how to approach this parameter and what was meant by internal processes. Therefore, due to its ambiguity, the decision was made to dismiss this parameter as useful for the purpose of this study's framework.

On the other hand, there were two parameters that were added. Following the work of Olsen and Ellram (1997), whom built upon Kraljic's (1983) definition of strategic importance, they argue for this dimension to be seen in terms of three factors; competence-, economic- and image-related. The first concerns how much the purchase ties into the core competence of the organization and the second is the impact on costs and profits. Last, the image-related factors concerns how critical the purchase is for the brand name of the focal firm. Taking these three into consideration the first two will be added to the framework. However, referring back to the original parameters it is evident that some economic aspects have already been covered. Therefore, the complementing parameters are:

- Extent to which the purchase relates to firm's core competence
- Size of potential cost savings

Both these parameters shed further light upon the *Strategic Importance* of the purchase category since the proximity to the core competence would relate to how important its role is in maintaining a competitive advantage. The potential for cost savings highlight the fact that, all else equal, the higher the potential of saving money on engaging in strategic purchasing for a specific category would in most cases translate into it being a more strategically attractive option.

2.3.2 SUPPLY COMPLEXITY

Luzzini et al. (2012) used *Supply Complexity* to give explicit attention to the PPM literature and as such contributing to the integrative framework. This dimension contributes in that it identified the degree of supply complexity and risk between suppliers and buyers. To measure this Luzzini et al. (2012) used the following five parameters:

- Extent to which suppliers are interconnected
- Entry barriers for new suppliers
- Uniqueness of assets that suppliers provide to category

- Level of concentration of supplier market
- Switching cost of changing suppliers

Whereas the parameters according to Luzzini et al. (2012) did well in measuring the supply complexity, they were however reduced for the framework applied in this thesis. Specifically, the first parameter related to supplier interconnectedness was eliminated. The reason was that stating that a high degree of interconnectedness was positively correlated to the extent to which the firm should engage in strategic purchasing strategies was partly unfounded and too difficult to prove. The parameter was therefore excluded because the mere ambiguity of how to interpret it would also create further challenges concerning both data collection and how to analyze the empirical findings. The remainder of the parameters has been included in the new framework. Moreover, the PPM literature confirms that the higher the score would be for these the more suitable it would be to establish strategic relationships and in extension to engage in strategic purchasing (Kraljic, 1983).

An additional parameter was added with a focus on supply risk. This parameter was included to further incorporate Kraljic's (1983) work as he argued for supply risk being an element of evaluation. Considering supply risk in combination with the more general factor of delivery presented throughout the literature review (Giunipero et al., 2006; Mandal & Deshmukk, 1994), the new parameter was chosen to absorb both these views. T headded parameter was formulated as follows:

- The extent to which a sudden stop of supply will disrupt the firm's production process

This parameter falls in line with Talluri and Narasimhan (2004) who stated that consideration of factors beyond price would be necessary in situations when the purchased category is critical for the focal firm's production and where a stop in supply would be highly disruptive. In other words, a high score for this complementing measurement would entail that the firm must be strategic in which suppliers it chooses to build relations with and that such relations will gain from having a more holistic and long-term focus.

2.3.3 CUSTOMIZATION

The third dimension, *Customization*, was added by Luzzini et al. (2012) based on TCE. Luzzini et al. (2012) presented and identified *Customization* as representing asset-specificity,

which is one of the most influential contributions of Williamson's transaction cost approach that goes to explain the buyer and supplier relationship. To measure the *level of Customization* Luzzini et al. (2012) presented a rather straightforward parameter:

- Level of Customization of products or services needed within this category

As presented earlier, transaction-specific investments have the potential to lead towards a lock-in effect in terms of relationships with suppliers. For this reason, Luzzini et al.'s (2012) parameter is well suited for assessing this as it measures the degree to which the supplier have to customize, or tailor-make, their products or services to suit the focal firm's needs. However, in addition to this TCE also emphasize the value of learning and know-how. Whereas the parameter above could take this into consideration, the distinction made here is that although this may be the case, it is not clear enough. Therefore, the additional parameter was:

- Extent to which relation-specific knowledge is desired/required

This parameter was deemed useful since it provides further insight into another aspect of customization. In other words, by explicitly measuring the level of know-how needed, or the extent to which it is necessary for the transaction, more attention is given to the fact that customization is not only limited to the products or services themselves. Instead, the framework will also take into account the resources that must be invested into developing skills – such familiarity of the specific transaction-knowledge needed may create benefits of maintaining longer relationships with suppliers. In fact, according to Williamson (1985; 1989) more strategic purchasing and long-term contracting is advantageous for the firm when customization, the level of learning and know-how is high. Therefore, the degree to which economies of learning exist, the more likely will a strategic purchasing process be to benefit the firm. Once again referring back to lock-in effect it must also be remembered that if this exists, that is if transaction-specific investments have been made, the effectiveness of a renegotiation may decline. As such, if the parameters given above receive a high score it may indicate that strategic purchasing and more long-term relation is to be preferred.

2.3.4 SUPPLY MARKET VOLATILITY

The fourth dimension addressed uncertainty, defined as a key component within TCE. Luzzini et al. (2012) used this construct to measure the volatility in prices and volumes, hence, presenting the following parameters:

- Volatility of prices
- Volatility in volumes

As these two parameters were reviewed on how well they reflect the TCE literature it was concluded that these too resembles *uncertainty*, as presented by Williamson (1985) and Koopman (1957). Sudden changes in prices of purchases (e.g. raw materials) and the volumes either available (i.e. supplied) or demanded (as a result of final consumer demand fluctuations) do certainly reflect a degree of unpredictability. As such, this study will conform to Luzzini et al. (2012) in that the parameters are sufficient to measure *Supply Market Volatility*.

2.3.5 TECHNOLOGICAL UNCERTAINTY

The last dimension *Technological Uncertainty* is one out of two dimensions that were created to reflect the uncertainty from TCE. As was discussed in the literature review the uncertainty aspect of TCE mainly arises due to *primary uncertainty*, which referred to unsuspected or unpredictable changes in preferences. The *Technological Uncertainty* dimension therefore reflects this and was included to consider the changes and developments in technology as well as the level of newness of products offered by the selling firm. Luzzini et al. (2012) presents the following parameters to test for this dimension:

- Newness of products or services purchased to the firm
- Newness of technology used to firm
- Frequency of technological change

Considering what additional features that could be added to the parameters, a perspective on future activities was developed. As such, focus was on technical changes in future products, as well as the buying firm's inability to predict these technical changes that will affect the products or services purchased. This perspective on uncertainty adds value to the parameters

listed above because it centers on a more competence-based argument. The added parameter was:

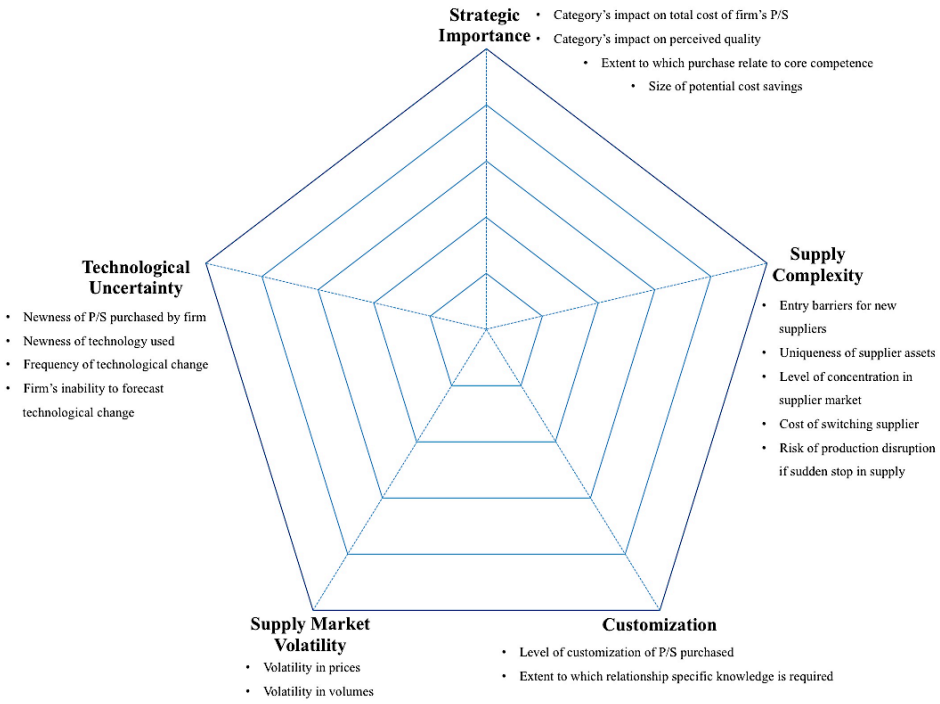
- Focal firm's inability to forecast technological change within category.

If one can assess the degree to which the focal firm depends on their suppliers' competence to predict and stay updated to technological changes, this informs one on how well equipped the firm is to deal with its environment. In other words, whereas the original parameters do well in addressing uncertainty in terms of products or services and technology, it does not address the firm's ability to deal with this kind of uncertainty. Moreover, as this dimension scores high it will tend to suggest for strategic purchasing and longer buyer-supplier relationships. As stated by Williamson (1985) the investments in relationships with asset-specificity, in this case being the ability of suppliers to forecast technological change, a certain degree of lock-in effect may occur suggesting for longer relationships.

2.3.6 FRAMEWORK & ADJUSTMENT

Based on the discussions held above, *Figure 3* below depicts the new framework in its entirety. As is evident, the pentagon points towards each dimension and under each of these one will find the parameters that will be assessed.

Figure 3 - Proposed Theoretical Framework



Source: Compiled by authors based on Luzzini et al. (2012), Williamson, 1985, Kraljic, 1983.

However, prior to the framework being finalized and ready for application there was one additional aspect that had to be considered. This aspect concerned whether there were any overarching factors that automatically would have an impact on how the framework, its dimensions and parameters were to be used. In accordance to Spina et al.'s (2013) review of previous purchasing and supply management it was argued that the competitive priority, or purpose, behind the purchase would impact the process. They argued that knowing this would answer 'why' the purchase process is carried out. The most popularly researched purposes were cost-, quality- and innovation related (Spina et al., 2013). Whereas the purpose of the purchase was not explicitly incorporated into the proposed framework it can be thought of as a precursor, which then would indicate the motivation and objective behind the entire sourcing process. The basic premise is that depending on purpose, it will automatically impact on what characteristics that becomes important. As such, apart from the dimensions and parameters this became an additional part to the framework that was tested through the qualitative study.

3. METHODOLOGY

This chapter outlines the research method and approach used in this study as well as reasons for choosing the specific methods. Furthermore, weaknesses and strengths of the research are discussed.

3.1 RESEARCH APPROACH

The research presented in this study focuses on developing a better understanding for when to engage in strategic purchasing based on the characteristics of what is being purchased. To study this topic a qualitative research method approach was taken, as this type of research is particularly well suited for investigating topics in depth by understanding the beliefs and meanings of underlying actions. This approach allows researchers to investigate and build theory (Bryman & Bell, 2015; Marschan-Piekkari & Welch, 2004). Furthermore, since the topic of this study was rather complex it was desirable to gather textual data through the use of qualitative research as oppose to numerical data through quantitative research (Eriksson & Kovalainen, 2008).

Qualitative research method is better suited in the study of complex issues, as was the case for the problematization of this thesis. This method allows researchers to gather detailed information of the phenomenon of interest, thereby providing more valuable results. Moreover, this research practice is generally considered to be well suited for research in international business management, being the field of study for this thesis (Marschan-Piekkari & Welch, 2004). Despite the benefits presented by qualitative research methodology, some criticisms do exist. It has been argued that the scientific level is not enough as qualitative studies are usually hard to statistically analyze. On other other hand, whereas quantitative studies are able to capture this aspect, especially for a larger sample population, they are limited to data gathered from answers derived from a questionnaire. Hence, important data may pass unnoticed, restricting the full understanding of a studied phenomenon (Bryman & Bell, 2015; Saunders, Lewis & Thornhill, 2012).

Case studies are considered best when examining research questions from the perspective of answering how or why a phenomenon works. A further benefit associated with case studies is the opportunity to study a phenomenon within its real-world context (Yin, 2014). Moreover, the use of case studies provides both the researchers and respondents with the opportunity to

repeat as well as clarify questions, thereby increasing for correct interpretation and understanding (Ghauri, 2004). The process of using a case study as the research method should be initiated by a thorough literature review, followed by the construction of a conceptual framework. This is important since the knowledge residing within the researchers is the base upon which the research design is developed (Yin, 2014).

The theoretical approach in this thesis is to be considered as a combination of both deductive and inductive. In order to establish a good foundation to build and develop research upon a thorough literature review was conducted prior to any additional data collection on the topic. This was crucial since it allows for a deep understanding of the environment within which the problematization takes place, which in a case study provides greater possibilities to successfully develop a process that could answer the research questions. After having reviewed the literature a theoretical framework was crafted, which was built on existing literature and theories. Hence, up till this point the thesis adopted a deductive research approach. However, as new information was gathered and analyzed the literature review as well as the theoretical framework was continuously revised and updated. This illustrates an inductive approach, which allowed for continuous reflections to be made on the findings and therefore gave a richer view of the identified research area. The combination of these two approaches allows for new ideas, questions and solutions to be created. Thus, the research approach of this study is to be considered abductive (Bryman & Bell, 2015; Ghauri, 2004). The abductive approach was deemed desirable as it facilitated the modification and improvement of the initially constructed framework, as empirical data was gathered and analyzed.

3.2 RESEARCH DESIGN

This section presents the research unit in focus, as well as the process by which the research questions were identified. Furthermore, it outlines how the research was designed, that is the systematic collection and analysis of data in order to study and answer the research questions.

3.2.1 RESEARCH UNIT & SAMPLE

The researchers of this thesis were early on to target SKF as the unit to perform a case study on. A dialogue was initiated with an employee at the company, with whom the researchers previously had established contact with through the university. The study of SKF aligned well

with the international business focus of this thesis since SKF is one of the largest Swedish MNCs. Having the opportunity to be present at SKF's headquarter for five month while conducting the research was also deemed attractive. From a research perspective it was viewed as preferable that SKF has English as the corporate language, since an international scope of data could be collected without compromising on understanding. From the first discussions the scope was narrowed down to the employee's field of work, which was global purchasing. Following this, several in-depth discussions were held, upon which a literature review within the field of global purchasing was initiated by the researchers. Meanwhile, SKF looked internally to identify any areas subject to potential improvements. As such, the final focus of this thesis became a compromise between the interest of the researchers and the need from SKF. This process meant that an academic relevance was maintained while the research also provided value for the organization. This guided the formulation of the research questions.

In order to study and answer the identified research questions a single case study on SKF was perceived feasible. Eriksson and Kovalainen (2008) stated that the use of a single case study is the most advantageous when looking to evaluate a phenomenon with limited resources available in a set timeframe. Ghauri (2004) and Yin (2014) added in their works that using a single case study can contribute and build theory by confirming, challenging and/or extending established theory. Hence, since the field of study was underdeveloped the ability to challenge as well as extend theory was desirable. The case study of SKF provided access to both primary data in the form of interviews and secondary data in terms of internal sourcing documents. Further information about the case of SKF and the identified area of improvement is found in Section 5.

3.2.2. DATA COLLECTION METHOD

In qualitative research the two most commonly used interview approaches are unstructured interviews and semi-structured interviews (Bryman & Bell, 2015). In order to answer the research questions of this thesis it was desirable to develop an in-depth understanding of the research topic, which was believed to be best accomplished by collecting primary data through the use of semi-structured interviews. This is partly due to the interviewees' ability to freely express his or her view and understanding, while still providing consistency (Ibid.). As was stated by Bryman and Bell (2015) semi-structured interviews suits purposes of complementing and building concepts and theories, and since the studied field was

underdeveloped this method would be favorable. However, it should be noticed that there are some shortcomings associated with a semi-structured interview approach. For instance, there can be a lack of standardization in the interview process and a risk of obtaining biased information due to poorly constructed questions or inaccurate interpretations of the answers provided (Yin, 2015).

In order to create a deep understanding and ensure that the collected information stayed as unbiased as possible a diversified sampling was preferred. Therefore, the focus was on purposefully selecting a sampling population, which is often the case in qualitative studies (Onwuegbuzie & Collins, 2007). The sampling population was therefore selected based on three criteria; interviewee's nationality, job position within the Group Purchasing department and job being in either direct or indirect materials purchased. Employees from Sweden, Germany, France, Italy and India were included in the study, with a spread of four different positions within purchasing. These were Purchasing Directors, Strategic Purchasing Managers, Category Managers and Strategic Sourcing Analysts, collectively representing both direct and indirect material. Based on these criteria a list of interviewee candidates was provided by the project owner. However, as interviews were held the respondents provided suggestions for additional colleagues that were considered as valuable candidates. This phenomenon is not uncommon in qualitative research and is referred to as 'snowball sampling' (Bryman & Bell, 2015).

The interviews with the Swedish employees were conducted in a face-to-face setting, whereas the interviews with employees from abroad were conducted via Webex, an online meeting tool. Holding interviews where the two interacting parties are not physically meeting could present some negative aspects in comparison to face-to-face interviews. One such shortcoming of holding distant interviews is the limited ability to observe the interviewee's body language and interact in person, which could provide additional information connected to questions or responses (Bryman & Bell, 2015). However, as Webex allows for oral and visual communication as well as to share computer screen, the level of interaction was enhanced (Bryman & Bell, 2015). During the interviews the language used was Swedish with the respondents coming from Sweden and English with those coming from abroad. The use of different languages does present a challenge to the research since interviewees of varying language may interpret questions differently (Willis and Miller, 2011). On the other hand, as the interviewees were all working in global positions related to Group Purchasing where the

corporate language is English, it was only assumed to have a marginal effect on the individuals' interpretation. As another precautionary step to avoid misinterpretations all the material provided to the respondents prior to and during the interview was in English, regardless of nationality.

In total 21 interviews were conducted. The data collection process begun in the middle of February and was initiated with four pilot interviews. These were executed on the request of the authors and had three major purposes; to align the academic focus with the practical need from SKF, to build up a general understanding of SKF's purchasing practices and to test the interview material prior to approaching all respondents to ensure its quality and accuracy. First, the Project Owner was interviewed who specified the problem facing SKF and how research could be used to address this issue. Second, there was a meeting with a Purchasing Director to confirm and make adjustment to the empirical focus the thesis had based on the first pilot interview. Third, a Category Manager was interviewed with the purpose of gaining more knowledge of how sourcing was used at SKF. Last, a meeting was arranged with an employee who held extensive expertise in interview technique and survey creation, with whom all interview material was reviewed. The purpose of this last meeting was to assure that the interview guide would enhance the ability to gather useful data.

As the pilot interviews were concluded the remaining 17 interviews were held. The number of interviews was determined by the allocated time for this research and the added value by each additional interview. As suggested by Andersen and Skaates (2004), the total number of interviews was governed by amount of new and valuable information that was collected through each session. As the novelty of the data collection decreased and similar responses was continuously repeated this indicated for saturation and it was decided to stop. In *Appendix 1* all interviewees are listed without consecutive order. For the sake of anonymity the names of all respondents have been replaced with R and a number.

3.2.3 INTERVIEW PROTOCOL & INTERVIEW PROCESS

To improve the quality, assure consistency and to enhance comparability of the interviews an interview guide was used. The first part of the guide was structured to gather some general information about the interviewees as suggested by Bryman and Bell (2015). The rest of the guide was developed to reflect the conducted literature review and the theoretical framework. Therefore, the structure of the interview guide was divided to focus on (1) general sourcing,

(2) the specific framework and (3) the purpose. This clearly reflects the equivalent three parts of the literature review and theoretical discussion. This structure was used as it would gather data on aspects that through the literature review had been determined desirable in answering the research questions. As mentioned, to further assure the structure of the interview guide R21 was consulted, being an expert in the field of research and surveys.

Apart from consulting on the structure, R21 pointed out the usefulness of using cycles of funnel respectively tunnel questions. Funnel questions allowed for new data to be gathered while tunnel questions examined existing material and made sure the respondents' answers would still relate to the desired topic. Although the tunnel approach was used for a large part of the interview guide, since one of the purposes was to test the proposed framework, the intent was to refrain from asking close-ended or leading questions. Instead the focus was on open-ended questions that provided space for the interviewees' perspective to come through. To further improve the quality of the interviews, questions were evaluated and adjusted if there were misinterpretations. Moreover, related to the tunnel questions concerning the theoretical framework a silent coding system from one to three was used, where one meant disagree and three agree. The form was used by the interviewers to indicate a quick reflections and first impression based on the answers given by the respondents. This practice was favorable since it helped the interviewers get an understanding of the interviewee's perception of the discussed topic and hence develop relevant follow-up questions (R21). The purpose behind the silent coding was to get a reference point when the analysis phase begun, since it helped to remind the researchers what opinion the respondents were arguing for. *Appendix* 3 provides a summary of all silent coding for each dimension and parameter of the suggested framework. Important to note however it that no parameters were excluded based on the results of the silent coding. The interview guide is found in *Appendix 2*.

To facilitate and allow for efficient interviews an introductory letter providing a short explanation about the project was sent out prior to the interviews (*Appendix 4*). Moreover, all interviews were recorded except the pilot interviews with R18 and R21. These interviews were not recorded since they had a more informal approach as the purpose was to dig for information not specifically related to the scope of the research, and since this information was not necessarily gathered with the purpose to contrast it to other data. Instead notes were taken to absorb the information of these interviews. Focus was rather on making sure that all interviews targeting the scope of this research were being recorded, which they were.

Recording allowed the researchers to reflect on the responses given by the interviewees, instead of focusing on taking good notes. Furthermore, to have the interviews recorded and being able to transcribe and play back the interviews improves the ability of the researchers to capture the answers in a correct way (Bryman & Bell, 2015). As such, the combination of a thorough literature review to improve the accuracy of the questions asked together with recording all interviews helped mitigate many of the drawbacks associated with semi-structured interviews identified earlier. To further secure correct interpretation of the responses given during the interviews, both researchers were present at all interviews.

The interview period, excluding the pilot interviews, lasted from the 18th of March to the 8th of April. Transcription of the interviews was completed in parallel during the interviewing period, and responses were analyzed throughout this period. This was done to provide insights of improvements in the interview practice. The length of the interviews was kept to 50 to 60 minutes each.

3.2.4 ANALYTICAL PROCESS

Transparency was identified by Bryman and Bell (2015) to be rather limited in qualitative research, as they suggested that the analysis of data gathered is usually unclear. Therefore, how data was analyzed and how conclusions were made are important to outline, in order to enhance validity and reliability (Bryman & Bell, 2015). Therefore, all data gathered was transcribed shortly after each interview. Furthermore, the continuous analysis of data allowed for theories to be developed along the way of holding the interviews as suggested by Ghauri (2004). Hence, the quality of the data collected from the following interview was improved as the understanding of the subject had been further developed.

All interviews were transcribed and coded. The transcriptions were conducted in Microsoft Word and then coded in Microsoft Excel. Key information from the transcribed interviews was inserted in the coding schedule, which was structured similar to the interview guide; general information about the interviewee, general sourcing, framework specific and purpose related data. In practice the coding schedule was used to easily provide critical information and as more in-depth information on a topic was desirable the transcribed word documents were used. This practice enhanced efficient handling of the data. Furthermore, the coding schedule provided structure for the empirical and analysis chapters. As was confirmed by Ghauri (2004) stating that identification of data into categories helps to interpret and analyze

responses from interviews. Moreover, a snapshot of the coding schedule is available in *Appendix 5*.

3.3 QUALITATIVE ASSESSMENT

In the assessment of qualitative research there are several factors that should be considered. Qualitative studies were by Lincoln and Guba (1985) suggested to be evaluated in terms of trustworthiness, which was developed as a replacement for validity and reliability that are commonly used for quantitative research. The focus of trustworthiness is to ensure an ethical approach, correct interpretation of gathered data and transferability (Lincoln & Guba, 1985). Having acknowledged these factors, actions were taken to improve the quality of the study. To increase for correct interpretation both interviewees were present during all interviews and follow-up questions were asked to clarify any uncertainties. As yet another precaution, the researchers ended every question by summarizing the interviewee how they had interpreted the answer and asked for confirmation or for the interviewee to correct them, which could be viewed as a practice of interviewee validation (Bryman & Bell, 2015). Furthermore, the research process has been transparent and interviewees were given space that allowed their personal opinions to come through. Moreover, the purposefully selection of interviewees based on their profiles, as previously mentioned, and the use of secondary data prove that the gathered data was triangulated, hence, enforcing trustworthiness.

Another important element of evaluation is external validity (Tsang, 2014). Already in 1963, Campbell and Stanley established the relationship between external validity and generalization, and according to Tsang (2014) generalization is better suited for evaluating case studies. Generalization was stated to be the extent to which the findings in one study can be applied in other settings. In contrast to the traditional notion of case studies providing less generalizable results, Tsang (2014) stated that in some aspects case studies are more generalizable than quantitative studies. This is due to case studies being more in-depth in the research, thereby providing a good contextual understanding, since the context can affect the phenomenon studied. *Theoretical generalization* is the development of theories for how certain variables studied are related, which can be developed through the use of case studies (Tsang, 2014). Therefore, the information underlying the findings of this thesis was well documented and deliberated upon. *Empirical generalization* on the other hand, involves whether the case or sample includes characteristics typical for that population (Tsang, 2014). Hence, one is looking for common patterns generated in a diverse sampling population

(Burawoy, 1998). Therefore, to mitigate the risk of low generalizability this thesis purposefully selected interviewees based on their profile.

4. THE CASE OF SKF GROUP PURCHASING

To better understand the research, results and implications of this thesis some general as well as specific information about SKF is provided in this chapter. First, SKF is presented in general and second, specific information related to the sourcing practices within the company is outlined. All information is based on the company website and internal documents provided by SKF.

4.1 BACKGROUND & CLARIFICATIONS

Founded in 1907, SKF has ever since been one of the world's leading producers of bearings. Since its inception, the company has grown rapidly in both size (profits and geographical reach) and in its offering. Initially producing ball-bearings the company has for the past 100 years diversified heavily into all kinds of heavy duty bearings, also providing seals, mechatronics, lubrication, and IT systems and support services to the market. All in all, SKF consider themselves a solution provider, today employing more than 45 000 people across 140 different production and business service sites that are spread all over the globe. Fundamentally, SKF provide its solutions to every industry imaginable and it has an explicit belief that its success in doing so rests upon its own reliability, both in terms of innovativeness and engineering knowledge - something that puts high requirements for making sure that the inputs purchased by SKF enables qualitative, effective and efficient operations. Being a global player in a resource intensive industry means that the requirements on the Group Purchasing department are high and its role in making their operations efficient and cost effective is crucial.

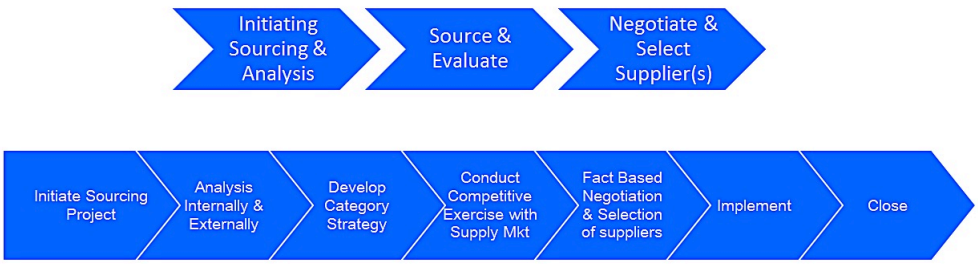
This thesis takes its focus at SKF's Group Purchasing department, which is a department dispersed over the company's global sites. Being a global company has its implications on how the purchasing function operates and in order to provide a clear understanding of what this means a clarification must be made. Crucial to understand and remember as the empirical findings are presented is that Group Purchasing's function is not to place orders on a daily basis. Instead, the Category Managers at Group Purchasing are in charge of establishing and developing the category purchasing strategies and driving sourcing projects to select the right supplier base from whom the local Category Buyers later will place orders. Therefore, the Global Purchasing department's main responsibility could be seen as two-folded: first, to ensure that the buyers operating with everyday purchasing, whom are spread across SKF's

global sites, have the best possible conditions to operate efficiently, and second, to secure long-term development in the supply base through proper supplier relationship management. Furthermore, enforcing the assumption of recurrent transactions that was provided earlier, Group Purchasing is most often involved in high volume transactions where buying takes place on a repetitive base across several factories world-wide.

4.2 THE SOURCING PROCESSES

Currently there exist two sourcing process at SKF Group Purchasing, shown in *Figure 4* below. The normal, or conventional, sourcing process is depicted through three consequent stages. In general, what characterizes this sourcing process is that the purchasing professionals know the specifications for what is to be purchased, they know the supplier base to target and they have a clear understanding of all stakeholders that the purchase would affect and their respective needs. On the opposite side, the strategic sourcing process has seven consecutive stages and is generally more useful when the Category Manager do not know the needs and specifications of all stakeholders, there is no structured supplier base, there is a lack of best practice within the category and there are clear benefits to be realized if working across business units and business areas (Longnell, 2014; Longnell & Manohar, 2015).

Figure 4 - Conventional versus Strategic Sourcing Process



Source: SKF company material. Data retrieved from Longnell, A-K, 2014.

Apart from being based on these opposing prerequisites there are other differences between the two processes. First, although more time is spent on negotiating, the conventional sourcing takes much less time. This is a consequence of the strategic sourcing emphasizing both internal and external data collection and analysis, which is time consuming. In other words, strategic sourcing places great value into clarifying the previous purchasing history

and internal needs to then scan the market and benchmark all potential suppliers against each other. The results are that negotiation becomes purely fact based. A second difference is that the attention of SKF's conventional sourcing is often at local suppliers with a focus on piece prices with relatively low volume contracts. In many cases certain supplies has to be local to maintain flexibility and low inventory for the factories and these situations are usually ideal for this type of sourcing process. Strategic sourcing on the other hand emphasize total cost and maintaining an optimal supplier base for high volume contracts, often with more global reach. A typical example would be that SKF realize that a history of conventional and local sourcing has lead to an excess amount of suppliers globally. In such a case the strategic sourcing process would map the internal requirements, scan the external market, initiate a bidding process and most likely end up with quotations from more global suppliers. In turn, having fewer but larger suppliers, as opposed to every factory having local contractors, will in most cases lead to SKF realizing volume benefits and reduction in prices while also establishing a more long-term supplier base for the future. The last and perhaps biggest difference between the two sourcing processes in terms of how they are run and managed is that strategic sourcing requires a steering committee. This means that the Category Managers running the projects will need approval by the committee at each stage to be able to proceed.

As was identified in the outset of this thesis, the problem that arose within SKF is that although these general characteristics exists for both methods of sourcing they are not sufficient to provide enough guidelines for when to choose one or the other process. Therefore, one is once again back to the problem of how to properly identify the characteristics of a category that properly would aid this decision. The following section presents the results from the interviews that tested the framework that was developed in this thesis.

5. EMPIRICAL FINDINGS

Prior to presenting the interview results that specifically arose concerning the applicability and accuracy of the framework that this thesis has created and set out to test, a more general discussion regarding strategic sourcing and the role of purchasing will be offered. To begin with, it is imperative to once again clarify that purchasing as a concept has several synonyms that during the interviews were used interchangeably. However, for the purpose of clarification, whereas it in SKF-terms will be referred to as sourcing it is still at work within the realms of purchasing.

5.1 STRATEGIC PURCHASING IN GENERAL

Generally there was consensus as to what strategic sourcing means for SKF and the major benefits that it brings. Throughout many of the interviews it was argued that 'structure' is to be seen a major driving force behind the strategic sourcing process. As such 'unstructure' per se has become a prerequisite and as put by R11 *"the strategic sourcing process comes best to use when we have less knowledge and information of what it is that we are buying at an aggregated level and who the users (i.e. what factories) are"*. R20 gave the example of tools used in SKF factories globally and said that *"[...] there was historic suppliers that had been supplying to the same factories for 20 to 25 years, and typically what happen is the complacency that comes is that the supplier starts feeling that 'OK I will always have this customer' and the factory thinks that they know everything and get the best deals. This has resulted in that we have less control to see how much we are spending globally"*. It was further argued that when the situation is as such, that is when there is no clear information on what the money is spent on, it is often a good indication of there being large potential savings in consolidating and benchmarking suppliers against each other. *"In this case and many others it becomes clear that supplier reduction would automatically happen once we created the competition and we entered the process with two objectives that for us were to improve total cost and to create a more sustainable platform for future activities - supplier reduction therefore becomes an outcome and not an objective"* (R20). The suppliers that make it through the strategic sourcing process did in this case end up on a SKF short list, essentially meaning that instead of the factories using the same local suppliers every time, the short list will give 'preferred suppliers' to replace tools. In this example the strategic sourcing process helped SKF to study the market and create 'preferred suppliers' that are to be kept for about five years, after which the short list is to be reconsidered and the market studied once again.

Moreover, on the subject of strategies R1 stated that *"During Tom Johnstone's time (previous President and CEO) the focus was very much on sourcing locally for products that were sold locally"* and in addition to this R6's belief was that *"It would be ideal if a decision tool could help us align the sourcing process to SKF's current strategic vision"*. Extending the discussion to how suppliers are selected, both R7 and R8 acknowledge that given today's economic climate and the changes that constantly takes place this has meant that SKF has to learn much more about the suppliers before they can fully decide who to go with. R15 explained: *"Within the global purchasing department we are often talking about QDCIM - quality, delivery, cost, innovation and management - how good is the supplier at these five?"*.

However, there were other reasons apart from 'structure' that were brought up as fundamental guidelines. For instance, 'the presence or lack of a purchasing strategy' and 'the amount of stakeholders' were said to be fundamental driving forces for strategic sourcing. By definition, one of the stages of the strategic sourcing process at SKF is to establish a purchasing strategy, but according to several respondents there are many cases where there is no category purchasing strategy to start with. R3 argued that *"If there is already a category strategy that means we know what suppliers to involve in the tendering and negotiation processes, but if there is no strategy you will have to do the analysis and much more work to begin with"*. This is in fact agreed upon by the majority of respondents. Nevertheless, the fact that the strategy established cannot be seen as static was also discussed and that eventually it will have to be reworked. With reference to 'the amount of stakeholders' the general belief seemed being that when the scope is larger and a sourcing activity could involve many factories and key decision makers, then there is also indications of strategic sourcing being more useful. This is reflected through the argument by R16, saying *"It can be very significant if there are many factories involved since in such a case the scope and effort increases, which means more coordination on a wider scale"*. Summarizing what many respondents talked about as general prerequisites for strategic sourcing, the above discussion seemed to link to complexity to a great extent. For instance, R9 stated that *"For strategic sourcing the underlying criteria is quite clear - it should be used when the situation for several different reasons is complex"*.

On the other hand, where the results from the interview thus far may seem to portray a situation in which SKF prefers to create long-term and close relationships with their suppliers as soon as there are signs of complexity, this is not the case. Whereas partnership and alliances do occasionally happen in terms of certain development partners, the major view is

that changes within the bearing industry are not rapid and most often the knowledge is kept in-house. *"Although we are often purchasing inputs from suppliers it is very common that it is according to our own drawings"*, as put by R8. As a result the most common argument is that at SKF they know what they are doing and are in most cases aware of the changes in the industry. To illustrate this, R16 believed that *"Changes are of course taking place but in this industry they tend to not be so dramatic and most often it does not cause much problem for SKF. However, when we know less we do of course have to go to the market and find suppliers that can help us"*. In relation to this statement, the fact that development partners at times are necessary is further clarified by R12 who argued *"There are scenarios in which SKF knows less and are looking for deeper relationships. According to my knowledge, when we are looking for long-term partnership it is all about continuous team-work and co-development"*. However, it also became clear that the same respondent also maintained that such scenarios are more apparent in, for instance, the car industry, where technological improvements are common for each component.

A last concern that was brought up by analysts and managers alike was the fact that to strategically source something takes longer time as opposed to just going out and purchasing items through the conventional sourcing process. For many reasons, this is argued to be a logical consequence when the aim of the actual strategic sourcing is to conduct more thorough analysis with a larger scope. However, as was also argued by many it therefore becomes a question of whether there is enough time and resources to capture the opportunity before it is too late. On the upside it seems though, R20 claimed that *"As with everything there is a learning process, not only for the sourcing team but for the company as a whole. So we are continuously learning how to go through strategic sourcing processes faster"*. In addition to this, several respondents also claimed that once a category has had its first strategic sourcing done, it will take much less time the next time it is being conducted.

5.2 STRATEGIC IMPORTANCE

Selected quotes and findings related to the Strategic Importance dimension are presented below.

5.2.1 CATEGORY'S IMPACT ON TOTAL COST OF FIRMS PRODUCTS & SERVICES

The overall impression at SKF was that the focus is on reducing costs. In total, all except two of the interviewees expressed their support for *Category's impact on cost of firm's product or service*. R12 reinforces this by saying that *"By looking at the yearly impact on cost, projects can easily be excluded from the strategic sourcing process"*. As such, R12 maintained that cost is the overarching and most determining factor for whether to do strategic sourcing or not. The respondent continued by saying that "*If the spend is large you need to have a closer relationship, since then there is a lot at stake"*. Moreover, the choice of process was generally expressed to be affected by the fact that *"[...] SKF are limited by resources, so it is important to put the resources where they have an impact. If a project makes up a large share of the total cost, that is where resources should be prioritized"*. Similar to this, R2 and R11 further stated that a higher cost often equals a higher willingness to spend more time on the sourcing, whereas the opposite would be true for when costs for the category are relatively low.

On the other hand, some ambiguity towards the parameter was recognized through R16 whom expressed that it is important to early on understand what the potential for a sourcing project is. However, in clarifying how this parameter could show such potential R16 instead got into potential savings: *"Cost is important, both the amount but even more so the potential cost savings"*. As such *impact on cost* was extended to *potential cost saving*, which is the focus of the fourth parameter of this dimension. In fact, R4 and R19 also got into discussions related to savings instead of just focusing on total cost. Nevertheless, getting back to how cost should be measured R16 believed "*It is the cost of the total part of the category being subject to the sourcing that matters"*.

5.2.2 CATEGORY'S IMPACT ON PERCEIVED QUALITY

For the parameter *Category's impact on perceived quality*, the opinions were diverse amongst the respondents. On the one hand R12 expressed that *"Quality always comes first. If the impact is high on quality it is more feasible to run the strategic sourcing process",* where R10

added that *"As more quality is needed the more people with technical expertise needs to be involved in the sourcing, making it larger and more complex"*. R8 went further by indicating a relationship between quality and the effort put into the selection of suppliers, and stated that *"When there is a high impact on quality we have to be more thorough in how we choose suppliers"*.

However, some interviewees suggested that the impact on quality was not sufficient to look at when deciding what sourcing process to select. The main argument for this, which was agreed upon by the majority of respondents, was that "*Quality is a must no matter what process you use"* (R2). In addition to this close to all respondents that were strategic sourcing analysts, maintained that indirect categories, for instance office materials, are ideal for running a strategic sourcing. They argued that if a high *impact on perceived quality* becomes a characteristic for strategic sourcing that means many categories on the indirect material side would not be considered potential sourcing projects.

5.2.3 EXTENT TO WHICH PURCHASE RELATE TO CORE COMPETENCE

Concerning core competence and its relation to purchasing, the interviews indicated that the support for this parameter was on the moderate side. Those expressing their support focused on the relationship between core competence, its relation to criticality and the amount of resources spent. This was exemplified by R2 *"If it is really critical, it is worth spending a lot of resources"*. Core competence was also understood to be related to the need for more analysis, which R3 phrased as *"When you have a category that has a big impact on the offer to the customer it should definitely be strategic sourcing, since you need to have a deep analysis"*.

However, similar to the previous parameter the skepticism did relate to that although a category has less of a relation to SKF's core competence it can still prove to be extremely beneficial to run through strategic sourcing. Once again, the strongest critics were three out of the four strategic sourcing analysts. R9 put it as *"[...] the choice of process will not depend on core competence"* and R10 further stressed this view by saying *"It is somewhat misleading. It should not determine what process to select"*. Another aspect brought up by R6 was that when the category is highly aligned to the core competence *"You may not want to go out to unknown suppliers if you are to source items involving classified knowledge"*.

5.2.4 SIZE OF POTENTIAL COST SAVINGS FOR THE PURCHASED CATEGORY

The parameter *Size of potential cost savings* received the strongest support of all parameters from the respondents. *"The saving level is usually the starting point and if there is a high potential for a large saving then we will have to launch a big project, usually"* (R7). Another aspect for why the potential cost saving is a good parameter was pointed out by R15 saying that *"It is very important in order to motivate why to run a project"* and R17 believing that *"[...] it is extremely important, because you have to sell the project to the factory. They will not spend resources on implementation if the saving is not quite high"*. Moreover, R12 expressed support for dividing up spend and cost saving into two separate parameters and stated that *"It is good that the framework breaks out cost saving from total spend. The first parameter is still important, but savings in relation to spend is more interesting"*.

The only concern raised regarding this parameter came from R3 who clarified that whereas potential savings is informative it does not automatically mean that it must be run through strategic source. In fact, R6 exemplified this by saying that *"I would rather run the shorter process with a similar cost saving than the long one"*.

5.3 SUPPLY COMPLEXITY

Selected quotes and findings related to the Supply Complexity dimension are presented below.

5.3.1 ENTRY BARRIERS FOR NEW SUPPLIERS

The general impression from the respondents is that *entry barriers* will have an impact on what sourcing process to pursue. The majority of respondents converged around a similar belief of R1 in that *"[...] this would be highly relevant if we are talking about barriers to integrate suppliers into SKF"*. Further elaborating on this, R12 said *"My interpretation of entry barriers would be how our technical specifications of what we are purchasing can put high demand on the suppliers' capabilities and therefore make it difficult for them to meet"*. Overall there was also a general consensus that all else equal *"The higher these barriers are the higher is also the complexity of the situation and the more suitable the strategic sourcing process becomes"* (R9). Another aspect came from R5 arguing for why the strategic sourcing process can be useful: *"Barriers can be high because there is a lot of convincing you must do internally. You will have to convince the factory-buyers, the quality and production engineers*

and many more [...] Although we sit at HQ there will be tons of opinions that can stop your progress, so the more information you have the better". In addition to this R5 said *"Since the strategic sourcing process is more detailed it will help you build up stronger arguments"*.

Partly opposing the parameter, three respondents (R6, R11 and R14) argued that high barriers mean that it is less suitable to choose strategic sourcing. R14 explained that *"If it is tough to integrated new suppliers and as such to switch, then the strategic sourcing process will not be the best one since it will waste resources"*.

5.3.2 UNIQUENESS OF SUPPLIER ASSETS

The general impression for U*niqueness of assets that suppliers provide to category* was rather skeptical and confusing. Whereas some indeed held that it was a useful parameter, there was large discrepancies and disagreement in how the respondents believed the parameter would impact the sourcing decision. For instance, out of the twelve respondents that agreed with the parameter only half believed a high uniqueness should be equivalent for strategic sourcing whereas the other half argued for the opposite relation. From those who argued that high uniqueness should be equivalent to SKF's strategic sourcing R1 and R7 said that*"[...] it could be considered a potential threat for SKF if we have too unique suppliers"* (R1) and *"When the suppliers are unique it leans towards a more monopolistic situation in which we prefer not to be"* (R7). Amongst those in favor for a positive relation it was a consensus that when assets are unique even more effort must be put towards scanning the market, which is best done through strategic sourcing.

Amongst those respondents that argued for that a high uniqueness instead should point towards the conventional sourcing process a popular claim was similar to R17 who said *"If we know what we need and the supplier assets are quite unique it will be unnecessary to run the detailed and longer sourcing process"*. Furthermore, those expressing disagreement towards the parameter maintained that *"It is seldom that the suppliers have that unique assets, so there will always be more than one"* (R12). It was also made clear by R16 that *"If the assets are unique or not will not help in choosing a sourcing process because it will vary depending on other factors such as volume, what it is that is being purchased and why"* (R16).

5.3.3 LEVEL OF CONCENTRATION IN SUPPLIER MARKET

The *Level of concentration in supplier market* was also characterized by mixed emotions. Here, too, there was a group of respondents that argued for an opposite relation where a high concentration of suppliers (few and large suppliers) would mean that the shorter sourcing process was instead better. In fact, this group of respondents represented the majority of the interviewees who held strong feelings towards the parameter being necessary. As put by R13 *"The more suppliers there are, the more useful it will be to do strategic sourcing"* and by R5 who said that *"It is more important to collect more information and make sure you choose the right suppliers if there is a lot of them"*. Pertaining to this group of respondents the general impression was that the amount of suppliers in the market often increases complexity, which then makes strategic sourcing most efficient for finding long-term solutions. The similar belief was held by R17 who argued *"If there are few suppliers it is easier and then SKF do not need strategic sourcing"*.

On the other hand R12, being one of few arguing for the opposite correlation, believed that *"If there are many suppliers (i.e. low concentration) it is often more of an off-the-shelf product, in which case one can rely more on the market creating the right kind of competition"*. The respondent continued by explaining that in such a case it would not be necessary to use the strategic sourcing process to create price pressure on the suppliers. The same respondent further argued that he/she partly could agree with that many suppliers could make it more complex, but still came back to that more effort must be put into the sourcing process when there are fewer and larger suppliers. Whereas both groups agreed that the parameter is valuable, the number of respondents that believed a higher concentration should imply strategic sourcing was fewer than the group arguing for the opposite.

5.3.4 COST OF SWITCHING SUPPLIERS

Cost of switching suppliers is one of the parameters under the *Supply Complexity* dimension that received the most unanimous responses. R8 summarized many of the arguments made in saying *"The switching costs can increase for many reasons. It could be that we are contractually bound, the products purchased are complex, we may need a lot of support from the factories to make a switch happen, or there may be extensive quality tests necessary as we swap suppliers"*. In general, there is consensus that the *Cost of switching supplier* prior to choosing strategic sourcing process is an imperative characteristic to consider. For instance,

R6 argued that *"When the switching costs are high it will be ever more important to collect as detailed information as possible, which will allow a more long-term decision"*. Similarly, R8 and R12 aligned with this and further emphasized that *"As switching costs increase we need to find a more sustainable and long-term solution, which the strategic sourcing process allows"* (R8) and *"If switching costs are high it will be even more expensive if we enter new supplier relations with the wrong information"* (R12). Further explaining the parameter's value R7 explained that *"If you consider the savings potential but forget to take the switching costs into consideration, well, then we may not realize any savings and you may find out that the sourcing process is far more resource-demanding than the resources that are to your disposal"*. The opinion that *Cost of switching supplier* must be considered in unison with potential savings was also communicated by R5, R9, R10 and R11.

Once again, the respondents arguing against the parameter held that "*How high the switching cost is does not matter in terms of what process you choose [...] you must be able to deal with it in both processes"* (R1). R2, R13 and R17 expressed similar opinions.

5.3.5 RISK OF PRODUCTION DISRUPTION IF SUDDEN STOP IN SUPPLY

Moving on to *Risk of production disruption if sudden stop in supply,* it has received little consent from the respondents. The major argument was that most of the purchasing that is done through SKF Group Purchasing has a certain criticality to it. R11 argued that *"[...] this does not play into what process we choose. If the product has a high criticality and can stop our production we almost certainly already have a solid supplier structure set up"*. The same respondent added that this does not mean categories that already have a structured purchasing approach cannot be improved, but rather that such changes could be done through both the conventional and strategic sourcing process. R14 further explained *"For many reasons steel, which by far would be SKF's most critical input, would not be ideal for the strategic sourcing process"*. Moreover, R12 stated that *"The risk of production disruption says nothing since you will not find many products or services that we purchase at a global level where one can say 'No, this is not critical for SKF'"*.

From the few supporting the parameter R9 argued *"You may only make a 100 Euro saving on price but if you have a stop in production it will cost us 10 000 Euro per hour. When this is the case it is a clear sign that strategic sourcing is needed"*. Another example, sometimes SKF receives a notice that some of their supplier have gone bankrupt and *"In such cases it is*

imperative that we beforehand have realized what our critical components are and that we have established back-up plans for dealing with it" (R7).

5.4 CUSTOMIZATION

Selected quotes and findings related to the Customization dimension are presented below.

5.4.1 LEVEL OF CUSTOMIZATION OF PRODUCT AND SERVICE PURCHASED

The parameter testing the *Level of Customization of product and services purchased* received a variety of opinions, as most agreed on its usefulness, while others thought it was not important in determining what sourcing process to use. Also, another group held the view that the parameter would influence the choice of sourcing process in the opposite way, meaning that strategic sourcing would be better when customization is low. Still however, out of these three perspectives the largest share still favored the parameter. Some of the interviewees who expressed their support were arguing that *"If it is a high level of customization, you need to spend more time finding the right supplier"* (R9). Similar to this R10 stated that *"As soon as we are buying non-standard products it becomes more difficult for both the supplier and SKF, then the strategic sourcing process becomes more favorable"*. Furthermore, R17 emphasized the relationship between the strategic sourcing process and level of analysis, *"The more it is customized, the more we need to go into analysis of what we are buying"*.

In contrast, among those in disagreement towards the parameter the skepticism mostly concerned that *"It is not influencing the decision to choose either of the two sourcing approaches"*, as argued by R2. In addition, R6 and R7 both argued that it is more likely that the strategic sourcing process will be used for an off-the-shelf product. As such, indicating an opposing relationship between customization and strategic sourcing compared to what the framework was built upon.

5.4.2 EXTENT TO WHICH RELATIONSHIP-SPECIFIC KNOWLEDGE IS REQUIRED

Similar to the previous parameter, the *Extent to which relationship-specific knowledge is required* did also receive divided opinions. However, for this parameter the largest share of the respondents expressed their disbelief. R8 framed it as *"[...] it makes little difference between what process you choose when you have a situation like this"*, which was supported

by R12 who said that *"Cost is still the determining factor. If the spend is large you need to have a closer relationship, since there is a lot at stake"*. Out of the few respondents supporting the parameter R5 gave the example that *"We need to educate our suppliers in the whole concept of stock and lead-time, it is a complex education demanding a lot of effort. That would push for the strategic sourcing process"*. Once again there were two respondents that held the view of an inverted relationship, saying that more relationship-specific knowledge should be associated with the conventional sourcing process. R14's argument was simply that *"In the case of much relation-specific knowledge it is not necessary to undertake a holistic approach"*.

5.5 SUPPLY MARKET VOLATILITY

Selected quotes and findings related to the Supply Market Volatility dimension are presented below.

5.5.1 DEGREE OF VOLATILITY IN PRICE

For this parameter the majority of the respondents expressed their support. They did so by stating that volatility in prices is a concern and that using the strategic sourcing process will better the ability to offset and mitigate these fluctuations. R10 supported this by saying *"If it is fluctuating a lot it can be good to have strategic partners that we have longer relationship with. We might need to do the strategic sourcing process to achieve such relationships"*. The relation between fluctuations in price and the choice of sourcing process was further identified by R16 who said that *"I would say that volatility in prices can determine what process to choose. Because then you might want to scan the market more thoroughly before you sign any contracts"*.

5.5.2 DEGREE OF VOLATILITY IN VOLUME

The majority of the interviewees who supported the parameter dealing with volatility in price did so for this parameter as well. In fact similar arguments were given where R14 said that *"High volatility in volumes, yes, then you need to understand the market better, so for sure a strategic sourcing process"*. This argument was given while referring to the volatility in SKF's own demand in volumes, a reference made by another five respondents who held similar views to R14 (R1, R4, R5, R7 and R11). Another strong voice who supported the parameter was R5 who said *"When you have trouble with fluctuation in volumes it is good to*

have strong relationships with suppliers as they will be more likely to prioritize helping and being supportive towards SKF over competitors. It is easier to build good relationships with the right suppliers through the use of the strategic sourcing process".

Those not in favor of the parameter were those who found it difficult to see how it would affect the choice of sourcing process. R9 said that *"I do not think volatility in volumes have any effect on the choice"* and R12 reinforced this saying that *"It is not important in the choice of sourcing process. [...] it must be included in both processes".* In addition, R6 brought up the fact that SKF is never promising any volumes to its suppliers, instead *"SKF assigns certain percentages of total purchasing volume to suppliers"*,

5.6 TECHNOLOGICAL UNCERTAINTY

Selected quotes and findings related to the Technological Uncertainty dimension are presented below.

5.6.1 LEVEL OF NEWNESS OF PRODUCT AND SERVICE PURCHASED BY FIRM

Overall, this parameter received strong support as the majority of the respondents thought it was a good characteristic to evaluate. The view presented by the majority of respondents was that when the purchase is related to a new product more effort should be put into the sourcing process to develop a good understanding of the market. One who shared this view was R8 who said *"The newer the product or service is, the more useful to go for the strategic sourcing process".* R15 confirmed this by saying that *"Usually in the case of a new product we have less knowledge and then I believe the strategic sourcing process is suitable".* On the subject of why more knowledge needs to be gathered, R12 argued that *"If it is a new product or technology we need more resources to scan the market and that point for strategic sourcing".* However, another opinion communicated by R12 was that even though it might concern a repeat buy one still have to evaluate how long time it has been since a strategic sourcing last was done. This last opinion was further emphasized by R2 who stated that *"From time to time we should refresh and see if our supplier base is the right one".* Speaking for the importance of being aware of how much one know of the purchase R11 said that *"Everything that has to do with uncertainty is what will have the highest influence - how much do we know about the product, market, etc.".*

Despite the general support for the parameter it was also argued that in the case of SKF, newness of the purchase is less relevant to look at since "*In general, SKF is not buying ground-breaking products"* (R9). Instead an alternative way of viewing the parameter, which partly was indicated through the above quote made by R11, was in terms of the 'knowledge of the purchase' rather than its 'newness'. Therefore, during R9's interview, who originally was against the usefulness of the parameter, the adjustment to 'knowledge of product/service purchased' instead of 'newness' was suggested, upon which the respondent completely changed opinion; *"Then it becomes a whole new thing. Then we talk about the whole indirect department. That would move the parameter to become a top characteristic"* (R9).

5.6.2 LEVEL OF NEWNESS OF TECHNOLOGY USED

Building on the previous parameter *Level of newness of technology used* was also given strong support, first and foremost from the respondents whom previously had showed their support for the first parameter. The arguments given were much similar to those regarding *level of newness of product or service*, as interviewees pointed out the relation between new technology and lack of information. Noteworthy was that a few respondents opposing newness of product had a different opinion on newness of technology. An example of this was R3 who argued against the first parameter by saying that *"For me a new product for SKF can most often be done by the same supplier that you've had before since the production process in most cases is very similar",* but towards the second parameter instead argued that *"If you have new technology, then you need to make the strategic sourcing process".* In favor of this parameter and further highlighting the optional way of communicating the parameters in terms of knowledge instead of newness, R12 claimed that "*Newness of technology is more important than newness of product, considering that the product could be simple but technology is often more advanced".*

5.6.3 FREQUENCY OF TECHNOLOGICAL CHANGE

Frequency of technological change received responses that were rather evenly distributed between supporting and opposing the parameter's relevance. Those who gave their support were, as in many cases earlier, referring to the need for gathering data. R9 and R16 aired their support by saying that *"If you are in a market that is undergoing radical changes, you need to ask yourself whether to jump on or stay outside, and that requires more in depth analysis"* (R9) and *"this is an important parameter because we need to be talking to the suppliers if there will be new things they will offer in the future"* (R16).

However, the parameter was also questioned by the respondents as it was argued that extensive technological change does not occur often within the industry. Instead an alternative way to look at it was suggested, concerning the frequency to which the strategic sourcing had been employed previously. R12 argued that *"If we are to source an item for which we thoroughly have scanned the market only one or two years ago, then we do not need to start a strategic sourcing project again"*. Other respondents that did not agree with the parameter were concerned with the time the strategic sourcing process takes. Their argument was that if there are technological changes taking place, meaning new opportunities for SKF, then one wants to act quickly. However, knowing the extensive time strategic sourcing takes compared to conventional sourcing, it becomes less useful in terms of capturing the opportunities (R7 and R13).

5.6.4 DEGREE TO WHICH THE FIRM IS UNABLE TO FORECAST TECHNOLOGICAL CHANGE

The last parameter concerned the *Degree to which the firm is unable to forecast technological change,* which received somewhat dispersed feedback that generally could be split into two perspectives. The first view perceived the parameter as valuable, as their belief was that SKF could benefit from running the strategic sourcing process when internal knowledge is low. A strategic sourcing process would in their opinion bring out more information from the suppliers, hence, mitigating SKF's lack of information. R15 argued that when there is no internal ability to forecast the change *"[...] then you want to have a supplier that possesses that kind of knowledge, which might ask for a larger sourcing project to be run"*. The same argument was put forward by R16 who stated that *"In general, if we are not good at it we need to look externally"*. However, the same respondent also added that *"[...] in the case of SKF I do not think this is a big problem"*.

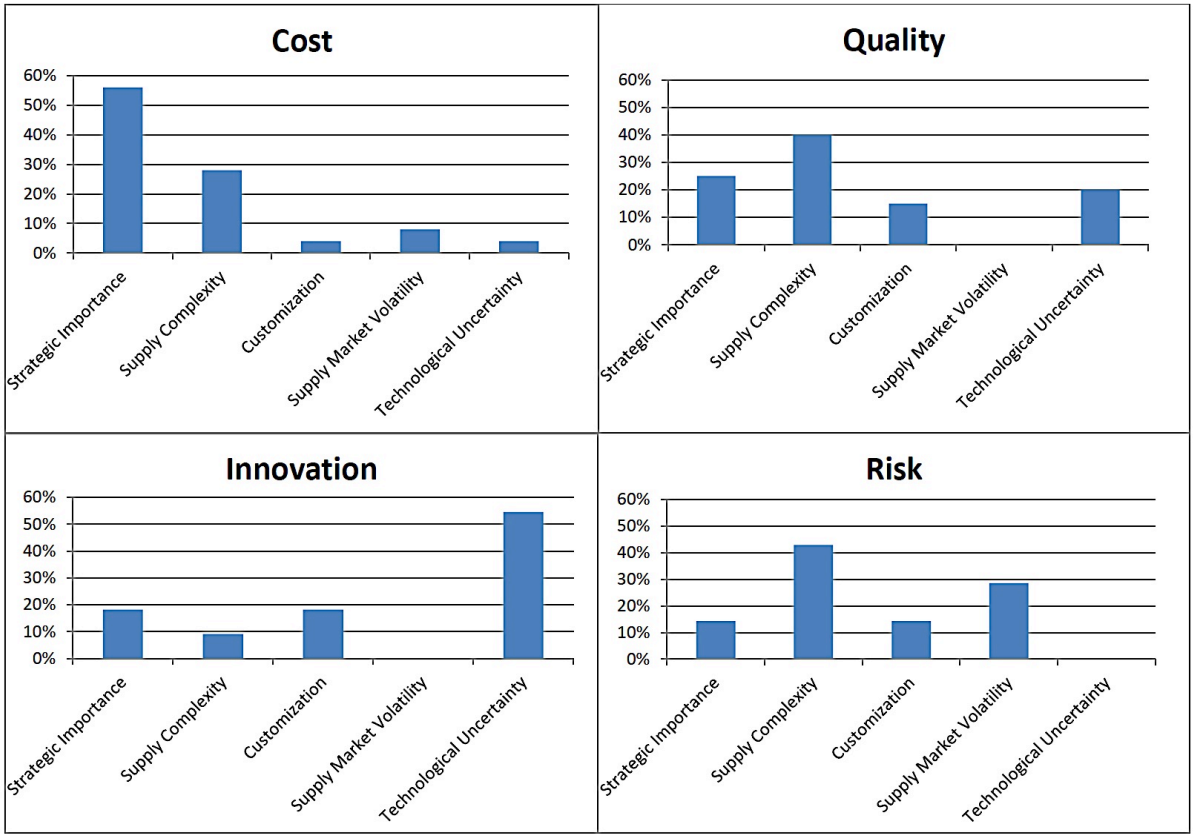
The second group of interviewees that held an alternative view, said that in the case of SKF this parameter is not as relevant. For instance, R2 and R3 kept their answers short but made their point clear by stating that such a parameter would have no influence on how to source the product or service. Furthermore, they instead emphasized the importance of other characteristics, such as cost, since they believed that change is part of *"daily life"* and should therefore not influence how SKF decide to purchase.

5.7 PURPOSE BEHIND PURCHASES

During the interviews there were three purposes that were expressed more frequently by the respondents; cost, quality and contingency/risk (henceforth referred to as risk). The frequency of cost being the purpose was illustrated by R9 saying that *"Everyone is extremely cost focused, that is what the Category Managers are evaluated on"*. R16 supported this and gave support for quality related sourcing: *"The purpose for running a strategic sourcing project is usually about finding a better supplier base that provides lower cost or higher quality"*. A fourth purpose was identified as risk, which was related to having the right supplier base. R1 and R12 were among the interviewees who expressed similar opinions connected to risk, stating that *"We want a supplier-base that expose the suppliers to competition, we do not want too few suppliers"* and *"I (R12) also think of flexibility, which can be important. This can involve dual sourcing, to have two suppliers in order to deal with rapidly increasing volumes and the risk of one supplier having a disruption in their production"*. Whereas innovation was not to the same extent spontaneously thought of it was however agreed upon by the majority once suggested by the interviewers. Still, R20 maintained that *"In some cases we are looking for new technologies or processes, which will require certain resources"*. Meanwhile R15 once again referred to SKF's QDCIM (quality, delivery, cost, innovation and management) where it was argued that *"In general a strategic sourcing project would be feasible as long as it addresses any of these"*.

Apart from investigating what the most common purposes behind strategic purchasing, or sourcing, is at SKF the interviews also dug deeper into how the purpose would affect what characteristics from the framework that becomes important. *Figure 5* shows what dimensions that were deemed most important for each of the four purposes.

Figure 5 - Purpose of Purchase Related to Dimensions



Source: Compiled by authors. Data retrieved from R1-R17.

As is evident from *Figure 5* rather clear and interesting trends arose. Looking at each purpose there is either one or two dimensions that the respondents believed to become more important. For cost it was *Strategic Importance,* for quality both *Supply Complexity* and *Strategic Importance* became most significant, for innovation the *Technological Uncertainty* was most interesting and last for risk *Supply Complexity* and *Supply Market Volatility* were of special interest.

6. ANALYSIS

Based on the previous chapter, this section will present the analysis of the most essential findings from the interviews and compare it against the literature review and theoretical framework that was presented in Chapter 2 and 3.

6.1 THE ROLE OF STRATEGIC PURCHASING – *FACTS NOT EMOTIONS*

A fundamental message that was brought forward through the literature review of this thesis was that the role of purchasing has evolved from being considered generic to becoming strategic. Kraljic (1983) was used to illustrate that globalization has caused supply markets to change, which in turn required higher emphasis on what has come to be called strategic purchasing. This does most certainly seem to be the case at SKF. The fact that the tougher and more fluctuating economic climate have brought SKF to learn more about their suppliers, as communicated by R7 and R8, conform to the notion of supply market changes affecting their purchasing processes (Kraljic, 1983). Having established this postulating stage, the question becomes to what extent the theoretical definition aligns with the respondents' view of what strategic purchasing (or strategic sourcing as it is called in SKF jargon) entails and what the actual objectives and outcomes are to begin with.

6.1.1 CONCEPTUAL ALIGNMENT

Beginning with the conceptual definition of the construct *strategic purchasing,* it has most commonly been described by its strategic alignment and long-term focus, but also with factors such as strategic management of supplier relations and proactivity (Reck & Long, 1998; Van Weele and Rozemeijer, 1996; Carr and Smeltzer, 1997; Carr and Smeltzer 1999; Chen & Paulray, 2004). Looking at the empirical evidence, although not always explicitly stated, there are both similarities and differences in these characteristics when compared to the strategic sourcing process practiced at SKF. For instance, R1 spoke of strategic sourcing being subject to CEO priorities and indicated that the focus of sourcing changes along with top management. Moreover, R6 argued that there is a need to know more of how a potential strategic sourcing process would align with that of the SKF Group's overall strategic vision. This goes to prove the underlying aspect of strategic alignment since there obviously seem to be a link between the corporate strategies and how the strategic sourcing process is being practiced, as was discussed in the theoretical review. Moreover, in the theoretical review a

most apparent feature of strategic purchasing was its long-term focus - a feature clearly communicated by the respondents when describing SKF's strategic sourcing process. Looking at the two sourcing processes available at SKF (i.e. conventional versus the strategic sourcing process) there is no question of the strategic sourcing being more long-term, both in terms of the time it takes to conduct but also in the overall impact and the platform it sets out to create for future activities. Both R8 and R12 argued for how the strategic sourcing process allows for *"[...] more sustainable and long-term solutions"* and that it is valuable in *"[...] creating the right conditions going forward"*. Extending this, R3 illustrated this clearly in stating that *"[...] if there is no [category] strategy you will have to do the analysis and much more work to begin with"*, which implies that the strategic sourcing process sets the starting point from which conventional sourcing can continue.

On the other hand, studying the empirical findings in search for responses that would conform with strategically managing supplier relations, also being a part of the conceptual definition, more than one line of reasoning are evident. One reasonable deduction comes from the fact that *"[...] having back-up plans [...]"* (R7) when a supplier falls through on delivery, can be thought of as a crucial element in terms of managing the suppliers. In such a case, SKF would have to manage several supplier relations to decrease their exposure to single sourcing and in extension also to risk. However, another reflection that arises while listening to many respondents is their focus on gathering and structuring information to make decisions based on facts. As such, SKF's strategic sourcing process gives less attention to the management of supplier relations. In contrast to the conceptual view then, the process does seem to neglect, or at least give less consideration, to the relationship prior to having built a correct understanding of each potential supplier.

Moving on and referring back to the example of *"[...] having back-up plans [...]"* (R7), an alternative way of interpreting such an approach to purchasing is that it proves some sort of proactivity. Throughout the interviews it was not only R7 whom implied this but also R8 as a link between quality and strategic purchasing was indicated. The argument that "*When there is a high impact on quality we might have to be more thorough in how we choose suppliers [...]"* shows signs of the Category Managers' desire to be proactive in such instances. However, although these few examples illustrate signs of proactivity being exercised the more critical approach is that strategic purchasing at SKF has to a larger extent been practiced in a reactive manner. Proving this point, the majority of arguments stipulated that SKF's strategic

sourcing process is often used as a result of either a lack of structure in the existing supplier base, a lack of knowledge of what is being purchased or lack of best practice. In addition to this, as illustrated through the example provided by R20, another reason could also be that there has not been any benchmarking done in 20 to 25 years, resulting in suboptimal and rather local deals. All these cases show tendencies of SKF's strategic sourcing process being practiced in a rather reactive way.

Although there are discrepancies how strategic purchasing has been conceptualized in theory and the fundamental characteristics it takes in SKF's strategic sourcing process, it can this far be concluded that the they do align in the most essential factors; strategic alignment and in the long-term focus. Therefore, the next step will be to analyze how strategic purchasing is taking its shape at SKF in greater detail and whether theory still applies in reality.

6.1.2 APPLICATION IN REALITY – *MOTIVATION & OUTCOMES*

Assessing the extent to which the theoretical review properly depicts the correct way in which strategic purchasing actually plays out in an organization necessitates looking into the more detailed motivations behind it. As was stipulated by Gadde and Håkansson (1994), two major aspects pertaining to strategic purchasing was supply base structure and buyer-supplier relations. However, based on the empirical findings it cannot be said that this is fully applicable, nor completely inaccurate. Through several respondents it became clear that much is related to supply base structure but in contrast to what Gadde and Håkansson (1994) argued for, it does not necessarily mean the supply base will decrease in size. Instead, the focus is to reach an optimal supply base that not only avoids too many suppliers but also too few. As such, the motivation is not related to reducing the number of suppliers but is rather related to the discussed purpose, such as reducing cost, improving quality, managing risk and so on. This was clearly illustrated by R20 in referring to a previous strategic purchasing project when supplier reduction, as Gadde and Håkansson (1994) argued for, was simply the outcome and not the objective. Having this said, it does become clear that a reduction in size of the supply base is the most occurring outcome at SKF.

Shifting the attention to the second aspect that Gadde and Håkansson (1994) advocated, namely the buyer-supplier relationship, this has received surprisingly little support throughout the interviews. As a reminder of the literature review, Gadde and Håkansson (1994) argued that through strategic purchasing the organization would seek to deepen the relationship to

their suppliers. There are instances when relationships become decisive for SKF, such as in the case with development partners as was argued for by R12. This respondent did in fact clearly state that deeper relationships are emphasized when dealing with development partners, where continuous long-term teamwork also becomes a key ingredient. Therefore, the empirical findings do indeed contain examples of when deepening the relationships would become a motivation for strategic purchasing. However, undermining this is the fact that the example made by R12 was taken from his/her experience outside of SKF and therefore rendering a conclusion based on it weak and unfounded. Furthermore, the empirical findings also saw statements indicating that much of the knowledge behind the specifics of the products purchased resides within SKF. This is proven by R8 in claiming that *"Although we are often purchasing inputs from suppliers it is very common that it is according to our own drawings"*. In addition to this, R16 added that although changes happen within the industry they are often not too dramatic. This indicates that the reason for why deeper relationships, such as with development partners, are not occurring that often within the Group Purchasing department could be because they are often dealing with purchases related to areas where they themselves hold more knowledge. This in extension would conform to Heidi and John (1990), as they argued that transaction-specificity and uncertainty would relate to the closeness the supplier relationship takes. Evidentially the respondents believe there is not much uncertainty, which then explains why the supplier relations do not have to be close. Another reasonable explanation could be that the Group Purchasing department is higher up the organizational tree and therefore not dealing directly with the daily buying where relationships are more likely to be built.

Continuing on the subject of closeness, the theoretical review also aired some criticism regarding how previous research and conventional firms have tended to advocate for either arm's length purchasing or alliances. Assuming then that the supplier relationships at SKF do not significantly impact the decision of how to source, this does in fact confirm the critique. Instead however, it raises the question of whether SKF then solely go for arm's length purchasing or if strategic purchasing has become a third option that can be placed somewhere between arm's length and alliances. Linking this back to the criticism, Dyer et al. (1998) introduced an optional solution named durable arm's length approach, whereby the organization would engage suppliers with a more long-term focus without going into alliances or partnerships. Comparing this to the findings the interviews has yielded similarities. First, referring to SKF's two sourcing processes conventional and strategic sourcing, whereby the

second through this analysis have been established as strategic purchasing, the general impression remains that this process has a larger scope and is suitable for creating better conditions for future activities. In addition, the previous section discussed how the long-term aspect of strategic purchasing applies to SKF's approach and it has also become clear that the strategic sourcing process often ends with contracts to suppliers that last for a longer time as opposed to conventional sourcing that can be carried out on a yearly basis. Being described as a *"quick and dirty"* process whereby one sources from the suppliers that are already available, the conventional sourcing process could be seen as more of an arm's length approach. On the contrary, the longer strategic sourcing process does more closely conform to durable arm's length. For instance, in R20's previous sourcing project the suppliers ended up on a short list of 'preferred suppliers' for which they were promised to be contacted when new purchases were about to happen. As a result, instead of sourcing every year from the suppliers, such a short list would last for about five years. In other words, the outcome of the strategic sourcing process is not to create alliances, yet it is more extensive than the arm's length conventional sourcing. For these reasons it is deemed to carry a certain resemblance to Dyer et al.'s (1998) durable arm's length relationship.

Last but not least, a final comparison necessary is between how theory argues for evaluating suppliers and what SKF actually are taking into account. Theoretically the argument was that strategic purchasing goes beyond factors such as cost, quality and delivery to instead resort to other points of evaluation. These did according to Watts et al. (1992), Ellram and Carr (1994), Mandal and Deshmuck (1994), Talluri and Narasimhan (2004) among others include capabilities relating to management, processes, development, design and the ability to bring future cost reductions. Referring to the empirical evidence, there does exist an official guideline for how Category Managers should evaluate suppliers, which was based on what R15 named QCDIM (quality, cost, delivery, innovation and management). In other words, formally the evaluation undoubtedly goes beyond cost. However, as the interviews went along, another reality was described where cost indeed came first in the majority of cases. Moreover, it was not until after this first condition that the firm will begin to look beyond it. Having that said, there will always be exceptions and there are instances when cost is not everything but due to resource scarcity the firm becomes careful of how to invest its resources most wisely. As such this tie back to the problematization of this thesis, namely that resource scarcity renders it impossible to run all purchasing through alliances, and not even through

strategic purchasing. In fact, as was seen at SKF there was a wide consensus that spend would ideally correlate to the degree to which a strategic sourcing process becomes useful.

Contemplating upon what the above analysis yields, it seems that there are close alignments to what the theoretical review discussed in the beginning of the thesis. Though there are clear similarities, there are also distinct differences that have come to surface. Overall, the empirical findings confirms the increased strategic role that purchasing has taken within organizations.

6.2 FRAMEWORK – THE INDUSTRY MAKES THE DIFFERENCE

Having established that strategic purchasing aligns with SKF's practices the next part of the analysis concerns the identification of characteristics of a purchasing category. Therefore, the following section will focus on testing the applicability of the proposed framework that this thesis previously has developed based on Luzzini et al.'s (2012) work.

6.2.1 STRATEGIC IMPORTANCE – *ALL ABOUT THE MONEY*

The empirical findings related to this dimension enforced the fact that costs do matter to a great extent. Overall, the parameters related to cost and savings as well as the link to core competence received moderate to strong feedback, whereas the remainder were not fully supported. Being the dimension that Luzzini et al. (2012) chose to exclude from their original work, a most interesting outcome is that this dimension has been deemed the most important out of the entire framework.

Beginning with *Category's impact on cost of firm's products or services*, the results are straightforward as the parameter was believed to address an important characteristic for choosing a sourcing process. Throughout the interviews the perception of focusing on the largest cost impact was unanimous. The focus on cost does not come as a surprise, likely being explained by the fact that SKF is a profit driven and publicly traded company, meaning that keeping costs down and maximizing profit should be a top priority. However, although such strategic focus first and foremost resides with top management it is still reflected through the Group Purchasing's priorities, which further confirms Reck and Long's (1988) idea of purchasing's integrative strategic function. Another parallelism relates Dyer et al. (1998), Lyson and Farrington (2012) and Van Weele's (2014B) argument for how strategic

purchasing puts a strain on an organization's resources. In the interviews, R12 and R15 mentioned how cost is a useful factor to use for excluding what will be strategically sourced and it was further explained that due to limited resources the focus must be where the cost impact is the greatest. This shows a strong alignment to the problematization of this thesis and confirms how resources will limit an organization to freely run all purchasing through strategic sourcing processes (Kraljic, 1983; Ring and Van de Ven, 1992).

On the other hand, the empirical findings also saw the parameter being confused with that of *Size of potential cost saving*. In order to avoid such confusion within the same dimension, a suggestion for adapting the framework is to remove the *Category's impact on cost of firm's products or services* and instead place it as a preceding factor before moving on to using the actual framework. The value of moving the parameter is further enforced by the fact that *impact on cost* received strong support and was repetitively referred to while the respondents were discussing other dimensions of the framework. Since cost received such wide support it gives an indication that it should be overarching and not belong to one specific dimension. In order for an organization to prioritize between what to source using strategic purchasing, a suggestion would be to decide upon a cost-level that has to be met in order to proceed with using the framework.

If the first parameter were to be moved, then *Size of potential cost saving* still covers the focus on cost within the framework. This parameter was added by the authors of this thesis to reflect Olsen and Ellram's (1997) economic-related interpretation of Kraljic's framework, anticipating that the higher the potential savings the more attractive to go for strategic purchasing. In fact, this parameter received amongst the strongest support of the entire framework. Even though the arguments in favor of this parameter were similar to the first, R15 and R17 added that apart from prioritizing between projects it was also "[...] *very important in order to motivate why to run a project"* and that *"[...] it is extremely important, because you have to sell the project to the factory".* This addresses an interesting aspect that generally did not receive much attention, namely how the internal politics can become an obstacle. Without going into details it seems that having potential savings as a characteristics for strategic purchasing would not only help prioritize but also convince internal stakeholders of its value. Moreover, the fact that the respondents openly expressed the usefulness of cost savings when combined with other parameters, such as R12 talking about potential savings in relation to cost impact, demonstrates the value of the framework integrating many dimensions

and parameters. In addition, while speaking of supply complexity R9 emphasized that potential savings cannot be all decisive since a sourcing project can concern securing critical inputs although it has no impact on savings. Such an example gives further value towards the framework not solely focusing on cost but again being integrative and combining five different dimensions. In contrast to Kraljic (1983), the respondents suggested neither to measure cost nor savings, as a percentage but rather in absolute numbers. Overall however, the emphasis on cost and profit by Kraljic (1983), which provides the base for the first two parameters, seemed to be well aligned with the respondents view on *Strategic Importance*.

The *Extent to which purchase relate to core competence*, which was an addition made by the authors of this thesis, also received support. The largest criticism however concerned that many purchasing categories at SKF could, through strategic sourcing, bring large savings although they are not directly related to the core competence. Therefore, such a parameter could possible filter away potential strategic sourcing projects that could bring large financial benefits. On the other hand, since such statements immediately refer to potential savings, being a separate parameter, that goes to highlight the usefulness of the *Strategic Importance* dimension emphasizing both aspects. That would mean that although the *relation to core competence* would be scored lower, the framework will still indicate if there are large potential savings and as such not immediately filter away any large financial benefits. A second critique for the parameter concerned that if there is a strong alignment to core competence one may not want to choose SKF's strategic sourcing since it per definition means that one starts by going out to all potential suppliers. When categories are strongly related to the core business it often involves proprietary material and intellectual property, which the firm has no desire to share with too many suppliers, but rather a selected few. Interestingly, this contradicts the view of R3 whom maintained that when the impact on the offer to the customer is high, strategic sourcing should be done. Indeed this view could be seen as favorable from R6's perspective as well since a thorough selection process would increase the likelihood of selecting the right supplier with whom the company share classified knowledge. Overall, the parameter rests on strong enough ground to conclude that when combined with other parts of the framework it can provide a complementing function by indicating how closely the purchase align to the core of the business.

Moving on to the remaining parameter, *Category's impact on perceived quality* received weak support. The respondents made it clear that whereas impact on quality indicates how

careful one should be in selecting suppliers, most often correlating SKF's strategic sourcing, it only remains useful for a limited amount of categories. Instead, adhering to the strategic sourcing analysts that many categories does not have a direct impact on quality, it seems that such a parameter would rule out many categories that would benefit from strategic purchasing. Comparing the benefit to the cost the conclusion is that such a parameter would do more harm than good. Kraljic's (1983) idea of quality was that the sourcing becomes more important as the impact on quality is higher. Yet, considering the empirical findings this cannot be fully confirmed.

6.2.2 SUPPLY COMPLEXITY – *AS-IS OR TO-BE*

For *Supply Complexity* the result looks rather different as opposed to the other dimensions since the discussion to a large extent were characterized by opposing views for how the parameters would impact the decision of how to source. Whereas the parameters concerning *Entry barriers*, *Level of concentration* and *Switching costs* received adequate support for concluding that they are useful characteristics to evaluate, the remainder two did not.

Apart from *Entry barriers for new suppliers* receiving a wide support as a characteristic for doing strategic sourcing, the fact that entry barriers could be understood in different ways was emphasized in the interviews. However, the respondents were united in that there is two major ways in which entry barriers takes shape at SKF, both relating to the difficulty of integrating new suppliers into SKF operations. First, as stated by R12, SKF's own product specifications create barriers for suppliers to meet. In other words, if the specifications are tougher (vis-a-vis barriers are higher) a strategic sourcing process would be preferred since SKF would have to choose suppliers more carefully. Second, R5 identified that another kind of entry barrier for new suppliers was the internal process that has to be carried out. Stating that *"Barriers can be high because there is a lot of convincing you must do internally"* therefore goes to prove the earlier analysis regarding how internal politics can inhibit sourcing processes from being carried out. As a result, having the framework evaluating entry barriers could help mapping out the potential resistance that purchasing may run into. Overall, this means that the scope for how to interpret the impact of entry barriers is both external in that it is affected by the demands put on suppliers and internal related to the effort one has to go through to integrate new suppliers. In both cases however, the extent to which the barriers are high correlated to a more complex integration process and does as such strengthen the usefulness of the parameter, meaning that it aligns to the original arguments made by Luzzini

et al. (2012) and Kraljic (1983). Whereas a couple of respondents argued that doing strategic sourcing when the barriers for new suppliers are high is a waste of resources, such a statement rests upon the assumption that the barriers are too high. However, it only seems logical that when the objective is to find a new supplier, and doing so will be difficult, a more detailed sourcing process would be preferable.

Another parameter that can be confirmed as a predictable characteristic for strategic purchasing is the *Level of concentration of supplier market*. However, in spite of this a discussion must be held regarding how the parameter impacts whether or not to engage in SKF's strategic sourcing process. Even though both ways were supported the empirical findings shows that the strongest opinions were those favoring the parameter being inversely related to strategic sourcing. In other words, whereas the parameter was originally predicting that a high level of concentration would promote strategic purchasing, the empirical evidence shows that the opposite is true. What can be confirmed about the framework is that complexity is directly related to a higher preference for strategic purchasing. For instance, R5 and R17 both argued that the larger the supplier market is, the more complex does it become. This means that the parameter must be reconsidered to instead capture that complexity is not related to the size of the suppliers but rather to the amount of them. Since Luzzini et al.'s (2012) framework is built upon that when a parameter is deemed as 'high' it indicates strategic purchasing, the parameter could be rephrased into *Amount of potential suppliers*. Such a parameter would capture the fact that complexity may not be correlated to the total amount of suppliers in the market but more so to the amount of suppliers that potentially could supply SKF. If the amount of potential suppliers is high that implies more complexity, which then conforming to the responses suggests SKF's strategic sourcing process to be used.

Turning the attention towards *Switching cost of changing suppliers*, this was the parameter from the *Supply Complexity* dimension that received adequate support while also having close to all respondent agreeing of how it would impact the sourcing decision. Generally, Luzzini et al.'s (2012) model was correct in predicting that higher switching cost would correlate to a higher complexity and therefore more long-term focus of the purchasing. Based on R12's argument that switching costs makes it more expensive to enter new supplier relationships with the wrong information, this infers that the strategic sourcing process becomes important in creating the right conditions for SKF to actually build the right relations. As was analyzed in the beginning of this chapter, R8's statement for how switching cost also implies the need

to reach more sustainable solutions distinctly aligns to the long-term aspect of strategic purchasing that has been argued for by theory (Heide & John, 1990; Mandal & Deshmukk, 1994; Van Weele and Rozemeijer, 1996; Carr and Smeltzer, 1997; Carr and Smeltzer 1999; Chen & Paulray, 2004; Talluri & Narasimhan, 2004). Apart from confirming the parameter, the responses also emphasized the value of making the framework integrative. This is indicated by R7 when stating that *"If you consider the savings potential but forget to take the switching costs into consideration, well, then we may not realize any savings [...]"*. In fact, R7's statement also confirmed Kraljic (1983) notion of limited resources and its impact on profitability as it was argued that in such cases "*[...] you may find out that the sourcing process is far more resource-demanding than the resources that are to your disposal"* (R7). Indeed R7's argument provides solid proof for the problem that gave rise to this thesis and it further enforces the usefulness of how the framework has the potential to allow users to get a holistic view that integrates many aspects to make an informed decision.

Continuing with *Uniqueness of assets that suppliers provide to category,* this parameter received moderate support. However, although the support was adequate enough to establish this characteristic as valuable to the framework, the problem arose from the disagreement related to how a high uniqueness of assets would impact the sourcing process. Since the parameter builds upon Kraljic's (1983) PPM matrix, Luzzini et al. (2012) included it to reflect risk involved in having too unique suppliers and argued that high uniqueness means more strategic purchasing. The respondents partly confirmed this view, for instance R1 and R7 who claimed that the uniqueness and monopolistic situations could be potential threats. These beliefs together with the discussion belonging to *Level of concentration* also aligns with Kraljic's (1983) premise that market structure impacts how firms should engage in purchasing. Unfortunately, there were equally many that opposed this relationship, claiming that a high uniqueness renders SKF's strategic sourcing process unnecessary. Therefore, Luzzini et al.'s (2012) interpretation of Kraljic's supply market complexity into *Uniqueness of supplier assets* should be questioned. Since the framework should not include parameters that are interpreted in different and opposite ways it was chosen to be excluded.

The last parameter of this dimension, *Risk of production disruption if sudden stop in supply* received least support from the respondents. Added to the framework with the purpose of addressing the criticality of the categories purchased, the parameter also considered how such a characteristic could extend the understanding of Kraljic's (1983) supply risk. Overall, the

respondents perceived it as a legitimate factor but since criticality was argued to be present in almost all Group Purchasing categories it was believed not to provide value in the decision of sourcing process (R11 & R12). However, the parameter did get some support as R9 stated that criticality is important even though spend for an item is low. This argument may hold true but given that the majority believed both sourcing processes should consider criticality it seems to add little value to the framework. Moreover, given the example by R14 of how steel for several reasons would not be ideal for SKF's strategic sourcing, it would be contradicting to include a parameter that would not apply to SKF's most critical input.

6.2.3 CUSTOMIZATION – *NO NEED FOR CONSTANT INNOVATION*

As was evident in the empirical findings both parameters under this dimension received mixed opinions. In general however, Luzzini et al.'s (2012) *Level of Customization of product or service purchased* received positive reactions, whereas the *Extent to which relationship-specific knowledge is required* is less applicable with weak empirical evidence.

Beginning with the first parameter, the more positive perception was illustrated by R9 and R10 who pointed towards the importance of finding the right suppliers when products become customized. Moreover, the increased complexity that comes along with buying non-standard products makes spending more time and resources during the sourcing crucial, which clearly points towards strategic sourcing rather than conventional. Interestingly, these views strongly correlate to TCE. More specifically Williamson (1985) stated that asset-specificity explains the buyer-supplier relationship and that a potential lock-in effect may occur. As a result, the importance of selecting the right supplier in cases of high customization is vital, which was confirmed by the majority of respondents. Furthermore, since SKF's strategic sourcing practice aligns with the strategic purchasing concept, as was established earlier in the analysis, it does per definition also have a more long-term orientation. Knowing that the respondents prefer SKF's strategic sourcing in cases of high customization can therefore be extended to also assume they favor more long-term sourcing solutions. This gives further alignments to Williamson (1985) as he argued that long-term relationships are favorable when customization is high. With reference to the respondents that expressed a certain degree of disbelief towards the parameter, the main argument was that customization does not affect what process is chosen. Although one takes this opinion into consideration it was not strong enough to change the above analysis or make the extent of customization a less important characteristic for when to engage in strategic purchasing.

Contrary to the first parameter, the *Extent to which relationship-specific knowledge is required* did not receive much convincing arguments from the respondents. This parameter was added by the authors of this thesis to emphasize that Williamson's (1985) transaction-specific investment also included the aspect of know-how and how certain purchasing relationships may benefit from being more long-term in terms of accumulated knowledge. Instead however, the largest share held the opinion that the need for relationship-specific knowledge would not have any effect on the selection of sourcing process. Once again referring back to the previous analysis concerning the conceptual alignment between strategic purchasing and SKF's strategic sourcing (*Figure* 4 page 34), the disagreement to this parameter conforms to the lack of relationship focus that became evident earlier. Therefore, whereas the respondents invalidate the applicability of the parameter they do at least show consistency in their responses. In other words, a possible explanation to the disagreement of the parameter could be traced to that SKF's strategic sourcing process to a large degree is focusing on gathering information and facts as opposed to considering the relationships to all suppliers. A second reasonable explanation could be that relationship-specific knowledge is more difficult to relate to in comparison to the *Level of Customization of the product or service*. This could especially be the case for the interviewees of this thesis. Since they to a large extent are operating quite high up the organization, meaning being further away from the daily purchasing operations, this could have an impact on how they view the importance of relationships.

6.2.4 SUPPLY MARKET VOLATILITY – *INTERNAL OR EXTERNAL*

Under this dimension both the parameters *Degree of volatility in price* and *Degree of volatility in volume* were perceived as valuable characteristics to evaluate in the selection of sourcing process. The arguments in favor for the parameters emphasized the increased chance of mitigating the negative effects of these volatilities by being more thorough in choosing the right suppliers, which SKF's strategic sourcing allows (R16 & R14).

As was argued in the theoretical review, this dimension contributes to the framework by considering how uncertainty and unpredictability affects how one wishes to source (Williamson, 1985; Luzzini et al., 2012). For both the *Volatility in price* and *volume* several respondents indicated a relationship between fluctuations and the preference towards more long-term supplier relations. This does unmistakably show close resemblance to Williamson (1985) who argued that uncertainty could be mitigated through proper contracting. For

instance, R10 claimed that strategic relations would help the firm guard against price spikes and R5 added that such relations also would better the conditions for suppliers prioritizing SKF in times of volume fluctuations. Evidentially, this also aligns with Luzzini et al. (2012) and Williamson (1985) in confirming that SKF's limited ability in predicting volumes and future prices makes long-term relationships more suitable. An additional way of viewing the responses is by referring to TCE and its perspective on bounded rationality. According to Williamson's (1985) argument, bounded rationality meant that contracting would never be able to encompass all complexities in a transaction and therefore relationships would need to be established. The argument made by R5 that strong supplier relationships could guard against fluctuations could therefore be seen as confirming this argument made my Williamson.

Whereas the empirical findings show no indication of the parameters being dismissed, more discussion arose in connection to *Volatility in volumes* as opposed to *Volatility in price* (being widely agreed upon). The discussion that arose interestingly enough aligns with the theoretical discussion connected Luzzini et al.'s (2012) clarification that volume per se could relate to either volumes demanded by SKF or volumes supplied by the market. Although both interpretations were theoretically applicable one of them came forth as a more descriptive characteristic in regard to what will have most impact on the decision of how to source. This was in terms of SKF's volume demanded from the suppliers. Although the empirical findings merely gave one example from R14, clearly stating that fluctuations in volume demanded would be decisive in how to source, this was also explicitly argued for by another five respondents. In fact, out of these respondents there were Category Managers, a Strategic Sourcing Manager and Strategic Sourcing Analysts that all alike argued that this perspective was the most decisive. Since the opinion is presented by the wide diversity of the respondents this goes to specify how the parameter should be applied.

6.2.5 TECHNOLOGICAL UNCERTAINTY - *KNOWLEDGE, NOT NEWNESS*

The parameters that received most support under this dimension were the first two related to the newness of the purchase and the technology. Overall, the empirical findings associated to this dimension gave some valuable insights into how the parameters could be adjusted to make the framework better accommodated for most essential characteristics in terms of uncertainty. As a result, this dimension will become subject to larger changes in terms of phrasing as well as content.

In general, the arguments that supported the first two parameters were similar, as the respondents who associated new products and technologies with insufficient information. Also reinforcing this view, it was generally believed that buying a product for the first time versus having a repeat buy would have a direct effect on the selection of strategic sourcing (R8 & R16). In extension, this essentially meant that the higher the uncertainty is the more suitable would strategic purchasing be. Once again referring to uncertainty often resulting from bounded rationality (Williamson, 1985), this too was confirmed by the empirical evidence since the respondents argued newness correlated to a higher need of collecting information. This clearly indicates that when something is new there is a presence of information asymmetry and looking at all the responses the lack of information was indeed standing out as the most critical aspect associated with uncertainty. In addition to this, the empirical findings also showed that whereas 'newness' was perceived as a good indicator in theory, this was not really the case in reality since it rarely happened. These two arguments lead towards a reconsideration of the first two parameters. This reconsideration is based on the observation that whereas the original parameters focused on newness, the responses solely related to the knowledge, or lack thereof, that SKF have of the purchase or technology. Therefore, changing the parameters to more explicitly deal with knowledge will strengthen the predictability of the framework, while also improving its alignment to reality. As was shown through the response of R9, who believed such a change *"[...] would move the parameter to become a top characteristic"*, it would also decrease the risk of interpreting the parameters in different lights.

The third parameter under this dimension, *Frequency of technological change,* did as stated in the empirical findings receive moderate reactions from the respondents. Whereas the balance between those in favor of the characteristic guiding the sourcing decision compared to those opposing it was relatively equal there existed an important distinction, namely that once again the former seem to only support the theoretical application of the parameter. More specifically, what becomes evident through the findings was that whereas R9 and R16 promoted the parameter they also stated that it would be most useful *"If you are in a market that is undergoing radical changes [...]"* (R9). Taking the group of opposing respondents into consideration it was clarified that extensive technological change does not occur often within the industry. This results in that although the parameter is valuable it remains less applicable. Furthermore, the reason for why the parameter only concerned *technological change* could be seen as a limitation, which was the result of Luzzini et al. (2012) taking uncertainty from TCE

and developing it more towards technology. In other words, whereas technological changes may have been more applicable and reoccurring in the sample of their study, this specification is less relevant in the bearing industry.

The last parameter measuring *Degree to which the firm is unable to forecast technological change*, which was added to Luzzini et al.'s (2012) framework by the authors of this thesis, received reactions not overly enthusiastic nor excessively negative. The parameter was added to address the fact that the original framework lacked any measurement of the firm's own ability to keep track of changes in the industry. The main argument was that if the firm would be unable to forecast changes it would indicate even higher uncertainty and as such suggest that strategic sourcing and more careful selection of the right suppliers would be necessary. Referring to the empirical findings, the arguments favoring this kind of characteristic referred to that when internal knowledge is low, it would be more favorable to run SKF's strategic sourcing process. This was further proven by R15 who argued that when this ability is low you will have to find a supplier that possesses such knowledge. These responses explicates that once again the reference was towards internal knowledge and although this correctly aligns with what the parameter was constructed to measure, that also means a certain degree of repetition. The repetition is caused by the reconsideration of the first two parameters to explicitly deal with internal knowledge. As a result they will carry close resemblance to this last parameter. Since this last parameter received moderate support, with respondents even criticizing its relevance in choosing sourcing process, it will be more logical to allow the other parameters to take its place.

6.3 PURPOSE BEHIND PURCHASE – *A WEIGHTAGE FACTOR*

As a last part of the theoretical framework Section 2.3.6 added that apart from the proposed framework, which up till now has been analyzed, there could be factors beyond it that affects how it is applied and more specifically what in the framework that becomes important. With the use of Spina et al. (2013) three common purposes were identified, cost, quality and innovation. Looking at the empirical findings, all these three purposes were confirmed. However, even more apparent was that the most common ones were cost, quality and risk, whereas innovation-related purposes do occur but it was not part of the respondents' spontaneous answers. The fact that cost came forth as the most popular purpose for choosing SKF's strategic sourcing process is not surprising considering the large focus it has received.

One advantage of the actual framework is that it is straightforward to use. As has been explained, for each dimension the user goes through the parameters and scores each on a scale between low and high. The higher a parameter is the more potential is there to engage in strategic purchasing. With reference to SKF and its two sourcing processes, what it calls strategic sourcing has been put as equivalent to strategic purchasing, the decision becomes binary in that either SKF engage in it or they refrain from doing so. However, a problem arises from the fact that there will be instances when the outcome of the framework is not high nor low, but instead somewhere in the middle. When the situation is as such it will not be as clear to SKF whether, according to the framework, to engage in the strategic sourcing process or not. However, beyond just confirming the purposes the empirical findings yield another important aspect. Knowing how the purposes are related to different dimensions from the framework, the information that was presented in *Figure 5* (page 51) can help an organization get out of a situation where the framework is between low and high. More specifically, given that the framework shows inconclusive results in that it is not high to the point where it is obvious to go for strategic sourcing nor is it low enough to know not to, this would be solved if the user indicate what the purpose is behind the purchase. Referring back to the empirical findings, in the case of inconclusive results *Figure 6* below shows what parameter that should be given weightage for each purpose.

Figure 6 - Purpose of Purchase Related to Parameters

Purpose of Purchase	Weightage Given to:
Cost	***Strategic Importance***
Quality	***Strategic Importance & Supply Complexity***
Risk	***Supply Complexity & Supply Market Volatility***
Innovation	***Technological Uncertainty***

Source: Compiled by authors. Data retrieved from R1-R17.

In other words, imagine that SKF use the framework to decide what sourcing process to choose and at first the outcome is uncertain. If the user has identified that the purpose is cost-driven, he/she will according to the above analysis take a closer look into the *Strategic Importance* dimension (*see Figure 3, page 22*). If the specified dimension has yielded results

that are high it means SKF should use their strategic sourcing process, if the results are the opposite they should not.

7. CONCLUSION & RECOMMENDATION

This thesis set out to extend the understanding of how an organization can make informed decisions on when to engage in strategic purchasing. This chapter presents the main findings and recommendations in relation to the research questions. First, the theoretical contributions are presented, which is then followed by the managerial implications and how the findings affects the practice of strategic purchasing. Last, recommendations for future research are presented.

7.1 THEORETICAL CONTRIBUTION

The role of purchasing has evolved. Theoretically, the spectrum of supplier relationship is anywhere between short to long-term, the trend being that the latter is more strategic and in many cases to be preferred. Where previous research had not fully considered that as strategic purchasing is being practiced more the issue of limited resources arises, this thesis has established that resource scarcity has a large impact on organizations' ability to practice strategic purchasing, forcing them to be selective. Based on a substantial literature review and case study, the detailed contextualization of the concept strategic purchasing contributes to its theoretical development. The main findings have successfully addressed the research questions, leading to both academic and practical contributions. To answer the research question '*How can a global organization determine when to use strategic purchasing'* two sub-questions were developed.

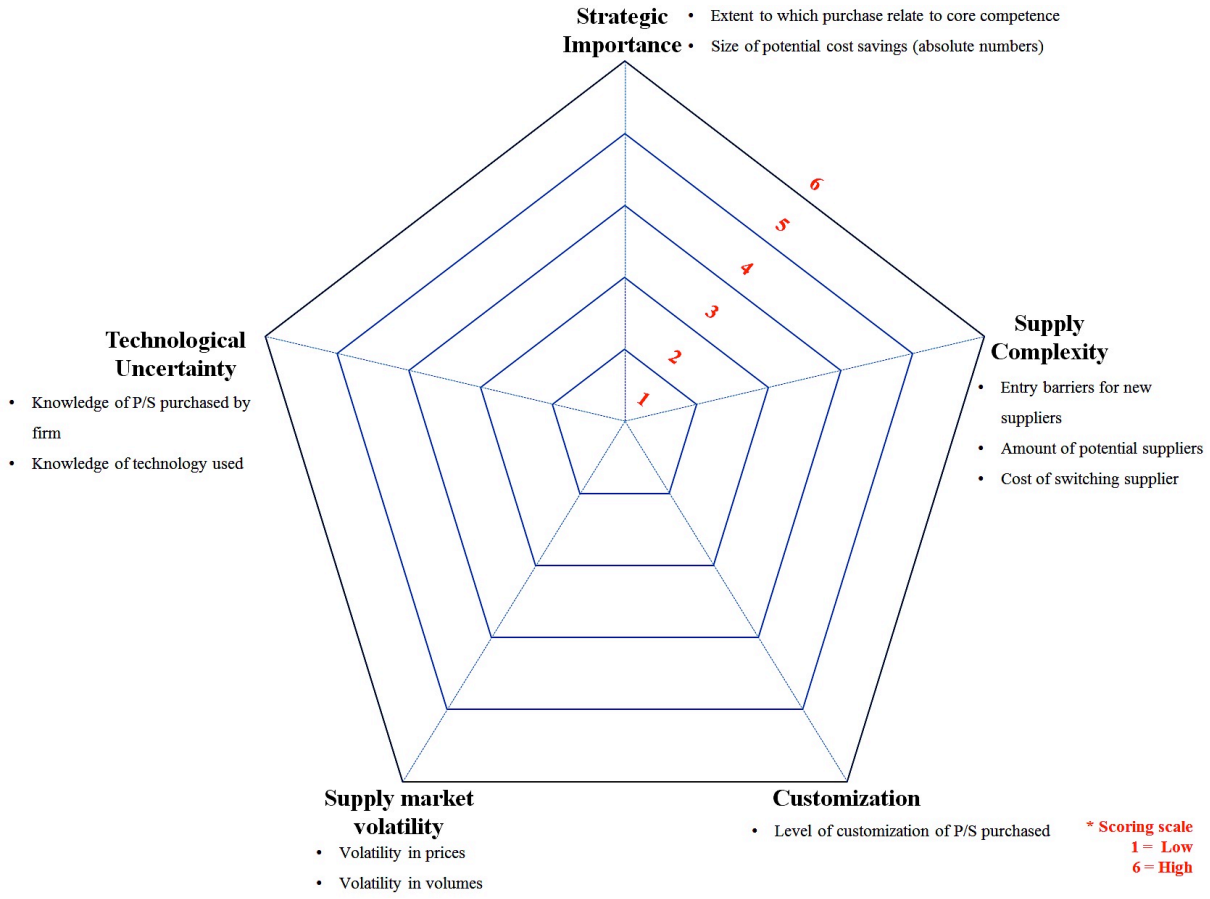
The first sub-question '*What is strategic purchasing?'* aimed at providing a more detailed understanding of the concept itself. Beginning with where theory successfully described strategic purchasing, it has been confirmed that the fundamental requirements of it being long-term focused and emphasizing strategic alignment are correct. Furthermore, previous studies have accurately identified that strategic purchasing evaluates suppliers on factors other than cost, quality and delivery. Still, the most interesting findings were related to how this study does not align with theory. Beginning with the conceptual discrepancies, the analysis could not corroborate how a long-term focus must relate to supplier relationships. Extending this argument, this shows how rather than stressing long-term relationships, SKF is emphasizing how facts will lead towards a long-term focus by establishing the right internal conditions. In other words, the reality in this case has been that the long-term focus of strategic purchasing is the result of minimizing the role of and not seeking deep relationships.

Another discrepancy resides in what was partly confirmed above, namely that factors other than cost, quality and delivery are subject for evaluation. To clarify, theory tends to stipulate that strategic purchasing considers all factors regardless. Yet, this study can conclude that although it is true that strategic purchasing considers additional capabilities and processes, the analysis shows that cost remains the most important one. Therefore, the adjustment made was: after that of cost, strategic purchasing evaluates suppliers on other factors. Although the difference in such distinction seems minimal, it does make a large difference since cost is a key element for the organization to prioritize their resources. Therefore, strategic purchasing become:

An approach whereby the organization takes a more long-term perspective in their purchasing by mapping potential suppliers on cost to proceed with evaluating them on factors related to capabilities and business processes. Strategic purchasing emphasizes alignment of purchasing activities to the corporate strategic vision and promotes continuous supplier evaluation to avoid sub-optimal contracting.

Addressing the second sub-question '*What characteristics are important to identify when deciding how to run purchasing?',* Luzzini et al.'s (2012) framework was extended by considering literature from both TCE and Kraljic's (1983) PPM matrix. The best way to provide a comprehensive answer is by presenting the revised and final framework, shown in *Figure 7*. The framework presents five dimensions, *Strategic Importance, Supply Complexity, Customization, Supply Market Volatility* and *Technological Uncertainty*, each being composed of the specific characteristics that are necessary to evaluate.

Figure 7 - Final Framework



Source: Compiled by authors.

The major contribution of the proposed framework is twofold. First, the multi-theoretical focus of this study extends the understanding of what parameters that must be measured to fully describe the dimensional characteristics. Second, despite that Luzzini et al. (2012) successfully operationalized the five dimensions, they chose to limit their research by assuming that all purchasing categories of their study had equally high *Strategic Importance*. This study has verified that *Strategic Importance* is a valuable dimension that the organization must consider and therefore is to be included in the framework. Emphasizing the value of this contribution is that although SKF's Group Purchasing department also maintains the majority of their purchasing categories are considered high on *Strategic Importance*, they still argue that the dimension is crucial. Therefore, this study has shown that *Strategic Importance* cannot be excluded since it provides a crucial way for the organization to prioritize their resources among several strategically important purchases.

Finally, having provided a more detailed understanding of what strategic purchasing is and what characteristics to evaluate, the main research question can be answered; '*How can a*

global organization determine when to use strategic purchasing?'. The first recommendation is that an organization must identify what purchasing process that for them constitutes strategic purchasing. At SKF this process was called 'strategic sourcing process', whereas it at another organization may be named differently. The second recommendation is to adhere to the proposed framework, which in turn will guide the organization to make a decision based on the correct and most informative characteristics. In other words, the evaluation of the dimensions and parameters of *Figure 7* will help an organization determine when to engage in strategic purchasing. The fundamental argument behind the framework remains that the higher an organization deems each dimension, the more potential would there be to engage in their strategic purchasing approach. However, as was mentioned along with the *purpose and research question* (Section 1.3), the greatest value of this thesis lies in how it was able to extend the conceptual understanding and characteristics of strategic purchasing. Based on Luzzini et al.'s (2012) method of measuring the original framework, the following section provides one suggestion for how an evaluation could look like.

7.2 MANAGERICAL & PRACTICAL IMPLICATIONS

To begin with, in order to realize the framework's full potential three key factors must be carefully considered while applying it. First, continuity becomes key since the real value of the tool lies in that, when consistently applied, it will make purchases comparable in terms of the characteristics the framework addresses. Therefore, when continuity is practiced the organization will gain more insight into what motivates the strategic purchasing, which in extension also gives them an indication of how to prioritize their resources. Along this, a second implication is that while using the framework it must be emphasized that it has been developed to identify potential for strategic purchasing only. This implies that if the concern is whether to enter an alliance the framework no longer applies, at least it has not been empirically tested to do so. Third, the value the organization can gain from the framework is directly dependent on the honesty invested while using it. If the organization properly exercises these three priorities, it will better the chances for absorbing most value.

On a more practical side, this thesis has also given careful consideration to how the use of the framework may play out in reality. Therefore, a suggestion as to how the framework could be evaluated would, similar to Luzzini et al. (2012), be to utilize the Likert scale system. Using the proposed framework the organization would then evaluate each parameter on a scale from 1 to 6, where each of the five dimensions would receive the mean score of its underlying

parameters. However, during the research and data collection it was realized that situations would arise when the outcome of the framework is not clearly indicative for how to approach purchasing. For instance, where all dimensions scoring high means strategic purchasing there will be times when some dimensions score high while others are low. To guard against such dilemma, this study mapped how cost and the four major purposes behind purchasing (*cost, quality, innovation* and *risk*) will weigh the dimensions differently (*seen in Figure 6, page 68*). Important to note with reference to the purposes is that this study has not attempted to quantitatively weigh them but rather indicated how the purpose shift the importance of the dimensions. In order to increase the framework's practicality and user friendliness, *Appendix 6* presents one suggestion for how an organization could transform the framework into a questionnaire. As is evident, the framework has been translated into a list of statements that conforms to the dimensions and parameters. Using the framework in excel, the organization would simply start by indicating the total spend the purchase involves and the purpose for why strategic purchasing would be suitable, then continue by grading each statement from 1 to 6 whereby a mean for each dimension will be generated and transferred into the framework (*Figure 7 page 72*). When the outcome of the model is uncertain, the purpose behind it will provide guidance for what dimensions that needs to be high for there to be strategic purchasing potential. Furthermore, by indicating the total spend for the purchase the organization would more easily get a reference point. Such a reference would help the organization determine when they themselves believe it is worth spending the extra resources that strategic purchasing demand. Since such a spend level would be firm specific, it is sufficient to conclude that it is up to each user to decide upon.

7.3 LIMITATIONS & FUTURE RESEARCH

To begin with, this research field would greatly benefit from further research. For instance, being a single case study the application of the framework on other industries to comparatively study its applicability would greatly add to its rigor. However, due to the rather underdeveloped state of the conceptual understanding regarding the decision process prior to purchasing, which this thesis attempted to shed further light upon, two more specific research areas will be outlined.

First and foremost, more research is needed to extend the measurability of the proposed framework. What has become evident through this thesis is that although the recommendation was to evaluate the characteristics in order to determine when to use strategic sourcing, there

still exist ambiguity as to how such an evaluation could take place. As was presented under the previous section, the proposed framework now builds upon the psychometric Likert scale system. Although the framework has been revised to avoid misinterpretations, the fact that different interpretations may arise cannot be fully safeguarded against. This is a natural consequence from using the Likert scale since when the scale ranges from low to high it becomes up to the user to interpret and define what each point on the scale constitutes. As a result it becomes subject to the individuals own characteristics and for this reason the previous section suggested to apply the framework with a fair degree of honesty and continuity. Still, along with this suggestion the issue of bounded rationality also emerges. As was suggested by Williamson (1981), although full honesty and continuity is practiced the rationality of the responses will be limited due to imperfect information. The use of the Likert scale may increase the negative effects of bounded rationality. However, this limitation also highlights a major contribution. Since much of the analysis was spent on discussing different conceptual interpretations regarding the characteristics it emphasizes the need to look deeper into how measurement of the proposed framework could become more generic. For instance, the empirical findings showed how cost was seen as a powerful characteristic for convincing internal stakeholders. This could possibly be the case since it is concrete and measureable. It would therefore be interesting to see if other characteristics would gain importance when their measurability is improved, and if such a change would limit the negative effect of bounded rationality.

Second, since this study partly rejected an increased focus on long-term relationship it is hoped to have provoked further research to question how a global organization can afford to neglect such social capital. Through this study it became clear that at SKF, purchasing and negotiations are ideally fact-based. Therefore, an interesting angle would be to investigate what impact and role social capital has as processes become more focused on objectivity.

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9. APPENDIX

1. Interviewee Specification

Respondent	Position	Nationality	Experience	Interview Method	Date
Pilot Interviewees					
R18	*Project Owner*	Swedish	Worked in SKF since 2013	Face-to-face	2016-02-12
R19	Purchasing Director (DM)	Swedish	Worked in SKF since 2013	Face-to-face, recorded	2016-03-15
R20	Category Manager (IDM)	Indian	Worked in SKF for 13 years (within purchasing)	Face-to-face, recorded	2016-03-18
R21	Business Processes Manager	Swedish	Worked in SKF since 2008, previously for TNS*	Face-to-face	2016-03-23
Main Interviewees					
R1	Category Manager (DM)	Swedish	Worked in SKF for 15 years, Category Manager since 2014	Face-to-face, recorded	2016-03-29
R2	Category Manager (DM)	German	Worked in SKF for 30 years	Webex, recorded	2016-04-01
R3	Category Manager (DM)	Franch	Worked in SKF since 2004, Category Manager since 2007	Webex, recorded	2016-04-04
R4	Purchasing Director (IDM)	Swedish	Worked in SKF since 2012	Face-to-face, recorded	2016-04-05
R5	Category Manager (DM)	Swedish	Worked in SKF for 26 years, within purchasing since 2005	Face-to-face, recorded	2016-04-04
R6	Category Manager (DM)	Swedish	Worked in SKF since 2000, Category Manager since 2015	Face-to-face, recorded	2016-04-05
R7	Category Manager (DM)	Franch	Worked in SKF since 1993, Category Manager since 2016	Webex, recorded	2016-04-04
R8	Category Manager (DM)	German	Worked in SKF since 2003, Category Manager since 2014	Webex, recorded	2016-04-06
R9	Strategic Sourcing Analyst (DM)	Swedish	Worked in SKF since 2014	Face-to-face, recorded	2016-04-01
R10	Strategic Sourcing Analyst (DM)	Swedish	Worked in SKF since 2013	Face-to-face, recorded	2016-03-31
R11	Strategic Sourcing Analyst (IDM)	Swedish	Worked in SKF since 2003, Strategic Sourcing Analyst since 2014	Face-to-face, recorded	2016-03-31
R12	Straegic Purchasing Manager (DM)	Swedish	Worked in SKF since 2014, previously Volvo Cars	Face-to-face, recorded	2016-04-08
R13	Category Manager (IDM)	Swedish	Worked in SKF since 2014	Face-to-face, recorded	2016-04-01
R14	Strategic Sourcing Analyst (DM)	Swedish	Worked in SKF since 2014	Face-to-face, recorded	2016-03-30
R15	Category Manager (DM)	Swedish	Worked in SKF since 2010, Category Manager since 2015	Face-to-face, recorded	2016-03-31
R16	Strategic Purchasing Manager (DM)	Swedish	Worked in SKF since 2014	Face-to-face, recorded	2016-03-29
R17	Category Manager (IDM)	Italian	Worked in SKF since 1986, Category Manager since 2006	Webex, recorded	2016-04-08

*TNS is one of the largest research agencies worldwide and provide insights that help customers make impactful decisions that drive growth.

2. Interview Guide

In a previous email the respondents have been informed of:

1. *The background of the researchers*
2. *The purpose/main objective of the study*
3. *The two different sourcing processes that this study concerns*
4. *How they as respondents will contribute to the research and final results.*

BACKGROUND

Before we dig into the details of this research we would appreciate if you could tell us a bit about yourself:

1. How long have you been working within SKF?
2. What is your current position?
3. What are your main responsibilities?

(1) PURCHASING / SOURCING

We would now like to move towards purchasing and as you have been informed via email this project is, based on the two sourcing processes, attempting to develop a decision-tool, or framework.

Basically, the decision-tool (or framework) has been created to measure certain characteristics of a category and based on this give an indication of how much potential there is in running the strategic sourcing process.

4. Is it clear what processes we are relating to?

5. Broadly, what do you see as important criteria for running the strategic sourcing process?

Strategic Importance	Supply Complexity	Customization	Supply Market Volatility	Technological Uncertainty

(2) THE FRAMEWORK

Revealing the framework that has been built, it consist of 5 criteria, or dimensions. These are:

A. Strategic importance
B. Supply complexity
C. Customization
D. Supply market volatility
E. Technological uncertainty

The fundamental idea behind these is that when they are high it indicates a higher potential of running the strategic sourcing process, whereas the opposite is true when they are low.

We would now like to go through each of these dimensions and ask you a set of questions.

Strategic importance *– this dimension concerns cost, quality, and the category's relation to SKFs core competence…*

Reveal parameters
For each parameter:

6. In order to make a decision regarding what sourcing process to use, how important is it to have an understanding of this parameter?
7. Why is it important/unimportant?

Cost	Quality	Core competence	Cost saving
1 2 3	1 2 3	1 2 3	1 2 3

Supply Complexity *– this dimension concerns entry barriers, uniqueness of supplier's assets, concentration in supply market, switching costs, and production disruption…*

Reveal parameters
For each parameter:

8. In order to make a decision regarding what sourcing process to use, how important is it to have an understanding of this parameter?
9. Why is it important/unimportant?

Entry barriers	Uniqueness	Concentration	Switching cost	Pro. disruption
1 2 3	1 2 3	1 2 3	1 2 3	1 2 3

Customization *– this dimension concerns customization of products and relation specific knowledge…*

Reveal parameters
For each parameter:

10. In order to make a decision regarding what sourcing process to use, how important is it to have an understanding of this parameter?
11. Why is it important/unimportant?

Customization product	Relation specific knowledge
1 2 3	1 2 3

Supply Market Volatility *– this dimension concerns volatility in prices and volumes…*

Reveal parameters
For each parameter:

12. In order to make a decision regarding what sourcing process to use, how important is it to have an understanding of this parameter?
13. Why is it important/unimportant?

Prices	Volumes
1 2 3	1 2 3

Technological Uncertainty *– this dimension concerns newness of product and service, newness of technology, technological change, and inability to forecast technological change…*

Reveal parameters
For each parameter:

14. In order to make a decision regarding what sourcing process to use, how important is it to have an understanding of this parameter?
15. Why is it important/unimportant?

Newness product	Newness tech.	Tech. change	Inability to forecast
1 2 3	1 2 3	1 2 3	1 2 3

Now when we have a better understanding of the dimensions, let's evaluate them…

16. In order to run a strategic sourcing process, what dimensions are most important?

Strategic Importance	Supply Complexity	Customization	Supply Market Volatility	Technological Uncertainty

(3) PURPOSE FOR PURCHASING

Apart from the dimensions, the ***purpose behind purchasing*** *must have some sort of impact on how to evaluate the potential for strategic sourcing.*

17. Apart from the five dimensions, in your opinion, are there additional factors that will impact what process to use when purchasing a category/item?

Purpose	Additional?

Purpose of purchase

Whereas there are several purposes that guides why and from whom to purchase, the majority is based on Cost, Quality, Innovation or Risk/Contingency.

18. Do you agree with these and are there any other major purposes that you would like to add?

19. For each purpose, what dimension do you find most important?

Purpose	**Dimension**
Cost	Strategic importance
Quality	Supply complexity
Innovation	Customization
Risk/contingency	Supply market volatility
	Technology uncertainty

	1. STRATEGIC IMPORTANCE				2. SUPPLY COMPLEXITY					3. CUSTOMIZATION		4. SUPPLY MARKET VOLATILITY		5. TECHNOLOGICAL UNCERTAINTY			
RESPONDENT	*Cost*	*Quality*	*Core Competence*	*Cost Saving*	*Entry Barriers*	*Uniqueness*	*Concentration*	*Switching Cost*	*Prod. Disruption*	*Customization*	*Relation-specific knowledge*	*Prices*	*Volumes*	*Newness product*	*Newness technology*	*Techn. change*	*Inability to forecast*
R1	3	2	2	3	3	2	3	1	1	2	2	3	3	1	3	1	1
R2	3	1	2	3	2	2	2	1	1	1	1	1	1	3	2	1	1
R3	1	1	3	1	3	3	-	3	-	3	2	-	2	1	3	1	1
R4	1	2	3	3	2	-	-	3	-	-	-	-	3	2	2	-	-
R5	3	2	2	2	3	2	3	3	3	1	3	1	2	3	3	2	2
R6	3	2	3	3	3	3	3	3	1	3	1	3	1	2	3	-	-
R7	3	2	2	3	2	1	1	2	3	3	3	1	3	3	3	3	2
R8	3	2	1	3	2	3	2	3	3	3	1	3	2	3	3	2	1
R9	3	2	1	3	3	1	2	3	1	3	2	2	1	1	2	3	2
R10	3	3	2	3	2	2	2	2	3	3	3	3	3	3	3	3	2
R11	3	2	3	3	3	2	2	3	1	1	1	1	1	3	3	3	3
R12	3	3	3	3	3	1	3	3	1	1	1	1	1	3	3	1	2
R13	2	2	2	3	1	3	3	1	3	3	3	3	3	2	2	2	3
R14	3	1	1	3	2	2	3	3	2	1	2	3	3	3	3	3	3
R15	3	2	1	3	3	3	2	2	1	1	1	3	3	3	3	2	3
R16	3	1	3	3	2	1	2	3	1	2	2	3	2	3	3	3	2
R17	3	3	3	2	3	2	3	1	1	3	1	2	2	3	3	-	2
AVERAGE	2,71	1,94	2,18	2,76	2,47	2,06	2,40	2,47	1,73	2,13	1,81	2,20	2,12	2,47	2,76	2,14	2,00
Average per dimension	2,40				2,23					1,97		2,16		2,34			
New average per dimension & change (*excluding parameters marked in red*)	2,55 *gained 0,15*				2,45 *gained 0,22*					2,13 *gained 0,16*		2,16 *remained same*		2,62 *gained 0,28*			

Rating 1 - 3 — 1 =Disagree, 2 = Neutral, 3 = Agree

R1 - R17 — *All respondents excluding the pilot interviews*

The response is indicating an opposite relation between parameter and strategic purchasing

Indicates that after the analysis the parameter was excluded

4. Letter Sent to the Interviewees Prior to the Interviews

Dear SKF colleague,

My name is Fredrik and together with my colleague Victor we are conducting a research project on behalf of SKF Global Purchasing. The project is part of a master thesis and has been running since January, with a provisional deadline in the end of May.

As you are aware of SKF has introduced a seven-step purchasing process (strategic sourcing) in addition to the former three-step process (normal/conventional purchasing), which are both seen in the attached file. The research project that we are conducting is looking to develop a decision/filter tool that will identify when there is more potential to run the strategic sourcing process, which will be based on the characteristics of each category purchased. After having conducted two months of research, upon which we have successfully created a provisional decision-tool, it is now time to test and benchmark this against your experience and daily practice.

Our SKF-mentors view you as a valuable interview candidate and have provided us with your contact details. We would now kindly like to ask for a brief moment of your time. The interview will take between 30 to 45 minutes. Your time is greatly appreciated and is most valuable in the creation of this research.

The interview will be conducted over Webex and we kindly ask you to answer this email with a suitable time-slot for you, preferably between the 30th of March to the 8th of April.

(The supervisor for this project is Peter Smedberg and it is sponsored by Kristin Ang – Global Purchasing).

Normal/Conventional purchasing process vs. Strategic sourcing process

Best Regards,
Fredrik Peterson & Victor Jacobson

5. Coding of Interviews

INTERVIEWEE		1. STRATEGIC IMPORTANCE					2. SUPPLY COM		
		Cost	*Quality*	*Core Competence*	*Cost Saving*		*Entry Barriers*	*Uniqueness*	*Concentration*
R1	*Code:*	3	2	1	3	*Code:*	3	2	3
	Comment:	*Redan tidigt i ett projekt är det viktigt att sätta vad potentialen är... med andra ord är det en sådan här stor del utav kakan vi koncentrerar oss på och vi tror kunna uppnå en X% besparing.*	*För vissa kategorier skulle man kunna sätta denna som väldigt hög och för andra inte...*	*Jag vet fan inte riktigt vad det är ni menar med detta...* *Om jag tolkar den rätt så tänker jag att det är relaterat till förra punkten.... men jag har svårt att relatera till denna.*	*Det är viktigt att hålla koll på, vilket vi diskuterade i första parametern.*	*Comment:*	3 om vi pratar om integrering av nya suppliers in i SKF 1 om vi pratar om Kina exemplet, förstår inte hur det skulle påverka vår sourcing process. *Inte en jätte stark parameter* I en diskussion kring volatility in volume så kommer Jan in på barrier: *Amerikanska kunder kan kräva att komponenter är tillverkade i USA, om vi då inte har leverantörsstrukturen för det kan det vara jobbigt.*	*Eftersom att det går åt ganska mycket tid och resurser till att urforska leverantörsmarknaden i strategic sourcing så kan den parametern platsa lite högra. Det är självklart ett hot att ha för unika leverantörer.* *Om man ser till hotbilden ja*	*Denna måste vara på en hög podng för att köra strategic sourcing. Vi går mer åt att minimera antal supplier...på nästan alla kategorier* Det är absolut viktigt att fråga sig själv hur supply basen ser ut
R2	*Code:*	3	1	2	3	*Code:*	2	2 (omvänd)	2
	Comment:	Clear relation between money spent and 7 step. However, if the spend is low it will only make sense if it is a critical component for the company.	No! Because you have to do both processes in a professional way, both processes should bring a professional result. Quality is a must no matter what process you use.	If it is really critical, it is worth spending a lot of resources. Depends on what is the relation of the item to the SKF product.	For sure! Very related to the first point. 10 % of nothing is nothing and 10% of a lot of money is a lot.	*Comment:*	This will be easier with a simpler process. In general I would judge supply complexity as less important than the first point.	This would be easier to evaluate in a smaller project. Supplier with unique assets are suggesting for the shorter process.	In general this is not so important. It can be helpful to have a big project in both cases.
R3	*Code:*	1	1	3	1	*Code:*	3	3	
	Comment:	No, for me it's no impact.	I don't see any difference between the two processes here, should not affect the quality.	When you have a category which has a big impact on the offer to the customer, it should definitely be the seven step. Because you need to have a deep analysis of the category and the strategy.	No! But I am a bit confused. The question should be: do we need to run the full process to achieve the savings?	*Comment:*	Yes, especially, when you mention the cost of switching suppliers and entry barriers. The entry barrier in my category is very big because of missing documentation.	I assume you mean tools and assets. In my category we have, we don't know if SKF is the owner of the tool, this means that if we want to switch to another supplier you have to invest into a new tool, which can be a barrier for a new supplier.	
R4	*Code:*	1	2	3	3	*Code:*	2		
	Comment:	Ej viktig parameter. Trots att det är en kategori med enorm spend så kan besparing realiseras genom enkla sourcing processer. Det är en annan femma om vi pratar om ett område som har mycket spend men även är mycket känsligt. Då kan det vara läge med strategic sourcing. Om det är lite spend och mindre känsligt så är vanlig sourcing självklar!	Lite motsägande... "Utifrån ett inköpsperspektiv spelar det ingen roll om det är toalettpapper eller något annat. Kvalitetsspecen måste vara rätt utefter vad som behövs!". Sen: "Toalettpapper är enklare och mindre kritiskt, det ska inte vara mycket diskussion". Återigen, kvalitétspåverkan ska spela mindre roll mellan toapapper eller annat. MEN, marknaden är däremot enklare för toapapper = enklare process!	Det lutar mer åt att man alltid måste fråga sig själv varför man gör det man gör?	QCDM med stort C. Cost är det viktigaste. Sen beror det givetvis på ease of implementation. Istället för cost savings, vilket alltid är viktigt, handlar det mer om hur komplext det är att genomföra. Är det komplicerat blir det en längre process.	*Comment:*	Jan påpekar här att parametern (och delvis de andra parametrarna här) berör just ease of implemenation.		
R5	*Code:*	3	2	2	2		3	2 (omvänd)	3 (omvänd)
	Comment:	Generellt är 50% av kostnaden inköpt material och 50% är eget value added. Och för ringarna brukar de stå för halva materialinköpet, det vill säga 25%, så det är mycket. Det är nyttit att veta detta.	Det är viktigt. Det är stor skillnad om SKF värmebehandlar internt eller köper in färdigbehandlade produkter.	Om processen spelar roll är tveksamt, det beror på hur bra koll man har på sin lev. bas.	Du vet ju aldrig vad potential cost saving är innan du gjort det.		Ja, man måste övertyga fabriksinköparen, kvalite och tillverkningschefen. Därför ju mer man har på fötterna detså enklare blir det, och mer information får man genom sjustegsprocessen.	Om det är en unik leverantör, då är ofta marknaden väldigt lite, få spelare, och då behöver man inte gå sjustegaren.	Det är något man ska tänka igenom. Det är nog faktiskt viktigare att samla in mer information om det är många spelare på maknaden, sjustegaren.
R6	*Code:*	2->3	2	3 (omvänd)	3	*Code:*	3 (omvänd)	3 (omvänd)	3 (omvänd)
	Comment:	Hur kategorin påverkar produkten, eller? På en tatning kanske min kategory är 15% av kostnaden, liten. Det är en viktig vetskap att ha. Mäter du i kronor eller procent så slår det olika.	Både ja och nej, valideringsprocessen är ju redan spikad. Oavsätt vilken process så är det samma för mig.	Om det är en produkt som är betraktad som vår kärnverksamhet så behöver man inte göra en sjustegare. För då har man en så exklusiv skara av leverantörer som man känner så pass väl. Man går inte ut med det hemligaste kunnandet till okända leverantörer.	Det är nog den viktigaste. Om det spelar roll för vilken process... Jag tar ju hellre den korta processen med likvärdig besparing and den långa. Då får jag igenom besparingen fortare.	*Comment:*	Definitivt bra att tänka igenom. Jag tror att det är mer sjustegare på standardsortiment. För det är lite likt det här med kärnverksamhet, du känner till de speciellt produkterna och dess leverantörer bättre än massverksamheten.	Då beror det igen på vad vi köper. Om uniqueness är hög så är det mer mot en trestegare. Jag tycker ju lite att högvolym + lätta produkter är mer sjustegaren. Unika småvolymsprodukter är mer trestegaren för där är inte utbudet så stort.	Om det är många små tror jag det är viktigare att köra sjustegaren.
R7	*Code:*	3	2-	2	3	*Code:*	1+	1	1+
	Comment:	*Most important. We want to reach good savings and this is related to total spend!* Victor: Note that he is actually talking about the importance of savings (para. 4).	*More that if the quality is not there then of course strategic sourcing may become more important. However, we often consider that the quality is "perfect" and therefore it is less important.*	*For me it is important* Victor: However, no explanation	See also parameter 1 *The saving level is usually the starting point. We look at category spend and define a value, then we will work to reach that target.* *If there is a high potential of a large saving then we will have to launch a big project...usually.*	*Comment:*	*In all project I've been involved in we always realize that when we do market analyzis we have always forgotten some very interesting suppliers.* **Victor:** This really sounds like a misunderstanding of what we are talking about... Victor: Thierry seems to find it difficult to understand what is meant by this parameter... at least at the beginning	*I do not understand the question...* *If they are very unique it will be a monopolistic situation in which we do not prefer to be...*	*Not the best parameter because in a AEROSPACE project (which I am a part of now) we only consider the suppliers that the end suppliers believe are the best. The concentration of suppliers does not matter here.*
R8	*Code:*	3	2+	1	3	*Code:*	1+	3	2
	Comment:	*This is normally based on volume and if there is some sort of strategic point of view it should last for a longer time.*	*Goes along with cost.* If there is a high impact on quality we might have to be more thorough in how we choose suppliers. Normally, those products also have more complicated processes behind them, meaning that there is will be more difficult to swith suppliers. In such case the potential of other suppliers need more carefull investigation and development	*That is not an easy question and is quite difficult to answer*	We have ltd resources and therefore have to prioritize how to invest them most wisely		*Generally NO* *If anything it relates to timing. If we want to develop new suppliers and there is a limited situations on the market, then it might become more complex and a strategic sourcing process is needed.*	*The more unique the assets the mroe suitable to go for a strategic sourcing process* *This can also have a big influence on cost and savings*	In the end we are looking to the facts and figures

6. Questionnaire to for Suitable Sourcing Process

Decision Tool – Evaluation of Category to be Purchased

Purpose of the sourcing project? Cost ☐ Quality ☐ Risk ☐ Innovation

Total yearly spend of purchase……

	Low *1*	*2*	*3*	*4*	*5*	*High* *6*
Strategic Importance						
1. Extent to which purchase relate to core competence	○	○	○	○	○	○
2. Size of potential cost savings (absolute numbers)	○	○	○	○	○	○
Supply Complexity						
1. Entry barriers for new suppliers	○	○	○	○	○	○
2. Amount of potential suppliers	○	○	○	○	○	○
3. Cost of switching supplier	○	○	○	○	○	○
Customization						
1. Level of customization of products or services purchased	○	○	○	○	○	○
Supply Market Volatility						
1. Degree of volatility in price	○	○	○	○	○	○
2. Degree of volatility in volume	○	○	○	○	○	○
Technology Uncertainty						
1. Knowledge of products or services purchased by firm	○	○	○	○	○	○
2. Knowledge of technology used	○	○	○	○	○	○