STRATEGIC SOURCING DECISION MAKING
PARADIGM SHIFT FROM A TACTICAL WAY OF THINKING (COST SAVING) TO A STRATEGIC WAY OF THINKING (VALUE DRIVEN)

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Student number: 01202022
Supervisor: Prof. dr. Geert Poels
Advisor: Ms. Laleh Rafati

Master's Dissertation submitted to obtain the degree of:

Master of Science in Business Engineering

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Abstract

Strategic sourcing, being a part of procurement, is nowadays not just focused on costs savings but also on supporting the company in realizing its long-term goals. In this way, strategic sourcing has become a critical part of strategic management that is focused on a company’s sourcing decision making. A paradigm shift in strategic sourcing decision making from a tactical way of thinking focused on cost savings towards a strategic way of thinking focused on value is identified in the academic area.

In the real-world environment, strategic sourcing is currently still (mostly) driven by a tactical way of thinking focused on cost savings. This paradigm shift, only yet defined at a theory level, is not clear for practitioners, they do not understand what exactly cost saving strategic sourcing decision making is and what value driven strategic sourcing decision making is. Therefore, we define the following fundamental research question in this area: “What is the difference between cost saving strategic sourcing decision making and value driven strategic sourcing decision making?”

In this master dissertation, we confirm the paradigm shift based on literature review on strategic management and strategic sourcing. Next, to address this research question, we define the research objective to develop two models, one for cost saving and one for value driven strategic sourcing decision making. These models include different decision categories, questions, metrics and methods. After this, we describe how you can move from cost saving to value driven strategic sourcing decision making in a gap analysis. Finally, we apply a case study in Nokia to demonstrate the developed models and evaluate their correctness.
Foreword

Writing a master dissertation is the biggest challenge to obtain the certificate of a Business Engineer. This thesis would not be on point without the help of several people, in particular my advisor L. Rafati and Nokia for the company case study. I would like to take this opportunity to thank them all.

I want to thank my advisor L. Rafati for her help, feedback and guidance. Furthermore I want to thank L. Rafati and Prof. Dr. Geert Poels for providing me this subject. During my research, I developed a deep interest in strategic sourcing and will eventually search for a job in this area.

Finally I want to thank my boyfriend Vic, parents, sister, family and friends for all their support during difficult moments and for their believe in my skills.
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1. Introduction

The latest years, the area of supply chain management and the role of procurement within supply chain management itself has become more and more important. This increase in importance is due to global competition, availability of digital information, technological complexity and the need for a sustainable competitive advantage. (Castells, 1996; Erridge, 1995; Möller, Rajala & Svahn, 2005, p. 1274) Strategic sourcing, being a part of procurement, is now not just focused on costs savings but also on supporting the company in realizing its long-term goals. In this way, strategic sourcing has become a critical part of strategic management that is focused on a company’s sourcing decision making. (Rafati & Poels, 2015, p. 1; Weele, 2010) A paradigm shift in strategic sourcing decision making from a tactical way of thinking focused on cost savings towards a strategic way of thinking focused on value is identified in the academic area. On the one hand, the cost down thinking focuses on minimizing costs, competition with suppliers, and both sourcing department and overall company each trying to achieve their own goals independently. On the other hand, the value driven way of thinking focuses on the company’s capabilities and competencies, partnerships with suppliers and alignment of company’s and sourcing goals. (Axelsson, Rozemeijer & Wynstra, 2005; Cox, 2014; 2015) Strategic sourcing decision making is the scope of this master dissertation. Strategic sourcing decisions are, for example, make-or buy decisions and supplier selection.

The need to shift to value driven strategic sourcing decision making is only yet defined at a theory level. In the real-world environment, strategic sourcing is currently still (mostly) driven by a tactical way of thinking focused on cost savings. This paradigm shift is not clear for practitioners, they do not understand what exactly cost saving strategic sourcing decision making is and what value driven strategic sourcing decision making is. Some companies say they have value driven strategic sourcing decision making, but practically they only have cost savings strategic sourcing decision making. Therefore, we define the following fundamental research question in this area is: “What is the difference between cost saving and value driven strategic sourcing decision making?”

In this master dissertation, we want to illustrate this paradigm shift for practitioners by clearly defining what cost saving strategic sourcing decision making is, what value driven strategic
sourcing decision making is and how you can go from cost saving to value driven strategic sourcing decision making. For this reason, we aim to develop two separate models, one for cost saving and one for value driven strategic sourcing decision making.

This study is structured as follows. Initially, we propose a literature review on strategic management and strategic sourcing. After this, we present the research problem and solution and describe our research methodology, the design science research method. Next, we develop the models and describe how you can move from cost saving to value driven strategic sourcing decision making in a gap analysis. Furthermore, we apply a case study in Nokia to demonstrate the developed models and evaluate their correctness. In this case study, we observe if Nokia agrees with these models and how Nokia experiences the paradigm shift from cost saving to value driven strategic sourcing decision making. Finally, we elaborate our general conclusions and make suggestions for future research.
2. Literature Review

At the end of this literature study, we hope to have found the strategic importance of strategic sourcing to confirm and define the paradigm shift, based on existing research. In order to identify the strategic way of thinking in strategic sourcing, we will go through a certain number of steps. To start, we introduce the concepts of strategic management and the strategic decision making process, which is the domain in which we situate this master dissertation. After this, we will look into the process of procurement and strategic sourcing. Next, we will discuss the current trends in strategic sourcing decision making and identify strategic sourcing as critical part of strategic management. Then, we will elaborate on strategic sourcing decision makers and perspectives in strategic sourcing decision making. Finally, we look into different strategic sourcing methods and link these to either a tactical or strategic way of thinking.

2.1 Strategic management

David (2001) stated that strategic management can be defined as the art and science of formulating, implementing and evaluating cross-functional decisions that enable a company to achieve its goals. Key aspect of strategic management is achieving a sustainable competitive advantage. It is the superior long-term benefit obtained by the implementation of a unique, non-imitable value-creating strategy. Superior, in sense of creating more value than competitors. (Frynas & Mellahi, 2005)

Strategic decision making is the process itself of generating, implementing and controlling strategies so as to realize the goals. There are three levels of strategy: corporate, business and functional strategy. The corporate strategy defines in which industries and markets the company is going to compete. The business strategy defines how a company competes within a particular industry or market. The functional strategy defines the elaboration and implementation of business strategies through individual functions. The strategic decision making process declares the business strategy, thus the industry or market is already defined. (Grant, 2010)

The process can be subdivided into six steps and is visualized in Figure 1. The first step is the definition of the company’s vision, mission, values and goals. The second step is the situation analysis of a particular industry or market consisting out of an external and internal analysis. Opportunities and threats are obtained out of the external analysis and the strengths and weaknesses out of the internal analysis. In the external analysis, the environment can be studied
via a STEEP-analysis where social, technological, economic, ecological and political factors are taken into account. The suppliers, buyers, competitors, substitutes and new entrants can be linked in a Porter’s five forces model. In this model these five forces are expressed in terms of power or threat. The goal of this analysis is to assess the attractiveness of the business arena. In the internal analysis, the type of competitive advantage is identified: cost advantage or differentiation. One company possesses a competitive advantage over its competitors when it earns a persistently higher profit rate. Cost and differentiation advantages can be summarised by looking at their linkages with the activities of the company that stand behind their existence in a Porter’s value chain. In this value chain the companies’ activities are split up in primary and support activities to examine the sources of the competitive advantage. Resources and capabilities are the foundations of a sustainable competitive advantage. Those resources have to fulfil the features of the VRIN model to be strategically important. Following this model, resources have to be valuable, rare, inimitable and non-substitutable. The capabilities are the company’s ability to integrate different resources to achieve the defined goals. The VRIN resources and capabilities reinforce competencies. A competency is a unique company-specific ability to create value for its customers and so central to its strategy (in order to achieve a competitive advantage). For example, the combination of technology and innovation capability are the basis of a company’s product design skills.

The third step is the generation of strategic alternatives (strategies and strategic decisions). As a result of the second step, strategic alternatives can be generated on the basis of a SWOT analysis. In this analysis, the opportunities, threats, strengths and weaknesses from the external and internal analysis are put together. Strategies are developed based on fitting strengths and opportunities, exploiting strengths to minimize threats, acting on opportunities to improve weaknesses and avoiding weaknesses to eliminate threats. The generated alternatives can be assessed against two conditions: expected economic impact and expected implementation
problems. In this way, a roadmap is created. The strategic alternatives should be verified and checked on a quantitative basis.

The fourth step is the evaluation and choice of strategic alternatives. The fifth step is the implementation of the strategies. The last and sixth step is controlling if the chosen strategies realize the goals. If they do not, some adjustments in the previous steps have to be made. (Barney, 1991; Frynas & Mellahi, 2005; Grant, 2010; Porter, 1979; 2011; Rafati & Poels, 2014)

In what goes further, the focus lies on strategic sourcing as part of strategic management. As a consequence, we can define the strategic sourcing decision making process, which is the scope of this master dissertation. Goals become sourcing goals such as value driven goals, cost saving goals, long-term and short-term goals. Core competencies obtained out of the internal analysis are no longer only evaluated by the VRIN model but via spend analysis, capability analysis and cost-benefit analysis. Furthermore, strategic alternatives become strategic sourcing alternatives such as make- or buy decisions, supplier selections and outsourcing.

In the next paragraph we first explain the concepts of procurement and strategic sourcing, to situate this strategic sourcing decision making process.

### 2.2 Procurement and strategic sourcing

The supply chain process within a company is the starting point to define procurement and strategic sourcing. Supply chain is the whole process starting from getting an order from a customer till the customer receives its product. Procurement as a part of this process is focused on purchasing goods or services needed for the final product. Next to purchasing this department also consists of functions such as determining the need for purchasing, selecting suppliers, contracting, ordering and monitoring delivery and ensuring the payment. (Weele, 2010) In this way the procurement process can be subdivided in two major sub-processes: a strategic and an operational one (Figure 2). The first sub-process is sourcing, it includes spend analysis, strategic sourcing and contract management. Strategic sourcing is focused on choosing the right sourcing strategies, suppliers’ selection and the evaluation of suppliers’ performance relative to the company’s goals. The second sub-process is purchasing, consisting of all activities from purchasing to payment. (Rafati & Poels, 2016)
In the past, markets and distribution channels were regulated and resources were scarce and as a consequence companies were able to earn high profits by focusing on minimizing costs. (Doyle, 2000; Lindgreen & Wynstra, 2005, p. 732) These favourable circumstances are changing due to the need for a sustainable competitive advantage, changing markets, increasing importance of knowledge, technological complexity, global competition and availability of digital information. (Castells, 1996; Erridge, 1995; Möller, Rajala & Svahn, 2005, p. 1274) Due to this change, the latest years, supply chain management has become more important and so has procurement. Also, the role of procurement itself within supply chain management has increased. Strategic sourcing recognizes that procurement is not just a cost function, but also supports the company’s effort to realize its long-term goals. In this way strategic sourcing has become a critical part of strategic management that is focused on decision-making regarding a company’s procurement activities. (Rafati & Poels, 2015, p. 1; Weele, 2010) A paradigm shift in strategic sourcing decision making from a tactical way of thinking focused on cost savings towards a strategic way of thinking focused on value is identified in the academic area. The tactical way of thinking is not able to support the company’s effort to realize its long-term goals, such as value creation. It focuses on minimizing costs, competition with suppliers, and both sourcing department and overall company each trying to achieve their own goals independently. Tactical sourcing decisions are for example make-or buy the cheapest way and finding the cheapest supplier. The strategic way of thinking focuses on the company’s capabilities and competencies, partnerships with suppliers, and alignment of company’s and sourcing goals. (Axelsson, Rozemeijer & Wynstra, 2005; Cox, 2014; 2015) Sourcing contributes to the competitive advantage of the company through configuration of VRIN resources and capabilities within a changing environment. (Hill &Jones, 2012) Furthermore, value driven management is also able to support a company in enhancing value creation, increasing quality, mitigating risk, driving innovation and fostering long-term
partnerships. (Rafati & Poels, 2016, p. 7) Value driven sourcing decisions are for example strategic make-or-buy decisions, and supplier and buyer working together in the long term and co-creating value for each other. For example, just-in-time (JIT) production is implemented in more and more companies and as a consequence they encounter high pressure to stay competitive in the market. JIT is possible through close and joint-creation relationships with their suppliers and in this manner the responsibility of the purchasing managers gains importance. Executives have changed the way they think of the scope of sourcing within their company and identify opportunities in sourcing that can be a source of competitive advantage. (Kotabe & Murray, 2004)

**Strategic sourcing decision makers**

The main task of management, including top level but as well as middle, low and employee level, is to make the right decision about the right problem. A decision is an act requiring judgment of several alternatives, to bring a conclusive result. (Cornell, 1980, p. 9) A decision maker needs to make the trade-off between the benefits and costs, related to the decision alternatives. (Cornell, 1980) Strategic decision makers generate, evaluate and implement strategies obtained by following the strategic decision making process, described above. In the fourth step, they need to evaluate and choose between the different strategic alternatives retrieved from the previous steps in the process, for example, focus on low or high value segment. (Frynas & Mellahi, 2005) Strategic sourcing decision makers are in their turn strategic decision makers focused on sourcing decisions, such as make-or buy decisions or selection of suppliers. Different sourcing decision makers can be distinguished: chief procurement officers (CPO), chief strategic officers (CSO), strategic sourcing managers, category managers, product managers, purchasing managers and contract managers. These functions are having more and more responsibilities due to the increasing importance of procurement. In strategic way of thinking, the sourcing department supports the company’s long-term goals and therefore the CPO not only has to organize short-term but also long-term plans. (Rafati & Poels, 2015)

**Perspectives in strategic sourcing decision making**

Next to different decision makers, four different perspectives can be distinguished in strategic sourcing decision making: learning, relationship, planning and performance (Table 1).
### Perspectives in Strategic Sourcing Decision Making

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Focuses on Discovering Possibilities for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning</td>
<td>New products, services, and capabilities</td>
</tr>
<tr>
<td>Relationship</td>
<td>Selecting the right suppliers and evaluating their strategic and performance dimensions for short-term and long-term partnerships. New customers to create more value and innovation.</td>
</tr>
<tr>
<td>Planning</td>
<td>Identifying and aligning sourcing goals in order to realize long-term strategic goals.</td>
</tr>
<tr>
<td>Performance</td>
<td>Cost savings and value creation.</td>
</tr>
</tbody>
</table>

Table 1: Perspectives in strategic sourcing decision making

The decisions in these four perspectives are characterized by each being made by specific sourcing decision makers (listed above in strategic sourcing decision makers). Learning-oriented sourcing decisions are make-or-buy decisions and choosing right sourcing alternatives. These are made by strategic sourcing managers and capability sourcing analysts. Relational-oriented sourcing decisions are made by contract managers and chief procurement officers. The planning perspective decisions are executed by chief strategy officers and purchasing managers. The performance perspective is led by product managers and category managers. (Eltantawy, Giunipero & Handfield, 2014; Rafati & Poels, 2015)

### Strategic Sourcing Methods

In addition to the different perspectives, we identify different methods for effective strategic sourcing. More in particular, these methods help to decide how to attempt category management and develop sourcing strategies. The methods are explained in order of existence.

1. **Kraljic Purchasing Analysis or Purchasing Portfolio Analysis**

   This approach advises to examine supply market complexity and importance of a purchased item. Four sourcing strategies are proposed depending on this previous examination: strategic, leverage, bottleneck and non-critical. (Caniëls & Gelderman, 2005; Cox, 2014; 2015; Kraljic, 1983)

2. **Cox Power Analysis**

   This approach advises to examine the supplier power and buyer power. The main focus lies on the analysis between the buyer and all of the potential suppliers within a supply market. Four sourcing strategies are proposed depending on this previous examination: alliance
(interdependence), dependency (supplier dominance), leverage (buyer dominance) and market (independence). (Cox, 2001a; 2014; 2015)

3. Purchasing Chessboard

The Purchasing Chessboard is based upon the Kraljic Purchasing Analysis but uses also the four power positions from the Cox Power Analysis. This approach advises to examine the demand power and supply power. The same four sourcing strategies as Kraljic Purchasing Analysis are proposed: strategic, leverage, bottleneck and non-critical, each with 16 methods. (Cox, 2014; 2015; Schuh et al., 2008)

In the Kraljic Purchasing Analysis, only the importance of a purchased item is examined which results in a simplistic perception of category value. Managers perceive this category value as an optimistic way of saying that performance of procurement is now measured by cost savings and not as value for money from supply, which is strategically important to the company. Hence, sourcing decisions are made based on tactical management focused on cost savings rather than value driven management focused on value. (Cox, 2015) In this way, the listed methods relate to three subsequent steps in strategic sourcing driven by tactical spend management. The first step is determining the positioning of the purchasing categories by using the Kraljic Purchasing Analysis. A purchasing category is an assembly of goods and services with the same characteristics. Second is the determination of supplier-buyer dependency positioning by applying Cox Power Analysis. Third and last step is identifying purchasing strategies for the identified purchasing categories by using the Purchasing Chessboard. (Rafati & Poels, 2016)

Additionally, there was a focus on static forms of leverage: once the managers went through the sourcing decision-making and knew in which quadrant they were positioned they would not think about moving to another quadrant. But as Andrew Cox says: “Ultimate goal of buying activity is dynamic movement.” For this reason there has been a shift from static to dynamic forms of leverage. New methods were developed to answer to these needs. (Cox, 2014; 2015)

4. Criticality Analysis

This approach advises to examine operational criticality and commercial criticality. Four sourcing strategies are proposed depending on this previous examination: strategic critical, tactical critical, strategic and tactical. (Cox, 2014; 2015)
5. Cox Power Analysis

This approach is similar as the one described above with as difference, dynamic and static leverage instead of static leverage. A buyer should first examine the possibility to move dynamically to more favourable power positions, only if this is not possible the buyer can adapt static tactics. (Cox, 2001b; 2014; 2015)

6. Sourcing Portfolio Analysis

Sourcing Portfolio Analysis combines the criticality matrix and power matrix. This approach advises to examine the criticality of categories of supply and buyers & suppliers power positions. Sixteen strategies are proposed depending on this previous examination. (Cox, 2014; 2015)

In the Criticality Analysis, in contrast to the Kraljic Purchasing Analysis, it is now examined how value for money from supply can be realized. Hence, sourcing decisions are made based on strategic management focused on value. (Cox, 2015) In this way, these three last methods relate to three subsequent steps in strategic sourcing driven by value driven management. The first step is determining the capability positioning by using the Capability Criticality Analysis. Capabilities are the foundations of the long-term competitive advantage. Second is the determination of supplier-buyer dependency positioning by applying Cox Power Analysis. The two dimensions are measured by essentiality & substitutability, and capabilities, resources & competencies. Third and last step is identifying capability sourcing strategies by using the Sourcing Portfolio Analysis. (Rafati & Poels, 2016)

This proposition of theoretician Cox is an attempt of introducing the need of a paradigm shift in current thinking in strategic sourcing by providing some approach idea on methods focused on value for money from supply. Nevertheless, in the real-world environment, strategic sourcing is currently still driven by tactical spend management rather than value driven management. (Cox, 2015)


2.3 Research problem and solution

Based on the previous performed literature review, we identified a paradigm shift from a tactical way of thinking focused on cost savings to a strategic way of thinking focused on value in strategic sourcing decision making. The cost saving perspective is not sufficient anymore due to the need for a sustainable competitive advantage, changing markets, increasing importance of knowledge, technological complexity, global competition and availability of digital information. (Castells, 1996; Erridge, 1995; Möller, Rajala & Svahn, 2005, p. 1274) The need to shift to value driven strategic sourcing decision making is only yet defined at a theory level. In the real-world environment, strategic sourcing is currently still (mostly) driven by a tactical way of thinking focused on cost savings. This paradigm shift is not clear for practitioners, they do not understand what exactly cost saving strategic sourcing decision making is and what value driven strategic sourcing decision making is. Some companies say they have value driven strategic sourcing decision making, but practically they only have cost savings strategic sourcing decision making. There is a lack of definitions and techniques defining this value driven perspective and distinguishing it from the cost saving perspective. Therefore, we define the following, fundamental research question in this area: “What is the difference between cost saving strategic sourcing decision making and value driven strategic sourcing decision making?” The first step is to understand what cost saving and value driven strategic sourcing decision making is and how they differ.

In the next paragraphs, we aim to answer to this question by developing two models (representations), one defining cost saving and one defining value driven strategic sourcing decision making and by describing how you can shift from cost saving to value driven strategic sourcing decision making in a gap analysis. These models are graphical and verbal representations, or simplified versions, of two complex concepts, cost saving strategic sourcing decision making and value driven strategic sourcing decision making. The objectives of these models are first to simplify understanding by only using core and necessary components and deleting unnecessary components in strategic sourcing decision making. The necessary components in our models are: decision categories, questions, metrics and methods. Secondly, to support practitioners for right strategic sourcing decision making to select the right metrics and methods. Strategic sourcing decision making is a complicated phenomenon, including different
metrics and criteria. Therefore, these models only highlight core components of strategic sourcing decision making, one from a cost savings and one from a value driven viewpoint. (Dictionary, 2007)

In our models we define four sourcing decision categories covering the four perspectives in strategic sourcing decision making: learning, relationship, planning and performance. In each decision category, sourcing decisions are defined via specific questions and their sourcing metrics and methods. The decision categories are the same for both models, while the questions, metrics and methods are specific to each model. (Eltantawy, Giunipero & Handfield, 2014; Rafati & Poels, 2015)

2.4 Research methodology

The research methodology we follow is the Design Science Research method, which is used as a standard in Information Systems in order to construct new artefacts (constructs, models, methods) or improve existing ones. (March & Smith, 1995; Peffers et al., 2007) The artefacts of our research are the two models, the cost saving strategic sourcing decision making model and value driven strategic sourcing decision making model. Based on this methodology, four distinctive phases can be defined (Figure 3). (Peffers et al., 2007)
First, in the Problem Analysis Phase, we did an explorative literature review on strategic management and strategic sourcing to identify the research problem. The problem that the paradigm shift in strategic sourcing decision making is defined at a theory level but is not clear for practitioners, is explained in the beginning of the research problem paragraph. Secondly, in the Solution Analysis Phase, we propose a solution addressing the existing problem in strategic sourcing decision making. Solution objectives are defined in order to answer the research question, described above. We propose to design models for strategic sourcing decision making. Thirdly, in the Design Phase, we develop those models to show what cost saving and value driven strategic sourcing decision making is. In addition we perform a gap analysis to show how you can move from cost saving to value driven strategic sourcing decision making. We make a classification for decisions and define different decision categories, questions, metrics and methods based on both cost saving and value driven targets. These models are based on an extensive literature study conducted on cost saving and value driven targets in strategic sourcing decision making. We studied several theories, methods and techniques to distinguish between these two identified ways of thinking. Finally, in the Demonstration and Evaluation Phase, we use a real-world company case study to demonstrate the proposed models and evaluate their correctness. Nokia is approached to do this case study because its procurement department is of major importance. In this case study we observe upon which questions and metrics Nokia agrees and how Nokia experiences the paradigm shift from cost saving to value driven strategic sourcing decision making.
3. Models for representation of strategic sourcing decision making

In this part of this thesis master dissertation, we will develop two models, one for cost saving and one for value driven strategic sourcing decision making, and describe how you can move from cost saving to value driven strategic sourcing decision making in a gap analysis. In both models we focus on the following necessary components: decision categories, questions, metrics and methods. Those core components are represented as four layers. The first layer focuses on decision categories, by which we cover the four perspectives in strategic sourcing decision making: learning, relationship, planning and performance. The second layer are several specific questions that are asked per decision category and are classified within this layer per decision group. The third layer focuses on the sourcing metrics related to the specific questions. The fourth layer are the sourcing methods that can be applied to help answering a certain question. In each decision category, sourcing decisions are defined via specific questions and their corresponding sourcing metrics and methods. The decision categories are the same for both models, while the questions, metrics and methods are specific to each model. In the gap analysis, we will focus on analysing, for each decision category, what the major changes are in terms of decision domains.

3.1 Model for representation of strategic sourcing decision making from cost saving viewpoint

The cost saving strategic sourcing decision making model describes a company’s sourcing decisions focused on cost saving targets, taking a tactical management perspective and is visualized in Figure 4. This perspective focuses on minimizing costs, competition with suppliers to obtain lowest possible price, and both sourcing department and overall company each trying to achieve their own goals independently. (Axelsson, Rozemeijer & Wynstra, 2005) The figure does not include all questions, metrics and methods for the relationship decision category. In the following, we discuss the decision categories one by one. Per decision category, we will identify and define the sourcing methods, the specific questions and their corresponding sourcing metrics.
Figure 4: Cost saving strategic sourcing decision making model
3.1.1 Learning decision category
The learning decision category describes how much knowledge is used to create money in a company. It focuses on discovering the right mix of knowledge for new products and services. Learning-oriented sourcing decisions are make-or-buy decisions and choosing right sourcing alternatives. One sourcing method, the Kraljic Purchasing Analysis, is identified in this decision category. Kraljic Purchasing Analysis advices to examine the supply market complexity and the importance of the purchased item. Four sourcing strategies are proposed depending on this previous examination: strategic (focus on long-term alliances), bottleneck (focus on buffers against supply shortage), leverage (focus on ST regular market testing) and non-critical (focus on short-term functional efficiency). (Caniëls & Gelderman, 2005; Cox, 2014; 2015; Kraljic, 1983)

Making all products and service the company needs itself, is not the most optimal way of working. Next to new products and services, the company is advised to analyse all activities based mainly on costs in order to decide to insource, make it itself, or outsource, buy it from suppliers. By outsourcing, the company can concentrate on those products, services and activities made in-house, increase production efficiency, reduce its costs and increase flexibility (adapt to changes in customer’s needs). Therefore the following question is assessed, make-or-buy for in- or outsourcing? A distinction is made between activities, categories of spend and components. (Erridge, 1995; Ungson & Wong, 2008)

The first aspect in the make-or buy decision is activities, including for example product development, marketing, service, etc. and which can be evaluated by two sourcing metrics (Table 2).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production costs versus purchasing costs</td>
<td>The company should outsource an activity when the in-house production costs are higher than the purchasing costs. (Ungson &amp; Wong, 2008)</td>
</tr>
<tr>
<td>Production capacity</td>
<td>The company should outsource an activity when there is not (enough) production capacity available to perform this activity. (Ungson &amp; Wong, 2008)</td>
</tr>
</tbody>
</table>

Table 2: Metrics for make- or buy decision for activities
The second aspect we discuss in the make-or buy decision is categories of spend. A category of spend is an assembly of products and services with same price characteristics. The categories of spend can be assessed by two sourcing metrics (Table 3).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material costs as percentage of total costs</td>
<td>The company should buy a spend category when its-material cost as percentage of the total cost of the end product is high. A lower percentage can be obtained out of negotiation with potential suppliers. (Caniël &amp; Gelderman, 2005; Cox, 2014)</td>
</tr>
<tr>
<td>Profitability profile</td>
<td>The company should buy a category when its impact on profitability is high. For example, bottling equipment is acquired by breweries. (Caniël &amp; Gelderman, 2005; Cox, 2014)</td>
</tr>
</tbody>
</table>

Table 3: Metrics for make- or buy decision for categories of spend

The third aspect in the make-or buy decision is components, which are supplier’s products being a part of the buyer’s product. Components can be evaluated by four sourcing metrics (Table 4).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product’s stage in the technological life cycle</td>
<td>The company should buy a component when the component is in its advanced stage. When the component is still emerging, it should be produced in-house. (Cavusgil, Yaprak &amp; Yeoh, 1993)</td>
</tr>
<tr>
<td>Degree of product differentiation</td>
<td>The company should buy a component when the component’s differentiation is low and so is a standardised or undifferentiated component. The company should choose a supplier based on price. (Frynas &amp; Mellahi, 2000; Cavusgil, Yaprak &amp; Yeoh, 1993)</td>
</tr>
<tr>
<td>Level of price competition</td>
<td>The company should buy a component when the level of price competition in the market is high, resulting in suppliers lowering their prices against each other. (Cavusgil, Yaprak &amp; Yeoh, 1993)</td>
</tr>
<tr>
<td>Manufacturing costs as percentage of total costs</td>
<td>The company should buy a component when this percentage is high. The company will search for the best price and put potential suppliers under pressure. (Frynas &amp; Mellahi, 2005; Cavusgil, Yaprak &amp; Yeoh, 1993)</td>
</tr>
</tbody>
</table>

Table 4: Metrics for make- or buy decision for components
3.1.2 Relationship decision category

Each company needs to understand its industry environment so as to create value-adding strategies. From the viewpoint of a buying company, it stands in relation with its customers and suppliers, and needs to understand them. (Frynas & Mellahi, 2005) For each relation, different questions and sourcing metrics are determined. In this decision category, the following six sourcing methods are defined:

- Cox Power Analysis: advices to examine the supplier power and buyer power. The main focus lies on the analysis between the buyer and all of the potential suppliers within a supply market. Four sourcing strategies are proposed depending on this previous examination: alliance (interdependence), dependency (supplier dominance), leverage (buyer dominance) and market (independence). (Cox, 2001a; 2014; 2015)
- Porter’s Five Forces Model: distinguishes five different forces within a business arena: power of the buyer, power of the supplier, threat of substitutes, threat of new entrants and rivalry in the market. These forces are evaluated in order to assess the attractiveness of the business arena and the company’s competitive position. (Frynas & Mellahi, 2005; Porter, 1979; Ungson & Wong, 2008)
- Industry customer analysis: examines the position of the customers in the industry’s competitive environment. This customer knowledge helps to better understand the complexity of the market. (Parniangtong, 2016)
- Supply chain analysis: describes the company’s main activities and discovers the value added among those activities in the supply chain. The value added is the subtraction of the selling price of the output and cost of the input. This analysis helps to understand the company’s cost structure. (Frynas & Mellahi, 2005)
- Vendor appraisal: analyses potential suppliers via systematic investigation and assessment in order to meet to buyer’s requirements. (Erridge, 1995)

-Experience curve: examines the relation between the decrease in the supplier’s selling price and the increase in accumulated knowledge. The price will eventually decline over time at a constant rate, related to the gained knowledge. (Parniangtong, 2016)
**Buyer based decisions**

The buying company itself is concerned about its power relative to the supplier and should define it. The higher its power in making decisions, the better. In this way, the buyer has the ability to bargain and formulate favourable terms for himself. The question, **how much power has the buyer?** can be measured via nine sourcing metrics (Table 5).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative concentration</td>
<td>The buying power is higher when its business area is more concentrated than that of suppliers. This is the situation when few buyers are purchasing large quantities, for example supermarkets purchasing agricultural products from farmers. (Frynas &amp; Mellahi, 2005; Porter, 1980; Ungson &amp; Wong, 2008)</td>
</tr>
<tr>
<td>Product differentiation</td>
<td>The buying power is higher when the product differentiation of the supplier is low, offering standardised and undifferentiated products. In this case the buyer chooses his supplier based on price, for example supermarkets purchasing the cheapest unbranded goods. (Cox, 2014; Frynas &amp; Mellahi, 2005; Porter, 1980)</td>
</tr>
<tr>
<td>Buyer switching cost</td>
<td>The buying power is higher when its cost for switching from one supplier to another is low. For example, when buying airplane tickets with a limited budget, you just choose the cheapest provider. You won’t experience any cost for choosing another provider than the previous time. (Porter 1980; Ungson &amp; Wong, 2008)</td>
</tr>
<tr>
<td>Supplier’s product’s impact on the final performance of the buyer’s product</td>
<td>The buying power is higher when this impact is low. The buyer chooses his supplier based on price because the product won’t be of main quality importance to him. (Frynas &amp; Mellahi, 2005; Porter, 1980)</td>
</tr>
<tr>
<td>Ability of backward integration</td>
<td>The buying power is higher when they are able to integrate themselves backward, also called vertical integration. Here, the buying company is able to make the products itself, independently from suppliers, for example supermarkets having their own ‘white’ label. (Frynas &amp; Mellahi, 2005; Porter, 1980)</td>
</tr>
<tr>
<td>Clear information about the suppliers’ products</td>
<td>The buying power is higher when they have all the information about the products, the costs and selling prices. In this way, the buyer knows how far he can go in negotiating lower prices. (Porter, 1980; Ungson &amp; Wong, 2008)</td>
</tr>
</tbody>
</table>
Cost of the supplier’s product as % of the total cost of the end product

The buying power is higher when this cost is a high percentage of the total cost. The price of the product is then important and the buyer searches for the supplier offering the lowest price and eventually negotiates for even a lower price. This is for example the case in the car industry where all the components are a high percentage of the total cost. (Frynas & Mellahi, 2005; Porter, 1980)

Attractiveness of the buyer’s account to supplier

The buying power is higher when suppliers really want you as buyer. (Cox, 2014)

Buyer search costs

The buying power is higher when its search, transaction and negotiation costs in finding alternative suppliers are low. (Cox, 2014)

Table 5: Metrics for how much power has the buyer

Customer based decisions

The buying company has in its turn also customers or people who buy and use the offered products or services. The focus lies on deciding whether or not to get a certain customer. It is important to know who your (potential) customers are in order to better understand the complexity of the market. We assess the question, who is the new customer? via three sourcing metrics (Table 6).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer needs</td>
<td>Different customers have different needs, for example reduce the time to cook a healthy meal or improve skin texture. The company must clearly understand how products can answer those needs and fit in their lifestyles. (Grant, 2010)</td>
</tr>
<tr>
<td>Customer segment</td>
<td>The market can be split up in different customer segments, consisting out of customers having the same needs, in order to determine which segments you want to target. Segments can be defined based on descriptive and behavioural characteristics. (Kotler &amp; Keller, 2012)</td>
</tr>
<tr>
<td>Acquisition cost</td>
<td>The cost you need to make to attract and gain a prospect. It includes the cost for defining customer needs and customer segments you want to target. (Kotler &amp; Keller, 2012)</td>
</tr>
</tbody>
</table>

Table 6: Metrics for who is the new customer
Supplier based decisions

The buying company stands as well in relation to its suppliers who deliver the requested activities/products/components. The buying power depends on the power of the supplier, competition in the supply market, the threat of entrants in the supply market and the threat of substitutes of the supplier’s products. In addition, supplier based decisions are listing potential suppliers and eventually selecting the best-in-class supplier.

The lower the power of the supplier, the higher the power of the buyer and the better for the buying company. Therefore, the following question is evaluated, how much power has the supplier? Nine sourcing metrics can be used to evaluate the power of the supplier. The first seven sourcing metrics mentioned for buying power can be used in the same way in this case, more specifically: relative concentration, product differentiation, buyer switching costs, supplier’s product’s impact on the final performance of the buyer’s product, buyer’s characteristics(backwards integration, clear information) and cost of the supplier’s product as % of the total cost of the end product. The two new sourcing metrics are explained below (Table 7).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attractiveness of the supplier’s account to</td>
<td>The supplying power is lower when buyers are not determined to have you as their supplier. (Cox, 2014)</td>
</tr>
<tr>
<td>the buyer</td>
<td></td>
</tr>
<tr>
<td>Supplier switching costs</td>
<td>The supplying power is lower when its cost for switching from one buyer to another is high. Switching costs include financial and physical costs such as breaking a legal contract, educate your employees again from the start, the end of a supplier-buyer relationship and a bad reputation. (Cox, 2014; Frynas &amp; Mellahi, 2005; Porter, 1980)</td>
</tr>
</tbody>
</table>

Table 7: Metrics for how much power has the supplier

The buying power is also higher when the competition between the suppliers is high. Supplying companies compete on prices, quality, technology and new research and developments, resulting in lower profits. The question, how intensive is the competition in the supply market? can be measured by seven sourcing metrics (Table 8).
<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market growth</td>
<td>The competition between suppliers is more intense when the market growth is low. This is the case when a certain product matures or declines in its product life cycle. The demand for this product is then increasing slowly. As a consequence, suppliers compete very harshly over their existing buyers. (Frynas &amp; Mellahi, 2005; Porter, 1980; Ungson &amp; Wong, 2008)</td>
</tr>
<tr>
<td>Industry concentration</td>
<td>The competition between suppliers is more intense when the industry concentration is high. A high number of suppliers are then competing in the market. If one of them starts lowering his prices, all the others are obliged to follow him. (Frynas &amp; Mellahi, 2005; Porter, 1980)</td>
</tr>
<tr>
<td>Diversity of competitors</td>
<td>The competition between suppliers is more intense when they are all very different, intensifying the competition. The suppliers differ in way of thinking about competition, having different strategies, vision, objectives, origin, personality and resources. (Frynas &amp; Mellahi, 2005; Porter, 1980; Ungson &amp; Wong, 2008)</td>
</tr>
<tr>
<td>Product differentiation</td>
<td>The competition between suppliers is more intense when their product becomes a commodity. Suppliers are obliging each other to lower their prices. (Frynas &amp; Mellahi, 2005; Porter, 1980)</td>
</tr>
<tr>
<td>Excess capacity</td>
<td>The competition between suppliers is more intense when there is excess capacity. Over-capacity can occur due to a decrease in demand during an economic depression, large production capacities typical to a specific business arena and investing more money into the assets than needed. (Frynas &amp; Mellahi, 2005; Porter, 1980)</td>
</tr>
<tr>
<td>Exit barriers</td>
<td>The competition between suppliers is more intense when there are many exit barriers, making it harder for the suppliers to leave the market. In this case, the cost is higher to leave the market than staying in the market. Examples of exit barriers are fixed costs of exit (dismissing employees), emotional barriers (supplier-buyer relationships) and government restrictions. (Frynas &amp; Mellahi, 2005; Porter, 1980; Ungson &amp; Wong, 2008)</td>
</tr>
<tr>
<td>Fixed cost structure</td>
<td>The competition between suppliers is more intense when their fixed costs are a high percentage of their total costs. It is too costly to reduce production and suppliers start producing too much, resulting in excess capacity and lower prices.</td>
</tr>
</tbody>
</table>
When the potential of new suppliers entering the market is high, the power of the buyer increases. New suppliers are attracted to industries where invested capital is effectively used, especially when they are in their growth phase. Therefore, the following question is assessed, **is there a potential for new suppliers to enter the market?** via six sourcing metrics (Table 9).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economies of scale</td>
<td>New potential suppliers are more likely to enter the market when there are no economies of scale. In this situation, existent suppliers do not have a lower production cost as result of higher production rate. Therefore, the new potential suppliers do not have to enter the market on a large scale and do not experience any cost disadvantage. (Porter, 1980; Ungson &amp; Wong, 2008)</td>
</tr>
<tr>
<td>Capital requirements</td>
<td>New potential suppliers are more likely to enter the market when there are low capital requirements. This depends on the industry and the corresponding needed assets. (Frynas &amp; Mellahi, 2005; Porter, 1980)</td>
</tr>
<tr>
<td>Brand identity</td>
<td>New potential suppliers are more likely to enter the market when the need for brand identity is low. They won’t have to spend a fortune on advertising to build their brand and gain customers’ trust. (Frynas &amp; Mellahi, 2005; Porter, 1980)</td>
</tr>
<tr>
<td>Switching costs for buyers</td>
<td>New potential suppliers are more likely to enter the market when those costs are low. Buyers can easily go from an existent supplier to a new one. (Porter, 1980; Ungson &amp; Wong, 2008)</td>
</tr>
<tr>
<td>Access to distribution channel</td>
<td>New potential suppliers are more likely to enter the market when there is an easy access to the distribution channel. In this case, distribution channels do not have limited space and the distributors themselves are willing to trade new products and to set up deals with new suppliers. (Frynas &amp; Mellahi, 2005; Porter, 1980)</td>
</tr>
<tr>
<td>Cost disadvantage</td>
<td>New potential suppliers are more likely to enter the market when they do not experience a cost disadvantage. Existent suppliers do not have patented know-how or proprietary inputs. (Porter, 1980; Ungson &amp; Wong, 2008)</td>
</tr>
</tbody>
</table>
The power of the buyer is higher when the supplier’s products are easily substitutable or interchangeable. The question, **can the existing supply offering be replaced with substitute products or services?** is assessed via three sourcing metrics (Table 10).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switching cost</td>
<td>Supplier’s products are easily substitutable when switching costs are low between existing and substitute supplier’s products. (Porter, 1980; Ungson &amp; Wong, 2008)</td>
</tr>
<tr>
<td>Price difference</td>
<td>Supplier’s products are easily substitutable when the substitutes offer a lower price. (Frynas &amp; Mellahi, 2005; Porter, 1980)</td>
</tr>
<tr>
<td>Performance difference</td>
<td>Supplier’s products are easily substitutable when the substitutes offer the same or higher performance. (Frynas &amp; Mellahi, 2005; Porter, 1980)</td>
</tr>
</tbody>
</table>

Table 10: Metrics for can the existing supply offering be replaced with substitute products or services

After general investigation of the supply market, the buyer should make lists of potential suppliers based on more detailed analyses. We assess the question, **who are my potential suppliers?** and can be measured via four sourcing metrics (Table 11). After having measured these metrics, those metrics should be defined as the extent to which the supplier matches the buyer’s requirements and the buyer should list those ones that match best.

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial viability</td>
<td>Performance measures such as profit margin, annual turnover, return on investment, liquidity ratio, sales, profit and debt ratio are examined in order to estimate the risk of choosing that particular supplier. This is especially important when the supplier’s product is of main importance to buyer’s end product. (Erridge, 1995)</td>
</tr>
<tr>
<td>Management structures</td>
<td>Every company has its own management structure representing the way in which all the activities are led and by whom. (Erridge, 1995)</td>
</tr>
<tr>
<td>Product costings</td>
<td>Quantitative analysis of every resource used in the supplier’s product is performed in order to gain understanding of aggregated total cost. (Erridge, 1995)</td>
</tr>
<tr>
<td>Production and quality processes</td>
<td>Examination of the supplier’s main activities related to the wanted product and comparison to buyer’s requirements. (Erridge, 1995; Frynas &amp; Mellahi, 2005)</td>
</tr>
</tbody>
</table>

Table 11: Metrics for who are my potential suppliers
Once the potential suppliers are listed, your best supplier is determined via assessment of four other performance criteria measuring the following question, **who is the best-in-class supplier?** (Table 12) After having measured these criteria, those metrics should be defined as the extent to which the supplier matches the buyer’s requirements and the buyer should select the supplier that matches the best.

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>The direct product costs required by the supplier depend upon the competitiveness in the market and can result sometimes in higher or lower prices than competition. The price does also rely on changes in the market. (Erridge, 1995; Ulaga, 2003)</td>
</tr>
<tr>
<td>Product quality</td>
<td>One viewpoint is the technical performance and can be determined by the ratio of actual performance to the specification. Another viewpoint of the quality refers to the reliability measured by the number of defects and amount of returns from buyers. (Erridge, 1995; Ulaga, 2003)</td>
</tr>
<tr>
<td>Delivery time</td>
<td>On-time delivery of the products is evaluated next to the accuracy of the delivery in terms of correct quantity and rights products. (Erridge, 1995; Ulaga, 2003)</td>
</tr>
<tr>
<td>Service</td>
<td>The after-sales service related to the product such as product warranty and availability of reserve products. (Erridge, 1995; Ulaga, 2003)</td>
</tr>
</tbody>
</table>

Table 12: Metrics for who is the best-in-class supplier

In addition, these four metrics are elements of the total cost of ownership (TCO). This is the true cost of buying from a supplier, by including more than only the price. TCO is thus a good comprehensive metric for supplier selection. A subdivision can be made between monetary-based TCO and value-based TCO. Monetary-based TCO allocates the costs to those four TCO elements. Value-based TCO combines cost and qualitative data. It decides upon the weight on each element in the TCO and then allocates points to those elements. In addition to the supplier selection decision, this TCO is further explained in the next two decision categories under procurement based decisions to measure all purchasing costs in order to set the procurement’s goal and to see if the procurement’s goal is met. (Ellram, 1995)
### 3.1.3 Planning decision category

The planning decision category focuses on defining decisions related to the general goals and strategy of the company and specific goals of the procurement department. Therefore, a distinction is made between general management and procurement based decisions and different questions and sourcing metrics can be determined. In this decision category, the following two sourcing methods are defined:

- **SWOT analysis**: the company’s external properties, opportunities and threats and internal properties, strengths and weaknesses, are put together and evaluated in this framework. Strategic alternatives can be generated on the basis of this analysis. (Grant, 2010; Kotler & Keller, 2012)
- **Purchasing Chessboard**: is based upon the Kraljic Purchasing Analysis but uses also the four power positions from the Cox Power analysis. This approach advises to examine the demand power and supply power. The same four sourcing strategies as Kraljic Purchasing Analysis are proposed: strategic, leverage, bottleneck and non-critical, each with 16 methods. (Cox, 2014; 2015; Schuh et al., 2008)

#### General management based decisions

General management is focused on deciding on general company goals and the strategy of the company. The goals of the management are in cost saving strategic sourcing, short-term oriented. The answer to the question, **what are the company's short-term goals?** defines this short-term view, as managers only focus on increase in profit (revenues minus costs). To calculate this increase, one should subtract the profit from the previous year (quarter) from the profit of the current year (quarter). It can also be measured via the two following sourcing metrics (Table 13).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue growth</td>
<td>This is the increase in sales over time, where sales are defined as the quantity sold times the price per quantity. (Ungson &amp; Wong, 2008)</td>
</tr>
<tr>
<td>Cost savings</td>
<td>The savings are the amount of costs you saved by acting on a certain opportunity. For example, when the production of certain components is outsourced, the competition between suppliers increases and the costs reduce. (Frynas &amp; Mellahi, 2005; Pandit &amp; Marmanis, 2008)</td>
</tr>
</tbody>
</table>

*Table 13: Metrics for what are the company's short-term goals*
After having set the short-term goals, the management team of the company has to start working on how to achieve those goals via a well-defined strategy. We assess the question, **what is the company's short-term strategy?** via four sourcing metrics (Table 14). First, revenues and costs should be broken down into quantity, revenue per unit, fixed cost, variable and cost per unit. Next, the strategy is developed based on analysis of the company’s external business- and internal environment. (Frynas & Mellahi, 2005) It is generated by focusing on one or two of the following four matches: fitting strengths and opportunities, exploiting strengths to minimize threats, acting on opportunities to improve weaknesses and avoiding weaknesses to eliminate threats. For example, revenue growth through growth in quantity (strength) by entering a new market (opportunity).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities</td>
<td>The external characteristics of the market environment, such as a certain customer need on which the company can act. Three sources of market opportunities can be identified: offer a product short in supply, offer an existing product in a new manner and offer a completely new product. (Kotler &amp; Keller, 2012)</td>
</tr>
<tr>
<td>Threats</td>
<td>The external characteristics of the market environment, such as trends or developments that would lead to performance deterioration when no action is undertaken. For example, new technologies that might impact your offering negatively or new regulations. (Kotler &amp; Keller, 2012)</td>
</tr>
<tr>
<td>Strengths</td>
<td>The company’s capabilities and resources are internal characteristics of the company. For example, specialized marketing expertise, a new and innovative product or service, and excellent quality of offering. (Kotler &amp; Keller, 2012)</td>
</tr>
<tr>
<td>Weaknesses</td>
<td>The company’s weaknesses and capability gaps are internal characteristics of the company. For example, a lack of marketing expertise, an undifferentiated product or service, and poor quality of offering. (Kotler &amp; Keller, 2012)</td>
</tr>
</tbody>
</table>

Table 14: Metrics for what is the company's short-term strategy

**Procurement based decisions**

The short-term goals for procurement slightly differ from those ones of the general management. The answer to the question, **what are the short-term goals in sourcing?** is cost reduction.
procurement department is focused on minimizing its costs related to their suppliers. For example, cost savings are realized when the production of certain components is outsourced and the competition between suppliers increases, which lowers the costs. (Frynas & Mellahi, 2005; Pandit & Marmanis, 2008) Both general management and procurement goals are short-sighted on financial statements, supporting operational requirements and managing the sourcing process efficiently and effectively. (Axelsson, Rozemeijer & Wynstra, 2005) To calculate this decrease in costs, one should subtract the costs from the previous year (quarter) from the costs of the current year (quarter). The costs can be measured via the two following sourcing metrics (Table 15).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing expenditure</td>
<td>The total cost of ownership (TCO) consisting of the sum of the purchase price, transaction costs and overhead costs related to the products that are acquired. In other words, the composition of pre-transaction, transaction and post-transaction costs. This purchasing expenditure can be diminished by certain practises such as negotiation tactics, volume bundling and standardization of products. (Axelsson, Rozemeijer &amp; Wynstra, 2005; Parniangtong, 2016)</td>
</tr>
<tr>
<td>Capital investment</td>
<td>The net capital employed corresponds to working capital, or current assets minus current liabilities. When the working capital is positive, long-term debt or equity are needed as working capital is a long-term investment. The capital investment can be lowered by just-in-time management (reducing inventory) and vendor-managed inventory schemes. (Axelsson, Rozemeijer &amp; Wynstra, 2005)</td>
</tr>
</tbody>
</table>

Table 15: Metrics for what are the short-term goals in sourcing

3.1.4 Performance decision category

After having analysed the learning, relationship and planning perspective of the buying company, the fourth and last decision category is the performance decision category. Performance is related to evaluation if the buyer’s goals are met. Therefore, costs and benefits based decisions are described via specific questions and their corresponding sourcing metrics. The following two sourcing methods can be used to analyse this decision category:
- Cost-benefit analysis: measures the costs and benefits of a certain decision to conclude if the benefits exceed the costs and to compare with other decisions. (Eldenburg, 2016)
- **Spend analysis**: systematic analysis of all purchasing data of the company in order to identify opportunities to realize savings in the total spend. For example, when the spending for a supplier of products of low impact on final performance of the buyer’s product is high relative to a supplier of products of high impact, lower prices should be negotiated. (Pandit & Marmanis, 2008)

**Benefit based decisions**

The evaluation of the realization of the general management’s short-term goal is based on actual profit. Therefore the following question, **how much profit is captured?** is measured via four sourcing metrics. Revenue growth and cost savings are defined correspondingly to the metrics for the general management short-term goals in the planning decision category. The two new sourcing metrics are explained below (Table 16).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on equity</td>
<td>ROE measures how well the owner’s capital is used by management to realize profit. (Parniangtong, 2016; Ungson &amp; Wong, 2008)</td>
</tr>
<tr>
<td>(ROE)</td>
<td></td>
</tr>
<tr>
<td>Return on assets</td>
<td>ROA measures how well the total assets are used by management to realize profit. (Parniangtong, 2016; Ungson &amp; Wong, 2008)</td>
</tr>
<tr>
<td>(ROA)</td>
<td></td>
</tr>
</tbody>
</table>

*Table 16: Metrics for how much profit is captured*

**Cost based decisions**

The procurement’s short-term goal is assessed on the basis of the actual cost via the question, **how much is the total cost spent and for what?** Two sourcing metrics are used to evaluate the actual cost. The sourcing metrics mentioned for the short-term goals in sourcing in the planning decision category can be adopted in the same way in this case, more specifically: total cost of ownership (purchasing expenditure) and capital investment. To identify what the costs are made for, it is important to break down these metrics to their components. (Axelsson, Rozemeijer & Wynstra, 2005; Parniangtong, 2016)
3.2 Model for representation of strategic sourcing decision making from value driven viewpoint

The value driven strategic sourcing decision making model describes a company’s sourcing decisions focused on value driven targets and is visualized in Figure 5. This model takes a value driven management perspective on how sourcing is remodelled into a core business process. (Laseter, 1998) This perspective focuses on the company’s capabilities and competencies, partnerships with suppliers as to create value for both parties, and alignment of company’s and sourcing goals. (Axelsson, Rozemeijer & Wynstra, 2005) Sourcing decisions are in this case strategic decisions made by the company’s integrated management. They are linked to the formulation of the corporate strategies in order to contribute to the competitive advantage through configuration of resources and capabilities within a changing environment. (Hill &Jones, 2012) Furthermore, value driven management is also able to support a company in enhancing value creation, driving innovation, increasing quality, mitigating risk and fostering long-term partnerships. (Rafati & Poels, 2016, p. 7) The figure does not include all questions, metrics and methods for the relationship decision category.

In the following, we discuss the decision categories one by one. Per decision category, we will identify and define the sourcing methods, the specific questions and their corresponding sourcing metrics.
Figure 5: Value driven strategic sourcing decision making model
3.2.1 Learning decision category

The learning decision category describes how much knowledge is used to create money in a company. The competitive advantage is achieved by developing learning capabilities as to innovate and adapt to future changes. (Ungson & Wong, 2008) Learning-oriented sourcing decisions are make-or-buy decisions and choosing right sourcing alternatives. One sourcing method, the capability criticality analysis, is identified in this decision category. Capability criticality analysis advises to examine operational criticality and commercial criticality. Four sourcing strategies are proposed depending on this previous examination: strategic critical, tactical critical, strategic and tactical. (Cox, 2014; 2015)

Next to the evaluation of the costs of products, services and activities (cost saving strategic sourcing decision making model), a company should also take into account its strategic importance to decide where to focus on. (Frynas & Mellahi, 2005) Typically products, services and activities not closely connected to the company’s strategy are outsourced. In this way, the company can concentrate on its core competencies, which are those unique company-specific abilities to create value for its customers. The company is then better able to focus on value creation instead of on cost reduction. (Schilling, 2013) Three conditions must be fulfilled to be a core competency: adding significant value to the market offering, help the company move across multiple markets and performed at superior level that very few companies can emulate. (Kothandaraman & Wilson, 2001, p. 381) Furthermore the linkages in the company’s strategic structure themselves are crucial, more specifically how exactly an activity is connected to the company’s strategy or competitive advantage. (Ungson & Wong, 2008, p. 257) This characteristic is unique for each company. To describe the sourcing decision, the following question is assessed, **make-or-buy for in-or outsourcing?** A distinction is made between activities, categories of supply and items.

The first aspect in the make-or buy decision is activities, including for example product development, marketing, service, etc.. The strategic importance of activities can be evaluated by three sourcing metrics (Table 17).
### Metrics

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier’s competences versus</td>
<td>When the company’s competences fall behind those of the supplier, the company should outsource the activity or acquire knowledge to become as good as the supplier. (Iyer, 1996)</td>
</tr>
<tr>
<td>company’s competences</td>
<td></td>
</tr>
<tr>
<td>Company’s need to build competences for</td>
<td>The company should outsource the activity when it does not need to build competences for this activity in the future. When it does need to build those competences, a detailed assessment is required to determine to which extent the competences can be internalized. (Iyer, 1996)</td>
</tr>
<tr>
<td>this activity for the future</td>
<td></td>
</tr>
<tr>
<td>Easiness to acquire competences</td>
<td>The company should outsource the activity when it is hard to acquire those competences. When this is easy, the cost and benefits of in-house production should be assessed. (Iyer, 1996)</td>
</tr>
</tbody>
</table>

**Table 17: Metrics for make-or buy decision for activities**

The second aspect we discuss in the make-or buy decision is categories of supply which are products/services classified based on their ability to achieve overall strategic goals commercially and operationally. (Cox, 2014) This decision should be based on the relative significance of a category of supply in achieving its commercial and operational goals. The strategic importance of categories of supply can be assessed by four sourcing metrics (Table 18).

### Metrics

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational criticality</td>
<td>Comparison of the company’s technical competence against that of the supplier in terms of relative impact of the category on quality, functionality, delivery and service. (Cox, 2014)</td>
</tr>
<tr>
<td>Commercial criticality</td>
<td>Comparison of the company’s commercial competence against that of the supplier in terms of relative impact of the category on total cost of ownership, revenue generation and profitability. (Cox, 2014)</td>
</tr>
<tr>
<td>Impact on the sustainability of revenue</td>
<td>When the company outsources its category of supply, there is a potential risk of impact on the sustainability of revenue generation. This aspect should be taken into account when assessing the operational and commercial criticality. (Cox, 2014)</td>
</tr>
<tr>
<td>generation</td>
<td></td>
</tr>
</tbody>
</table>
Threat of post-contractual lock-in by a potential supplier

When the company outsources its category of supply the potential risk exists of being locked-in by the supplier. This aspect should be taken into account when assessing the operational and commercial criticality. (Cox, 2014)

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total item value</td>
<td>The criticality of the item is low when its total value is low. (Parniangtong, 2016)</td>
</tr>
<tr>
<td>Impact on product/service quality</td>
<td>The criticality of the item is low when its impact on the total product/service quality is low. (Parniangtong, 2016)</td>
</tr>
<tr>
<td>Impact on business growth</td>
<td>The criticality is low when its impact on the company’s business growth is low. (Parniangtong, 2016)</td>
</tr>
<tr>
<td>Impact on qualitative factors</td>
<td>The criticality of the item is low when its impact on qualitative factors such as safety and environment are low. (Parniangtong, 2016)</td>
</tr>
</tbody>
</table>

The third aspect in the make-or buy decision is items (components), which are supplier’s products being a part of the buyer’s product. Items can be evaluated by four sourcing metrics. The company should outsource the item when its criticality is low, which is described by the four factors beneath (Table 19).

3.2.2 Relationship decision category

Each company needs to understand its industry environment so as to create value-adding strategies. From the viewpoint of a buying company, it stands now not only in relation with their customers, suppliers but also with their competitors and complementors and needs to understand them. (Frynas & Mellahi, 2005) The company sustains those relationships through partnering with these actors in value creation by achieving common goals. (Ungson & Wong, 2008) For each relation, different questions and sourcing metrics and methods are determined. In this decision category, the following three sourcing methods are defined:

- Cox power analysis (dynamic): This approach is similar as the one described in the cost saving strategic sourcing decision making model with as difference, including both dynamic and static
leverage instead of only static leverage. A buyer should first examine the possibility to move dynamically to more favourable power positions, only if this is not possible the buyer can adapt static tactics. (Cox, 2001b; 2014; 2015)

- Value net analysis: visualizes the different players, i.e. the buying company, customers, suppliers, competitors and complementors and their relationships to one another. This analysis helps to identify which players and relationships add most value to the business. A strategy for every relationship is required to be developed by the buying company. (Nalebuff, 1996; Nalebuff & Brandenburger, 1997)

- Benchmark: analyses the different processes applied in the industry based on performance and imitability to find the best processes. Next, these processes are implemented within the company in order to realize higher performance. (Frynas & Mellahi, 2005)

**Competitor based decisions**
The buying company stands in relation with its competitors. It is essential to know who your competitors are in order to decide upon building the right kind of relationship with them. Firstly, it is important to know who the competitors are in order to better understand them. For example, Compaq and Dell compete on the latest Intel chip. We measure the question, **who are my competitors?** via two sourcing metrics (Table 20).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer value</td>
<td>When customers also have another player’s product on top of your product, your product is less valued compared to having your product alone. The other player is in this case your competitor. (Nalebuff, 1996; Nalebuff &amp; Brandenburger, 1997)</td>
</tr>
<tr>
<td>Attractiveness for a supplier to provide resources</td>
<td>When a supplier is also providing another player, it is less attractive for the supplier to provide resources to you compared to only providing you. The other player is in this case your competitor. (Nalebuff, 1996)</td>
</tr>
</tbody>
</table>

*Table 20: Metrics for who are my competitors*

Secondly, once the competitors are known, it is important to assess the question, **what is the relationship between company and competitor?** Four types of relationships can be distinguished: coexistence, cooperation, competition or co-opetition. Coexistence occurs when the company and competitor don’t make an economic deal. (Bengtsson & Kock, 1999)
cooperation they focus on achieving common goals together while in competition they focus on achieving both their own goals. In co-epetition the company and competitor both compete and cooperate at the same time. (Bengtsson & Kock, 2000) This question can be measured via seven sourcing metrics (Table 21).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic, information and social exchange</td>
<td>There is no economic but only an information and social exchange in coexistence, while there is an economic and non-economic exchange in cooperation and competition. (Bengtsson &amp; Kock, 1999)</td>
</tr>
<tr>
<td>Interaction</td>
<td>There is no interaction between the company and competitor in coexistence, while there is in cooperation and competition. (Bengtsson &amp; Kock, 1999)</td>
</tr>
<tr>
<td>Power</td>
<td>Power depends on the strength of all competitor’s positions in the network and their connectedness. (Bengtsson &amp; Kock, 2000)</td>
</tr>
<tr>
<td>Dependence</td>
<td>It is measured via heterogeneity in resources and closeness of an activity to the customer. First unique resources are for both cooperation and competition an advantage. Secondly, an activity is close to the customer in competition, while far from the customer in cooperation. (Bengtsson &amp; Kock, 2000)</td>
</tr>
<tr>
<td>Conflicts</td>
<td>Conflicts are rare in cooperation and frequent in competition. (Bengtsson &amp; Kock, 1999)</td>
</tr>
<tr>
<td>Norms</td>
<td>They are informal in coexistence and competition, and formal in cooperation. (Bengtsson &amp; Kock, 1999)</td>
</tr>
<tr>
<td>Dependence of goals</td>
<td>Goals are independent in coexistence and competition and dependent in cooperation. (Bengtsson &amp; Kock, 1999)</td>
</tr>
</tbody>
</table>

Table 21: Metrics for what is the relationship between company and competitor

**Customer based decisions**

The buying company has in its turn also customers or people who buy and use your products or services. The focus lies on deciding to whether or not to keep our customer. It is important to know the added value a customer provides in order to better understand his/her impact on the company's goals. The question, **how much added value is provided by the customer?** can be measured via one sourcing metric (Table 22).
**Metrics** | **Definition**
---|---
Retention | The lifetime value of the customer depending on his/her loyalty to the company. The higher the lifetime value, the more profitable the customer is because the expenses for selling to existing customers are lower, the customer relationship sustains through partnering up and new customers are attracted by pleased customers via word of mouth. The retention rate can be assessed by calculating the number of customers the company had one year ago, and the number of them we still have now. (Walter & Yusen, 2014)

Table 22: Metric for how much added value is provided by the customer

**Supplier based decisions**

The buying company stands as well in relation to their suppliers who deliver the requested activities/products/components. It is essential to decide on the kind of relationship between the company and the supplier and to define what the value creating potential of the company itself and the supplier is. In addition, supplier based decisions are selecting potential suppliers and eventually choosing the best-in-class supplier.

The buying company enhances the strategic importance of sourcing by building and sustaining a relationship with its supplier(s). Several advantages such as effective resource sharing, risk reduction and improved cooperation in meeting customer needs can be obtained based on this relationship. (Bozart, Handfield & Das, 1998; Ungson & Wong, 2008) Additionally, the long-term view of the relationship depends on the reliability and timeliness of delivery, and the fit between supplier's component inputs or processes and the firm's value-added chain. (Cavusgil, Yaprak & Yeoh, 1993, p. 153) The company should decide upon the kind of relationship they want to build with their suppliers. Therefore the following question is assessed, **what is the relationship between company and supplier?** Four types of relationships can be distinguished: integrative, facilitative, losers and developmental. (Kothandaraman & Wilson, 2001) Two sourcing metrics can be used to evaluate this question (Table 23).

---

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value added to partner</td>
<td>The ability to add value to the partner’s market offering by contributing to the core capabilities needed for this offering. The value added is high for integrative and developmental relationships and low for facilitative and loser relationships. (Kothandaraman &amp; Wilson, 2001)</td>
</tr>
</tbody>
</table>
Operating risk | The risk of inferior performance in terms of quality delivered by your partner. The operational risk is high for facilitative and integrative relationships and low for losers and developmental relationships. (Kothandaraman & Wilson, 2001)
--- | ---

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit function</td>
<td>Profitable buyer relationships are needed for the supplier to endure in the long term. The suppliers can also use this surplus to finance other relationships. (Walter, Ritter &amp; Gemunden, 2001)</td>
</tr>
<tr>
<td>Volume function</td>
<td>When buying large volumes, the suppliers even charge lower prices as they are, next to profit, also focussed on selling a certain volume. (Walter, Ritter &amp; Gemunden, 2001)</td>
</tr>
<tr>
<td>Safeguard function</td>
<td>Emergency buyers keep buying even in disadvantageous situations and can be seen as insurance in crises. This function enhances the efficiency and in this way also impacts the profitability in a positive way. (Walter, Ritter &amp; Gemunden, 2001)</td>
</tr>
</tbody>
</table>
Innovation function
The buyer's high product expertise or later stage technology can provide long-term benefits. Furthermore, the supplier's offering increases in value when innovations are jointly developed. (Walter, Ritter & Gemunden, 2001)

Market function
Recommendations and referrals of current buyers to new, potential buyers help the supplier in entering new markets. (Walter, Ritter & Gemunden, 2001)

Scout function
Buyers can provide relevant market development information to the suppliers, that is not yet available directly to them. (Walter, Ritter & Gemunden, 2001)

Access function
The buyer's experience with official authorities, banks and trade associations can aid the supplier and limits in this way the supplier's time and money spent to gain access himself. (Walter, Ritter & Gemunden, 2001)

Table 24: Metrics for what is the value-creating potential of the buyer

Secondly, the value-creating potential of the supplier can be measured via six sourcing metrics (Table 25). The core value is in this case provided via the costs and benefits, production capability, delivery capability and process improvement capability, the value-adding relational value by the incremental innovation capability and the future value by the radical innovation capability.

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs and benefits</td>
<td>The transactional value which is transparent and expressible in financial terms. When a buyer decides to acquire several components from one specific supplier, it is likely that the supplier decreases the purchasing costs for the buyer. (Möller &amp; Törrönen, 2003)</td>
</tr>
<tr>
<td>Production capability</td>
<td>The ability of the supplier to produce regarding a specific capacity, speed, quality and flexibility. Furthermore, the qualifications of the workforce and production facilities determine this capability. (Möller &amp; Törrönen, 2003)</td>
</tr>
<tr>
<td>Delivery capability</td>
<td>The ability of the supplier to deliver a certain volume and quality within a settled schedule. (Möller &amp; Törrönen, 2003)</td>
</tr>
<tr>
<td>Process improvement capability</td>
<td>The ability of the supplier to achieve continuous cost reductions in the core processes and to improve its production and delivery capability. (Möller &amp; Törrönen, 2003)</td>
</tr>
<tr>
<td>Incremental innovation capability</td>
<td>The ability of the supplier to innovate production processes and delivery processes incrementally in terms of functionality and costs. The production of core value is a</td>
</tr>
</tbody>
</table>

39
The ability of the supplier to innovate radically creates new business opportunities. This capability is measured by the number of technologies learned, the qualifications of technical workforce, the relations with research academies and registering R&D accomplishments. The production of core value and the accomplishment of incremental innovation are necessary conditions in accomplishing this capability. (Möller & Törrönen, 2003)

After general investigation of the relationship type and the value-creating potential, the buyer should make lists of potential suppliers based on detailed analyses. **Who are my potential suppliers?** depends on five sourcing metrics (Table 26). After having measured these metrics, those metrics should be defined as the extent to which the supplier matches the buyer’s requirements and the buyer should list those ones that match best.

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial stability</td>
<td>Performance measures such as sales, profitability and growth are examined in order to estimate the risk of choosing that particular supplier. It signifies the ability to realize what they promised and keep on contributing in the relationship. (Laseter, 1998)</td>
</tr>
<tr>
<td>Long-term plans</td>
<td>The supplier can be asked to make a suggestion of how the buyer fits in its long-term strategy. (Laseter, 1998)</td>
</tr>
<tr>
<td>Cultural compatibility</td>
<td>It evaluates if the cultural patterns of the supplier are compatible with those of the buyer. (Erridge, 1995; Laseter, 1998)</td>
</tr>
<tr>
<td>Fit of proposed process and infrastructure</td>
<td>For example, the assessment of the supplier’s completeness of the operation, process integration with the buyer and implementation of the buyer’s vision. (Laseter, 1998)</td>
</tr>
<tr>
<td>Capabilities</td>
<td>Evaluation of the supplier’s competences in terms of production capabilities and service capabilities. For example, the ability to be flexible for volume and mix changes and the rate at which product design can be integrated in the company. (Laseter, 1998)</td>
</tr>
</tbody>
</table>

Table 26: Metrics for who are my potential suppliers
Once the potential suppliers are listed, your best supplier is determined via assessment of three other performance criteria measuring the following question, **who is the best-in-class supplier (creates most value)?** (Table 27) After having measured these criteria (or sources of value creation), those metrics should be defined as the extent to which the supplier matches the buyer’s requirements and the buyer should select the supplier that matches the best.

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier know-how</td>
<td>The supplier’s knowledge of the supply market. It also describes the supplier’s ability to help the buyer in the improvement of existing products and the development of new products. (Ulaga, 2003)</td>
<td></td>
</tr>
<tr>
<td>Time-to-market</td>
<td>The ability to decrease the time-to-market depends on the supplier’s help in stimulating design tasks, prototype development, product testing and validation. (Ulaga, 2003)</td>
<td></td>
</tr>
<tr>
<td>Personal interaction</td>
<td>It includes enhanced communication, problem solving and achieving mutual goals. In this way, it determines the supplier’s commitment to the relationship. (Erridge, 1995; Ulaga, 2003)</td>
<td></td>
</tr>
<tr>
<td><strong>Table 27:</strong> Metrics for who is the best-in-class supplier</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Complementor based decisions**

Next to competitors, customers and suppliers, the buying company also relates to its complementors. It is important to know who the complementors are in order to better understand them. For example, Compaq and Dell complement in financing Intel’s R&D costs. We measure, **who are my complementors?** via customer value and attractiveness for supplier to provide resources. They are defined based on the metrics for the who are my competitors question in competitor based decisions (Table 28).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer value</td>
<td>When customers have another player’s product on top of your product, your product is higher valued compared to having your product alone. The other player is in this case your complementor. (Nalebuff, 1996; Nalebuff &amp; Brandenburger, 1997)</td>
<td></td>
</tr>
<tr>
<td>Attractiveness for supplier to provide resources</td>
<td>When the supplier is also providing another player, it is more attractive for the supplier to provide resources to you compared to only providing you. The other player is in this case your complementor. (Nalebuff, 1996)</td>
<td></td>
</tr>
</tbody>
</table>

**Table 28:** Metrics for who are my complementors
3.2.3 Planning decision category
The planning decision category focuses on defining decisions related to the general goals and strategy of the company and specific goals of the procurement department. Therefore, a distinction is made between general management and procurement based decisions and different questions and sourcing metrics can be determined. Sourcing is not focused on cost reduction anymore but other factors helping to deliver value need to be taken into account. General company goals may help to differentiate the factors that are the most important. Furthermore the centrality of sourcing should be considered within the company’s core strategy. (Ungson & Wong, 2008) In this decision category, the following three sourcing methods are defined:

- Strategic planning: is the strategic decision making process of generating, implementing and controlling strategies so as to realize the goals. The process is subdivided into six steps: the definition of the company’s goals, the internal and external analysis, the generation of strategic alternatives, evaluation and choice of the strategic alternatives, the implementation and control to check if the strategies realize the goals. (Frynas & Mellahi, 2005; Grant, 2010)

- Sourcing Portfolio Analysis: combines the capability criticality analysis and Cox power analysis. This approach advises to examine the criticality of categories of supply and buyers & suppliers power positions, besides cost savings it also takes the value for money into account. Sixteen strategies are proposed depending on this previous examination. (Cox, 2014; 2015)

- VRIN analysis: identifies the strategically important resources to form the foundation for the sustainable competitive advantage. The resources have to be valuable (create value for the user), rare (only owned by few competitors), inimitable (cannot be easily made by another company) and non-substitutable. When the resources are only valuable, the company offers a competitive parity and when valuable and rare a temporary competitive advantage is granted. (Barney, 1991; Frynas & Mellahi, 2005)

General management based decisions
General management is focused on deciding on general company goals and the strategy of the company. The goals of the management are in value driven strategic sourcing, long-term oriented. The answer to the question, what are the company's long-term goals? proves the long-term view, as managers focus on growth for the whole company and sustainable competitive advantage. Growth for the whole company is a condition for achieving a sustainable competitive
advantage. (Ungson & Wong, 2008) This question can be measured via specific sourcing metrics for each goal. First, growth for the whole company can be assessed via two sourcing metrics (Table 29).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset valuation</td>
<td>The estimation of the amount a competitor is required to spend in order to enter the market and become a direct competitor. (Ungson &amp; Wong, 2008)</td>
</tr>
<tr>
<td>Earning power value</td>
<td>The current, no-growth, free cash flow of the company including some adjustments and divided by the cost of capital. There is growth for the whole company if the earnings power value exceeds the asset value. This is the surplus earned by the company with its competitive advantage. (Ungson &amp; Wong, 2008)</td>
</tr>
</tbody>
</table>

Table 29: Metrics for what are the company’s long-term goals(1)

Secondly, resources and capabilities are the foundations of the sustainable competitive advantage. In this case, in the dynamic capability perspective, as opposed to the resource-based view, both internal and external company-specific resources and capabilities are defined. In addition, sustainable value creation results in a sustainable competitive advantage. This goal can be evaluated via the following three sourcing metrics (Table 30).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td>Valuable, rare, inimitable, non-substitutable resources</td>
<td>Resources are valuable when they affect the efficiency and effectiveness of the company by realizing strategies. Rare resources are only owned by few competing companies. Resources are inimitable when it is not possible to acquire those resources when you do not own them. Non-substitutable resources are not interchangeable with similar strategically resources. (Barney, 1991; Frynas &amp; Mellahi, 2005)</td>
</tr>
<tr>
<td>Dynamic capabilities</td>
<td>The company’s ability to integrate, reconfigure, renew and transfer the different resources to address changing environments. (Möller, 2006; Möller &amp; Svahn, 2003; Teece, Pisano &amp; Shuen, 1997, p. 516)</td>
</tr>
<tr>
<td>Sustainable value creation</td>
<td>It focuses on continuity of improvement and innovation of value to assure sustainability. (Verdin &amp; Tackx, 2015)</td>
</tr>
</tbody>
</table>

Table 30: Metrics for what are the company’s long-term goals(2)
After having set the long-term goals, the management team of the company has to start working on how to achieve those goals via a well-defined strategy. The question, **what is the company's long-term strategy?** can be defined via four sourcing metrics (Table 31). The strategy is generated by fitting strengths and opportunities, exploiting strengths to minimize threats, acting on opportunities to improve weaknesses and avoiding weaknesses to eliminate threats, based on complementing resources and capabilities of all actors in the value network. For example, offer a completely new product to the customer by joint development of supplier and buyer for a new and innovative product.

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengths</td>
<td>The actor’s capabilities and resources are internal characteristics of that actor. For example, specialized marketing expertise, a new and innovative product or service, and excellent quality of offering. (Kotler &amp; Keller, 2012)</td>
</tr>
<tr>
<td>Weaknesses</td>
<td>The actor’s weaknesses and capability gaps are internal characteristics of that actor. For example, a lack of marketing expertise, an undifferentiated product or service, and poor quality of offering. (Kotler &amp; Keller, 2012)</td>
</tr>
<tr>
<td>Opportunities</td>
<td>The external characteristics of the market environment, such as a certain customer need on which the company can act. Three sources of market opportunities can be identified: offer a product short in supply, offer an existing product in a new manner and offer a completely new product. (Kotler &amp; Keller, 2012)</td>
</tr>
<tr>
<td>Threats</td>
<td>The external characteristics of the market environment, such as trends or developments that would lead to performance deterioration when no action is undertaken. For example, new technologies that might impact your competitive advantage negatively or new regulations. (Kotler &amp; Keller, 2012)</td>
</tr>
</tbody>
</table>

**Table 31: Metrics for what is the company's long-term strategy**

**Procurement based decisions**

The long-term goals for procurement focus on aligning to the ones of the general management. In this way they intend to develop strong relationships with other functional groups, develop integrated sourcing strategies supporting the company's strategies and support the company's goals. (Axelsson, Rozemeijer & Wynstra, 2005, p. 18) The answer to the question, **what are the long-term goals in sourcing?** is long-term relationships with suppliers and a sustainable
competitive advantage. First, long-term relationship with suppliers can be measured via two sourcing metrics (Table 32).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of information sharing</td>
<td>It is determined by daily interactions between the buyer and supplier, the buyer sharing production information, the supplier’s reaction sharing financial information, and the supplier’s performance feedback given by the buyer. (Bozart, Handfield &amp; Das, 1998)</td>
</tr>
<tr>
<td>Mutual commitment to problem solving</td>
<td>Sharing of sensitive information and joint-problem solving activities in order to find solutions together to material and design problems. (Bozart, Handfield &amp; Das, 1998)</td>
</tr>
</tbody>
</table>

Table 32: Metrics for what are the long-term goals in sourcing

Secondly, the sustainable competitive advantage is a common, shared long-term goal of general management and the sourcing department. The sourcing metrics are defined correspondingly to the metrics for the general management long-term goal in the planning decision category.

3.2.4 Performance decision category

After having analysed the learning, relationship and planning perspective of the buying company, the fourth and last decision category is the performance decision category. Performance is related to evaluation if the buyer’s goals are met, in this case the aligned long-term goal, sustainable competitive advantage. A company achieves this by implementing a superior value creating strategy, compared to its competitors. (Frynas & Mellahi, 2005) In this model the focus is not on costs anymore but other factors helping to deliver value need to be taken into account. (Erridge, 1995) Therefore value based decisions are defined via specific questions and their corresponding sourcing metrics. The following three sourcing methods can be used to analyse this decision category:

- Value net analysis: is already explained in the relationship decision category.
- Value proposition canvas: helps you to determine your customer’s needs and develop the products and services they want. Customer jobs, customer pains and gains are the starting point. Based on this analysis the value proposition can be stated, founded on pain relievers, gain creators and the product/service itself. (Osterwalder et al., 2014; Strategyzer AG, 2017)
- VC2 framework: describes the strategic challenge a company can experience in a certain industry against two dimensions, value creation and value capturing. Four different situations are possible: nightmare (high value creation, low value capture), heaven (high value creation and capture), dream (high value capture, low value creation) and hell (low value creation and capture). (Verdin & Tackx, 2015)

- Balanced scorecard: measures the performance of a company through evaluation of four different perspectives (financial, learning, process and customer). The key aspect of this tool is the fit with the company’s competitive strategy, by helping to operationalize the company’s mission, vision and strategies. Therefore, the specific purchasing BSC measures depend on the company’s strategy. For example customer value is used as a measure when customer intimacy is the company’s strategy. (Axelsson, Rozemeijer & Wynstra, 2005; Kaplan & Norton, 1992)

**Value based decisions**

The focus lies on who exactly proposes, creates and captures value, the way value is created and the amount of value proposed, created and captured.

The evaluation of the realization of the aligned goal is partly assessed by the proposed value via the question, **who proposes value?** The actors who state the value, to achieve a competitive advantage, are determined. (Ungson & Wong, 2008) Two sourcing metrics are used to evaluate this question (Table 33).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buying company</td>
<td>The category and product manager compose categories of supply consisting of products/services classified based on their ability to achieve overall strategic goals commercially and operationally. Those product categories propose value for the customer and company itself. (Cox, 2014)</td>
</tr>
<tr>
<td>Supplier</td>
<td>The supplier proposes value to its buying company via their product/service offering and buyer-seller relationship. In return the supplier requires benefits from the buyer at the same time. (Walter, Ritter &amp; Gemunden, 2001)</td>
</tr>
</tbody>
</table>

Table 33: Metrics for who proposes value
Besides determining the actors who propose value, the question, **who creates value?** is assessed via one general sourcing metric, to outline the actors who realize the proposed value (Table 34). (Verdin & Tackx, 2015)

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actors of the value network</td>
<td>More specifically the buying company, supplier, complementor and customer work together to co-create value in a joint creation relationship. The focus lies on the value-creating system or network instead of on the company itself. In this way, the health of the network and its actors are as important as the company’s well-being. The value-creating potential of the supplier and company are explained in detail in the relationship decision category. (Peppard &amp; Rylander, 2006)</td>
</tr>
</tbody>
</table>

**Table 34: Metrics for who creates value**

Next to the value-creating perspective, the price and cost structures also have to be taken into account in order to generate value capturing. The actors of the value network should be able to capture the value created as to guarantee a sustainable business. Therefore the following question is defined, **who captures value?** and measured by one sourcing metric (Table 35).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actors of the value network</td>
<td>Opposite to value creation, they compete in dividing the realized value up. The buying company and complementor capture value from the customers, and the supplier from the buying company. Each actor has to generate sufficient revenues and profits. (Bowman &amp; Ambrosini, 2000; Nalebuff, 1996; Verdin &amp; Tackx, 2015)</td>
</tr>
</tbody>
</table>

**Table 35: Metrics for who captures value**

After having analysed which actors co-create value, it is at least as important to examine the way they co-produce value. The ability of an actor to create value depends on dynamic capabilities, which are the ability to integrate internal and external resources. (Kothandaraman & Wilson, 2001) Value is created by exchanging resources between the different related actors in the network and by eventually integrating them and possibly interrelating activities. (Normann & Ramirez, 2000) In this way, all relationships with external linked actors can be considered as
The value depends on the relational competences of the actors, including the ability to build trust and commitment between actors. (Möller & Törrönen, 2003; Möller, 2006) The question, **how is value created?** can be measured via five sourcing metrics. Both metrics, VRIN resources and dynamic capabilities, are defined correspondingly to the metrics for the general management long-term goals in the planning decision category. The three new sourcing metrics are explained below (Table 36).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange of products</td>
<td>The traditional flow in return for a fee, invoice or confirmation, for example the flow of content and payment. (Allee, 2000; Peppard &amp; Rylander, 2006)</td>
</tr>
<tr>
<td>and services</td>
<td></td>
</tr>
<tr>
<td>Exchange of knowledge</td>
<td>Including strategic information, technical and process knowledge, product development, supporting the core product/service. For example, possible joint-efforts in for example product development and feedback on products in return for personally targeted offerings. (Allee, 2000; Peppard &amp; Rylander, 2006)</td>
</tr>
<tr>
<td>Exchange of intangible</td>
<td>For example, a sense of community in return for loyalty and co-branding opportunities. (Allee, 2000; Peppard &amp; Rylander, 2006, p. 37)</td>
</tr>
<tr>
<td>benefits</td>
<td></td>
</tr>
</tbody>
</table>

**Table 36: Metrics for how is value created**

After having investigated who proposes, created and captures value and the way value is created, the amount of value stands central. We define the question, **how much value is proposed?** The proposed value includes the company’s value and its competitive advantage. (Ungson & Wong, 2008) The stated question can be evaluated via two sourcing metrics (Table 37).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain creator</td>
<td>Defines how your product/service creates gains for the user. Those creators describe how the company generates certain benefits for the user such as cost savings, positive emotions, etc. (Strategyzer AG, 2017)</td>
</tr>
<tr>
<td>Pain reliever</td>
<td>Defines how your product/service relieves pains of the user. Those relievers describe how the company excludes certain things that were felt as a pain by the user when doing a job. For example, no more pollution is a pain reliever leading to the value proposition of environmental sustainability. (Strategyzer AG, 2017)</td>
</tr>
</tbody>
</table>

**Table 37: Metrics for how much value is proposed**
Besides determining the amount of value proposed, **how much value is created?** is assessed via three sourcing metrics, to outline the perceived value or the content of the realization of the proposed value (Table 38).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transactional value</td>
<td>The perceived trade-off in a market exchange between a set of technical and economic benefits and the sacrifices made by using internal resources and competences from a user’s perspective relative to all market offerings and prices. (Lindgreen &amp; Wynstra, 2005; Möller, 2006)</td>
</tr>
<tr>
<td>Relational value</td>
<td>The perceived trade-off between a set of social and service benefits and sacrifices achieved by a particular producer-user relationship and possibly all linked (network) relationships related to them. (Ulaga, 2003; Walter, Ritter &amp; Gemunden, 2001)</td>
</tr>
<tr>
<td>Total value of ownership (TVO)</td>
<td>Includes next to total costs also downstream revenue-enhancing aspects, achieved by the buying company creating value for their customers and getting extra revenues in return for it. For example, by using high quality or branded inputs for the final product. (Axelsson, Rozemeijer &amp; Wynstra, 2005; Hurkens &amp; Wynstra, 2004)</td>
</tr>
</tbody>
</table>

Table 38: Metrics for how much value is created

Finally the question, **how much value is captured?** is defined for the different actors and is determined by the type of relationship between them. It is measured via the following sourcing metric (Table 39).

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability</td>
<td>Evaluation of a company’s ability to gain profits. Return on assets (ROA) measures how well the total assets are used by management. Return on equity (ROE) measures how well the owner’s capital is used by management. (Parniangtong, 2016; Ungson &amp; Wong, 2008)</td>
</tr>
</tbody>
</table>

Table 39: Metrics for how much value is captured

### 3.3 Gap Analysis

The gap analysis between cost saving and value driven strategic sourcing decision making describes how we can move from cost saving to value driven strategic sourcing decisions and is visualized on Figure 6. We first discuss general observations between the two ways of thinking. Next, we elaborate on the major changes per decision category.
Figure 6: Gap analysis between cost saving and value driven strategic sourcing decision making
3.3.1 General observations

Transactional value versus relational value
In defining value, two levels can be distinguished: the value of goods and/or services, or transactional value, and the relational value. The content of the former is determined by the competition as for the offering to be competitive relative to the offerings of their competitors. (Miles, 1961) Customers will base their decision upon the offering which delivers the most value. (Lindgreen & Wynstra, 2005) Value is defined as the perceived trade-off in a market exchange between a set of technical and economic benefits such as the offering’s performance, design, quality and image brand, and the sacrifices made by using internal resources and competences such as the offering’s price and the price of using it, from a user’s perspective relative to all market offerings and prices. (Lindgreen & Wynstra, 2005; Möller, 2006) The value can be increased by reducing the internal resources and competences needed in a way that extended services are provided to the initial offering such as delivery services, education and maintenance. (Möller, 2006) From a producer’s perspective, value is perceived by the loyalty of their customers who are less price sensitive and are taking less time in personal selling. (Miles, 1961) But the focus of the producer has changed from only providing the offering to the user to additionally creating a system where the user can create its own value or where they both can co-create value. (Lindgreen & Wynstra, 2005)

The latter, relational value, can be defined as the perceived trade-off between a set of social and service benefits and sacrifices achieved by a particular producer-user relationship and possibly all linked(network) relationships related to them. (Ulaga, 2003; Walter, Ritter & Gemunden, 2001) The value depends on the relational competences of both the user and producer, including the ability to build trust and commitment between actors, and the specific characteristics of this relationship. The value is then created through joint efforts in for example product development, realized by interrelating their activities. (Möller & Törrönen, 2003; Möller, 2006)

Value can in this way be subdivided into four levels. First the exchange value, or transactional value as defined above and is in no need of adaptations of the producer and user. Secondly, the generative value generated through mutual learning and adaptation. Thirdly, the effects of the value activities on the relationship portfolio of the producer and user. Lastly, the effects of the value activities on the network of the producer and user. (Möller & Törrönen, 2003)
To conclude the value created by relational value is higher, relative to the transactional value. For this reason companies focus not only anymore on their internal employees but also on their external actors, such as customers, suppliers, complementors and competitors in order to manage their relationships and networks. (Lindgreen & Wynstra, 2005) In this master dissertation the focus lies on the relational value.

**Transactional-oriented versus relational oriented approach**

Next to the distinction between transactional and relational value, it is also possible to distinguish between a transactional-oriented approach and relational-oriented approach. Table 40 clarifies the main dissimilarities between the two approaches. The transactional-oriented approach is mainly characterized by a various set of replaceable actors and intensive competition in the supply market. The relational approach, controversially, is mainly characterized by few important actors, cooperation and long-term relationships in the network of all related actors. The network concept will be further explained in section 3.3.3.

<table>
<thead>
<tr>
<th>Transactional-oriented approach</th>
<th>Relational-oriented approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many alternatives</td>
<td>One or few alternatives</td>
</tr>
<tr>
<td>Every deal is a new business and no-one should benefit from past performances</td>
<td>A deal is part of a relationship and the relationship is part of a network context</td>
</tr>
<tr>
<td>Exploit the potential of competition</td>
<td>Exploit the potential of cooperation</td>
</tr>
<tr>
<td>Short-term and avoid coming too close</td>
<td>Long-term with tough demands and joint development</td>
</tr>
<tr>
<td>Renewal and effectiveness by change of partner, and choose the most efficient supplier at any time</td>
<td>Renewal and effectiveness by collaboration and team effects, and combine resources and knowledge</td>
</tr>
<tr>
<td>Buying product</td>
<td>Buying capabilities</td>
</tr>
<tr>
<td>➔ Price orientation, strong in achieving favourable prices in well-specified products and so lowering costs</td>
<td>➔ Value orientation, strong in developing new value</td>
</tr>
</tbody>
</table>

Table 40: Transactional-oriented and relational-oriented approach

(Lindgreen & Wynstra, 2005, p. 742)
Additionally the transactional-oriented approach aims for commercial competencies such as market knowledge and the ability to use this knowledge in the market. The technical competence needed is the ability to evaluate the value of the offering that is to be transacted. The relational-oriented approach aims for commercial competencies such as the ability to understand all functionalities of the network and knowledge of how to behave in the network. The technical competence includes the broader view on the functional facets of the product/service in context of the system in which the product/service needs to be included. (Lindgreen & Wynstra, 2005)

**Top management versus every employee**

In the tactical way of thinking the company’s strategy is formulated by top-level managers, focused on the content rather than the process of strategy formulation. The implementation of the strategy is executed by middle management and is not the company’s main interest. (Axelsson, Rozemeijer & Wynstra, 2005) In the strategic way of thinking every employee working for the company may be engaged in formulating the company’s strategy. Furthermore there is also an influence from external actors. The focus here doesn’t only lie on the ones who formulate but also on the ones who implement the strategy. (Axelsson, Rozemeijer & Wynstra, 2005)

**Organizational divisions versus internal and external integration**

The company’s structure in tactical thinking is characterized by organizational divisions, each under different ownership, with inconsistent policies and maximization of inventory to satisfy the needs of each division. (Erridge, 1995) In strategic thinking it is characterized by internal integration through cross-functional buying team in which buyers work together with employees from other functions to identify needs, inventory, transportation and delivery. (Erridge, 1995) Furthermore there might also be external integration, meaning key suppliers may be also involved for joint development or improvement. (Axelsson, Rozemeijer & Wynstra, 2005) The more several different actors are involved, the more diverse the opinions are and the more creative solutions are generated. (Laseter, 1998)

**3.3.2 Learning decision category**

**In/outsourcing: cost based versus strategic importance**

In order to decide to in- or outsource, the company analyses all products, services and activities based mainly on costs in tactical thinking. By outsourcing, the company can increase production
efficiency, reduce its costs and increase flexibility. (Erridge, 1995; Ungson & Wong, 2008) However next to the evaluation of the costs, it should also take into account the strategic importance to the company to decide where to focus on. (Frynas & Mellahi, 2005) In strategic thinking products, services and activities not closely connected to the company’s strategy are outsourced. In this way the company can concentrate on its core competencies, namely the unique company-specific abilities to create value for its customers. Furthermore the linkages in the company’s strategic structure themselves are also crucial, more specifically how exactly an activity is connected to the company’s strategy or competitive advantage. (Ungson & Wong, 2008, p. 257)

**Categories of spend versus categories of supply**

In tactical thinking the supply products/services are categorized on the basis of what they cost into categories of spend. This categorisation is based on its importance of purchasing because the procurement department wants to discover what is important as a function instead of what is important to the business. (Cox, 2014, p. 112) However companies are not really interested in this kind of categorisation. The categories of spend are replaced by categories of supply in strategic thinking. Supply products/services should be categorized on the basis of their ability to achieve overall strategic goals commercially and operationally. (Cox, 2014) To realize these strategic goals, companies need to understand the value enclosed in these categories. Therefore, it is important to comprehend the value chain, which links the demand and supply side of a company. The CPO is then expected to consider both sides in order to manage interactions between company’s buyers, suppliers and internal/external customers. (Rafati & Poels, 2016) We can conclude that tactical thinking categorisation is only focused on cost savings and thus too simplistic because it doesn’t take into account the ability to achieve strategic goals operationally and commercially.

3.3.3 Relationship decision category

**Company versus network**

The way a company manages its activities has shifted from the perspective of the company as unit of analysis towards the company as part of a network. In the past, there was not always a need to focus on value creation but nowadays this fact is changing due to the need for a
sustainable competitive advantage, changing markets, increasing importance of knowledge, technological complexity, global competition and availability of digital information. (Castells, 1996; Erridge, 1995; Möller, Rajala & Svahn, 2005, p. 1274) Companies are not able anymore to manage all value activities internally and start designing networks of knowledge with their external actors to divide the activities. Networks are characterized by flexibility and excellent information-processing, and are in this way the best way to manage the value activities in knowledge-rich environments. These networks take the value-creating system itself as unit of analysis, in which suppliers, buyers, complementors, customers and competitors co-create value. Each actor has its own distinctive knowledge which it uses to specialize in the value creation activity. (Möller, Rajala & Svahn, 2005; Möller & Svahn, 2003; Peppard & Rylander, 2006) Hence value creation, in order to achieve a sustainable competitive advantage, has become the essential goal for the actors in the network. (Walter, Ritter & Gemunden, 2001) It is how the company describes its business and connects the today’s two most important resources, namely knowledge (or competences) and relationships. The main strategic task of the company is the integration of knowledge and relationships between different actors. It should also focus on continuous enlargement of knowledge and use this knowledge in any particular offering. For example, Ikea is not just about shopping but it includes real entertainment. They didn’t just add value but really reinvented it and their business system provides it by fitting the capabilities of all actors efficiently and effectively. To conclude, nowadays, a company should redesign its business system in context of its network, with as main task the integration of the different resources and it should stimulate their users to not only consume but also create value themselves. (Normann & Ramirez, 2000)

**Power of buyer/supplier versus value-creating potential of buyer/supplier**

Porter Five Forces model evaluates five specific forces, such as power of buyer and supplier, in order to assess the attractiveness of the business arena and the company’s competitive position. (Frynas & Mellahi, 2005; Ungson & Wong, 2008) Since the shift from focus on the company towards on the network in strategic thinking, Porter should assess competitive groupings of buyers and suppliers. In this way the evaluation of power of buyer and supplier would be of no longer importance. (Erridge, 1995) Instead the value-creating potential of buyer and supplier to one another should be measured. A distinction is made between core value, value-adding
relational value and future-oriented value. This is explained in detail in the value driven strategic sourcing decision model in section 3.2.2, for supplier based decisions in the what is the value-creation potential of the buyer/supplier question. (Möller & Törrönen, 2003)

**Buyer-supplier relationship: competition versus coopetition**

The buyer-supplier relationship specifically has also changed. Traditionally, in a tactical approach, this relationship was based on competitive bidding, which is characterized by competition between a high number of suppliers and the buyer selecting the lowest bid for each item separately resulting in a high supply base. (Axelsson, Rozemeijer & Wynstra, 2005; Erridge, 1995) In strategic thinking, partnering relationships contribute to a company’s competitive advantage. A reduction in the supply base is noticed to engage more in relationships with their key suppliers. (Ulaga, 2003) Furthermore short-term, formal and rigid contracts are transformed into long term, informal and flexible contracts and the delivery process has shifted from large quantities and infrequent to small quantities and just-in-time. In addition this partnering relationship is characterized by openness, trust, shared goals between buyer and supplier, long-term relationship, cooperation and flexibility. This relationship is profitable for both and results in lower inventories, also for both. The buyer additionally experiences on-time delivery, improved quality and quicker product development. (Erridge, 1995, p. 84) The supplier on the other hand adds enhanced management and technology capability, marketing advantage and long-term agreement. (Erridge, 1995) For the creation of supplier partnerships, buyer and supplier have to invest both in adjustments and integration of their resources to develop this partnering relationship. (Möller & Törrönen, 2003) Managing this relationship is possible through implementing two types of procurement strategies. First information sharing between both parties. The buyer must share more detailed and accurate production information in terms of their requirements. The supplier in his turn shares financial information. The buyer then provides supplier’s performance feedback. Secondly, mutual commitment to (material and design) problem solving by sharing more and sensitive information and joint-problem activities. (Bozarth, Handfield & Das, 1998)

In the end, it is more correct to use the term coopetition instead of cooperation/partnership. All actors in the network cooperate in creating value but they compete in dividing this created value up. (Nalebuff, 1996)
Getting versus keeping the customer
The buying company has in its turn also customers or people who buy and use your products or services. A shift can be noticed from a focus on getting the customer to keeping the customer. Before, it was important to know who your (potential) customers were in order to better understand the complexity of the market. Now, it is important to know the added value a customer provides in order to better understand their impact on the company's goals. (Kotler & Keller, 2012; Walter & Yusen, 2014)

3.3.4 Planning decision category

Short-term versus long-term goals
In tactical thinking, management is focused on short-term goals, as managers only concentrate on increase in profit (revenues minus cost). (Ungson & Wong, 2008) The short-term goals for procurement slightly differ from those ones of the general management, concentrating on minimizing its costs related to their suppliers. (Axelsson, Rozemeijer & Wynstra, 2005) In strategic thinking, management is focused on long-term goals, as managers concentrate on growth for the whole company and a sustainable competitive advantage. (Kothandaraman & Wilson, 2001; Ungson & Wong, 2008) Sourcing is now not focused on cost reduction anymore but other factors helping to deliver value need to be taken into account. General company goals may help to differentiate the factors that are the most important. For example, British airways linked their sourcing long-term goals to the company’s long-term goals. (Erridge, 1995) The long-term goals for procurement concentrate on long-term relationships with suppliers and a sustainable competitive advantage. Sustainable in sense that the benefits of these goals are inimitable by other companies. (Barney, 1991; Bozart, Handfield & Das, 1998; Frynas & Mellahi, 2005) In this way a sustainable competitive advantage has become the shared, long-term goal of general management and sourcing department. (Verdin & Tackx, 2015)

Supporting operational requirements versus supporting company’s goals
Both general management and procurement short-term goals are supporting operational requirements and focused on managing the sourcing process efficiently and effectively. In contrast the procurement long-term goals focus on aligning to the long-term ones of the general management. In this way they intend to develop strong relationships with other functional groups,
develop integrated sourcing strategies supporting the company's strategies and support the company's goals. (Axelsson, Rozemeijer & Wynstra, 2005, p.18)

**Positioning company versus creating value**

Value creation, to achieve the sustainable competitive advantage, has become the essential goal for the actors in the network. (Walter, Ritter & Gemunden, 2001) In this manner, strategy, or the way to achieve this goal, has evolved into the art of creating value. Before, it was the art of positioning the company based on the analysis of its external business- and internal environment. (Frynas & Mellahi, 2005; Normann & Ramirez, 2000)

**Internal versus complementary resources and capabilities**

Resources and capabilities are the foundations of the sustainable competitive advantage. In the resource-based view this competitive advantage is achieved only by internal, company-specific resources and capabilities. (Steinle & Schiele, 2008; Teece, Pisano & Shuen, 1997) Because of this internal orientation, the company is not able to transform their resources and capabilities into (relational) value for customers. (Möller, 2006) Changing markets, increasing importance of knowledge, technological complexity, global competition and availability of digital information (Erridge, 1995; Möller, Rajala & Svahn, 2005, p. 1274) and additionally the discontent with this perspective, have been the basis to broaden the context of the company’s resources and capabilities. In this way, suppliers are considered as company’s resources and so are a part of the foundations of a sustainable competitive advantage. (Steinle & Schiele, 2008) Resources and capabilities of both supplier and the company itself are needed to create value. (Möller, 2006) In context of the company’s network, all relationships with external linked actors can be considered as company’s resources. (Steinle & Schiele, 2008) This is the dynamic capability perspective and as opposed to the resource-based view, sustainable competitive advantage is in this case achieved by not only internal but also external company-specific resources and capabilities. Dynamic capabilities are the company’s ability to integrate, reconfigure, renew and transfer the different resources to address changing environments. (Möller, 2006; Möller & Svahn, 2003; Teece, Pisano & Shuen, 1997, p. 516)
3.3.5 Performance decision category
The performance measures to evaluate if the goals are met, differ for tactical and strategic thinking as their focus on goals also differs. The measures related to the short-term goal set by general management, increase in profit, are benefit based. (Parniangtong, 2016; Ungson & Wong, 2008) The short-term goal of procurement, cost reduction, is assessed by cost based measures. (Axelsson, Rozemeijer & Wynstra, 2005; Parniangtong, 2016) Both short-term goals are in this way evaluated by traditional performance measures. However when evaluating the aligned long-term goal, sustainable competitive advantage, other measures are needed. (Verdin & Tackx, 2015) In strategic thinking the focus is not on evaluating costs anymore but other factors related to value are to be assessed. (Erridge, 1995) The value concept is explained in section 3.3.1. The focus lies on who exactly proposes, creates and captures value, the way value is created and the amount of value proposed, created and captured.
4. Evaluation by case study

In this part, we will demonstrate the proposed two models and evaluate their correctness by means of a real-world company case study in Nokia. We will first introduce the procurement department of Nokia and then we observe per decision category, upon which questions and metrics Nokia agrees and which questions and metrics Nokia finds (additionally) important. These observations are represented in a model, which is provided in Appendix. In addition we will investigate how Nokia experiences the paradigm shift from cost saving to value driven strategic sourcing decision making.

We had a face-to-face interview with the three senior managers of Nokia: the Global Procurement & Sourcing Manager, the Director Transversal and Innovations Projects Product Procurement and the Purchasing OEM Director. Within Nokia, procurement is subdivided into global procurement and procurement within the business units.

Global procurement is in its turn subdivided into product, service and indirect procurement. The three managers with whom we discussed with, work within product procurement. Six billion out of ten billion euros is spent within this subdivision of global procurement. In addition, product procurement is also split up in different product category areas.

The Purchasing OEM Director, leads the Original Equipment Manufacturer category area. In this area, the company buys products which they would normally design themselves, but decides not to because they don’t have the competence, they don’t want to develop this competence or they don’t want to make investments. Typically, the production capacity of these suppliers is a lot higher than when they would design those products themselves. For example, Nokia needs 500000 pieces while the supplier produces 30 million pieces. This category is comparable to filling the empty spots in the portfolio temporary or permanently. When this is done permanently, it could be that they buy those products from competitors because they would never design it themselves, but definitely need that product in its end-to-end solution. This category area is complex to analyse based on costs.

The Director Transversal and Innovations Projects Product Procurement, leads projects and is focused on total cost, total value and strategic supplier relationship management. Based on mathematical models, the company is able to calculate the optimal price of all materials. This
price is used to compare to the prices they pay to their suppliers. It is possible then to compare suppliers based on their competitiveness (suppliers being systematically higher or lower than the calculated price). These models do not cover very low commodities or OEM. The latest years, the total purchased value is also analysed, which is a specific total cost of ownership for Nokia’s procurement. It includes next to price, the supplier’s payment terms, minimum order quantity, quality, delivery time, flexibility and financial health. It is possible to analyse the competitiveness of the suppliers based on these factors.

In procurement within business units, they have a more vertical interpretation of the projects. Every aspect of the product is taken into account. Costs and goals are defined based on this product level, in contrast with global procurement where it is based on a more global level. Before, there was even a third subdivision in procurement, strategic procurement, which was focused on 5 years from now. At the moment it is now included in global procurement because it is hard to disconnect short-term and long-term business. From the moment you start disconnecting the long term, you start speaking different languages and the suppliers start misusing this. Furthermore, value driven decisions are becoming more and more important as telecommunications is a market of innovation where the speed of innovation and the need for speed is higher than ever before.

### 4.1 Learning decision category

The make-or buy decision for products is a question that systematically raises. In some segments, every purchase is a make-or buy decision, in other segments it is too obvious to ask the question. Nokia has various reasons why a certain decision is made: cost, capacity, but most of the time it is differentiation. Differentiation depends upon their core business, points where they do not want to give any visibility to the outside world and want to protect their intellectual property. More in particular, it is the thing that brings you the sustainable competitive advantage. This is a make decision by default. A category group close to commodity or the standard components are by default bought. Nokia does not negotiate these parts anymore, it is a pure cost savings agreement. Time-to-market is another very important metric, it captures the windows of an opportunity. It can happen for the same type of solution that you first decide to buy, reach the market fast and then eventually, replace your decision by a make, adding more features, having a better product and better costs.
4.2 Relationship decision category

**Power/Value-creating potential**

Nokia agrees that in a cost driven segment they want to have easily switchable components between sources. Multiple sourcing is an important focus point. They measure which percentage of a product is using a multiple sourcing component.

Nokia puts next to the Kraljic Purchasing Analysis, which indicates the view of the buyer, the view of the supplier. How does the supplier see Nokia, what is Nokia’s business potential for him in short and long term, how does the supplier see Nokia as a partner, is Nokia attractive to him and so on. Then Nokia overlays these two views. When there is a mismatch, one can forget about having power to each other. Maybe one might have power but if the other one is not interested in that segment, you have no grip. When it fits on the strategic area, one can have much more on value creation. One of the values Nokia is looking for is matching technology and future roadmaps of technology. They evaluate the technical advantage that can be achieved by working with them. This is no absolute scale and remains a subjective interpretation of a few people together giving a rating based on these roadmaps.

Nokia has also passed the time that they are a big customer, and that they can choose with which high-end technology supplier they are going to work with. There happened several mergers and acquisitions, which means that Nokia still needs to work with high-end technology in their core network to be able to differentiate. They need to keep on working with the best possible, high-end technology suppliers. They have noticed that their choice of suppliers has been shrinking to only a few players. As a consequence, in terms of relationship, they handle now a totally different approach compared to ten years ago. The alternatives are less so they have to be more open, together is more important than you versus me.

**Supplier selection**

Nokia agrees on selecting suppliers on more than cost parameters, more specifically on the following metrics: price, personal interaction (relationship performance, compatible DNA), time-to-market and supplier know-how (technical capabilities and innovations). Nokia uses for price its broadened cost definition of total purchased value by including other factors than only price. Nokia also uses compliance as metric which includes guarantees with child labour and blood diamonds. Time-to-market is at the moment more important than ever before. Thirty years ago,
you first discussed with the customers, signed the contract and then started developing. Now you come to the customer with your product. If customization is needed, this is only accepted in terms of weeks. Time-to-market is not only important in developing roadmaps for having your products on-time for the market but you also need to be quick in delivering.

Some partners are measured against a high weight on innovation, others on costs. Nokia decides upon a fixed percentage on each of their categories. For example, price and delivery performance, metrics of the cost savings approach, have a high fixed percentage for suppliers of nuts and bolts (standard components). In the future, Nokia is planning to restructure the weight factors. Certain suppliers should have higher weights on innovation than others. There should also be some flexibility in defining the weight factors for suppliers.

**Buyer-supplier relationship**

In general, the buyer-supplier relationship is becoming more and more important. They don’t have many relations anymore where this relation is distant. Nokia is a thirty billion company but other companies are strange enough not queuing up to work together. It is not only the value you add to the partner but also that you have to be prepared to add value in the relationship. Furthermore, the company segments its suppliers on their status towards the future in preferred, allowed, challengers, restricted and phase-out suppliers. Nokia builds a very close relationship with the top two suppliers. Therefore, the category managers have four times a year a business review with the preferred and allowed suppliers. Within this important group, another ranking is applied based on supplier relationship into focus and strategic suppliers. The focus suppliers are the ones they really focus on in this important group. The strategic suppliers are an even smaller group within these group of focus suppliers, with whom they build very close relationships up to the executive management. In this relationship, both parties consider together to build a relationship with the next step in the chain, a common customer. Together, they build a system in which the buyer, strategic supplier and customer interact and co-create value. Moreover, Nokia shares information on their roadmaps in order to understand that they are working on a technology that could interest the suppliers. But also in the other direction: suppliers having a technology that could help Nokia in its next generation products. It is a win-win situation where everyone is prepared to give themselves in a relationship. Those strategic suppliers are just a
selective set of suppliers. Nokia will not do this with everyone to protect their intellectual property, market, differentiation capabilities and especially their core activities.

**Customer**

Nokia has quite a lot of different products. In general the closer to the end customer, the higher the weight on the cost savings approach, including competition on price. Nokia tries to step away from this by trying to differentiate based on innovation and to be ahead of competition. The further away from the end customer, the higher the weight on the value driven approach. For example, the IP routing division of Nokia is situated in the core of the network. There, it is all about innovation and coming with products nobody else has. In this case cost does almost not play a role here.

In a simpler way, if cost is a predominant parameter for the customer, then the company will handle a cost savings approach. If the customer is more focused on a competitive edge on technology or service availability, then the company will handle a value driven approach. In addition Nokia also goes more to the customer with a total package with the objective of retaining the customer.

**Competitors/Complementors**

Nokia agrees it is important to know your competitors and complementors. The history of Nokia is characterized by looking to competitors and eventually getting together (acquisition of Alcatel-Lucent). By knowing their competitors, they know where they can differentiate to do it better and come with new features. For Nokia this question would be more important in their value driven decisions, but argue that in cost savings decisions it remains also important to know them. In addition differentiation has to come from the new thing on time. Nokia can invent a lot itself but more and more, they are looking to the external world to help them with innovation. Those external partners can be key partners, sharing information in order to get advanced access to some of their products. Furthermore, start-up companies help with new ideas and Nokia is using platforms in which it cooperates with smaller players to jointly come to innovative ideas. This decision is almost completely focused on value.
4.3 Planning decision category

Procurement is now still 70% short-term cost driven but there is an important shift going on much more in the direction of value. Today’s most important KPI is savings on price, other KPI’s are always a little bit less important. With the current project on total purchased value, Nokia has the intention for next year to go for a KPI on total purchased value, instead of savings on price. Remark that the total purchased value is still cost driven, because at the end they want to know how to reduce fixed and variable costs. At least this shows that Nokia is considering more than needing the lowest price. Total purchased value is broadening the cost concept and looks to the value that the company is getting from the supplier by measuring the supplier’s performance and not only on price.

Internally, the procurement within the business unit and the business unit management itself are all at the same page when it is about the strategic suppliers and thus make sure that procurement’s long-term goals fit with the long-term goals of management. For example, during the mobile world congress, Nokia sets up 80 different supplier meetings with executives per supplier. The company decides per supplier if this meeting will be with Nokia’s biggest chief, with the business side or with the global operations side. This is really executive sponsoring of relationships management and fits in longer-term relationships, innovation and added value for both.

Planning is also about aligning the supplier’s and company’s goals. For instance Nokia might be active in markets where you need to support customers in the long term (10 years). Although there is a big focus on innovation to catch new opportunities/differentiation, at the same time it still needs to remain important, as an example of a common goal, to keep on supporting the older technologies. Suppliers only focused on newer technologies, won’t align to the company. When defining sustainable, it should also be kept in mind that you have to be two to be sustainable. The supplier must also have a sustainable view.

4.4 Performance decision category

The cost and benefit based metrics are generally used measures in the company. The way Nokia evaluates its suppliers afterwards is not only based on costs. They compare the actual performance of a certain supplier to the expected performance of the moment when they selected that supplier. They keep it in their mind when they do new selections, but they do not really measure it. In the future, they realize they have to develop a method to measure this. Before the
acquisition of Alcatel-Lucent by Nokia, Alcatel-Lucent attempted to measure the innovation relationship. Category managers were asked to come up with the number of initiated innovation projects of their key partners and its expected benefit over the next three years. Nevertheless, it was very subjective and difficult to maintain, but it was clearly showing the amount of value that was delivered by each partner.

The view of the supplier towards Nokia in terms of value, is measured every four years typically through a ‘Voice of the Supplier’ inquiry. The suppliers are asked to answer predefined questions and a score is calculated by an external company. This score explains how well Nokia did improve on supplier relationship management, more in particular what the weak spots were four years ago and where they are today. This inquiry definitely makes the supplier relations stronger.

By proposing these models, the three managers found it easy to select the metrics they used for a certain decision. When certain metrics were not listed in the model, Nokia explained them as described above.

Nokia experiences the paradigm shift more as a balance weight of value and cost. There are scenarios still 90% cost based and 10% value based. But others are 90% value based and 10% cost based. To decide these weight factors, Nokia should look at the market and technology they are in and the competition pressure. Segmentation is crucial in defining what the appropriate way of sourcing is. They propose to assign weights on cost and value to each segment, per product category and to list up what they have to do to realize it. Nokia also challenges itself to think in terms of where they will be in two or three years, if the segment is still the same. For this, they take everything into account: the market, the ecosystem and internal discussions. For example, in a cost driven segment, it could happen that for standard components, the market goes to a shortage leading to other factors that gain in importance. Furthermore, in those internal discussions, they define what the value of a certain supplier is. They need to demonstrate that the selected suppliers are fitting the criteria they have set before. There is as much internal alignment needed as there is alignment needed with the external market, the suppliers.

At the moment Nokia is trying to increase the weight on value in general. The market is experiencing a shift and purely cost driven is not possible anymore. Everyone is obligated to follow this shift but it is a hard process which takes a lot of time and various initiatives. Nokia already broadened the cost definition by adopting total purchased value but this is still a cost
savings approach. They realize that they still have to add other dimensions to this metric. A cost based approach will never disappear. For example, the entry barriers in the telecommunications market are quite high but even though the little Chinese Huawei managed to become a very big player in three to four years. Nokia reacted with an ever bigger focus on costs and sales. Furthermore, today’s lifecycle of products is shorter and the cost of investment is higher than ever before. Because of this shorter lifecycle, the cost aspect is important from the beginning. Before, you brought your product on the market and afterwards you made it cheaper. Today, you need to have the correct price from day one. Shorter lifecycles and higher required investments obligate companies to work together with other companies and to step into mergers to co-create products on time.

For Nokia, there will always exist a mix of both, it will never be or tactical or value driven management of strategic sourcing decision making. Nevertheless some segments are more cost driven, others more value driven. Cost and value should enhance each other instead of breaking each other down.
5. Conclusion and future research

In this master dissertation, we proposed two models for cost saving and value driven strategic sourcing decision making to declare the difference between the two ways of thinking. Value driven strategic sourcing decision making is a new concept and supports the company in achieving its long-term goals. These models simplify understanding of the complex concept of strategic sourcing decision making by only using necessary components (decision categories, questions, metrics and methods). In addition we performed a gap analysis to describe how to go from cost saving to value driven strategic sourcing decision making. Furthermore, we used a case study to demonstrate the models and evaluate their correctness in a real-world environment, namely in the strategic sourcing department in Nokia. The senior managers found it easy to select the metrics they used for a certain decision, supported by the models. The company’s focus in strategic sourcing decision making depends on the weights on cost and value determined by its customer segments. In Nokia’s case, there will always exist a mix of both, cost saving and value driven strategic sourcing decision making.

We should remark that it is difficult to generalize the results based on this single case study. Therefore, we suggest for further researches to demonstrate and evaluate the models on a diversified portfolio of companies including different sectors based on their business activities, different sizes, different globalization levels and different current strategic sourcing practises. Based on literature, it was possible to make a clear distinction between tactical and strategic management. This black-and-white thinking is meant to trigger the attention in the business area. As experienced in the Nokia case, we feel that a nuance should be made in this strict distinction when looking to the real world. Cost will always play an important role, which will eventually lead to a combination of both perspectives in strategic sourcing decision making.

Practical and theoretical implications

From a practical viewpoint this research wants to show the big picture of the two viewpoints in strategic sourcing decision making towards companies. We want to guide them in their first step to establish value driven strategic sourcing decision making in the right way. This first step is to know what value driven strategic sourcing decision making actually is and for this our models could be used as valid input for strategic planning in the company. The next step could be to improve the process and system towards a value focus. It is important to stress that the proposed
models do not provide any tool, but they clearly describe the two different ways of thinking. Furthermore the two models developed in this research, can be used as a base-line for further researches in strategic sourcing such as strategic sourcing data management and data analytics. In their case, it is better to first look at our models to understand what strategic sourcing decision making really is.

From a theoretical viewpoint this research complements the previous research of Cox and Rafati & Poels on presenting the need of a paradigm shift in strategic sourcing. While Cox provided some approach idea on methods focused on value for money from supply (Cox, 2015) and Rafati & Poels focused on developing a modelling and analysis language that helps exploring sourcing alternatives in value driven management (Rafati & Poels, 2014; 2015), we focused on developing models for both cost saving and value driven strategic sourcing decision making and on describing how to go from cost to value decision making. In general, little research on all used concepts (decision questions, sourcing metrics and methods) in the value driven model was done from the perspective of purchasing and supply management but is rather initiated from a strategy perspective. Because of the shift in strategic sourcing it is necessary now to define all those concepts from a purchasing perspective. This research is a step towards answering to this need.

**Limitations and future research**

The proposed models are developed, based on findings from literature. Probably not all possible decision categories within strategic sourcing decision making are defined. Furthermore, specific questions related to the decision categories and sourcing metrics could be added more or deleted, depending on a company. For this reason, future research could perform more case studies to identify additional decision categories, questions and sourcing metrics and in this way tend to investigate in more realistic models.

In addition the models are just a representation of what strategic sourcing decision making is but are not enough to do the decision making. For applying these models, guidelines and tools need to be added. Future research could focus on developing these tools to design and explore strategic sourcing options, based on the proposed models as valid input.

To conclude, we believe that this shift towards value creation has a significant impact on identifying and making the right strategic sourcing decisions, in order to achieve a company’s sustainable competitive advantage.
List of References


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V


Appendix

Learning

Make-or-buy decision 1+2

Supplier based decisions:
what is the value-creating potential? 2
who is the best in class supplier? 1+2
what is the buyer-supplier relationship? 2

Customer based decisions 1+2

Competitor based decisions 2

Complementor based decisions 2

Cost (standard components) 1
Capacity 1
Differentiation (core business) 2
Time-to-market +

Relationship

Buyer based decisions:
how much power has the buyer relative to the supplier? 1

Planning

General management based decisions:
what are the company’s long-term goals? 2

Procurement based decisions:
what are the short-term goals in sourcing? 1
what are the long-term goals in sourcing? 2

Performance

Benefit based decisions 1
Cost based decisions 1
Value based decisions:
how much value is created? 2
how much did the company improve on supplier relationship management? +

Align supplier’s and company’s goals +
KPI on price savings –
Align goals of procurement and management, for strategic suppliers 2

Switching cost (cost segment) 1
Matching Kralic matrix supplier-buyer +
Total purchased value 1
Personal interaction 2
Time-to-market 2
Supplier know-how 2
Compliance +
Value added to partner 2
To be prepared to add value +
Status towards future +

Cost segment 1
Value segment 2

Appendix I